# CITY OF DUBLIN CLIMATE ACTION PLAN 2030 AND BEYOND

**Building Thriving and Resilient Neighborhoods for All** September 2020

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### Acknowledgements

This Climate Action Plan 2030 and Beyond (CAP 2030) has been developed to establish new greenhouse gas reduction targets for 2030 and 2045 and strategies to meet these targets. It builds on the City of Dublin's actions to mitigate the acceleration of climate change. The greenhouse gas reduction goals align with Senate Bill 32 and Executive Order B-55-18. The CAP 2030 was presented to the Dublin City Council on August 18, 2020 and adopted Resolution No. 100-20 is included at the end of this document.

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### CITY OF DUBLIN CLIMATE ACTION PLAN





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### **Glossary of Terms**

| Term               | Definition  |
|--------------------|---|
| AB                 | Assembly bill   |
| Action             | In this document the term "action" references the policy, ordinance or act that will be<br>implemented and achieved to reduce greenhouse gases.   |
| Active Mobility    | Human-powered mode of transportation such as walking, biking, or rolling.   |
| Adaptation         | The changes or process of changes a community or jurisdiction undergoes to become better suited to a changing environment.  |
| Alternative energy | Energy derived from nontraditional sources (e.g., compressed natural gas, solar, hydroelectric, wind).  |
| Anthropogenic      | Made by people or resulting from human activities.  |
| Atmosphere         | The envelope of gases surrounding the earth. These gases include nitrogen (78.1%), oxygen (20.9%), and argon, helium, greenhouse gases, ozone, and water vapor in trace amounts.                                  |
| BART               | Bay Area Rapid Transit (BART) connects the San Francisco Peninsula with Berkeley, Oakland, Fremont, Walnut Creek, Dublin/Pleasanton and other cities in the East Bay.   |
| CalRecycle         | California Department of Resources, Recycling, and Recovery. CalRecycle administers and provides oversight for all of California's state-managed non-hazardous waste handling and recycling programs.             |
| САР                | Climate Action Plan (CAP). Climate action plans are comprehensive roadmaps that outline the specific activities that an agency will undertake to reduce greenhouse gas emissions.                                 |
| CAP 2020           | Climate Action Plan (CAP) 2020 refers to the City of Dublin's Climate Action Plan adopted in 2010 and updated in 2013 that established greenhouse gas reduction targets and implementation measures through 2020. |
| CARB               | California Air Resources Board (CARB) is charged with protecting the public from the harmful effects of air pollution and developing programs and actions to fight climate change.                                |



| Term                              | Definition  |
|-----------------------------------|---|
| Carbon dioxide (CO <sub>2</sub> ) | A gas produced by burning organic compounds containing carbon and by respiration.   |
| Carbon dioxide<br>equivalent      | A metric measure used to directly compare emissions from various GHGs based on their global warming potential conversion factor.  |
| Carbon footprint                  | The total emissions caused in a year by an individual, event, organization, or product, expressed in carbon dioxide equivalent.   |
| Carbon neutral                    | A rate of greenhouse gas emissions where negative emissions from sequestration equal emissions from fossil fuels or carbon emissions are eliminated altogether.   |
| Carbon sequestration              | The long-term storage or capture of carbon dioxide and other forms of carbon from the atmosphere through biological, chemical and physical processes.   |
| Climate                           | The usual condition of temperature, humidity, atmospheric pressure, wind, rainfall, and other meteorological elements in an area of the earth's surface over a long period of time (typically 30 years or more).  |
| Co-benefits                       | The secondary benefits that occur due to implementation of a program, measure or policy.  |
| EBCE                              | East Bay Community Energy (EBCE) is a community energy purchaser that provides electricity to communities in the East Bay.  |
| EV                                | Electric vehicle (EV) is a vehicle powered by electricity.  |
| Fossil fuel                       | A general term for fuel formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust.   |
| GHG                               | Greenhouse gas (GHG) is a heat trapping gas in the Earth's atmosphere. The most common human made greenhouse gases are carbon dioxide, methane and nitrous oxide.   |
| Global Warming<br>Potential (GWP) | Global warming potential (GWP) refers the heat trapping ability of a particular greenhouse gas.<br>Carbon dioxide is considered the baseline for this measurement with a GWP of 1. However,<br>other gasses like methane (CH4) trap 25 times as much heat as a molecule of CO <sub>2</sub> and therefore,<br>has a GWP of 25. When all GHGs have been adjusted to reflect their GWP the resulting unit is<br>carbon dioxide equivalent, or CO <sub>2</sub> e. |
| Goal                              | Goal in this document refers to a level of GHG emissions in a given year. Goal years include 2025, 2030, and 2045.  |
| ICLEI                             | International Council for Local Environmental Initiatives (ICLEI) builds and serves the movement of local governments pursuing deep reductions in carbon pollution and tangible improvements in sustainability and resilience.  |
| IPCC                              | Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.  |
| LAVTA                             | Livermore Amador Valley Transit Authority (LAVTA) provides transit services to the Tri-Valley area.   |
| MT CO <sub>2</sub> e              | Metric tons of carbon dioxide equivalent (MT CO <sub>2</sub> e).  |
| Ordinance                         | A locally adopted piece of legislation. A requirement that the community has to follow such as the City's ban on the sale of all flavored tobacco products and electronic smoking devices.  |
| PV                                | Photovoltaic (PV) relates to the production of electric current at the junction of two substances exposed to light (e.g. solar energy)  |



| Term                         | Definition  |
|------------------------------|---|
| Quantified measure or action | A quantified measure or action has an associated calculation that estimates the GHG reductions associated with the measure/action. Quantified measures are summed to show the total reduction expected by implementing the CAP.                     |
| Reach code                   | A reach code is a building code which requires a higher level of energy efficiency than the standard statewide code. Reach codes are allowed and encouraged under Title 24.   |
| Sector                       | References a distinct part of the community's or jurisdiction's greenhouse gas emissions inventory related to specific type of activity. In this document this includes the following sectors: transportation, energy, water, wastewater and waste. |
| SB                           | Senate bill (SB)  |
| Service population           | Sum of residents and employees within a specific jurisdiction.  |
| Sequestration                | Sequestration in this document refers to the storage of carbon in plants or materials so that it cannot enter the atmosphere and cause additional warming.  |
| Strategy                     | The plan of action and measure implementation designed to achieve greenhouse gas reduction in the community.  |
| Supportive measure or action | A supportive measure or action is one which has not been quantified and does not provide a direct or easily quantified GHG reduction. However, these measures are expected to contribute to overall GHG reductions and/or provide co-benefits.      |
| Threshold                    | A threshold in this document refers to an amount of emissions which cannot be crossed in order to meet a GHG reduction goal.  |
| U.S EPA                      | United States Environmental Protection Agency. The U.S. EPA is a branch of the federal government, the mission of which is to protect human health and the environment.   |
| VMT                          | Vehicle miles traveled (VMT) measures the amount of travel for all vehicles in a geographic region over a given period of time, typically a one-year period.  |
| Weather                      | The state of the atmosphere over a short period of time (usually an hour or day), describing if it is hot or cold, wet or dry, calm or stormy, clear or cloudy, etc.  |



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### CITY OF DUBLIN CLIMATE ACTION PLAN





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### How to Use this CAP

The Climate Action Plan (CAP) establishes the beginning of a vision for the City of Dublin (City) to reach carbon naturality by 2045 and includes quantified actions the City will take to reduce greenhouse gas (GHG) emissions by 65,090 MT CO<sub>2</sub>e by 2030 while growing the population and economy. Additional, bold actions will need to be implemented above and beyond the actions presented in this CAP to reach carbon neutrality, however implementing the actions in this plan will put the City on the trajectory needed to meet this crucial goal.

Dublin adopted its first Climate Action Plan (CAP 2020) in 2010 and is on track to meet the 2020 GHG emissions target. The City of Dublin is now taking a proactive approach by developing this CAP 2030 to guide improvements in the community and meet the State of California's new GHG reduction targets<sup>1</sup>. CAP 2030 is intended to be aspirational, achievable, and adaptable by leveraging the information included in the following sections:

#### Section 1 Vision, History, and Purpose

CAP 2030 serves as a guiding document to identify ways in which the community and City can reduce GHG emissions, meeting Dublin's long-term climate action goals, and promoting a healthy, prosperous community. This section details Dublin's sustainable achievements and the commitments and goals embodied in CAP 2030.

<sup>1</sup> Specifically, this CAP is consistent with SB32 and B-55-18



#### Section 2 Scientific Context

Climate change is a widely accepted fact among scientists. This section details the impacts associated with GHG emissions and climate change.

#### Section 3 Regulatory Context

Although climate change occurs on a global scale, it is important to recognize that climate change affects every community and must be managed at the local level. This section details the regulations that have been developed at the international, national, State, and regional levels that are driving GHG emission reductions.

#### Section 4 City of Dublin GHG Emissions Levels and Goals

To understand the extent of action the community must undertake to achieve their emissions reduction goals, it is necessary to consider how projected growth, State policies and existing sustainability efforts will impact future emissions. This section identifies sources of GHG emissions caused from actions within the City of Dublin and estimates how these emissions may change over time and then identifies future reduction targets based on State reduction goals.

#### Section 5 Public Outreach and Engagement

This section outlines how the City of Dublin conducted public outreach to its residents via an online survey promoted virtually and in person at City facilities and events, as well as to outside entities via technical advisory group meetings.

#### Section 6 GHG Reduction Strategy and Measures

Section six frames the high-level strategies for reducing GHG emissions in the City of Dublin; delineates the associated strategy measures the City will take to reduce GHG emissions; and describes the many cobenefits associated with the measures in each strategy. The strategies to meet the City of Dublin's 2030 GHG emissions reduction goal include: 100% renewable electricity, building efficiency and electrification, sustainable mobility and land use, materials and waste management, and municipal leadership. Each strategy measure includes an estimate of the associated cost and the amount of estimated GHG reductions to be achieved through measure implementation.



#### Section 7 Working Towards a Low Carbon Economy

Section 7 provides more detail on Dublin's consumption-based carbon footprint. This view takes into account not just the GHG emissions from direct sources such as fuel and electricity use, but also the GHG emissions associated with the complete life cycle of the products we use every day. While not directly quantified, this section provides ways that each member of the Dublin community can reduce their impact on the world and improve their community at the same time.

#### Section 8 Implementing CAP 2030

CAP 2030 establishes the groundwork for the critical implementation and monitoring tasks that lay ahead. This section outlines how the City of Dublin will implement the actions included in the CAP, monitor progress, and prepare CAP updates as needed to achieve the 2030 GHG reduction goals and further work toward the goal of carbon neutrality by 2045. Specific detail is provided on the progress tracking metrics, responsible parties and timing associated with each measure and the associated actions.

#### Appendices

To help streamline the main document, multiple technical appendices have been prepared to provide additional detail and information regarding GHG reductions, costs, and sources. This Plan includes the following five appendices:





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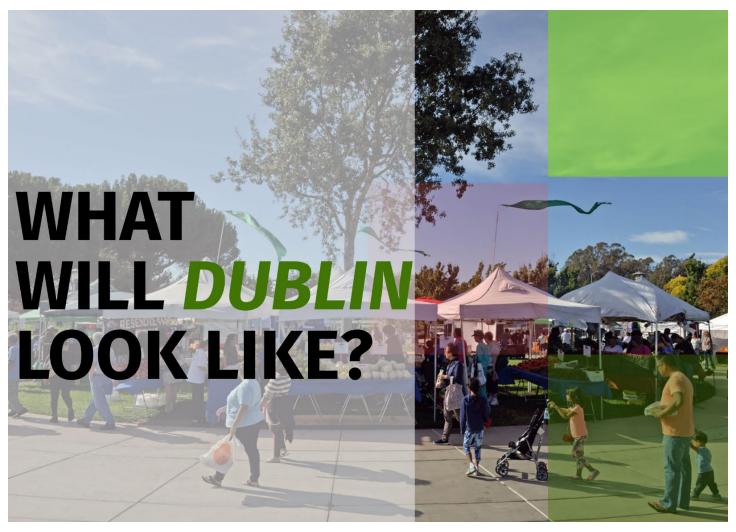


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### **1.0 Vision, History, and Purpose**

#### Improving Dublin's Quality of Life

The role of the City of Dublin Climate Action Plan 2030 and Beyond (also referred to as CAP 2030) is about more than just reducing negative effects on the environment; it's about making holistic improvements to Dublin's community and way of life. The City's commitment to reducing greenhouse gas (GHG) emissions also means that, as the actions in this plan are adopted, the Dublin community will benefit from cleaner air, more versatile and flexible transportation, new opportunities for economic growth, reductions in localized flooding risks, and greater energy independence from fossil fuels.

CAP 2030 outlines a roadmap to support the City of Dublin and its commitment to creating a vibrant, modern city that focuses on people and places while reducing its impact on the environment. A description of the anticipated community benefits from CAP 2030 are detailed in the following section.



#### **Dublin Residents Will Be Healthier**

People of all ages, abilities, and backgrounds in Dublin will benefit from cleaner air and increased mobility options through implementation of the actions in this plan. CAP 2030 focuses on actions such as encouraging electrification of new home construction and promoting incentives for residents to replace natural gases that have been linked to increased respiratory symptoms and asthma.<sup>1</sup> This plan also continues the City of Dublin's commitment to facilitate the shift to zero-emission vehicles by planning to expand electric vehicle charging infrastructure. The shift to more electric homes and vehicles will not only improve health and help protect Dublin residents with underlying health conditions but will also make Dublin more active and livable.

#### Neighborhoods Will Be More Attractive

Planting trees, improving stormwater systems, and creating people-focused places will create more visually appealing spaces for residents and visitors to enjoy. Encorporating carbon sequestration as a key element of CAP 2030 will encourage increased tree planting to capture GHG emissions and increase the greenery and shade in Dublin. As the transportation network is expanded to encourage alternate, active modes of transportation such as biking and walking, less reliance on cars will mean better designed pedestrian walkways and bicycle networks, allowing for more opportunities for social interaction. Below is a conceptual rendering of the town square in the Downtown Dublin Preferred Vision illustrating a vision of a more walkable, engaging downtown.



Conceptual Rendering of Town Square in Downtown Dublin Preferred Vision

https://www.ncbi.nlm.nih.gov/pubmed/8618483

<sup>&</sup>lt;sup>1</sup> Jarvis et al. (1996) "Evaluation of asthma prescription measures and health system performance based on emergency department utilization."



#### Cutting-edge Technologies Will Improve Quality of Life

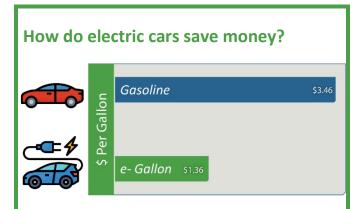
Cutting edge technologies like self-driving vehicles, battery storage, and fully electrified homes will both reduce GHG emissions and provide convenience and time-saving opportunities. Fully electrified homes are effective and efficient and can optimize heating and cooling systems to save money on utility bills. The City's role in the development of infrastructure that facilitates the use of autonomous shuttles and vehicles will help lead to a rollout of new transportation options designed to reduce congestion and time spent in transit, and may make driving private vehicles a thing of the past.

### The Local Ecosystem Will Be More Dynamic and Resilient

By focusing on locally produced and renewable energy, creating more green space and tree cover, and improving the energy efficiency of existing buildings and infrastructure, Dublin will be better positioned to withstand and recover from extreme heat, drought, and other natural disasters that are predicted to occur at higher frequencies. Creating a more sustainable and resilient Dublin with greater self-reliance and a focus on the future will reduce the risk posed by natural hazards and protect homes, businesses, and people.

#### The Economy Will Be Vibrant

Green industries like wind farms, solar energy, advanced building heating and cooling, and battery storage are adding jobs at rapid rates. In California alone, the push for renewable energy is expected to add up to one million jobs through direct and indirect workforce needs.<sup>2</sup> Here in Alameda County, East Bay Community Energy approved a \$6.57 million allocation for the 2020/2021 fiscal year to help spur development of renewable resources, energy efficiency programs, as well as building and vehicle electrification programs.3 What's more, electrification and other green technologies also save money. The fuel costs for an electric vehicle in 2019 are about half of a traditional internal combustion vehicle in California and have a lower lifetime cost of maintenance (e.g. no oil changes or fluid top offs for electric vehicles).<sup>4</sup>



eGallon is new terminology developed to compare the cost of fueling a vehicle with electricity to the cost of fueling a similar vehicle that runs on gasoline. Based on California's average fuel and electricity costs, electric vehicles (EV's) cost about half as much to drive as a traditional gasoline or diesel vehicle.

Find out more at: <u>https://www.energy.gov/maps/egallon</u>

 $<sup>^2</sup>$  https://www.c2.org/wp-content/uploads/2019/08/E2-Clean-Jobs-California-2019.pdf

<sup>&</sup>lt;sup>3</sup> https://ebce.org/wp-content/uploads/Item-13-2020-2021-Draft-Budget-Review-Informational-Item-2.pdf

<sup>&</sup>lt;sup>4</sup> https://www.sciencedirect.com/science/article/pii/S0306 26191 731526X?via%3Dihub

#### Traffic Will Be Reduced

With more alternative transportation options, traffic congestion within Dublin will be reduced. Given Dublin's location at the intersection of two Interstate Highways (I-680 and I-580), less traffic congestion will also mean less traffic-related air pollution and cleaner air for Dublin residents, employees, and visitors.

#### The City Will Utilize Carbon Sequestration

In addition to directly reducing GHG emissions through implementation of mitigation measures such as promoting electrification of homes and procuring carbon-free electricity, the City also has opportunities to lower carbon emissions by sequestering carbon through tree planting and the application of compost to open space and cultivated landscapes. Carbon dioxide is removed from the atmosphere through photosynthesis by trees and plants, which helps to reduce GHGs already emitted into the atmosphere.

#### The City Will Provide Climate Leadership and Continue in Climate Partnerships

The City of Dublin will lead the way towards a lowcarbon future which is based on developing and utilizing carbon-free power sources (e.g. power generated from sources other than fossil fuel), which results in reduced output of GHG emissions into the atmosphere. Cities are centers of commerce, culture, and innovation, and the birthplace for some of humankind's greatest ideas. At this crossroads in time, there is a great need for the ideas that cities can foster and help create. For example, urban density can create the possibility for a lower carbon footprint through more efficient infrastructure and planning achieved via partnering with developers, utilities, local businesses, and organizations.

### The City of Dublin Will Be More Equitable and Inclusive

The City of Dublin strives to consider the viewpoints of all its residents and businesses and desires that all community members have equal access to the opportunities provided through implementation of



this plan. Low-cost transportation options, diverse housing options, maximizing use of public space, and expanded community engagement for climate mitigation programs will benefit all community members while at the same time reducing Dublin's GHG emissions levels.



Photo Credit: The Independent



#### City of Dublin Sustainability History

At both the community and municipal level, the City of Dublin has a successful track record of implementing programs, policies, and projects that resulted in GHG emissions reductions. The first City of Dublin Climate Action Plan, adopted in 2010, established a GHG emissions reduction goal consistent with the State of California's (State) 2020 GHG emissions reduction target and included a list of environmental initiatives intended to guide the community towards the State's 2020 target. Dublin has achieved many of the objectives of the first Climate Action Plan (referred to in this document as CAP 2020) and as detailed in the most recent (2015) Dublin GHG emissions inventory, is on track to achieve the 2020 GHG emissions reduction goal.

#### The City of Dublin GHG Emissions Reductions Successes

The City of Dublin completed the first communitywide GHG emissions inventory for the year 2005. This inventory was the initial step in understanding the sources of GHG emissions in Dublin. The City of Dublin also prepared a CAP Update in 2013 to better understand how emissions had changed overtime and the impact of the first CAP reduction measures (the 2010 and 2013 Climate Action Plan are collectively referred to in this document as CAP 2020 since they both aimed towards 2020 GHG emissions reductions goals). Since the first GHG emissions inventory in 2005, Dublin has experienced significant growth, including a 38% increase in population and has been one of the fastest growing cities in California.

Since the City of Dublin (City) adopted CAP 2020, California has continued to advance its climate policy and has adopted new GHG emissions reductions goals for 2030 and 2045. To stay in line with the latest climate science and goals set by the State,<sup>5</sup> the City has developed this Climate Action Plan 2030 and Beyond (CAP 2030) with updated targets and measures that coincide with these new State goals. CAP 2030 represents the City of Dublin's next climate action planning effort, built upon the successes of prior efforts, to achieve long-term GHG emissions reduction targets necessary for a healthy and vibrant community.

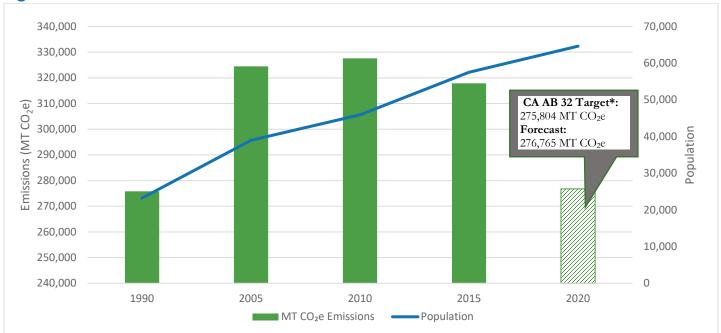


<sup>&</sup>lt;sup>5</sup> See section 3.0 for a complete description of the regulatory context.





The addition of energy and resources needed to support Dublin's recent and future growth generates additional GHG emissions and increases the challenge of reaching the City's long-term GHG emissions reduction goals. Despite these development trends, overall GHG emissions in Dublin have decreased 2% since 2005. The most recent (2015) Dublin GHG emissions reduction inventory establishes a decreasing trajectory over time as shown in Figure 1-1. If Dublin continues on this GHG emissions trajectory, the original CAP goal of reaching 1990<sup>6</sup> levels of GHG emissions by 2020 will be achieved. This analysis will be confirmed after all 2020 activity data is available and the 2020 emissions are inventoried. Activity data for 2020 is expected in Spring 2021 and the GHG emissions reduction inventory will be conducted shortly thereafter.



#### Figure 1-1: Dublin's GHG Emissions Over Time

\*See footnote 6 and Section 3, Regulatory Context, for a description of California Assembly Bill 32.

by approximately 15% from current levels by 2020" (p. 27). "Current" as it pertains to the AB 32 Scoping Plan is commonly understood as sometime between 2005 and 2008.

<sup>&</sup>lt;sup>6</sup> The AB 32 Scoping Plan states that the California Air Resources Board "encourages local governments to adopt a reduction goal for municipal operations emissions and move toward establishing similar goals for community emissions that parallel the State commitment to reduce greenhouse gas emissions



#### Local Leadership

In addition to implementing many of the climate action and GHG emissions reduction measures, the City has publicly committed to GHG emissions reduction leadership in several notable ways, including:

- <u>Sustainable States Network</u> Community Energy Challenge: Through its participation in Green Cities California, the City of Dublin is one of 30 communities from five states participating in this challenge in 2020 to assess clean energy goals and identify future clean energy initiatives.
- <u>Carbon Disclosure Project</u> (CDP) Score of B-: For transparency in sustainability, regular emissions and reporting, and sustainability actions at a local level, the City of Dublin received a Bscore from the Carbon Disclosure Project in 2019.
- <u>Beacon Award</u>, Platinum Level Winner: Through the adoption of best practices for sustainability, the City of Dublin was the recipient of the sustainability best practices activities award from the Institute for Local Government in 2014.

The City also has plans and policies for municipal operations and community activities that support climate action planning efforts. These plans include:

- Bicycle and Pedestrian Master Plan;
- Parks and Recreation Master Plan;
- <u>Complete Streets Policy</u>; and
- Green Stormwater Infrastructure Plan.

#### Successful Programs

The most crucial phase of a plan is implementation, and the City of Dublin has a long and successful track record of sustainability and GHG emissions reduction programs. Examples of programs for the public include:

• **East Bay Community Energy** – The East Bay Community Energy (EBCE) is the energy provider in Dublin and provides Dublin residents and businesses with less carbon-intense electricity. EBCE currently offers three power portfolios, including two that are 100% carbon-free electricity.

- <u>Electric Vehicle Charging Stations</u> Public electric vehicle chargers provided by the City as of 2020 are located at the Shannon Center, Fallon Sports Park, Dublin Library, and the Public Safety Complex.
- Farmers' Market –A weekly farmers' market runs from April through September enabling residents to support local farmers and purchase local produce with a lower carbon footprint.
- <u>Fixit Clinics</u> Volunteer Fixit coaches help residents learn how to fix broken household appliances, toys, clothing, and more, reducing waste and the carbon generated from manufacturing new products.
- <u>Green Shamrock Program</u> The City offers a program that recognizes local businesses which have outstanding sustainability practices.
- <u>GoDublin!</u> Local transit agencies and transportation network companies offer up to a 50% fee reduction for rideshare rides within Dublin city limits.
- Solar Panel Discount Programs The City has partnered with the <u>SunShares Program</u> and <u>EBCE</u> to provide Dublin residents the opportunity to buy solar panels and battery storage at discount prices through these group purchase programs.

Examples of mandatory ordinances implemented in the City include:

- Mandatory Recycling Ordinance The City of Dublin opted in to this Alameda County Waste Management Authority ordinance focused on enforcing proper recycling and organic waste separation and diversion at businesses and multifamily residential homes.
- <u>**Reusable Bag Ordinance**</u> The City opted in to the Alameda County Waste Management Authority ordinance which was enacted to prevent single-use plastic bag waste.
- <u>Polystyrene Ban</u> The Dublin City Council adopted an ordinance requiring restaurants to



provide compostable or recyclable to-go food containers.

Examples of municipal leadership include:

- **LEED Rated New Construction** Since 2010, all municipal buildings have been built to LEED Silver rating standards or better, resulting in healthy, energy efficient, and cost-effective buildings. This includes the Dublin Corporation Yard, The Wave Waterpark, and the Public Safety Complex.
- <u>Paperless Plan Check</u> Developers are able to save paper, mileage, money, and time by submitting development plans electronically.
- <u>Recycled Water</u> As of 2020, over 90% of the water used in municipal irrigation is recycled water.
- **<u>Renewable Electricity</u>** The City opted up with EBCE to receive 100% renewable electricity for all municipal electric accounts.
- <u>Solar Panel Installation</u> As of 2020, solar panels have been installed at eight municipal buildings.

#### Roadmap to the Future – Climate Planning Purpose

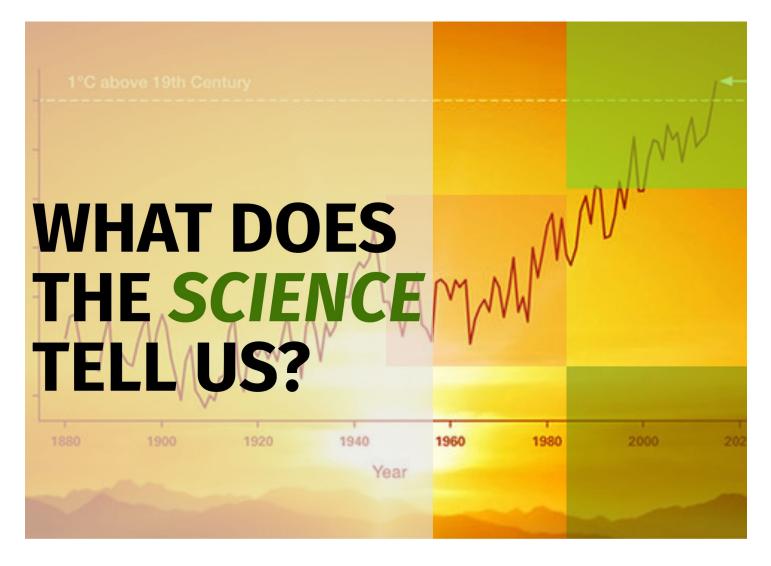
The actions detailed in CAP 2030 will help the City of Dublin reduce GHG emissions communitywide and begin to mitigate for climate change impacts, while improving the quality of the community. In addition to establishing a feasible and implementable pathway to GHG emissions reductions, the climate action plan will:

- Bring stakeholders together;
- Inform and educate the public;
- Integrate actions from various community plans;
- Integrate actions across different scales (local, regional, state, federal, international);
- Save Dublin residents, businesses, and municipal operations money through energy efficiency and lifecycle planning;
- Build the local economy;
- Allow for California Environmental Quality Act (CEQA) streamlining;
- Improve community health and livability; and
- Respond to local context and conditions.









### **2.0 Scientific Context**

#### Scientific Context

Since the City adopted its first Climate Action Plan in 2010, the science of climate change has continued to evolve. However, the mechanism that is driving climate change has been well understood since the mid-20<sup>th</sup> Century.<sup>1</sup> As shown in Figure 2-1, atmospheric science has identified that the Earth's atmosphere acts as a blanket that allows high energy heat from the sun to pass through to Earth, while reflecting and absorbing lower energy heat that is

radiated back from Earth. This process is what has allowed life on Earth, and, without it, Earth would be uninhabitably cold.

Carbon dioxide (CO<sub>2</sub>) and other GHGs including methane (CH<sub>4</sub>) and nitrous oxides (N<sub>2</sub>O) are responsible for this radiative effect. Each of these gases has its own global warming potential (GWP) or extent to which it traps energy in the atmosphere. GWP utilizes CO<sub>2</sub> as a reference point to compare the potential impact of different GHGs. As such, CO<sub>2</sub> has

<sup>1</sup> https://climate.nasa.gov/evidence/



a GWP of 1. Methane has a GWP of 28 meaning that each metric ton (MT) of methane causes 28 times more warming than 1 MT of CO<sub>2</sub>. Nitrous oxide has a GWP of 265 or 265 times the GWP of 1 MT of CO<sub>2</sub>.<sup>2</sup> When all GHG's are normalized based on their GWP's they are referred to as carbon dioxide equivalents or CO<sub>2</sub>e.

The higher the concentration of these GHGs, the more heat is trapped here on Earth. Since the industrial revolution, human activities have been emitting large quantities of GHGs into the atmosphere, enough to nearly double the amount of  $CO_2$  from 280 parts per million to over 400 parts per million, which is 100 parts

per million higher than any other time in the last 800,000 years.<sup>3</sup>

Anthropogenic (human-caused) global warming is well-understood and widely accepted by the scientific community, with over 97% of climate scientists agreeing that the planet is warming at an accelerated rate and that human activities are the root cause.<sup>1</sup>

Combustion of fossil fuels (gasoline, natural gas, and coal), deforestation, and decomposition of waste, each release carbon dioxide into the atmosphere that had been locked underground and stored in oil, gas, and other hydrocarbon deposits or in the biomass of surface vegetation.

#### Figure 2-1: The Greenhouse Gas Effect

In the last century, human activities such as burning fossil fuels and deforestation have caused a jump in the concentration of greenhouse gases in the atmosphere. The result: extra trapped heat and higher global temperatures. **GREENHOUSE EFFECT GREENHOUSE EFFECT** with normal greenhouse gases with increased greenhouse gases HEAT-ABSORBED BY LAND, OCEANS, AND ATMOSPHERE-WARMS THE PLANET SOLAR RADATION SURRAUMON HEATIS RADIATED BACK INTO SPACE AS INFRARED LIGHD Some heat continues into space while the rest, trapped by greenhouse Increased greenhouse gases means less heat escapes. gases, help maintain the planet's relatively comfortable Between preindustrial times and now, the earth's average temperatures. Less gas = less heat trapped in the atmosphere. temperature has risen 1.8 °F (1.0 °C).

Source: Greenhouse Effect 101. Michal Bednarski for NRDC https://www.nrdc.org/stories/greenhouse-effect-101#whatis

<sup>2</sup> https://www.ipcc.ch/assessment-report/ar5/

<sup>3</sup> Lindsey, Rebecca. September 19, 2019. Climate Change: Atmospheric Carbon Dioxide. https://www.climate.gov/news-features/understandingclimate/climate-change-atmospheric-carbon-dioxide



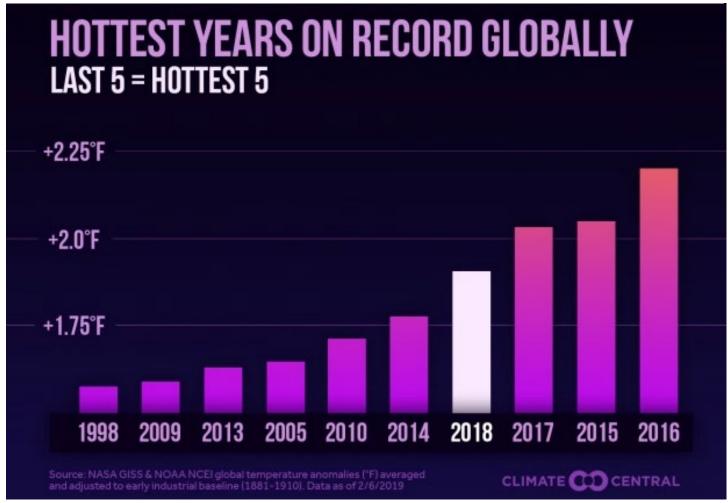
#### Global Climate Change Issue

Climate change is a global issue, because GHGs impact the atmosphere cumulatively. GHGs have long atmospheric lifetimes, ranging from several years to several thousand years. As such, GHGs persist in the atmosphere for a long enough time to be dispersed and accumulate around the globe. This accumulation is increasing temperatures globally as seen in Figure 2-2.

Although the exact lifetime of any particular GHG molecule depends on multiple variables, more CO<sub>2</sub> is

currently emitted into the atmosphere than is captured or sequestered. Carbon dioxide is sequestered from the atmosphere by plants, soil, and the ocean in what is known as carbon sinks. Of the total annual human generated  $CO_2$  emissions, approximately 55% is sequestered through ocean uptake, forest regrowth, and other terrestrial sinks. The remaining 46% of annual human-caused  $CO_2$  emissions remains in the atmosphere.<sup>4</sup>

#### Figure 2-2: Hottest Years on Record



<sup>&</sup>lt;sup>4</sup> https://earthobservatory.nasa.gov/features/CarbonCycle/page5.php



Emissions of GHGs have the potential to adversely affect the environment, because such emissions contribute to global climate change. Globally, climate change is already linked to several changes that will impact humans. Scientists have measured shrinking ice sheets, warming oceans, global temperature changes, decreased snow cover, sea level rise, and species extinction. Consequently, global climate change has the potential to result in flooding of low-lying areas, shortages to fresh-water supply, and adverse impacts on biological resources and public health.

Since climate change is driven by an increase in heat trapped by the atmosphere and heat is the driver of weather, it makes sense that Earth would experience an increase in natural disasters like hurricane, drought, and wildfire<sup>5</sup>.

A global warming trend is abundantly clear, with the top five hottest years on record happening during the past five years. Additionally, the 20 hottest years on record have all occurred since 1998.<sup>6</sup> The Intergovernmental Panel on Climate Change now recommends limiting the total increase in global temperature to below 1.5 degrees Celsius (2.7°F) in order to prevent "rapid, far-reaching and unprecedented changes in all aspects of society".<sup>7</sup>

## What Does Science Tell Us About Climate Change?



Photo Credit: Eric Hanson

### *If global temperature rises by 3.7C. (The current Projection)*

- Ranges of many of the world's plant and animal species could decrease by more than 50% by the 2080s.
- Changes to weather patterns such as increased heat and prolonged drought can significantly impact agricultural production and global food security.
- Seven times more people could experience the impacts of 100-year floods compared to the 1980s.
- Over 2/3 of coral reefs could experience long term degradation.

Source: https://www.wri.org/ipcc-infographics-emissions

<sup>5</sup> https://earthobservatory.nasa.gov/features/ClimateStorms/page2.php 6 https://www.ncdc.noaa.gov/cag/

<sup>7</sup> https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/

### DUBLIN CALIFORNIA

#### **Climate Change Impacts**

#### California Climate Change Impacts

Substantially higher temperatures, more extreme wildfires, and rising sea levels are just some of the direct effects of climate change experienced in by the Office California. As reported of Environmental Health Hazard Assessment (2018), despite annual variations in weather patterns, California has seen a trend of increased average temperatures, more extreme hot days, higher seawater pH, and earlier and lesser snowmelt and rainwater runoff.8 Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and a larger proportion of total precipitation is falling as rain instead of snow. Sea level rose by as much as seven inches along the California coast over the last century, leading to increased erosion and adding pressure to the State's infrastructure, water supplies, and natural resources.

For Dublin, the most apparent effects of climate change will likely be in the form of increased average temperature, more days of extreme heat, and increases in droughts and wildfires.<sup>9</sup> Air quality impacts from heat and wildfires may also continue to be an issue. The changes expected to impact the Dublin community and California include:

Increased Temperatures and Extreme Heat • Events. The Bay Area is expected to see an increase in average annual temperature of 2.7°F by 2050, and 3.5°F to 11°F by 2100. By the end of the century, the increase in the Bay Area's annual average temperature may range from approximately 3.5°F to 11°F relative to the average annual temperature for the 1961 to1990 baseline period, depending on the GHG emissions scenario. An overall average annual temperature increase of 2.5°F is projected by 2030 for the Bay Area, with inland areas expected to see the most extreme changes.<sup>10</sup> Compared to the historical average, Dublin is expected to experience 12 days over 101° F per year by 2030 (double the historic rate).

- Reduction in the Quality and Supply of Water from the Sierra Snowpack. If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70% to 90%. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- Changes in Rainfall Intensity. Studies of the effect of climate change on the long-term average California precipitation for show some disagreement. Considerable variability exists across models and examining average changes can mask more extreme scenarios that project much wetter or drier conditions. By mid-century, more precipitation is projected to occur in winter in the form of less frequent but larger events. Most climate models predict drying trends across the State by 2100. Overall, California is expected to see increases in the magnitude of extreme events, including increased precipitation delivered from atmospheric river events, which would bring high levels of rainfall during short time periods and increase the chance of flash floods.
- Increased Risk of Large Wildfires. If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of California are estimated to increase by approximately 30% toward the end of the 21st century because more winter rain will stimulate the growth of more vegetation that will be available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90% more Northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- Rise in Sea Levels Resulting in the Displacement of Coastal Businesses and Residences. If GHG emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would

<sup>&</sup>lt;sup>8</sup> https://oehha.ca.gov/media/downloads/climatechange/report/2018indicatorssummary.pdf

<sup>&</sup>lt;sup>9</sup> https://cal-adapt.org/ <sup>10</sup> https://cal-adapt.org/tools/extreme-heat/



inundate coastal areas with sea water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

• Exacerbation of Air Quality Problems. If temperatures rise to the medium warming range, there could be 75% to 85% more days with weather conducive to ozone formation, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.

> The number of 101° F days in Dublin is expected to double by 2030

#### Bay Area Air Quality Pollution Events

The Bay Area Air Quality Management District (BAAQMD) monitors air quality conditions, which includes monitoring of a location in the Amador Valley close to the Dublin border. The air quality data is translated into the U.S. EPA's color-coded air quality index scale as shown in Figure 2-3 for purposes of communicating air quality health information.

### Figure 2-3: BAAQMD Air Quality Index Scale

| 0-50<br>Good                   |
|--------------------------------|
| 51-100                         |
| Moderate                       |
| 101-150                        |
| Unhealthy for Sensitive Groups |
| 151-200<br>Unhealthy           |
| 201-300                        |
| Very Unhealthy                 |
| 301-500<br>Hazardous           |

The average air quality index in Dublin has consistently worsened over time and is lower than the State and national averages; it also worsens during extreme heat and wildfire events. As the air quality index increases, an increasingly large percentage of the Dublin population is likely to experience increasingly adverse health effects.



#### **Dublin Can Take Action**

While the impacts of climate change are imposing and the use of fossil fuels that drive it pervasive, there are solutions. National, state, and local governments worldwide are making changes to reduce the impacts of climate change to a manageable level. What's more, places like California have been making substantial reductions in GHG emissions while continuing to grow its gross domestic product by decarbonizing the economy and investing in clean energy and next-generation technologies.

This CAP 2030 includes actions in which every part of the community can participate – residents, property owners, businesses, and City government. Working together, Dublin can do its part to address a global crisis and achieve climate goals, and the City can continue to foster a vibrant and resilient community.



Photo Credit: Vanessa Thomas



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Photo Credit: The Independent

### **3.0 Regulatory Context**

#### **Global Agreements**

Agreements and regulations to lessen the acceleration of climate change have been developed at the international, national, and state levels that are driving GHG emissions reduction and climate action.

The United Nations (UN) has led the international community in addressing climate change. The UN sustainable development goals adopted by all UN Member States in 2015 set forth renewable energy and climate action as two of the 17 key development goals for achieving peace and prosperity for people and the planet. More recently, in 2016, the UN Framework Convention on Climate Change generated the Paris Agreement. The Paris Agreement is the first-ever universal, legally binding global climate agreement, and it has been ratified by 187<sup>1</sup> countries worldwide. The Paris Agreement establishes a roadmap to keep the world under 2°C of warming with a goal of limiting an increase in temperature to 1.5°C. The agreement does

<sup>&</sup>lt;sup>1</sup> https://unfccc.int/process/the-paris-agreement/status-of-ratification (January 2020)



not dictate one specific reduction target but rather relies on each country to set nationally determined contributions (NDCs) or reductions based on each country's gross domestic product (GDP) and other factors such as social equity. Data published in the International Panel on Climate Change (IPCC) 4<sup>th</sup> Climate Change Assessment Report, shows that limiting global warming to 1.5°C will require global GHG emissions to reduce through 2030 and reach carbon neutrality<sup>2</sup> by mid-century.<sup>3</sup>

#### California's Climate Leadership

California has become a recognized global leader in the effort to reduce GHG emissions through establishing a wide-ranging set of GHG reduction strategies. The primary GHG reduction legislation driving State and city climate action plans includes Assembly Bill (AB) 32, Senate Bill (SB) 32, and Executive Order (EO) B-55-18. These regulations have charted a path towards carbon neutrality for California by 2045.

In addition to the landmark climate change bills, California has also passed legislation that increases energy efficiency in buildings (Title 24), improves fuel efficiency in vehicles (Advanced Clean Cars Program)<sup>4</sup>, and most recently legislation that calls for 100% carbon neutral electricity by 2045 (SB 100). A brief description of the major regulatory drivers for this CAP is included in this section. A detailed description of all currently adopted relevant legislation is included in Appendix A. Figure 3-1 provides a timeline for climate change legislation and programs enacted at the local, state and international level. Information on City of Dublin programs can be found on the City's website.

#### Major California Climate Change Legislation

- Assembly Bill (AB) 32 AB 32 codified the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires the California Air Resources Board (CARB) to prepare a Scoping Plan that outlines the main strategies the State will employ to meet the 2020 target. The AB 32 Scoping Plan was adopted in 2014.
- Senate Bill (SB) 32 SB 32 is the successor to AB 32 and requires the State of California to achieve a statewide reduction in GHG emissions of 40% below 1990 levels by 2030. The SB 32 Scoping Plan was adopted in 2017.
- Executive Order (EO) B-55-18 EO B-55-18 established a new statewide goal of achieving and maintaining carbon neutrality as soon as possible and no later than 2045. Executive orders have not been codified by the State but are binding for State agencies and therefore, must be addressed by qualified GHG reduction plans<sup>5</sup>.
- Senate Bill 100 SB 100 establishes that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by 2045. Among the goals this bill is intended to achieve is meeting the State's climate change goals by reducing emissions of GHGs associated with electrical generation.

<sup>&</sup>lt;sup>2</sup> Carbon neutrality is a rate of greenhouse gas emissions where negative emissions from sequestration equal positive emissions entering the atmosphere from combustion of fossil fuels.
<sup>3</sup> https://www.ipcc.ch/sr15/

<sup>&</sup>lt;sup>4</sup> https://ww2.arb.ca.gov/our-work/programs/advanced-clean-carsprogram/about

<sup>&</sup>lt;sup>5</sup> A qualified GHG reduction plan is one the follows CEQA guidelines and review process and the requirements of Section 15183.5



#### Figure 3-1: Climate Action Regulatory Timeline

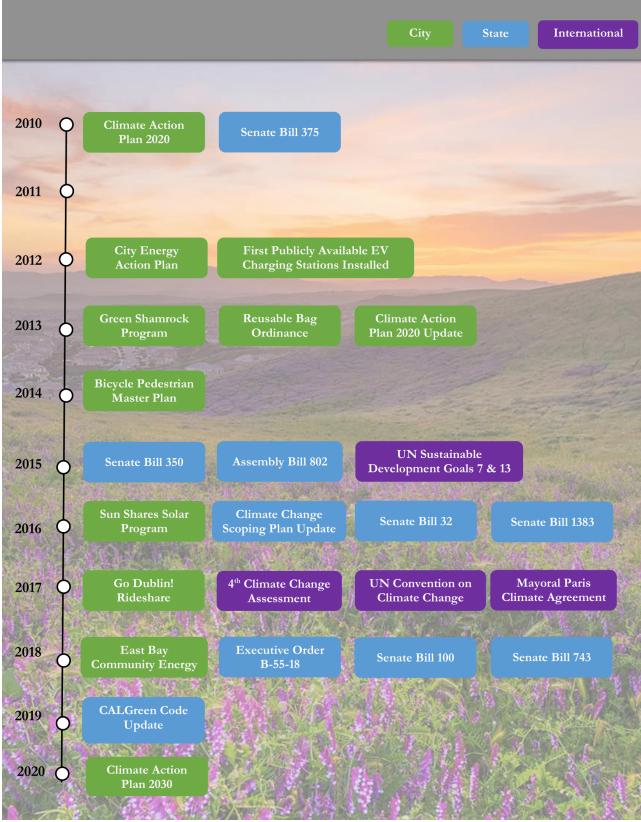


Photo Credit: Jay Huang



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### CITY OF DUBLIN CLIMATE ACTION PLAN





### 4.0 City of Dublin GHG Emissions Levels and Goals

#### A Call to Action

The City of Dublin's goal is to provide a safe, healthy, and vibrant community and recognizes that doing so requires balancing a growing economy, population, and demand for resources and services while meeting stringent GHG emissions reduction goals. In 2006, California passed the Global Warming Solutions Act, AB 32, setting a statewide target to reduce GHG emissions to 1990 levels by 2020. In response to AB 32, the City of Dublin prepared and adopted its initial CAP in 2010 (referred to as CAP 2020 due to the 2020 GHG emissions reductions goals). Since adoption of CAP 2020, the State has increased its commitment to GHG emissions reduction by adopting SB 32 in 2016 which increases the State's GHG emissions reduction target to 40% below 1990 levels by 2030. In 2018, Governor Brown set an even more ambitious goal for the State by adopting EO B-55-18, which sets a statewide goal of reaching carbon neutrality by no later than 2045. Carbon neutrality refers to emitting net zero carbon dioxide emissions by balancing carbon emissions with carbon removal (through carbon offsetting or carbon sequestration) or



eliminating carbon dioxide emissions completely. In response to SB 32 and EO B-55-18, the City of Dublin has prepared this updated CAP 2030 establishing new community GHG reduction targets and new measures to achieve these targets. While CAP 2030 does not provide a complete plan for achieving the very ambitious and necessary goal of achieving carbon neutrality by 2045 as envisioned by EO B-55-18, it sets the City on the path to achieving this goal as it aims to meet the 2030 GHG emissions reduction targets outlined in SB 32 and beyond.

To achieve the carbon neutral goal established by EO B-55-18, nearly every building in California, in both new developments and through building retrofit, will need to operate without direct fossil fuel-based emissions and utilize electricity that is generated by 100% renewable sources. In addition, nearly every motor vehicle will need to be 100% electric or fueled with another alternative fuel (e.g., hydrogen fuel cell), and total statewide vehicle miles traveled (VMT) will need to significantly decrease. While reducing the VMT of zero emission vehicles won't further decrease emissions, it will reduce congestion and the amount of renewable energy capacity required to fuel electric vehicles. In addition, waste will need to be reduced dramatically with an emphasis on reduction, reuse, and recycling. While meeting these mid-century targets will require changes to the current status quo, there are actions to take today to ease this transition while supporting long-term economic and population growth.

CAP 2030 contains the next steps in this City's climate action planning journey and will act as a roadmap to reduce GHG emissions within Dublin in a costeffective manner that prioritizes benefits to the community. By implementing the CAP, the City of Dublin will strive to set an example at the municipal level while developing policies to support the community to reduce GHG emissions.





## City of Dublin GHG Emissions Inventory

To better understand where GHG emissions originate in the community and to inform development of GHG emissions reduction measures and actions, the City has tracked GHG emissions over time by completing GHG emissions inventories every five years as directed by the CAP 2020. The most recent inventory of Dublin's communitywide GHG emissions was conducted for the year 2015. The City of Dublin 2015 GHG inventory identifies the sources and quantifies GHG emissions resulting from the community's residents, business, and municipal operations, and establishes an emissions baseline against which the City can establish GHG emissions reduction goals and track future progress.

In the 2015 GHG inventory, emissions from five sectors are calculated: natural gas, electricity, transportation, solid waste, and water. The methods used to estimate the community's GHG emissions are consistent with the U.S. Community Protocol for Accounting and Reporting of GHG Emissions.

### Accounting and Reporting of GHG Emissions

In 2015, Dublin's communitywide GHG emissions were approximately 317,840 metric tons of carbon dioxide equivalents (MT CO<sub>2</sub>e). This is equivalent to 5.5 MT CO<sub>2</sub>e for each person in Dublin (per capita)

and represents a 3% decrease from the previous GHG emissions inventory completed for the year 2010. While this reduction puts Dublin on a trajectory to reach the 2020 GHG emissions reduction target, a future 2020 GHG emissions inventory will be required to confirm this target has been met. The GHG emissions inventory accounts for direct emissions, such as the combustion of fuels in vehicles, as well as indirect emissions associated with community electricity consumption, emissions from solid waste, and from water. GHG emissions from the consumption of goods are not accounted for in the inventory, but strategies to address these consumptions based GHG emissions are included in Section 7.0 of this CAP.

A profile of Dublin 2015 GHG emissions by sector source is shown in Table 4-1 and Figure 4-1. The majority (60%) of emissions are a result of the transportation sector, with natural gas use in buildings (18%) and electricity use (18%) comprising the second and third largest sectors, respectively. Waste emissions (4%) and water/wastewater treatment (<1%) comprise the remainder. Details on activity data and emissions factors for the 2015 inventory can be found in Appendix A.

### Table 4-1: City of Dublin 2015 GHG Emissions Inventory by Sector

| the second s |                                |         |
|--|--------------------------------|---------|
| Sector   | 2015<br>(MT CO <sub>2</sub> e) | % Total |
| Residential Electricity  | 21,199                         | 7%      |
| Commercial/Industrial Electricity  | 33,628                         | 11%     |
| Residential Gas  | 35,997                         | 11%     |
| Commercial/Industrial Gas  | 20,961                         | 7%      |
| Waste  | 12,736                         | 4%      |
| Water/Wastewater   | 2,258                          | <1%     |
| Transportation   | 191,061                        | 60%     |
| Total Emissions  | 317,840                        | 100%    |





2015 EMISSIONS (METRIC TONS OF CO<sub>2</sub>E)

11% Commercial/Industrial Electricity Use (33,600 MT CO,e)

> 7% Commercial/ Industrial Gas Use (21,200 MT CO,e)

> > >**1% Water/Wastewater** (2,300 MT CO,e)

7% Residential Electricity Use (22,000 MT CO<sub>3</sub>e)

**11% Residential Gas Use** (36,000 MT CO<sub>3</sub>e)

**60% Transportation** (191,100 MT CO<sub>2</sub>e)

# GHG Emissions Goals

### **Dublin GHG Emissions Forecast**

To understand the magnitude of actions the City and community must undertake to achieve the 2030 and 2045 GHG emissions reduction targets, it is necessary to understand current GHG emissions levels and how projected population and employment growth, State policies, and GHG reduction efforts will affect future emissions levels and targets. This projection is quantified in what is known as an adjusted forecast.

Dublin's adjusted forecast illustrates anticipated GHG emissions if the City takes no new actions to mitigate climate change beyond compliance with currently adopted State policies that go into effect in future years. Several State programs have been enacted since 2015 or are set to go into effect by 2020 that would reduce Dublin's overall GHG emissions. The impact of these State programs has been quantified and 4% Waste (12,700 MT CO<sub>3</sub>e)

incorporated into an adjusted forecast. Programs incorporated into the forecast include Title 24 Building Energy Efficiency Standards updates; SB 100, the Renewable Portfolio Standard; Advanced Clean Car Program standards; CARB Innovative Clean Transit regulation; and AB 939, the Integrated Waste Management Act. For a complete description of these programs, see Appendix A. The adjusted forecasts for 2020, 2025, 2030, and 2045 are also based on demographic growth projections developed for the City of Dublin General Plan update, including population, employment, and VMT.

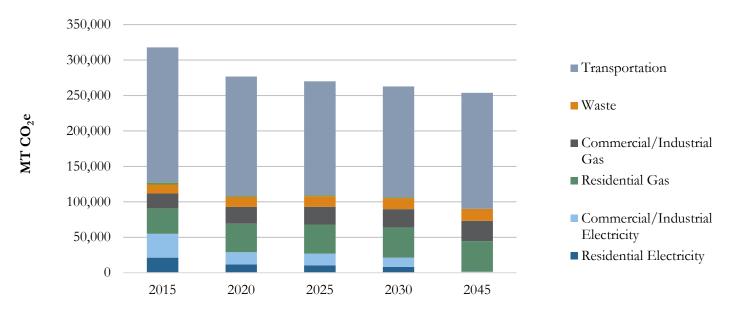
Table 4-2 and Figure 4-2 detail the adjusted GHG emissions forecast through 2045 by sector as well as the minimum reductions necessary to be compliant with California's 2030 and 2045 targets. These tables are included to highlight the gap between GHG emissions reduction measures needed to meet SB 32 and EO B-55-18 targets and what GHG emissions would be if the City takes no action.



# Table 4-2: Dublin Communitywide 2015 GHG Emissions and Adjusted Forecast by Sector (MT CO<sub>2</sub>e)

|                                   | 2015    | 2020    | 2025    | 2030    | 2045    |
|-----------------------------------|---------|---------|---------|---------|---------|
| Residential Electricity           | 21,199  | 11,505  | 10,507  | 8,202   | 525     |
| Commercial/Industrial Electricity | 33,628  | 17,502  | 16,362  | 13,055  | 890     |
| Residential Gas                   | 35,997  | 40,162  | 41,178  | 42,194  | 43,210  |
| Commercial/Industrial Gas         | 20,961  | 23,752  | 24,931  | 26,109  | 28,466  |
| Waste                             | 12,736  | 14,138  | 14,961  | 15,784  | 16,881  |
| Water/Wastewater                  | 2,258   | 1,218   | 1,148   | 923     | 62      |
| Transportation                    | 191,061 | 168,488 | 163,288 | 156,503 | 164,699 |
| Total Emissions                   | 317,840 | 276,765 | 272,374 | 262,770 | 254,733 |
| Population                        | 57,514  | 64,624  | 68.083  | 71,541  | 75,000  |
| Emissions Per Capita              | 5.5     | 4.3     | 4.0     | 3.7     | 3.4     |

# Figure 4-2: City of Dublin 2015 GHG Emissions and Adjusted Forecast by Sector



Note: Emissions from water and wastewater are included in each inventory year but continue to make up <1% of total emissions

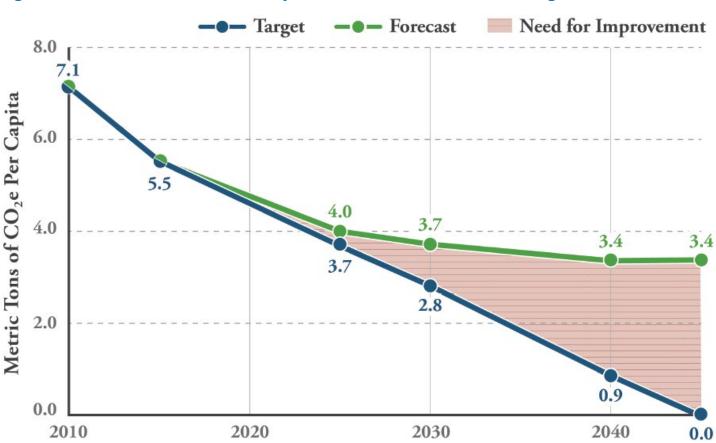


### City of Dublin Targets and Emissions Gap

In CAP 2020, GHG emissions were evaluated using total mass emissions. However, the California Air Resources Board now recommends using a per-capita emissions metric to evaluate GHG emissions to avoid penalizing cities for responsible growth patterns.<sup>1</sup> From the 2015 emissions rate of 5.5 MT CO<sub>2</sub>e per capita, the City of Dublin's GHG emissions reduction targets for 2020, 2030, and 2045 rate were identified as shown in Figure 4-3. These targets were identified by adopting a linear reduction from 2015 per capita emissions levels to carbon neutrality in 2045. This

equates to a 76.7% reduction from 1990 per capita levels.

The targets were then translated to absolute GHG emissions targets to identify the gap that must be closed, as shown in Table 4-3. Although CAP 2030 does not bridge the GHG emissions gap between 2030 to 2045, responsible implementation of the actions taken in this CAP will chart a path towards achieving the 2045 goal.



#### Figure 4-3: Dublin GHG Emissions Adjusted Forecast and Reduction Targets

Note: 0 MT of CO2e by 2045 is not an error in this image.

<sup>&</sup>lt;sup>1</sup> https://ww3.arb.ca.gov/cc/scopingplan/scoping\_plan\_2017.pdf



# Table 4-3: Dublin Per-capita and Absolute GHG Emissions Forecast, Reduction Targets, andGaps

|  | 2010    | 2015    | 2020     | 2025    | 2030            | 2045    |
|--|---------|---------|----------|---------|-----------------|---------|
| Adjusted Forecast Emissions<br>(MT CO <sub>2</sub> e)                              | 327,590 | 317,840 | 276,765  | 272,374 | 262,770         | 254,733 |
| GHG Emissions Target<br>(MT CO <sub>2</sub> e)                                     | _       | 317,840 | 275,8041 | 250,831 | <b>197,6</b> 80 | 0       |
| Population   | 45,913  | 57,514  | 64,624   | 68,083  | 71,541          | 75,000  |
| Per Capita Adjusted Forecast<br>(MT CO <sub>2</sub> e per capita)                  | 7.1     | 5.5     | 4.3      | 4.0     | 3.7             | 3.4     |
| Per Capita GHG Emissions Targets <sup>2</sup><br>(MT CO <sub>2</sub> e per capita) | 7.1     | 5.5     | 4.3      | 3.7     | 2.8             | 0       |
| Remaining Gap to Meet Target <sup>3</sup>  | _       | _       | 961      | 21,542  | 65,090          | 254,733 |

<sup>1</sup>This target set by CAP 2020 and consistent with AB 32 regulation of reducing GHG emissions to 1990 levels by 2020.

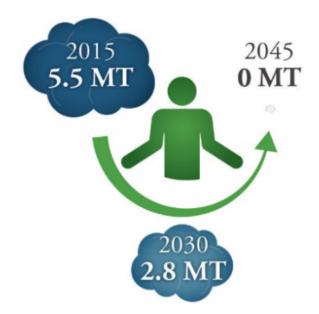
<sup>2</sup>These provisional targets are consistent with both SB 32 and on a trajectory set forth to achieve EO B-55-18 targets set by the State.

<sup>3</sup>Numbers may not sum due to rounding.

## Dublin GHG Reduction Targets (Per-capita)

Despite continued population growth, Dublin is expected to decrease absolute emissions and experience reduced GHG emissions on a per-capita basis due to a cleaner grid, efficient new construction, and the switch to more efficient vehicles and active mobility. Although Dublin is forecasted to emit less emissions per capita in the future, a reduction in annual emissions of 65,090 MT CO<sub>2</sub>e is required by 2030. To bridge the gap to carbon neutrality in 2045, a reduction of 254,733 MT CO<sub>2</sub>e per year is required. The City of Dublin and the community at large have made progress towards reducing GHG emissions but will need to take additional action to achieve the 2030 and 2045 targets.

The measures included in this CAP establish a pathway to achieve the 2030 GHG reduction goals established by SB 32 and help prepare Dublin to implement further programs and policies to meet carbon neutrality by 2045. The actions in this CAP will not achieve carbon neutrality. Future advances in technology, State policy, and additional CAP planning and implementation will be required to meet the lofty goal of carbon neutrality.





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# COMMUNITY CLIMATE ACTION PRIORITIES.

# 5.0 Public Outreach and Engagement

The City of Dublin's CAP 2030 was developed through a comprehensive planning and engagement process that included incorporating community input into the CAP visioning. Community engagement is essential in all planning processes and especially in relation to climate action planning. Climate action requires commitment and endorsement from community members, local government, and decisionmakers. The City's public outreach strategy included the following activities and actions:

• Kick-off announcement of the CAP update. The announcement was shared on the City's revamped CAP webpage and through social media channels.

- Local access news interviewed the Mayor and City staff about the CAP update.
- City staff engaged with an external Technical Advisory Group consisting of members from local agencies and the business community.
- Residents were surveyed at community events and at City facilities. The survey was also offered online at the CAP webpage.
- Staff distributed a business survey through Amador Valley Industries' bill inserts and the City's business e-newsletter.



• The CAP is also available for public comment and review as part of the California Environmental Quality Act (CEQA) review process.

# **Technical Advisory Group**

The City of Dublin hosted a series of meetings with a technical advisory group (TAG) to gather input and guidance related to CAP visioning. Members of the external advisory group included representatives from Livermore-Amador Valley Transit Authority (LAVTA), Bay Area Rapid Transit (BART), Dublin San Ramon Services District, California Association of Realtors, and local businesses. Staff members from these organizations were invited to participate in the CAP TAG because their organizations all support the quality of life of those who live in, work in, or visit the greater Bay Area and specifically Dublin by providing access to safe and affordable public transportation, residential housing, and commercial purchase choices.

The City of Dublin organized the TAG to receive input on potential GHG emissions reduction strategies. This input helped shape the strategies and measures included in the CAP to ensure that GHG emissions reduction goals can be achieved in a way that aligns with the goals of the Dublin community. CAP GHG emissions reduction strategies, measures, and actions are detailed in Section 6.

# **Community Feedback**

The City of Dublin conducted a climate action plan survey of its residents and businesses. Responses were gathered using paper surveys at City of Dublin public events as well as electronically through the Open City Hall application. Survey participation was encouraged on social media, the City's website, and through the local cable access television channel. A total of 147 residents ranging in age from 25 to over 65 completed some or all of the survey. In the survey, residents were asked the following 17 questions:

- 1) On which environmental area should the City focus its resources? Please rank the level of priority for each topic.
- 2) How problematic do you think each of the following climate-related hazards (increased

temperature and heat, wildfires, flooding and rainstorms, mudslide/landslide, drought, and poor air quality) will be for Dublin in the future?

- 3) How concerned are you about the impacts of climate change on the following areas: public health, homes and property values, future generations, economic vitality, and public infrastructure?
- 4) How important is it that the City of Dublin implements programs and policies that protect the environment?
- 5) What motivates you most to invest in energy upgrades for your home: environment, home comfort, saving money, indoor air quality? Please rank the reasons from lowest to highest motivation.
- 6) What have you done, or what do you want to do, to reduce energy usage at your residence in the following areas: install high-efficiency heating and air conditioning, complete home building envelope upgrades, plant shade trees, change light bulbs, install energy efficient appliances, add home insulation, add solar panels, install high efficiency window?
- 7) Would you be willing to switch to all electric appliances (i.e., on-demand hot water, electric or induction stoves, electric furnace)?
- 8) What are some of the barriers that keep you from completing energy upgrades: renting versus owning, project cost, time and effort, minimal financial or energy savings, technology concerns, safety?
- 9) What have you already done, or what do you want to do, to reduce water usage: install waterconserving faucets and showerheads, replace older toilets with a new low-flow model, adjust timers or install a new water-efficient irrigation system, replace lawns with drought-resistant plants (xeriscaping) or modify the length of showers to conserve water?
- 10) How often do you typically use the following methods to run errands and get to other nonwork destinations: personal car, Lyft/Uber, carpool, walk, bike, bus, or BART?

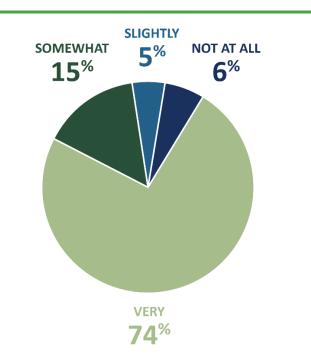


- 11) How often do you typically use the following methods to get to work: personal car, Lyft/Uber, carpool, walk, bike, bus, or BART?
- 12) If you typically walk or bike for travel, what motivates you to do so: exercise, environmental benefit, dislike driving/parking, cost savings, do not own a car, less stressful, feels safer?
- 13) If you use a privately-owned vehicle as your primary mode of transportation, what are some of the main reasons for this choice: quicker travel time, convenience, safety, public transit is not close enough to my home/work, limited infrastructure for biking or walking?
- 14) If you do not currently carpool to work, what are the reasons that prevent you from doing so?
- 15) What would convince you to ride a bicycle more often?
- 16) What would convince you to walk more often?
- 17) What is your age?

Similar survey questions were also developed for businesses in Dublin. Only two businesses responded to the survey, so no conclusions have been drawn regarding business priorities based on the survey.



Answers from 147 Dublin Residents when asked the question "How important is it that the City of Dublin implements programs and projects to protect the environment"?



# **Residential Survey Results**

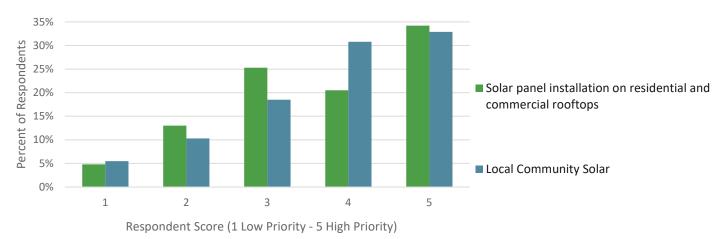
The City of Dublin used feedback from the community survey and TAG along with information from the GHG emissions inventory to develop the GHG emissions reduction strategies, measures, and actions found in this plan. Each of the five strategies and supporting measures and actions were highly ranked by the community as priorities for climate action. A summary of the responses is provided below. For complete Dublin CAP survey results, see Appendix D.

When asked how important it was that the City of Dublin implement programs and projects to protect the environment, a majority of respondents (74%) said it was very important.



### Strategy 1 – Carbon-Free Electricity

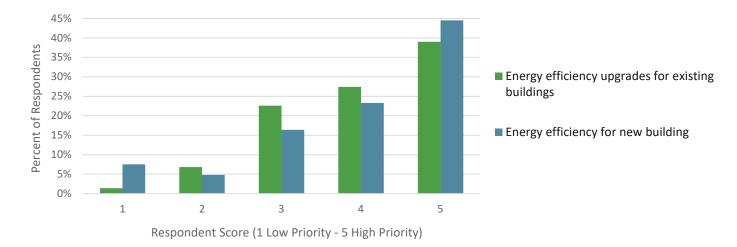
The residents of Dublin ranked their prioritization of renewable energy GHG emissions reductions in order of: 1) solar panel installation on residential and commercial rooftops; and 2) development of local community solar energy sources. Results are displayed in Figure 5-1 which show a majority of respondents ranked renewable electricity as a high priority (4 or 5).



### Figure 5-1. Carbon-Free Electricity

# Strategy 2 – Building Efficiency

The residents of Dublin ranked their prioritization of building efficiency and electrification GHG emissions reductions in order of: 1) energy efficiency improvements for new buildings and 2) energy efficiency upgrades for existing buildings. Over 40% of respondents gave building energy efficiency a high ranking. Results are displayed in Figure 5-2.



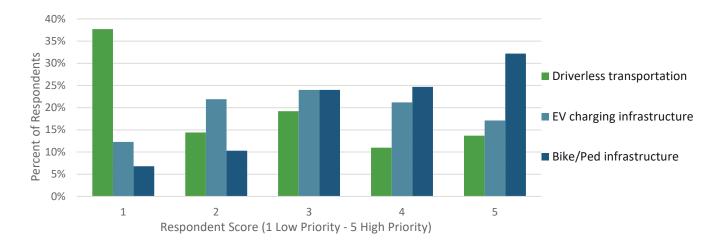
### Figure 5-2. Building Efficiency



## Strategy 3 – Sustainable Land Use and Mobility

The residents of Dublin ranked their prioritization of sustainable mobility and land use GHG emissions reductions for three topic areas: 1) bicycle/pedestrian infrastructure; 2) EV charger infrastructure; and 3) driverless transportation. Overall, driverless transit

ranked low, EV charging infrastructure averaged as a medium priority, while bicycle and pedestrian infrastructure ranked high with over 30% of respondents making it a high priority. Results are displayed in Figure 5-3.

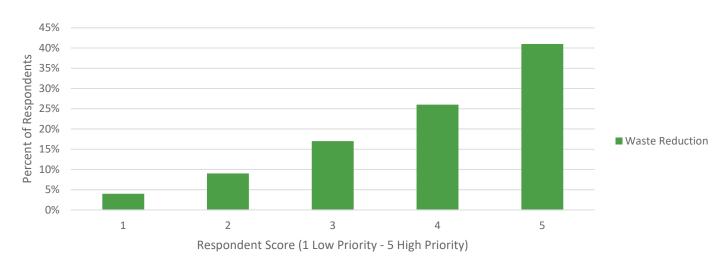


## Figure 5-3. Sustainable Land Use and Mobility

#### Strategy 4 – Materials and Waste Management

The residents of Dublin ranked their prioritization of GHG emissions reductions from waste management solely in terms of waste reduction. 41% of Dublin

residents ranked waste reduction as a high priority. Results are displayed in Figure 5-4.



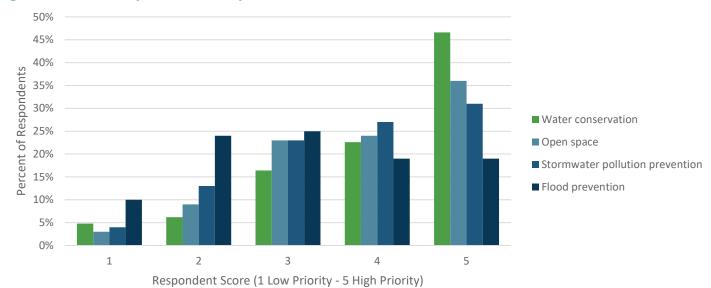
#### Figure 5-4. Materials and Waste Management



# Strategy 5 – Municipal Leadership

The residents of Dublin ranked their prioritization of GHG emissions reductions from municipal operations in order of water conservation, open space, stormwater pollution prevention, and flood prevention. Results are displayed in Figure 5-5. Water conservation ranked as a high priority for Dublin residents; however, due to its

low GHG impacts, water conservation is not explicitly covered in this CAP. Many measures included in this CAP improve water conservation as a co-benefit resulting from green infrastructure and improved soil quality.



### Figure 5-5. Municipal Leadership



# DUBLIN'S DUBLIN'S CLIMATE ACTION STRATEGY.

# 6.0 GHG Reduction Strategy and Measures

# How will Dublin Reach Carbon Neutrality?

While Dublin has made significant progress in reducing GHG emissions over time, achieving carbon neutrality by 2045 will require a focused plan of action and CAP 2030 is the next step in that plan. CAP 2030 contains five key Strategies that provide the foundation for achieving long-term decarbonization while providing co-benefits such as improved health, reduced traffic congestion, and decreased costs. Each of these strategies focus on Dublin's largest emissions sources: buildings, transportation, and waste. Together these sources make up 99% of the community GHG emissions. As the strategies are implemented by the City, they form the foundation for achieving carbon neutrality. Additional strategies and measures will need to be adopted following CAP 2030 implementation to achieve full carbon neutrality by 2045, but this is the next progression in reaching that goal.

# Strategy 1 – Renewable and Carbon-Free Energy

The keystone action of CAP 2030 is providing 100% carbon-free electricity to every electricity user in Dublin through East Bay Community Energy (EBCE). This single action will reduce community emissions by approximately 25,525 MT of CO2e in 2025 compared to the use of electricity currently provided by PG&E.<sup>1</sup> EBCE's carbon-free electricity products are on par with, or cost only slightly more than, PG&E's standard electricity rate.

Carbon-free electricity means that GHG emissions from every electricity-consuming device goes to zero. Therefore, even more GHG emissions reductions can be achieved through fuel switching – that is, changing from natural gas, gasoline, or diesel fuels that emit carbon dioxide ( $CO_2$ ) when used to electricity that is powered by solar, wind, and hydropower. Fuel switching also provides air quality and corresponding health benefits. The process of electrification is core to Dublin's achievement of carbon neutrality.

# Strategy 2 – Building Efficiency and Electrification

With carbon-free electricity, all-electric buildings mean zero carbon buildings. The City of Dublin's second strategy for reducing GHG emissions is to encourage all electric new construction in Dublin through updates to building code requirements and promotion of rebates provided by regional partners. Building all electric new buildings is cheaper than constructing buildings with both gas and electric utilities. When paired with solar panels and battery storage, all electric buildings can also be resilient to power outages or power safety shutoff events.

While it is generally easier to build new all-electric buildings, retrofitting existing buildings can also be cost effective, especially when repairs or replacement of both heating and air conditioning are required<sup>2</sup> For example, with the addition of rebates from regional

partners like EBCE and the Bay Area Regional Energy Network (BayREN)<sup>3</sup>, switching to all electric heat pump water heaters is cost competitive with gas appliance replacement. All-electric appliances will allow Dublin residents to improve indoor air quality, home comfort, and reduce operating costs. The City of Dublin will begin by promoting electrification rebates provided by partner organizations for existing buildings to encourage electric retrofits. Electrifying Dublin's existing buildings would decrease annual emissions by nearly 56,958 MT of CO<sub>2e</sub> while eliminating natural gas in new buildings would reduce emissions by 4,828 MT CO<sub>2</sub>e.

# Strategy 3 – Sustainable Mobility and Land Use

Transportation comprises over 60% of Dublin's GHG emissions and that share will continue to grow as Dublin grows. In order to help reduce vehicle miles traveled (VMT) the City will continue to improve bicycle and pedestrian infrastructure and work with regional partners including LAVTA and BART to streamline mobility and make getting around without a single-occupancy vehicle easier over time. The City will also work with micromobility and last mile transportation providers to allow the use of scooters and bike share programs in specific locations within Dublin. In addition to reducing the total miles driven, the City will also work to provide the infrastructure needed to support the adoption of electric and alternative fuel vehicles. While the City cannot control the choices made by residents on which vehicles to drive, it can ensure the infrastructure required to effectively own an alternatively fueled vehicle such as an electric vehicle (EV) is provided.

# Strategy 4 – Materials and Waste Management

Although waste makes up 4% of Dublin's overall emissions, reducing the amount of food waste and other organics in the waste stream will play a key role in achieving carbon neutrality. Diversion of organic



 $<sup>^1</sup>$  PG&E emissions factor for 2025 was estimated as 0.0798 MT CO\_2e per MWh based on a linear interpolation between current emissions factors and RPS requirements.

<sup>2</sup> https://rmi.org/insight/the-economics-of-electrifying-buildings/ 3 https://www.bayren.org/

waste from the landfill also generates compost which can be applied to soils to improve carbon sequestration and further decrease the amount of  $CO_2$  in the atmosphere. The City will also work to help divert edible food from the waste stream before it becomes waste, by working with large food waste generators to divert edible food to organizations serving those who are food insecure.

In addition, the City is committed to reducing lifecycle emissions, even those not accounted for in the State's current GHG quantification methodologies. For instance, concrete production is responsible for approximately 4% of global GHG emissions. These GHG emissions can be reduced through decreasing the amount of cement in concrete and replacing the cement with fly ash or other materials. Requiring use of low-carbon concrete will be the City's first step in addressing the lifecycle GHG emissions.

# Strategy 5 – Municipal Leadership

The City will continue to lead the way for the community and adopt policies, procedures, and operational guidelines that reflect the communitywide measures. While the City has already opted into EBCE's 100% renewable energy portfolio for all municipal electric accounts, the measures laid out in this section will serve to highlight the benefits and feasibility of the CAP 2030 measures.

# Key GHG Reduction Measures by Strategy

In each Strategy there are several measures that contribute either directly or indirectly to GHG emissions reductions. Table 6-1 highlights the quantified measures that will directly reduce GHG emissions within Dublin through 2030. GHG emissions reductions from actions in CAP 2030 will extend beyond 2030 and are the first steps towards achieving carbon neutrality by 2045, however, quantification of impacts beyond 2030 are not calculated due to the potential of unanticipated variables like new technology and legislation. The reductions quantified through 2030 show substantial progress towards the 2045 target by reducing emissions on a linear basis towards 2045. In addition to these direct quantitative measures, several indirect supportive measures are also included and described in greater detail in the respective Strategy Sections. While the supportive measures do not directly reduce GHG emissions, they are critical to the GHG emissions reduction goals established by the City.

Complete implementation of these direct quantitative and indirect supportive measures will not only allow Dublin to reach the 2025 and 2030 interim targets but will also provide substantial progress towards meeting the 2045 carbon neutrality goal through creation of the core infrastructure needed to reduce GHG emissions in the major emissions sectors. A complete description of each measure's quantification methodology and substantial evidence of the expected reductions are included in Appendix C. Over time, the City and Dublin community will continue to build on these foundational measures to further decrease emissions and reach the long-term goal of carbon neutrality by 2045.





## Table 6-1: GHG Emissions Reduction Measures Quantification (MT CO<sub>2</sub>e) by Strategy

| Measure   | 2025 GHG<br>Emissions<br>(MT CO2e) | 2030 GHG<br>Emissions<br>Reductions<br>(MT CO <sub>2</sub> e) |
|---|------------------------------------|---|
| Strategy 1 – Renewable and Carbon-Free Energy (CF)                        |                                    |   |
| Measure CF-1: Opt-Up to 100% Renewable and Carbon-Free Electricity        | 25,525                             | 20,195  |
| Strategy 2 – Building Efficiency and Electrification (EE)                 |                                    |   |
| Measure EE-1: Achieve All-Electric New Building Construction              | 2,633                              | 4,828   |
| Measure EE-4: Develop an Existing Building Electrification Plan           | 5,113                              | 14,061  |
| Strategy 3 – Sustainable Mobility and Land Use (SM)                       |                                    |   |
| Measure SM-1: Adopt an Electric Vehicle Charging Station Ordinance        | 8,537                              | 26,288  |
| Measure SM-3: Develop a Transportation Demand Management Plan             | 2,487                              | 3,928   |
| Measure SM-5: Update the Bicycle and Pedestrian Master Plan               | 336                                | 537   |
| Strategy 4 – Materials and Waste Management (MM)                          |                                    |   |
| Measure MM-1: Achieve the Organic Waste Diversion Requirements of SB 1383 | 3,427                              | 3,615   |
| Reductions Needed (Emissions Gap)   | 21,542                             | 65,090  |
| Total Measures Reduction Potential  | 48,058                             | 73,452  |

# The Many Co-benefits of Climate Action

# **Community Co-benefits**

The United Nations Intergovernmental Panel on Climate Change reports feature 'co-benefits' as a central concept of climate change mitigation<sup>4</sup>. Here, co-benefits refer to 'the positive effects that a policy or measure aimed at one objective might have on other objectives.' Many of the climate actions developed for CAP 2030 generate additional community benefits in addition to GHG emissions reduction. For example, the introduction of energy-saving equipment not only addresses the City's climate goals, but also lowers energy costs for residents and can improve indoor air quality. Other climate action co-benefits include:



Economic growth

Reduced traffic congestion



<sup>4</sup> IPCC,2007; IPCC,2014a; IPCC,2014b

# **CITY OF DUBLIN CLIMATE ACTION PLAN**

The City's CAP 2030 prioritizes solutions that make Dublin an even better place in which to live, save residents and businesses money over time. Examples and descriptions of the primary co-benefits associated with the implementation of this plan are presented below and specific references to these benefits are included for each CAP measure.

#### **Economic Growth**



Climate action can boost Dublin's economy through promoting the development of local projects, programs, and jobs and position Dublin as a

leader in next generation technologies and economic sectors.

Investments in construction, manufacturing, clean technology, green infrastructure, and civil engineering sectors provide businesses with opportunities for growth and create skilled, well-paying "green" jobs for the community. Many of the jobs in the renewable energy and energy efficiency sector are associated with installation, maintenance, and construction-making them inherently local and influential to the local economy. For example, Alameda County has implemented a professional development program called Climate Corps that provides opportunities for emerging climate protection leaders to implement climate change resilience projects with leading local governments, non-profits, and businesses while gaining valuable professional development skills.<sup>5</sup>

Studies have shown that energy efficiency investments create more jobs than those in fossil fuel industries. It is estimated that approximately eight green jobs are generated per \$1 million invested, compared to approximately three jobs per \$1 million in fossil fuel industries.<sup>6</sup> A University of California at Berkeley study

1467300981.1559153156

found that the solar industry creates 0.87 job-years (years of work) per gigawatt hours and energy efficiency creates 0.38 job years per gigawatt hours.<sup>7</sup>

Investments in climate action can also save money both up front and over time. While the purchase of an electric vehicle can be more expensive up front than fossil fuel vehicles, there are federal and State rebates as well as low-income programs to help offset this differential.8 According to a study by the University of California Transportation Center, electric vehicles have 50% to 75% of the average maintenance cost of a conventional vehicle9, and the U.S. Department of Energy reports that electric vehicles cost about half as much to fuel as traditional fossil fuel vehicles.<sup>10</sup>

Incorporating energy reduction initiatives into buildings can result in on-going cost savings for property owners. For example, using trees to shade buildings can save money on air conditioning costs. One study of a shade-tree planting project reported energy savings from cooling ranging from 7% to 47% due to passive solar shading.<sup>11</sup> Research has concluded that all-electric buildings are cheaper to build and cheaper to operate over time when compared to traditional buildings with both gas and electricity.<sup>12</sup>

Many of these saved dollars are spent in the local economy where they have economic multiplier effects. Residents have more money to spend on daily needs, education, medical care, and leisure activities, all of which feed into the local economy.

<sup>&</sup>lt;sup>5</sup> Climate Corps. A program of SEI. https://www.climate-corps.org/.

<sup>6</sup> Now Hiring: The Growth of America's Clean Energy and Sustainability Jobs: http://edfclimatecorps.org/sites/edfclimatecorps.org/files/the\_growth\_of\_ame ricas\_clean\_energy\_and\_sustainability\_jobs.pdf

<sup>&</sup>lt;sup>7</sup>Center for Resource Efficient Communities, UC-Berkeley. Methods to Assess Co-Benefits of California Climate

Investments.https://ww3.arb.ca.gov/cc/capandtrade/auctionproceeds/ucb\_lit\_r ev\_on\_jobs.pdf?\_ga=2.164452799.1014054594.1562085485-

<sup>&</sup>lt;sup>8</sup> https://cleantechnica.com/2018/05/27/analyzing-us-sales-trends-for-24shared-ice-ev-models-yes-price-range-matter/

<sup>&</sup>lt;sup>9</sup> Delucchi, Mark, Quanlu, Wang, and Daniel, Sperlin. "electric vehicles: performance, life-cycle costs, emissions, and recharging requirements." Transportation Research Part A 23A (February 1989): 255-78.

<sup>&</sup>lt;sup>10</sup> US Department of Energy,

https://www.energy.gov/eere/electricvehicles/saving-fuel-and-vehicle-costs <sup>11</sup> U.S. Environmental Protection Agency. Heat Island Reduction Activities. (2008)

<sup>&</sup>lt;sup>12</sup> https://localenergycodes.com/content/2019-local-energy-ordinances/



### **Reduced Traffic Congestion**



If the transportation measures included in this plan are fully implemented, there will be an added benefit of reduced traffic congestion. Measures designed to increase biking, walking, bicycle and scooter sharing, and use of public transportation have the goal of taking single-occcupancy vehicles off the road

and providing Dublin residents and visitors expanded options besides using personal vehicles.

Using 30 miles as the average car trip, it was estimated that achieving the Plan's 2025 vehicle miles traveled (VMT) reduction goal could reduce 189,497 car trips per year (2%). Achieving the 2030 VMT reduction goal of 9.6 Million VMT, provides a reduction of 386,239 trips (3%). Table 6-2 shows the potential number of trips reduced based on five different average trip scenarios.

## Table 6-2: VMT Reduction Goals and the Traffic Reduction Co-benefit

| Average Trip Distance      | 20 Miles/Trip | 25 Miles/Trip | 30 Miles/Trip | 35 Miles/Trip | 40 Miles/Trip |
|----------------------------|---------------|---------------|---------------|---------------|---------------|
| Car trip reductions (2025) | 236,872       | 189,497       | 157,914       | 135,355       | 118,436       |
| Car trip reductions (2030) | 482,799       | 386,239       | 321,866       | 275,885       | 241,399       |





#### Improved Public Health



Actions to mitigate climate change can also improve a variety of health and safety conditions, including risk of illness, access to healthy foods, physical fitness levels, and mental wellbeing.

Air monitoring data show that over 90% of Californians breathe unhealthy levels of one or more air pollutants during some part of the year.<sup>13</sup> Exposure to these pollutants can increase the risk of cardiovascular disease, chronic and acute respiratory illnesses, cancer, and preterm births. Research suggests that living within 50 to 200 meters of major roadways can trigger asthma symptoms among adults and children. Climate actions aimed at reducing traffic congestion, taking vehicles off the road, and electrifying or otherwise decarbonizing the remaining cars will lessen the potential for health risks for residents located near busy roads.

Actions like building bicycle lanes that encourage active modes of transportation such as biking and walking can reduce obesity and non-communicable disease risk, diminish public health service costs, and health.<sup>14</sup> Green stormwater improve mental infrastructure (GSI) projects have been shown to increase recreational opportunities and physical fitness exercises such as dog walking or jogging.<sup>15</sup> GSI can also be used to mitigate the urban heat island effect, lessening potential heat related health risks to sensitive populations.<sup>16</sup> Urban heat islands occur when cities build more homes, businesses and infrastructure. The materials used to construct buildings and roads retain heat, which can lead to increased localized temperatures. Installing GSI features, trees, and other landscape helps to keep the urban environment cooler.

Denser, transit-oriented neighborhoods can be designed to increase local access to essential services and nutritious food sources. Increased intake of more climate-friendly, plant-based, and whole-grain foods can reduce the risk of chronic diseases.

Actions that reduce the use of fossil fuels in the home also provide health benefits. The California Air Resources Board reports that cooking on gas stoves has been associated with increased respiratory disease especially for young children, people with asthma, and people with heart or lung disease.<sup>17</sup> According to research by Lawrence Berkeley National Laboratory, the use of natural gas appliances in the home without ventilation can cause the air inside a home to exceed the outdoor air quality standards for nitrogen oxides.<sup>18</sup> Switching from gas appliances to electric home heating and cooling, water heating, and induction cook tops can eliminate this health risk.

These and other health benefits from climate action result in tangible economic benefits. Studies have shown that the monetary benefit of climate action is valued between 50-380 per metric ton of carbon dioxide equivalent emissions. With that in mind, all but the most expensive climate mitigation action is either cost-saving over time or has a lower cost per metric ton of carbon dioxide equivalent emissions than what is listed in Table 6-1.<sup>19</sup>

#### Healthier Ecosystems



Actions to mitigate and adapt to climate change can also support more healthy and functional ecosystems. Healthier ecosystems provide a variety of public benefits including reducing pollutants in local creeks, providing species

habitat, improving air and water quality, reducing flood

<sup>18</sup> Julie Chao, Pollution in the Home: Kitchens Can Produce Hazardous Levels of Indoor

https://newscenter.lbl.gov/2013/07/23/kitchens-can-produce-hazardous-levels-

Pollutants, Berkeley Lab News Center, July 23, 2014,

<sup>&</sup>lt;sup>13</sup> California Air Resources Board. ARB Fact Sheet: Air Pollution and Health. https://ww3.arb.ca.gov/research/health/fs/fs1/fs1.htm

<sup>14</sup> https://www.vtpi.org/nmt-tdm.pdf

<sup>&</sup>lt;sup>15</sup> http://www.urbanwaterslearningnetwork.org/resources/green-infrastructureand-health-guide-jan-2019/

<sup>16</sup> https://www.epa.gov/green-infrastructure/reduce-urban-heat-island-effect

<sup>17</sup> California Air Resources Board. Combustion Pollutants.

https://ww3.arb.ca.gov/research/indoor/combustion.htm.

of-indoor-pollutants/. <sup>19</sup> Andy Haines, Health co-benefits of climate action, The Lancet Planetary

Health, Volume 1, Issue 1, 2017, Pages 4-5, ISSN 2542-5196,

https://doi.org/10.1016/S2542-5196(17)30003-7. <sup>20</sup> https://www.mckinsey.com/business-functions/sustainability/our-insights/a-

cost-curve-for-greenhouse-gas-reduction



risk, and providing areas for human recreation and respite.

For example, tree planting will not only sequester carbon dioxide thereby reducing Dublin's carbon footprint but planting native species will also help support ecosystem functionality and provide habitat and/or food sources for native animals. Increasing water infiltration will improve local water stores and reduce pollution in waterways, improving those habitats. Additionally, applying compost, mulch, and other organics to the soil can both restore and improve soil health as well as decrease the need for synthetic fertilizers and pesticides.<sup>21</sup>

#### Robust Landscapes



Climate actions can enhance the beauty and enjoyment of community spaces. For instance, green stormwater infrastructure projects that are designed to clean stormwater runoff by mimicking

nature, also improve community livability by providing additional green space and offering enhanced recreational opportunities. The positive impact of increased greenery is reflected in property values: people are willing to pay more to live in places with greenery. One study reported a 2% to 10% increase in property values for properties with new street tree plantings.<sup>22</sup> Properly planted mature trees also help to reduce noise pollution by deflecting or absorbing sound. In King County, Washington, property values were three and a half to 5% higher for properties next to green stormwater infrastructure. Interaction with natural landscapes has also been linked to numerous mental health benefits.<sup>23</sup>

#### Carbon Sequestration



Many actions that address climate vulnerability and risk also help reverse GHG emissions by absorbing  $CO_2$  from the atmosphere. Shade trees absorb, or sequester, carbon dioxide from the atmosphere through photosynthesis. Studies show that a young tree sapling can sequester anywhere from 1.0 to 1.3

pounds of carbon each year, while a 50-year-old tree can sequester over 100 pounds annually.<sup>24</sup>

#### **Enhanced Resilience**



Actions that address climate change can bolster the ability of Dublin residents and businesses to recover quickly from or reduce the impact of other hazards such as extreme heat

days or localized flooding. For example, planting trees for carbon sequestration and increasing tree canopy cover can help keep streets and neighborhoods cooler. Covering 40% of a city street can counteract the warming effects from asphalt.<sup>25</sup> The value of canopy cover and cooler streets will continue to be important for Dublin. Current models project an increase in extreme heat days over 101°F from about four per year to at least 22 by 2099. If GHG emissions do not decrease to net zero by 2045, the number of extreme heat days is projected to increase to over 33 extreme heat days per year. Utilizing programs like green stormwater infrastructure to provide cooling, water management, and carbon sequestration opportunities is one example of increased resilience.

Climate actions can also enhance community cohesion—the networks of formal and informal relationships among neighbors that foster a mutually supporting human environment.<sup>26 27</sup> One study found

<sup>&</sup>lt;sup>21</sup> http://ceventura.ucanr.edu/Com\_Ag/Subtropical/Citrus/Weeds/ An\_Alternative\_Weed\_Control\_-\_Mulching\_/

<sup>&</sup>lt;sup>22</sup> Wachter, S. and G. Wong. (2008). What is a Tree Worth? Green-City Strategies, Signaling and Housing Prices. Real Estate Economics. 36(2): 213-239. Cited at: https://www.cnt.org/sites/default/files/publications/CNT\_Value-of-Green-Infrastructure.pdf.

 <sup>&</sup>lt;sup>23</sup> Gregory N. Bratman, et.al, "Nature and mental health: An ecosystem service perspective," Science Advances 5, no. 7 (2019), doi: 10.1126/sciadv.aax0903.
 <sup>24</sup> US Department of Energy. Method for Calculating Carbon Sequestration by Trees in Urban and Suburban Settings.

https://www3.epa.gov/climatechange/Downloads/method-calculating-carbon-sequestration-trees-urban-and-suburban-settings.pdf

<sup>&</sup>lt;sup>25</sup> Sara Chodosh, Here's how many trees are required to cool a street; An equation for throwing shade. Popular Science. March 25, 2019

https://www.popsci.com/shade-city-streets-trees-cooling/

<sup>&</sup>lt;sup>26</sup> https://depts.washington.edu/hhwb/Thm\_Community.html

<sup>&</sup>lt;sup>27</sup> https://www.researchgate.net/publication/328539965\_Climate\_Action\_Cobenefits\_and\_Integrated\_Community\_Planning\_Uncovering\_the\_Synergies\_and \_Trade-Offs



that even small amounts of greenery helped inner city residents have safer, less violent domestic environments.<sup>28</sup> Another study showed a direct link between increased vegetation and use of outdoor spaces for social activity.<sup>29</sup> A survey measuring the social capital of residents in a wide range of neighborhood types found a positive relationship between neighborhood walkability and knowing neighbors, participating politically, trusting others, and being socially engaged.<sup>30</sup> A socially engaged community is one in which people are more willing to look out for each other and support each other in time of need.<sup>31</sup>

### **Equity and Inclusion**



Community-driven climate resilience planning approaches have the potential to increase equity and inclusion in both the resilience planning process as well as the longterm outcomes it achieves by ensuring

that solutions are place-based, democratic, and interconnected to address the interlocking nature of challenges communities face. Low-income populations stand to benefit the most from energy efficiency, retrofit, and weatherization programs. They are more likely to live in older, less energy efficient housing that is potentially unhealthy and does not provide as much occupant comfort. Not only do inefficient buildings increase energy bills, a disproportionately higher amount of income is spent on energy expenditures.<sup>32</sup> Improved household energy efficiency can reduce utility bills, providing extra resources for food, education, health care, and other health-improving expenditures.<sup>33</sup>

#### **Community Leadership and Partnerships**



Although cities cover less than 2% of Earth's surface, urban areas account for 71% to 76% of the world's carbon emissions from

energy.<sup>34</sup> As early adopters of low-carbon products and services (products and services which generate low to no GHG emissions during their creation, transport, use, and disposal), cities can provide crucial market support for innovative solutions and entrepreneurial business opportunities. Cities also manage highly visible public spaces, presenting an opportunity to lead by example. The C40 Cities Initiative<sup>35</sup> notes that "what our cities do individually and in unison to address climate change can set the agenda for communities and governments everywhere." <sup>36</sup>

Climate actions can also build and foster partnerships that benefit other facets of a city organization. Partnerships create a powerful force for higher-level advocacy and increase the efficacy of an individual city's climate actions. During the development of CAP 2030, the City worked with LAVTA, BART, and local businesses to discuss ideas, hurdles, and opportunities within the community. The City will continue its collaboration with these and other stakeholders to increase the effectiveness of climate action within Dublin.

<sup>30</sup> Leyden, K. M. 2003. Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. Am. J. Public Health 93: 1546–1551.

<sup>31</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3780560/

<sup>36</sup> C40 Cities. https://www.c40.org/ending-climate-change-begins-in-the-city.

<sup>&</sup>lt;sup>28</sup> Kuo, F.E. and W.C. Sullivan (2001). Aggression and violence in the inner city: Impacts of environment via mental fatigue. Environment & Behavior. 33(4): 543-571.

<sup>&</sup>lt;sup>29</sup> Sullivan, W., F. Kuo and S. Depooter. (2004). The Fruit of Urban Nature: Vital Neighborhood Spaces. Environment and Behavior. 36:678.

<sup>&</sup>lt;sup>32</sup> CEC (2010). "2009 California Residential Appliance Saturation Study." California Energy Commission.

 <sup>&</sup>lt;sup>33</sup> Shonkoff, S. B., R. Morello-Frosch, M. Pastor, J. Sadd. (2009). "Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature." Cal-EPA Climate Action Team Report.
 <sup>34</sup> United Nations. Climate Change. https://unhabitat.org/urbanthemes/climate-change/.

<sup>&</sup>lt;sup>35</sup> C40 is a network of the world's megacities committed to addressing climate change. C40 supports cities to collaborate effectively, share knowledge and drive meaningful, measurable and sustainable action on climate change



# **Cutting-Edge Technologies**



Actions to mitigate climate change can entail utilizing cutting-edge technologies like building electrification, battery storage, and electric and self-driving vehicles.

Actions that encourage use of cutting-edge technologies within buildings, transit, and vehicles can both reduce GHG emissions and provide convenience and time-saving opportunities to Dublin residents and businesses. Fully electrified and modern homes can optimize heating and cooling systems to save money on utility bills, and with the City's leading work on autonomous vehicles, driving may soon be a thing of the past.

# Lifecycle Costs

For each GHG reduction measure, an estimated cost is provided. Costs are broken out into community costs and City costs. Community costs are an estimate of how much it will cost an average resident, business, or developer to implement the measure where applicable. City costs are an estimate of costs related to staff time and consultant services, as well as costs related to procurement in order to implement a measure. City costs would be appropriated through the City of Dublin budget process, from grants, or from other revenue sources managed by the City. The estimated cost provided for each measure includes all the actions in that measure and incorporates total costs of the measure. Calculation lifecycle methodologies for community costs can be found in the Technical Appendix. Cost estimates can vary greatly depending on the specific situation. Section 7 includes additional information on grants, funding, and financing options to improve the cost effectiveness of the measures and actions. Each measure cost is broken down into four ranges:



No Cost - \$0 or net savings



Low Cost - \$1 to \$10,000

\$ \$

Moderate Cost - \$10,000 - \$100,000



High Cost - \$100,000+

# Co-benefits and Estimated Implementation Costs of Dublin CAP 2030 GHG Reduction Measures

The co-benefits and estimated costs associated with implementation of each measure are depicted with icons and a description of how they apply to the measures in CAP 2030. A summary of the co-benefits, community costs, and City costs by measure is included in Table 6-3 below. Greater detail on costs are included in each measure section. Actions included in the CAP that are required by previously adopted City policy or programs or by State mandates are listed as "no cost" items because funding of program implementation has or will be included in those separate municipal program budgets.



# Table 6-3: Measure Co-benefits and Implementation Costs

| Renewable and Carbon-Free Ene  | rgy   |   |
|--|---|---|
| Measure CF-1: Opt-Up to 100% R   | enewable and Carbon-Free Electrici  | ty  |
| Co-Benefits:   | Community Costs:  | City Costs:   |
| <ul> <li>Economic Growth</li> <li>Improved Public Health</li> <li>Cutting-Edge Technologies</li> </ul>   | <ul> <li>Average annual residential electricity costs<sup>37</sup> increase:</li> <li>\$8 for carbon-free electricity</li> <li>\$48 for 100% carbon-free and renewable electricity</li> </ul> | One-time costs:<br>• \$3,000- \$10,000 staff time                                   |
| CF-2. Develop a Renewable Reso   | urce Buildout Plan  |   |
| Co-Benefits:   | Community Costs:  | City Costs:   |
| <ul> <li>Economic Growth</li> <li>Improved Public Health</li> <li>Enhanced Resilience</li> <li>Community Leadership and<br/>Partnerships</li> <li>Cutting-Edge Technologies</li> </ul> | No cost.  | One-time costs:<br>• \$8,000- \$12,000 staff time plus<br>\$75,000 consultant costs |
| Building Efficiency and Electrific   | cation  |   |
| EE-1. Achieve All-Electric New E   | Building Construction   |   |
| Co-Benefits:   | Community Costs:  | City Costs:   |
| 💽 💎 🕄 🏠 🍹  | \$  | <b>\$</b>   |
| <ul> <li>Economic Growth</li> <li>Improved Public Health</li> <li>Enhanced Resilience</li> <li>Equity and Inclusion</li> <li>Cutting-Edge Technologies</li> </ul>                      | All-electric construction is less<br>expensive both to construct and<br>operate over the lifetime of a<br>building.   | One-time costs:<br>• \$6,000-\$10,000 staff time                                    |

 $<sup>^{37}\</sup> https://ebce.org/wp-content/uploads/EBCE-Web-Comparison-July2019\_FINAL090619.pdf$ 



| ng Energy Disclosure Program  |  |
|---|--|
| Community Costs:  | City Costs:  |
| Energy reporting is estimated to<br>take about 2 hours of time to report<br>annually.   | One-time costs:<br>• \$5,000 staff time<br>On-going annual costs:<br>• \$2,000- \$4,000  |
| Permit Requirements   |  |
| Community Costs:  | City Costs:  |
| Streamlining the permit process<br>should ultimately save costs as it will<br>simplify the permit application<br>process and associated time. | <ul><li>One-time costs:</li><li>\$7,000 to \$10,000 staff time</li></ul>   |
| ng Retrofit Plan  |  |
| Community Costs:  | City Costs:  |
| Since this measure is voluntary, this cost estimate assumes only low and no cost-effective projects will occur.                               | One-time costs:<br>• \$4,000 to \$6,000 staff time<br>Annual costs:<br>• \$5,000   |
| e   |  |
| harging Station Ordinance   |  |
| Community Costs:  | City Costs:<br>S S S<br>One-time costs:<br>• \$8,000-\$14,000 staff time   |
|   | Community Costs:   Streamlining the permit process   should ultimately save costs as it will   simplify the permit application   process and associated time.   no cost-effective projects will occur.   Since this measure is voluntary, this   cost estimate assumes only low and   no cost-effective projects will occur. |



| SM-2. Develop an EV Infrastruct   | ure Plan  |   |
|---|---|---|
| Co-Benefits:  | Community Costs:  | City Costs:   |
| <ul> <li>Economic Growth</li> <li>Improved Public Health</li> <li>Cutting-Edge Technologies</li> </ul>                                | Community costs will result from<br>use of the EV charging stations but<br>City EV charging station rates are<br>comparable to other publicly<br>available charging station fees and<br>are intended as cost recovery only. | <ul> <li>One-time costs:</li> <li>\$8,000 to \$12,000 staff time plus \$30,000 consultant costs</li> </ul>  |
| SM-3. Develop a Transportation  | Demand Management Plan  |   |
| Co-Benefits:  | Community Costs:  | City Costs:   |
| <ul> <li>Economic Growth</li> <li>Improved Public Health</li> <li>Equity and Inclusion</li> <li>Cutting-Edge Technologies</li> </ul>  | No cost to the community for plan development.  | <ul> <li>One-time costs:</li> <li>\$15,000-\$25,000 staff costs plus</li> <li>\$200,000 consultant costs</li> </ul>   |
| SM-4. Develop a Citywide Parkir   | ng Management Plan  |   |
| Co-Benefits:  | Community Costs:  | City Costs:   |
| <ul><li>Reduced Traffic Congestion</li><li>Improved Public Health</li></ul>   | No cost to the community for plan development.  | <ul> <li>One-time costs:</li> <li>\$7,000-\$15,000 staff time plus<br/>\$200,000-\$600,000 consultant<br/>costs depending on the scope of<br/>the plan.</li> </ul>  |
| SM-5. Update the City's Bicycle   | and Pedestrian Master Plan  |   |
| Co-Benefits:  | Community Costs:  | City Costs:   |
| <ul> <li>Economic Growth</li> <li>Reduced Traffic Congestion</li> <li>Improved Public Health</li> <li>Equity and Inclusion</li> </ul> | No cost to the community for plan<br>development.   | Staff time and consultant services<br>have already been allocated for this<br>effort and are funded through<br>Transportation Development Act<br>Article 3 funds, Measure B funds,<br>and Measure BB funds. |



| SM-6. Continue to Prioritize Transit-Oriented Development   |   |   |  |  |
|---|---|---|--|--|
| Co-Benefits:  | Community Costs:  | City Costs:   |  |  |
| <ul> <li>Economic Growth</li> <li>Reduced Traffic Congestion</li> <li>Improved Public Health</li> <li>Equity and Inclusion</li> </ul> | No cost.  | No additional costs will be incurred<br>as this measure supports<br>continuation of the City's on-going<br>prioritization of transit-oriented<br>development. |  |  |
| SM-7. Develop a Built Environmen  | nt That Prioritizes Active Mobility   |   |  |  |
| Co-Benefits:  | Community Costs:  | City Costs:   |  |  |
| <ul><li>Economic Growth</li><li>Improved Public Health</li><li>Robust Landscapes</li></ul>  | The cost to construct buildings that<br>prioritize active mobility is not<br>anticipated to increase. | <ul> <li>One-time costs:</li> <li>\$5,000 to \$10,000 staff time plus \$25,000 to \$40,000 consultant time.</li> </ul>  |  |  |
| Materials and Waste Management  |   |   |  |  |
| MM-1. Achieve Waste Diversion R   | equirements of SB 1383  |   |  |  |
| Co-Benefits:  | Community Costs:  | City Costs:   |  |  |
| <ul> <li>Healthier Ecosystems</li> <li>Carbon Sequestration</li> <li>Community Leadership and<br/>Partnership</li> </ul>              | <ul> <li>Annual costs:</li> <li>\$17 per resident<sup>38</sup></li> <li>\$662 per business</li> </ul> | Costs are and will be accounted for<br>in other program budgets.  |  |  |
| MM-2. Reduce Embodied Emissions Associated with Building Materials  |   |   |  |  |
| Co-Benefits:  | Community Costs:  | City Costs:   |  |  |
| <ul> <li>Carbon Sequestration</li> <li>Community Leadership and<br/>Partnerships</li> <li>Cutting-Edge Technologies</li> </ul>        | No cost.  | One-time costs:<br>• \$10,000-\$15,000  |  |  |

<sup>&</sup>lt;sup>38</sup> https://www.calrecycle.ca.gov/docs/cr/laws/rulemaking/slcp/impactassessment.pdf



# Municipal Leadership

| ML-1. 100% Renewable Electricity                              | for Municipal Buildings and Opera | tions   |
|---|-----------------------------------|---|
| Co-Benefits:  | Community Costs:                  | City Costs:   |
|   | <b>\$</b>                         | <b>\$\$\$</b>   |
| • Community Leadership and Partnerships                       | Not Applicable                    | Annual cost increase for electricity:<br>approximately \$25,000 to \$30,000 |
| Cutting-Edge Technologies                                     |                                   |   |
| ML-2. Reduce Municipal Employe                                | ee Commute GHG Emissions          |   |
| Co-Benefits:  | Community Costs:                  | City Costs:   |
| \$\$ <b>\}</b>  | <b>\$</b>                         | <b>\$\$</b>   |
| Reduced Traffic Congestion                                    | Not Applicable                    | One-time costs:   |
| Improved Public Health  |                                   | • \$25,000-\$55,000 in staff and consultant time for TDM plan               |
| Community Leadership and                                      |                                   | Annual costs:   |
| Partnerships  |                                   | • \$200 per employee  |
| ML-3. Electrify Municipal Vehicle                             | Fleet and Equipment               |   |
| Co-Benefits:  | Community Costs:                  | City Costs:   |
| 💽 💎 🌠 🍟   | \$                                | \$\$  |
| Economic Growth   | Not Applicable                    | One-time costs:   |
| Improved Public Health  |                                   | • \$7,000-\$12,000 staff time   |
| • Community Leadership and Partnerships                       |                                   |   |
| Cutting-Edge Technologies                                     |                                   |   |
| ML-4. Total Cost of Ownership an<br>for Proposals             | d Life-Cycle Analysis of GHG impa | acts in Municipal Project Request   |
| Co-Benefits:  | Community Costs:                  | City Costs:   |
| ···· 🏹  | \$                                | <b>\$ \$ \$</b>   |
| Economic Growth   | Not Applicable                    | One-time costs:   |
| <ul> <li>Community Leadership and<br/>Partnerships</li> </ul> |                                   | • \$10,000-\$15,000 staff costs   |
| Cutting-Edge Technologies                                     |                                   |   |



| ML-5. Promote Municipal Aware  | ness of Sustainable Goods and | d Service  |
|--|-------------------------------|--|
| Co-Benefits:   | Community Costs:              | City Costs:  |
| <ul> <li>Economic Growth</li> <li>Community Leadership and<br/>Partnerships</li> </ul>   | Not Applicable                | <ul> <li>One-time costs:</li> <li>\$5,000-\$10,000 staff costs</li> <li>Annual costs for monitoring &amp; implementation:</li> <li>\$3,000-\$10,000</li> </ul> |
| ML-6. Enhance Municipal Carbo  | n Sequestration Opportunitie  | s  |
| Co-Benefits:   | Community Costs:              | City Costs:  |
| <ul> <li>Robust Landscapes</li> <li>Carbon Sequestration</li> <li>Enhanced Resilience</li> <li>Community Leadership and<br/>Partnerships</li> </ul>  | Not Applicable                | <ul> <li>One-time costs:</li> <li>\$5,000-\$10,000 staff costs plus<br/>\$25,000 to \$30,000 contractor<br/>costs</li> </ul>                                   |
| ML-7. Implement the Green Store  | nwater Infrastructure Plan    |  |
| Co-Benefits:   | Community Costs:              | City Costs:  |
| <ul> <li>Economic Growth</li> <li>Healthier Ecosystems</li> <li>Robust Landscapes</li> <li>Carbon Sequestration</li> <li>Enhanced Resilience</li> <li>Community Leadership and<br/>Partnerships</li> </ul> | Not Applicable                | Costs are and will be accounted for<br>in other program budgets.   |



# How to Read the Measures Section



- 1..... Measures describe the high-level goals and ambitions for GHG reduction
- 2...... Metrics set the quantifiable values for measuring implementation success.
- **3**...... Reduction potential is the total estimated reduction in GHG emissions.
- 4...... Measure actions are the specific steps to implementing each measure.
- 5...... Co-benefits are the additional benefits beyond GHG emissions that Dublin will see due to implementing the measure.

- 6...... Community costs are an estimate of how much it will cost the residents, businesses, and developers of Dublin to implement the measure.
- 7..... City costs are an estimate of how much it will cost the City to implement the measure.
- 8...... Each measure will include a narrative explaining the reasoning behind the measure, the benefits, and notes on implementation.



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# Section 6.1: Strategy 1: 100% Renewable and Carbon-Free Electricity

The City of Dublin will default communitywide accounts to 100% carbon-free electricity and develop a renewable resource buildout plan.

# Quality of Life

East Bay Community Energy (EBCE), the local Community Choice Aggregation (CCA) program provides a cost effective, carbon-free electricity product that is available to most Alameda County power customers.<sup>1</sup> Community Choice Aggregation programs allow local governments to procure power on behalf of their businesses, residents, and municipal accounts from an alternative supplier while still receiving transmission and distribution service from the investor owned utility (which is Pacific Gas & Electric in Northern California).

The City joined the East Bay Community Energy (EBCE) CCA in 2016 and residents, businesses, and municipal accounts began receiving greener electricity provided by EBCE's Bright Choice energy portfolio in 2018. The City opted its municipal accounts to the Renewable 100 energy portfolio in 2019. Increasing the commitment to 100% renewable and carbon-free electricity maximizes the GHG emissions reduction benefits of building electrification, helps promote local energy resources, and expands the potential for local green jobs.

<sup>1</sup> https://ebce.org/residents/

# **GHG Emissions Reduction Impacts**

Carbon-free electricity is the key step towards achieving Dublin's carbon-free future. By defaulting all electricity accounts to EBCE's renewable and carbon-free energy offering, GHG emissions communitywide will decrease by 25,525 metric tons of CO<sub>2</sub>e. Once Dublin's communitywide electricity is carbon-free, any energy that is currently powered by natural gas in buildings and transportation that is converted to electric power becomes carbon-free as well.

# **GHG Emissions Reduction Measures**

Measure CF-1: Opt-Up to 100% Renewable and Carbon-Free Electricity

Measure CF-2: Develop a Renewable Resource Buildout Plan

6.1-1

# Measure CF-1: Opt-Up to 100% Renewable and Carbon-Free Electricity

The City of Dublin will set 100% renewable and carbon-free electricity as the default electricity for all Dublin customers served by East Bay Community Energy to unlock health and GHG emissions reduction benefits associated with carbon-free electricity.

Adoption of 100% renewable and carbon-free electricity through EBCE will result in homes and businesses in Dublin running on 100% GHG emissions free electricity at a price slightly higher than PG&E's electricity rate. It is estimated that Dublin's communitywide electricity use will increase to approximately 400 million kilowatt hours by 2045. Therefore, to meet the long-term goal of carbon neutrality by 2045, the City will convert community electricity accounts to EBCE's 100% renewable and carbon-free electricity power portfolio. This action will have the single largest GHG emissions reductions of all actions outlined in CAP 2030.

# **Key Target Metrics**

For all Dublin community accounts, set the default electricity source to EBCE's 100% carbon-free power portfolio by 2022.

# **GHG Emissions Reduction Potential**

**25,525** MT CO<sub>2</sub>e in the year 2022

**20,195** MT CO<sub>2</sub>e in the year 2030

MT= Metric Tons; CO<sub>2</sub>e= carbon dioxide equivalents



# Measure CF-1 Actions

- 1 Conduct community outreach on benefits of opting into 100% renewable and carbon-free energy.
- 2 Draft a resolution to join EBCE's 100% carbonfree electricity program for City Council's consideration.
- 3 Provide ongoing education and support to community regarding benefits.
- 4 Evaluate opt-out rates and calculate GHG emissions reductions.



# Community Cost: \$\$

Opting-up the Dublin community to EBCE's Renewable 100 power portfolio (100% carbon-free and 100% renewable energy) will result in a cost increase of a little over 0.01\$ per kWh more than EBCE's Bright Choice power portfolio which is Dublin's current default electricity product. For the average household, this equates to an annual increase in electricity costs of approximately \$48 per year. At the time of this plan's adoption, EBCE's board agreed to consider a future electricity product that is carbon-free but not renewable. Exact product and cost are currently unknown. All available carbon-free electricity options and costs will be brought to City Council for consideration.

# City Cost: \$\$

All Dublin municipal accounts currently subscribe to EBCE's Renewable 100 electricity. This action will have no additional impact on the City's electricity bill. Some one-time staff time will be required for community outreach on the communitywide opt-up process, collaboration with EBCE, and drafting a Resolution for City Council consideration. Staff time costs are estimated between \$3,000 and \$10,000 depending on the amount of outreach conducted.



# Benefits of Utilizing 100% Renewable and Carbon-Free Community Electricity

Bringing 100% renewable and carbon-free electricity to the Dublin community via EBCE will ensure that electricity is sourced from carbon-free sources including wind and solar. Utilizing carbon-free electricity will have several positive co-benefits for Dublin. Although Dublin's power can be sourced from as far away as Arizona and Nevada, the community's commitment to carbon-free electricity will decrease demand for fossil fuel power plants which have negative air quality and health impacts at a regional scale.

# Measure CF-2: Develop a Renewable Resource Buildout Plan

The City will leverage State and local funding and partnerships to develop local community solar projects in Dublin and investigate development of micro-grids to improve the resilience of the local electricity infrastructure.

As Dublin moves towards an all-electric future, increasing the resilience and dependability of the electrical grid will become an increasing priority. By developing local solar resources through partnerships with EBCE and other state and local stakeholders, the City will facilitate production of additional renewable energy to the grid as well as encourage local green jobs. Identifying opportunities for and implementation of micro-grids will enable uninterrupted power service during times of grid instability and public safety power shutoffs. While this measure does not provide direct GHG emissions reduction, the renewable resources buildout plan will identify the locations, infrastructure needs, partners, and funding sources to develop these resources and increase the resilience of the community.

# **Key Target Metrics**

Develop the Renewable Resource Buildout Plan Complete a renewable energy project within Dublin

# **GHG Emissions Reduction Potential**

Supportive



# **Measure CF-2 Actions**

- 1 Coordinate with EBCE to conduct outreach to key stakeholders on renewable resources development opportunities and hurdles.
- 2 In coordination with EBCE, develop the Renewable Resource Buildout Plan.
- 3 Conduct a pilot renewable energy or electricity resilience project.
- 4 Evaluate benefits and costs of pilot project, refine implementation strategy if needed, and continue implementation.



# Community Cost: \$

There are no anticipated costs to the community.

# City Cost: **\$ \$**

The Renewable Resource Buildout Plan will require hiring a consultant to develop a plan costing roughly \$75,000. One-time costs for staff time to conduct outreach and work with a consultant to develop a renewable resources plan will range from \$8,000-\$12,000.



# Benefits of Developing a Renewable Resource Plan

Facilitating development of local, renewable energy resources will allow Dublin to achieve more of the cobenefits associated with the switch to renewable energy. Not only will health benefits be gained regionally from less fossil fuel combustion but building renewable energy in Dublin will provide green jobs for local workers and expand partnerships with local and regional stakeholders that support community solar. The development of micro-grids will also provide Dublin with enhanced reliability and resilience to help counteract the impacts of grid disruptions from public safety power shutoffs and other disasters. These actions will help the City future proof the energy grid and provide long-term low-cost and clean electricity for the community.



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# Section 6.2: Strategy 2: Building Efficiency and Electrification

The City of Dublin will move towards increased energy efficiency and electrification of new and existing buildings to gain the associated health, cost savings, and GHG emissions reduction benefits.

#### **Quality of Life**

Limiting natural gas use in Dublin can significantly improve air quality in homes and businesses. Recent studies have found links between natural gas stoves, nitrogen dioxide emissions and higher occurrences of asthma<sup>1</sup>. Improving energy efficiency of current homes through appliance upgrades, retrofits, increased insulation, and air sealing minimizes temperature extremes, poor air quality, and dampness. These improvements support healthy homes by helping to reduce asthma, allergies, stroke, heart disease, and lung disease<sup>2</sup>.

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.277.9376&rep=rep1&type=pdf
 https://www.energy.gov/energysaver/weatherize/air-sealing-your-home

#### **GHG Emissions Reduction Impacts**

Building natural gas use (residential and non-residential) makes up 18% of Dublin's GHG emissions. In order to begin working toward the City's 2030 GHG emissions reduction goals and a carbon neutral future, the direct GHG emissions associated with natural gas use in new and existing buildings must be phased out while efficient use of energy will minimize the grid impacts of large shifts from natural gas to electricity.

#### **GHG Emissions Reduction Measures**

the Supplier

Measure EE-1: Achieve All-Electric New Building Construction

Measure EE-2: Implement the State Building Energy Disclosure Program

Measure EE-3: Streamline Battery Storage Permit Requirements

Measure EE-4: Develop an Existing Building Electrification Plan

# Measure EE-1: Achieve All-Electric New Building Construction

Adopt an all-electric building reach code for new construction to reduce natural gas use and limit the development of new gas infrastructure in the City of Dublin.

Coupled with the communitywide 100% carbon-free energy of Measure CF-1, new building electrification results in homes and businesses that emit no GHGs.

It is estimated that if an electric building reach code is not adopted, new construction would add over three million therms of natural gas use in Dublin by 2045. Developing all-electric buildings has been found to be less expensive to construct and operate in Dublin's climate zone compared to constructing residential and commercial buildings with both gas and electric utilities, especially when paired with solar photovoltaic and solar thermal installations, which are not yet mandatory under Title 24 of the California Building Code.

In order to meet the long-term goal of carbon neutrality by 2045, the direct GHG emissions from natural gas will need to be phased out. Therefore, it is critical to limit new natural gas infrastructure and construct buildings today that are ready for tomorrow.

#### **Key Target Metrics**

Adopt a new-building electrification ordinance in 2020.

#### **GHG Emissions Reduction Potential**

**2,633** MT CO<sub>2</sub>e by 2025 **4,828** MT CO<sub>2</sub>e by 2030

MT= Metric Tons; CO2e= carbon dioxide equivalents





#### **Measure EE-1 Actions**

- 1 Conduct outreach to the community as well as builders/developers to educate them on the proposed ordinance, the associated GHG emissions reductions, and cost benefits.
- 2 Draft a City Ordinance that favors all-electric new construction for City Council consideration.
- 3 Provide training to City staff on new electric preferred ordinance requirements.
- 4 Continue to evaluate cost effective opportunities to add additional building types into the electrification ordinance.



#### Community Cost: \$

Cost effectiveness studies conducted for Dublin's climate zone show all-electric construction to be less expensive both in construction costs and operation over the lifetime of the buildings and will therefore save Dublin residents, businesses, and developers money in the short and long term.<sup>1</sup>

#### City Cost: \$\$

Staff time will be required for community outreach, reach code development, drafting an ordinance for City Council consideration, and implementation of the new ordinance. This work is estimated to cost between \$7,000 and \$10,0000.



Benefits of All-Electric New Buildings

All-electric new buildings can offer several advantages over traditional mixed fuel buildings. With advances in modern heat pump technologies, all-electric homes can be more cost-effective in both up-front construction costs and long-term operational costs compared to mixed fuel homes, allowing for lower cost housing to be developed in Dublin and improved housing equity<sup>1</sup>. A large portion of these cost savings comes from not having to install natural gas infrastructure in the home. All-electric new buildings can also be operated with no GHG emissions due to Measure CF-1 which brings 100% carbon-free electricity to Dublin. Electrification also provides health benefits. Research has identified that natural gas combustion and low indoor ventilation rates can cause significant health issues including asthma<sup>2</sup>. Homes that decide to include solar and battery storage can also operate without electricity distributed by the grid, providing the benefit of additional resilience.

<sup>&</sup>lt;sup>1</sup> https://localenergycodes.com/content/2019-local-energy-ordinances/

<sup>&</sup>lt;sup>2</sup> https://www.atsjournals.org/doi/abs/10.1164/ arrd.1984.129.3.366?journalCode=arrd

## Measure EE-2: Implement the State Building Energy Disclosure Program

The City of Dublin will require all commercial and multifamily buildings covered by AB 802 to report energy use through the Energy Star Portfolio Manager tool.

AB 802 is State mandated energy reporting legislation that requires all commercial and multifamily buildings larger than 50,000 square feet to report energy consumption. Rather than report this information to the State, buildings within Dublin covered by this law will report energy use through the Energy Star Portfolio Manager tool to the City. This information will allow the building owners to better understand the energy usage of their buildings and make informed decisions on energy efficiency and electrification projects and allow the City to better understand the energy usage of the largest energy users in Dublin.

In addition to the mandatory program required by AB 802, the City will also allow voluntary reporting of smaller buildings within Dublin. Building owners who choose to report can gain critical information about their building's energy use compared to similar buildings and help identify energy and cost saving projects.

#### **Key Target Metrics**

Implement the State Building Energy Disclosure Program Track emissions and energy consumption data over time

#### **GHG Emissions Reduction Potential**

Supportive



#### **Measure EE-2 Actions**

- 1 Conduct outreach to owners of buildings greater than 50,000 square feet on the requirements of AB 802 and the change in reporting to the City.
- 2 Implement the State Building Energy Disclosure Program AB 802 for large commercial and multifamily buildings as well as voluntary residential disclosures.
- 3 Provide education to building owners on the value of additional energy audits and energy efficiency/electrification projects.
- 4 Showcase building owners and buildings that have exceptionally high energy efficiency numbers.



#### Community Cost: \$\$

Self-reporting under the AB 802 program (Energy Star Portfolio Manager) is free and only requires reporting of electricity and natural gas invoice data. This process is expected to take one to two hours and is therefore considered no cost.

#### City Cost: \$\$

City staff will promote self-reporting under the AB 802 program (Energy Star Portfolio Manager). This process is expected to take minimal staff time totaling under \$5000 for promotion and monitoring in the first year. Staff time for promotion and monitoring will be on-going but should decrease in time and related costs in future years to \$2,000 to \$4,000 annually. Staff and community partners will be able to review community reported data to get a better understanding of energy efficiency upgrade opportunities.

#### Benefits of Implementing the State Building Energy Disclosure Program and Promoting All-Electric Building Upgrades

Energy benchmarking and disclosure is a policy tool that has been adopted by the State and other agencies. Use of the tool increases building-energy performance awareness among building owners and kev stakeholders and can create demand for energyefficiency improvements. Benchmarking allows for energy use in buildings to be compared to a standard efficiency level that provides information to both owners and tenants about energy consumption and allows both parties to make decisions about the costs and benefits associated with energy efficient buildings. This information allows efficient buildings to be more competitive in the rental/sale market, incentivizing building owners to do more to improve building energy efficiency.

# Measure EE-3: Streamline Battery Storage Permit Requirements

The City will ensure that permitting for the installation of new battery storage in residential and commercial buildings is streamlined and clear in order to promote the installation of additional energy storage capacity in Dublin.

In order to facilitate an increased number of distributed battery storage installations, the City will update the battery storage permit process to streamline these installations. The inclusion of more battery storage will increase the resilience of building operations and can increase the availability of renewable and carbon-free power. While this measure does not provide direct GHG emissions reductions, increased battery storage facilitates more efficient use of renewables, increases the resiliency of the grid, and provides power to homes and businesses in case of planned or unplanned power outages.

#### **Key Target Metrics**

Review and streamline battery storage permit process

#### **GHG Emissions Reduction Potential**

Supportive



#### Measure EE-3 Actions

- 1 Review current battery storage permit process to identify opportunities for streamlining.
- 2 Update and implement streamlined process where appropriate for battery installation.
- 3 Provide training to City staff on updated battery storage permit process.
- 4 Provide education and outreach to the community on the benefits of battery storage and the availability of renewable power.
- 5 Reassess new opportunities for streamlining the battery storage permit process every few years and update in response to anticipated future uniformity in battery storage technologies.



#### Community Cost: \$

Streamlining the permit process should ultimately save on community costs as it would simplify the permit application process and associated time involved to obtain a permit. Costs associated with installing batteries at individual locations was not included in this analysis due to the highly variable costs associated with battery size.

#### City Cost: \$\$

City cost associated with battery storage permit streamlining will be between \$7,000 and \$10,000. Anticipated costs will be from staff time for review and possible updating of the battery storage permit application. Future staff time may be saved due to potential application streamlining.



#### Benefits of Battery Storage

Battery costs have been decreasing steadily each year in recent times allowing more and more homes and businesses to take advantage of the benefits. Batteries can provide cost savings due to the ability to conduct "rate arbitrage" or storing energy when the costs are low and discharging when the costs are high, saving households and businesses money on their energy bills while also reducing GHG emissions. Batteries can also provide resilience benefits allowing buildings to operate during power shutoffs and grid disruptions. Current programs like the California Self Generation Credit are providing substantial rebates for battery installations.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> https://www.cpuc.ca.gov/sgip/

## Measure EE-4: Develop an Existing Building Electrification Plan

Develop a plan to promote the retrofit of 22% of existing buildings in Dublin to allelectric by 2030 and consider development of existing building electrification ordinances in the future.

Coupled with Measure EE-1, reducing direct emissions from natural gas consumption in existing buildings will result in homes and businesses that run more efficiently and cleanly in terms of their energy use.

It is estimated that existing buildings in Dublin would use 13.5 million therms of natural gas annually by 2045 if no retrofits are completed. Upgrading existing building which use gas appliances to all-electric can be cost-effective in Dublin for both commercial and residential buildings especially when paired with solar photovoltaics.

To meet the long-term goal of carbon neutrality by 2045, the direct emissions from natural gas will need to be phased out. Therefore, it is critical to minimize natural gas consumption and begin upgrading existing buildings so that carbon-free electricity use is maximized. The existing building electrification plan will consider special land uses such as hospitals which may encounter technology limitations and may not initially be suited for electrification.

#### **Key Target Metrics**

Use less than 11.07 million therms of natural gas annually by 2025

Use less than 9.39 million therms of natural gas annually by 2030

**GHG Emissions Reduction Potential** 

**5,113** MT CO<sub>2</sub>e by 2025

**14,061** MT CO<sup>2</sup>e by 2030

MT= Metric Tons; CO<sub>2</sub>e= carbon dioxide equivalents



#### Measure EE-4 Actions

- 1 Conduct outreach to the community as well as builders/developers to educate them on the benefits, potential hurdles, and solutions surrounding existing building electrification.
- 2 Maintain the City website as a repository of information on the benefits and options associated with electrification.
- 3 Encourage the implementation of energy efficiency and electrification upgrades at the City building permit counter.
- 4 Promote electrification rebates and no interest loans provided by the State, utilities, and other stakeholders.
- 5 Conduct an electrification pilot project at a City owned building or in coordination with a local stakeholder.
- 6 Continue to evaluate costs/benefits of existing building electrification and consider future improvements to the existing building electrification plan.



#### Community Cost: \$\$

Studies show some Dublin buildings can be retrofitted in a cost-effective manner. Since this measure is voluntary, it is assumed only low and no cost projects would move forward.

#### City Cost: \$\$

On-going staff time will be required to keep electric retrofit information current and promote electrification rebates provided by regional partners. This is estimated to cost roughly \$5,000 annually.



Photo Credit: Cooperative.com

#### Benefits of Electrifying Existing Buildings

Electrifying existing buildings can improve indoor air quality, reduce energy bills, and when paired with improvements to the building envelope (insulation and air sealing), can significantly improve comfort. However, electrifying existing buildings is more complex than electrifying new buildings. When electrifying existing buildings, not all projects will be cost effective. Many variables including electric panel capacity, wiring age, and existing equipment can change the costs associated with the retrofit. However, with recent changes to how the California Energy Commission applies rebates, electrification can now receive part of California's annual \$1 billion-dollar energy efficiency budget which is distributed through various State and local programs.<sup>4</sup> Rebates are available to incentivize heat pump hot water heaters and HVAC units which comprise a majority of a home's natural gas consumption. Currently, residents should consider electrification whenever they are conducting a building retrofit or when a major natural gas appliance needs replacement. The City will continue to track opportunities such as funding and financing, effective electrification strategies, and new technologies and promote them on the City website and through outreach and engagement.

<sup>4</sup> <u>https://on.nrdc.org/2YuWnYw</u>



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# Section 6.3: Strategy 3: Sustainable Mobility and Land Use

The City will ensure infrastructure, policies, and the built environment support multimodal transportation and alternatively fueled vehicles. The City will provide new development in proximity to transit and with less focus on single-occupancy vehicles.

#### **Quality of Life**

The use of single-occupancy vehicles has been the standard form of mobility for years. However, as the population of Dublin increases, so does traffic, air quality impacts, and noise impacts. A shift to alternative, active, shared, and electric mobility will provide safer routes between home, transit stops, and other community amenities, reduce GHG emissions, improve traffic congestion, improve public health, and save the community money.

#### **GHG Emissions Reduction Impacts**

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Transportation is the single largest GHG emissions source in Dublin, accounting for 60% of the total GHG emissions. Achieving carbon neutrality by 2045 will hinge on reducing GHG emissions in this sector. GHG emissions reductions can be achieved through the use of alternatively fueled vehicles such as electric or hydrogen fuel cell vehicles and by reducing the total number of vehicle miles traveled (VMT) through a shift to shared and active transportation.

#### **GHG Reduction Measures**

Measure SM-1: Adopt an Electric Vehicle Charging Station Ordinance

Measure SM-2: Develop an Electric Vehicle Infrastructure Plan

Measure SM-3: Develop a Transportation Demand Management Plan

Measure SM-4: Develop a Citywide Parking Management Plan

Measure SM-5: Update the Bicycle and Pedestrian Master Plan

Measure SM-6: Continue to Prioritize Transit Oriented Development

Measure SM-7: Develop a Built Environment that Prioritizes Active Mobility

# Measure SM-1: Adopt an Electric Vehicle Charging Station Ordinance

The City of Dublin will adopt an electric vehicle (EV) charging station ordinance for multifamily and commercial buildings to increase access to charging stations and promote the use of electric vehicles.

Access to reliable electric vehicle charging stations at home and work are key components to facilitate the purchase of EV over gas vehicles. Lack of home access to EV charging infrastructure in multifamily buildings is a major hurdle to EV ownership. An EV charging station ordinance will ensure that access to EV charging stations will be available to all those living, working, or visiting the City of Dublin. Increased access to EV chargers will reduce range anxiety and encourage a shift to EV ownership at a rate that achieves the goal of 33% EV ownership in Dublin by 2030.

To facilitate this increase in electric vehicle use, the City will adopt an electric vehicle charging station ordinance. The ordinance will require all new commercial and multifamily buildings to ensure 25% of parking spaces be "EV Ready" (conduit and electrical panel capacity installed), with 3% parking required to have installed and operable Level 2 EV charging stations or a comparable level of service provided by DC Fast Charging or other technology as appropriate.

#### **Key Target Metrics**

Adopt an EV Charger Ordinance in 2021 12% EV ownership by 2025 33% EV ownership by 2030 **GHG Emissions Reduction Potential** 

**8,537** MT CO<sub>2</sub>e by 2025

**26,288** MT CO<sub>2</sub>e by 2030

MT= Metric Tons; CO<sub>2</sub>e= carbon dioxide equivalents



#### Measure SM-1 Actions

- 1 Conduct outreach to the community as well as builders/developers about the ordinance.
- 2 Draft an updated City ordinance that requires all new commercial and multifamily buildings to include 25% of parking spaces as "EV Ready" (conduit and electrical panel capacity installed), with 3% parking required to have installed operable Level 2 EV charging stations or a comparable level of service provided by DC Fast Charging or other technology as appropriate.
- 3 Provide training to permit counter and building code staff on the updated new building EV charging station requirements.
- 4 Provide education as needed to builders and developers on the requirements of the ordinance.
- 5 Track progress including the number of chargers installed and the percent of EV's in Dublin through the Department of Motor Vehicles website.



#### Community Cost: \$\$

While the EV Infrastructure Ordinance will increase construction costs by \$400 or more per space, overall costs for EV charging station installation will save money compared to the cost of retrofits. The ordinance will also ensure more individuals can have access to the benefits of an EV.

#### City Cost: \$\$

Staff time to develop and implement an EV charging station ordinance is expected to cost \$8,000-\$14,000 in one-time staff costs.



#### Benefits of Increasing Community EV Use

Installation of EV charging station infrastructure during building construction can save up to \$5,500 for two parking spaces.<sup>1</sup> While installation of EV charging stations with new construction costs approximately \$400 per parking spot, retrofit projects can cost upwards of \$2,700 per space. Therefore, including charging infrastructure as part of new construction projects will lead to significant long-term savings of up to 76%.<sup>1</sup>

Without charging infrastructure in multifamily homes, residents are limited in their ability to own an electric vehicle. While this ordinance may lead to increased construction costs by a small percentage, the long-term savings to Dublin residents are considerable. Installing infrastructure with new construction will ensure homes and businesses will not need as many retrofits in the future and that charging stations are available to both renters and homeowners. Electric vehicles result in no local air emissions, are quiet, and have lower lifecycle GHG emissions and costs compared to internal combustion engines.<sup>2</sup> EVs will also help improve air quality both at the building site and throughout Dublin. Thus, lower vehicle emissions mean improved health as well as reduced costs for the community.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> https://fremont.gov/DocumentCenter/View/31450/PEV-Infrastructure-Cost-Effectiveness-Report\_Energy-Solutions\_July-2016

 <sup>&</sup>lt;sup>2</sup> http://fsec.ucf.edu/en/publications/pdf/fsec-cr-2053-17.pdf
 <sup>3</sup> https://www.epa.gov/mobile-source-pollution/research-health-effects-exposure-risk-mobile-source-pollution

## Measure SM-2: Develop an Electric Vehicle Infrastructure Plan

Develop an electric vehicle (EV) infrastructure plan to ensure that the City is optimally siting EV chargers and using the most beneficial program for publicly accessible EV chargers.

Research by the International Council on Clean Transportation has shown the need for at least one public charger per 27 electric vehicles (in addition to home and work chargers) for optimal EV adoption. As of 2020 there were 120<sup>1</sup> publicly accessible EV charging ports within Dublin; however, an additional 68 chargers by 2025 and 184 by 2030 will be needed to keep pace with target EV adoption rates. To ensure that the correct types and locations of chargers are selected, an EV charging station infrastructure plan will be developed.

The EV Infrastructure Plan will guide the installation of additional chargers and identify funding opportunities and partners to cost effectively expand public access to charging stations. Opportunities include public/private partnerships, incentives, and the use of charging fees to expand infrastructure. Although this measure does not reduce GHG emissions on its own, it supports the overall strategy to encourage adoption of alternately fueled vehicles detailed in Measure SM-1.

<sup>1</sup> plugshare.com (as of 2020)

# Key Target Metrics 68 new public EV chargers by 2025 184 new EV chargers by 2030 GHG Emissions Reduction Potential Supportive



#### Measure SM-2 Actions

- 1 Conduct outreach to the community and work with community partners to understand need for chargers and identify potential locations.
- 2 Review successes and lessons learned from existing EV infrastructure plan projects.
- 3 Develop EV Infrastructure Plan.
- 4 Conduct outreach and education surrounding use and availability of public charging infrastructure.
- 5 Track progress and adjust plan to meet the long-term metrics.



#### Community Cost: \$

The cost to install public charging infrastructure will be managed by the City. However, the community will need to pay for charging to help cover the costs of infrastructure maintenance and electricity. These costs are considered low and charging an electric vehicle is less than refueling and maintaining a traditional internal combustion engine.<sup>4</sup>

#### City Cost: **\$ \$ \$**

Costs to develop an EV infrastructure plan are anticipated to be between \$35,000 to \$65,0000. Costs to the City to install and maintain publicly available charging stations are anticipated to be in excess of \$100,000. Exact costs are dependent on regional group purchase opportunities and grant funding.

#### **Benefits of Public Charging**

While a majority of charging happens at home or at work, public charging stations are key to expanding range and making EV's as convenient as traditional internal combustion vehicles.<sup>5</sup> The City is taking a twopronged approach to EV charging by requiring all new multifamily and commercial buildings to provide EV charging infrastructure (Measure SM-1), and also by providing additional public chargers to help relieve range anxiety. These new EV chargers will help ensure Dublin is ready for the projected growth in EVs.

<sup>&</sup>lt;sup>4</sup> https://www.energy.gov/maps/egallon

<sup>&</sup>lt;sup>5</sup> https://afdc.energy.gov/fuels/electricity\_charging\_public.html

# Measure SM-3: Develop a Transportation Demand Management Plan

Develop a comprehensive Transportation Demand Management (TDM) Plan for the City of Dublin. The TDM Plan will identify strategies to help facilitate the move from single-occupancy vehicles to less carbon intensive transportation modes.

Emissions from transportation make up 60% of total emissions in Dublin with much of those generated from single-occupancy vehicles. The Transportation Demand Management Plan will outline policies and strategies to shift travel away from single-occupancy vehicles to less carbon intensive modes such as rideshare, public transit, bicycle, or pedestrian travel. The TDM Plan will also include policies related to the roll out of last miles transit options and land use principles that encourage the use of active or shared transportation.

Adoption of a TDM Plan will also assist with new California Environmental Quality Act (CEQA) requirements established by SB743 requiring the mitigation of vehicle miles traveled (VMT).

#### **Key Target Metrics**

Develop TDM Plan by 2022 Reduce VMT by 14.8 million miles by 2025 Reduce VMT by 20.6 million miles by 2030 **GHG Emissions Reduction Potential** 

**2,487** MT CO<sub>2</sub>e by 2025

**3,928** MT CO<sub>2</sub>e by 2030

MT= Metric Tons; CO2e= carbon dioxide equivalent



#### Measure SM-3 Actions

- 1 Conduct community outreach and engagement around TDM principals such as transit, car share, shared rideables (bikes and scooters), unbundling of parking, and other mobility options.
- 2 Create guidelines and policies for micro-mobility and partner with other cities in the region to rollout shared ridable options like electric scooters and bikes.
- 4 Develop policies to plan for self-driving electric vehicles.
- 5 Conduct a shared rideables pilot in coordination with other Tri-valley Cities.
- 5 Draft and adopt a TDM Plan or Toolkit with requirements for new construction/major renovations.
- 6 Conduct further outreach, education, and training on the new TDM requirements.
- 7 Track progress over time through TDM modeling and traffic counts and identify new technologies such as live VMT data for better analysis.



#### Community Cost: \$

The TDM Plan will be developed by the City. No direct costs to the community are expected. Some TDM measures may have cost impacts to the community but they are currently unknown and will be addressed during Plan development.

#### City Cost: **\$ \$ \$**

One-time City staff costs for working with a consultant to develop a TDM plan are estimated to be \$10,000 to\$15,000. Collaborating with regional partners to pilot shared rideables in the Tri-Valley is estimated to be \$15,000 to \$20,000. Consultant services to develop a TDM plan or toolkit are estimated at \$200,000. Implementation costs cannot be estimated until the plan has been completed.



#### Benefits of Developing a Transportation Demand Management Plan

As the population of Dublin and the surrounding Bay Area continues to increase, traffic has also continued to increase. Not only does increased vehicle use increase GHG emissions, it also costs time and money when people sit in traffic, degrades air quality, and can increase stress. Transportation demand management combines multiple strategies to reduce the number of cars on the road through alternative transportation, shared vehicles and transit, and alternatives like telecommuting and alternative work schedules. Transportation demand management can decrease traffic, improve air quality and health, and save the community both time and money.



## Measure SM-4: Develop a Citywide Parking Management Plan

Develop a comprehensive Parking Management Plan that will specify parking requirements and costing that supports multi-modal transportation and a reduction in vehicle miles traveled.

A Parking Management Plan will analyze how and where different user groups are parking, and how various policies can be used to improve the efficiency of the parking system for all users. The Parking Management Plan will explore reducing parking requirements in transit-oriented developments and ways to incentivize alternate modes of transportation such as walking, biking or public transportation.

#### **Key Target Metrics**

Develop Parking Management Plan by 2022

#### **GHG Reduction Potential**

Supportive



#### Measure SM-4 Actions

- 1 Conduct outreach and engagement around parking management.
- 2 Conduct a pilot project with one area of Dublin using parking management strategies.
- 3 Develop the Parking Management Plan with information developed from the pilot project and engagement efforts.
- 4 Provide education and training around the Parking Management Plan requirements.
- 5 Monitor the program over time and identify benefits and hurdles of the program.



#### Community Cost: \$

The Parking Management Plan could increase the costs of parking in some areas of Dublin. However, these specifics would be identified during development of the plan.

#### City Cost: \$\$\$

A parking management plan is estimated to cost between \$200,000 to \$600,000 depending on the scope of the plan.

#### Benefits of Parking Management

The Parking Management Plan will provide a roadmap for managing the number, location, and pricing of parking spaces available in the City of Dublin. The Parking Management Plan will investigate the opportunities for reduced parking requirements for new construction to maximize livable space as well as additional requirements to provide mobility to Dublin residents without the need for a single occupancy vehicle. Changing parking options can help with prioritizing and emphasizing other forms of mobility that will alleviate traffic and improve air quality.

## Measure SM-5: Update the Bicycle and Pedestrian Master Plan

Update the Bicycle and Pedestrian Master Plan to contribute to the overall VMT reduction required to meet the City's climate goals. The plan will maximize the convenience and safety of active transportation within the City of Dublin.

Implementation of the updated Bicycle and Pedestrian Master Plan will support more participation in active transportation through infrastructure development to make walking and biking safer and more convenient. Switching to active transportation will help reduce GHG emissions from singleoccupancy vehicles, improve air quality, and community health.

#### **Key Target Metrics**

Update the Bicycle and Pedestrian Master Plan Identify miles of bike lane and number of pedestrian improvements Implement the Bicycle and Pedestrian Master Plan **GHG Emissions Reduction Potential** 

**336** MT CO<sub>2</sub>e by 2025**537** MT CO<sub>2</sub>e by 2030

MT= Metric Tons; CO<sub>2</sub>e= carbon dioxide equivalents



#### Measure SM-5 Actions

- 1 Conduct outreach and engagement as part of Bicycle and Pedestrian Master Plan (Plan) update.
- 2 Identify the vision, goals and strategies for the Plan development.
- 3 Identify gaps in the existing network and opportunities for latent demand.
- 4 Prioritize and identify near-term and long-term projects to close the network gap, improve safety and connectivity.
- 5 Develop policy and program recommendations to achieve Plan goals.
- 6 Prepare cost estimates, identify funding sources and develop an implementation plan.
- 7 Track miles of bike lane and number of pedestrian improvements over time.



#### Community Cost: \$

The Bicycle and Pedestrian Master Plan will identify new active transportation strategies and projects. The costs associated with these projects will be primarily covered by the City as well as grants and other funding sources.

#### City Cost: \$

Development of the Bicycle and Pedestrian Master Plan Update began in December 2019 with consultant assistance costing \$348,247. Funds have already been allocated and funded through Transportation Development Act Article 3 funds, Measure B funds and Measure BB funds.



# Benefits of Implementing the Bicycle and Pedestrian Master Plan

Implementing the Bicycle and Pedestrian Master Plan will provide safe and efficient options for walking and biking within Dublin. Studies show that commuting by bicycle or walking can reduce the occurrence of cardiovascular disease and cancer.<sup>6</sup> Walking or biking instead of driving also saves money, improves air quality, reduces stress, and reduces traffic congestion. By providing safe and low-cost alternatives to owning and operating a vehicle, the City will also be providing equitable and inclusive mobility for all Dublin residents.

<sup>&</sup>lt;sup>6</sup> https://bit.ly/37ZQi9x

# Measure SM-6: Continue to Prioritize Transit Oriented Development

Dublin has access to two BART stations and several LAVTA bus lines. Focusing higher density development and amenities around these transit stops can decrease VMT and GHG emissions generated within Dublin.

Transit oriented development (TOD) has been shown to decrease VMT and traffic congestion while decreasing impacts to air quality. The City has already zoned several areas for transitoriented development and will continue to prioritize these uses in areas of Dublin that have good access to public transit.

#### **Key Target Metrics**

Number of TOD units constructed in Dublin

#### **GHG Emissions Reduction Potential**

Supportive



#### Measure SM-6 Actions

- 1 Conduct outreach and engagement around transit-oriented development projects.
- 2 Track number of units within <sup>1</sup>/<sub>4</sub>-mile and <sup>1</sup>/<sub>2</sub>mile of transit to estimate VMT reduction over time.



#### Community Cost: \$

Transit-oriented development would have minimal to no cost on the community.

#### City Cost: \$

This measure does not expand on what the City is already doing, therefore there are no new associated costs for this measure.



#### Benefits of Transit Oriented Development

By focusing growth along transit corridors, the City of Dublin can manage growth in a way that limits increases in traffic and vehicle miles traveled and develop residences and businesses in locations that provide access to active and public transit options without the requirement of owning a car. These changes will help lower air quality impacts from vehicles. It will also incentivize people to walk and bike, another health benefit. Transit-oriented development can be cheaper for both residents and for developers who can take advantage of State incentives. Transit-oriented development also provides equity benefits by providing lower cost units that do not require vehicle ownership.

# Measure SM-7: Develop a Built Environment that Prioritizes Active Mobility

The City of Dublin will implement building standards that improve the pedestrian experience and create a built environment that prioritizes active mobility.

Building design and construction can promote walkability and an improved urban experience. The City will update zoning regulations and standards to encourage and promote active mobility. This includes requiring a mix of building types and uses, as well as regulations on building design, number of driveway openings and wide sidewalks that create a better sense of place. Designs that facilitate walking and biking can generate more revenue for retail spaces in these areas.<sup>1</sup>

<sup>1</sup> https://bikeleague.org/sites/default/files/Bicycling\_and\_the\_Economy-Econ\_Impact\_Studies\_web.pdf

#### **Key Target Metrics**

Updated zoning regulations and standards to prioritize active mobility.

#### **GHG Emissions Reduction Potential**

Supportive





#### Measure SM-7 Actions

- 1 Conduct outreach and engagement around building standards that encourage activity mobility.
- 2 Conduct a pilot project using building principals that encourage active mobility for one area of Dublin.
- 3 Amend the Zoning Ordinance and design guidelines and standards as needed to require new development and remodels that modify 50% or more of a commercial or multi-family property, to encourage active mobility.
- 4 Conduct education and training on the new requirements.
- 5 Conduct follow up surveys and engagement around impacts of new requirements.



#### Community Cost: \$

The development and implementation of building requirements that encourage active mobility would have minimal to no cost on the community. Some changes in the cost of development are possible depending on the end requirement; however, most of the design elements that encourage active mobility require different layouts and better use of space of buildings rather than changes to the building itself.

#### City Cost: \$\$

Development of new requirements to prioritize active mobility in the built environment are estimated to cost \$35,000 to\$50,000 for a combination of City staff and consultant time.



Photo Credit: Plannersweb.com

# Designing the Built Environment to Encourage Active Mobility

Cityscapes designed for walking and biking help create a better sense of place. Requiring that new developments encourage active mobility will result in usable streetscapes and provide for a walkable downtown decreasing vehicle emissions and incentivizing walking and biking. Increasing walkability has also been shown to increase revenue at local retail and support small businesses.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> https://www.strongtowns.org/journal/2018/1/16/whywalkable-streets-are-more-economically-productive



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### Section 6.4: Strategy 4: Materials and Waste Management

The City of Dublin will work to reduce the use and transport of new natural resources and materials and divert solid waste (including organics) from landfills.

#### **Quality of Life**

The production and consumption of new items requires the use of natural resources and results in the release of carbon dioxide and other GHGs from the making and transporting of goods, including mining, refining, and shipping. Senate Bill (SB) 1383 is a comprehensive state bill that mandates the recovery of edible food waste for human consumption as well as diversion of organic waste from the landfill through composting. The local recovery of edible food waste for human consumption will benefit food insecure residents in Dublin and Alameda County and maximize the natural resources and energy that went into growing the recovered food.

The application of compost made from inedible organic waste within Dublin will help sequester carbon, mitigate the risk of flooding, reduce plant irrigation needs, and increase soil biodiversity and health. This will also build healthier landscapes which are more resistant to pests.

#### **GHG Emissions Reductions Impacts**

Materials use, transport, and solid waste disposal comprises 4% of the City of Dublin's GHG emissions. To achieve the City's 2030 GHG emissions reductions goal and begin working toward a carbon neutral future, the transport and use of new materials and waste generation must be reduced across the community.

#### **GHG Reduction Measures**

Measure MM-1: Achieve the Organic Waste Reduction Requirements of SB 1383

Measure MM-2: Reduce the Embodied GHG Emissions Associated with Building Materials

# Measure MM-1: Achieve the Organic Waste Reduction Requirements of SB 1383

The City of Dublin will coordinate with community stakeholders to achieve the goal of organics comprising less than 9.35% of Dublin waste by 2025. Additionally, at least 20% of currently disposed edible food will be recovered for human consumption by 2025.

Methane gas is released from the anaerobic or oxygen free decomposition of organic waste in landfills making landfills a significant source of greenhouse gas (GHG) emissions. Diverting organic waste from landfills through the recovery of edible food for human consumption or through composting prevents this.

It is estimated that if not action is taken, the City of Dublin will generate approximately 44,000 tons of total waste annually by 2045. Full implementation of SB 1383 requirements will reduce the tons of projected landfilled material by drastically reducing the volume of organics landfilled through prevention, recovery of edibles and composting organic waste. This will have the additional unquantified benefits of maximizing the resources used to grow and transport food which is discussed further in Section 7 of CAP 2030 and will increase the production and use of compost which supports Measure ML-7.

#### **Key Target Metrics**

Comply with SB 1383 organic waste reduction requirements

Reduction in solid waste sent to the landfill

#### **GHG Reduction Potential**

**3,427** MT CO<sub>2</sub>e by 2025

**3,615** MT CO<sub>2</sub>e by 2030

MT= Metric Tons; CO<sub>2</sub>e= carbon dioxide equivalent



#### Measure MM-1 Actions

- 1 Conduct outreach to residents and food waste generators about the requirements of SB 1383 and the benefits of composting and organics waste reduction.
- 2 Collaborate with regional partners like StopWaste<sup>1</sup>, waste haulers, food recovery organizations and other cities to establish a regional approach to SB 1383 compliance including establishing a regional food waste recovery plan.
- 3 Adopt a plan and associated policies/ordinances required for the successful implementation of SB 1383.
- 4 Work with StopWaste and other regional partners to conduct education on the requirements of SB 1383 and implement Action 3.
- 5 Continue to monitor waste collection data with regional partners to track progress and evaluate additional measures as necessary.



#### Community Cost: \$\$

CalRecycle estimates that implementation of all program requirements will cost each resident approximately \$17 annually and each business \$662 annually. Organics and recycling are already included in the City's current waste hauling franchise agreement so the total implementation cost may be less.

#### City Cost: \$

The cost to the City is not quantified as implementation will be covered under other program budgets as SB 1383 compliance is mandatory.



Photo Credit: StopWaste

#### Benefits of Achieving SB 1383 Organic Waste Reduction Requirements

SB 1383 is a California regulation which calls for a 75% reduction in organic waste landfilled statewide compared to 2014 levels and at least 20% diversion of edible foods from landfills by 2025. Although required by the State to reduce organic waste disposal, the program also offers several co-benefits to the community. A focus on edible food recovery reduces lifecycle GHG emissions associated with food production. The United States Department of Agriculture estimates that 30-40% of food produced in the United States is wasted<sup>2</sup>. Recovery of just 20% of edible food currently thrown away will help maximize resources and feed the one in five Alameda County residents that are food insecure<sup>3</sup>. Enhanced waste diversion creates more jobs to support and enforce organics reduction, recovery, and composting compared to traditional solid waste disposal. Enhanced organics composting creates a beneficial product that provides a valuable resource for the City and the community to amend soils which results in healthier soils and facilitates more soil carbon sequestration. Adding compost to landscapes also enhances water infiltration into the ground.

<sup>2</sup> https://www.usda.gov/foodwaste/faqs

 $^{\rm 4} https://www.calrecycle.ca.gov/docs/cr/laws/rulemaking/slcp/impact\ assessment.pdf$ 

<sup>&</sup>lt;sup>1</sup> StopWaste is a public agency governed by the Alameda County Waste Management Authority, the Alameda County Source Reduction and Recycling Board, and the Energy Council and provides assistance to local governments, businesses, residents and schools to use resources more efficiently.

<sup>&</sup>lt;sup>3</sup> https://www.accfb.org/impact/by-the-numbers/

# Measure MM-2: Reduce the Embodied GHG Emissions Associated with Building Materials

The City of Dublin will require the use of low carbon concrete in new construction projects to reduce lifecycle GHG emissions and the embodied carbon associated with construction projects.

Although this Climate Action Plan does not quantify the lifecycle GHG emissions from the consumption of materials, the City recognizes the growing science on embodied GHG emissions in the built environment.

The "embodied emissions" of a building are emissions of carbon dioxide or other GHGs generated by making and transporting materials to a building site, including mining, refining, and shipping. Globally, embodied emissions account for 11% of a building's lifecycle emissions<sup>1</sup>. The concrete industry is a major producer of carbon dioxide in the world, resulting in approximately 7% of worldwide GHG emissions. New technologies that replace cement with alternatives such as fly ash or carbon absorbing particles can reduce embodied GHG emissions by up to 50%.<sup>2</sup>

Requiring projects to specify low carbon concrete in their projects, while maintaining required strength and durability standards, will help the community work towards addressing lifecycle GHG emissions and make an ever-larger impact on global CO<sub>2</sub>e emissions. Although this measure will reduce GHG emissions, it is difficult to quantify and is not currently included in the State GHG inventory. Therefore, this measure is considered supportive.

<sup>1</sup> http://www.carbonleadershipforum.org/about/why-embodied-carbon/ <sup>2</sup> https://materialspalette.org/concrete/

#### **Key Target Metrics**

Adopt an ordinance mandating low carbon concrete for all new development projects by 2023

#### **GHG Reduction Potential**

Supportive

RAGI



#### Measure MM-2 Actions

- 1 Conduct outreach to the development community regarding low carbon concrete using the Bay Area Low Carbon Concrete Codes Project.
- 2 Present a low carbon concrete ordinance to City Council based on the Marin County model ordinance with specifications for residential and non-residential development applications.
- 3 Educate City staff, and the development community on the new reach code requirements.
- 4 Keep current on new model ordinances that identify other building materials to target for additional embodied carbon reductions.

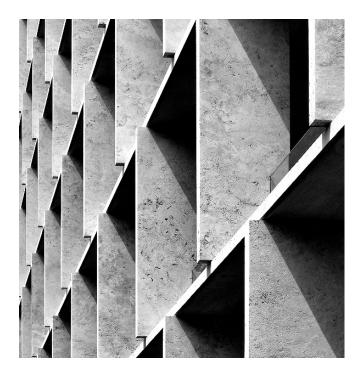


#### Community Cost: \$

Low carbon concrete is approximately equal in cost to standard high carbon concrete due to a currently available significant local supply of fly ash in the Bay Area.

#### City Cost: \$\$\$

Staff time will be required to update the City of Dublin Building Code and implement the new requirements. A low carbon concrete building code update can be modeled off the work done by Marin County under a grant from the Bay Area Air Quality Management District. Costs for staff time is estimate at \$10,000-\$15,000.



#### Benefits of Reducing Embodied Emissions Associated with Concrete

Concrete is the most widely used construction material in the world and contributes the most lifecycle GHG emissions of any single building material, resulting in approximately 7% of global GHG emissions.<sup>4</sup> New technologies allow concrete to be produced with less cement (the binding agent in concrete) while maintaining strength and durability. Some additives can even help sequester more carbon during the curing process. By adopting these requirements, the City of Dublin will join a list of pioneering cities working to address lifecycle GHG emissions and embodied carbon<sup>5</sup>. Based on data provided by the Marin County low carbon concrete ordinance, the use of low carbon concrete is expected to be cost competitive with traditional concrete in the Bay Area.

<sup>4</sup> https://materialspalette.org/concrete/

<sup>&</sup>lt;sup>5</sup> https://www.marincounty.org/depts/cd/divisions/sustainability/low-carbon-concrete-project



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# Section 6.5: Strategy 5: Municipal Leadership Measures

The City of Dublin's municipal government will continue to lead by example by implementing Climate Action Plan measures as part of facility operations and maintenance and as part of new City construction projects.

#### **GHG Emissions Reduction**

Municipal GHG emissions are considered a subset of communitywide GHG emissions. To avoid double counting, municipal GHG emissions reduction are not included in the overall GHG emissions reduction quantification. All of the municipal measures are considered supportive of the overall community-wide reduction and are based on the most recent municipal data (2015). The municipal measures allow the City of Dublin to be a leader in reaching the community's climate action goals.

#### **Quality of Life**

The City of Dublin is committed to improving the quality of life for Dublin residents and doing its part in working towards reducing climate change. The City has already demonstrated leadership in GHG emissions reductions by installing solar panels at City facilities, providing public EV chargers, building LEED silver and gold certified facilities and by opting-up municipal accounts to 100% renewable electricity with East Bay Community Energy (EBCE). This CAP provides a roadmap for the next chapter in the City's sustainability, resilience, and leadership.

#### **Key GHG Reduction Measures**

Measure ML-1: 100% Renewable Electricity for Municipal Buildings and Operations

- Measure ML-2: Reduce Municipal Employee Commute GHG Emissions
- Measure ML-3: Electrify Municipal Vehicle Fleet and Equipment
- Measure ML-4: Total Cost of Ownership and Life-Cycle Analysis of GHG Impacts in Municipal Project Request for Proposals
- Measure ML-5: Promote Municipal Awareness of Sustainable Goods and Services
- Measure ML-6: Enhance Municipal Carbon Sequestration Opportunities
- Measure ML-7: Implement the Green Stormwater Infrastructure Plan

## Measure ML-1: 100% Renewable Electricity for Municipal Buildings and Operations

The City of Dublin's municipal government will help achieve GHG emission reduction goals related to municipal electricity use by opting-up all municipal accounts to 100% renewable electricity and expanding the City's battery storage capacity.

The City has already taken the important step outlined in Measure ML-1. As of July 2019, all municipal accounts were opted-up to EBCE's 100% renewable energy power portfolio, which eliminated all GHG emissions associated with electricity usage at municipal buildings, streetlights, traffic lights, and other electric-powered infrastructure. Switching to the EBCE's Renewable 100 power portfolio also enhances Measure ML-3 by increasing the municipal GHG emissions reductions associated with switching municipal vehicles and equipment to all-electric models.

Many municipal buildings have solar arrays which generate 100% renewable energy. Installation of battery storage at these facilities will facilitate the development of microgrids for critical infrastructure such as police and fire stations, City Hall, and cooling centers which will allow the City to maintain carbon-free electricity during power outages and shutoffs.

The GHG emissions are shown below for scale but have not been included in the overall GHG reductions to avoid double counting.

#### **Key Target Metrics**

Opt-up all municipal accounts to EBCE Renewable 100 (Complete)

Establish a battery storage policy for municipal facilities

#### **GHG Reduction Potential**

205 MT CO<sub>2</sub>e by 2025

156 MT CO<sub>2</sub>e by 2030



#### Measure ML-1 Actions

- 1 Switch all municipal electricity accounts to EBCE's Renewable 100 power portfolio (complete).
- 2 Complete a studies and conduct outreach to engage staff at critical facilities about the potential to install additional solar and new battery storage.
- 3 Conduct a pilot program for solar and battery storage at one or more locations.
- 4 Develop a policy to define parameters for installation of solar panel arrays and battery storage.
- 5 Provide education and training on the battery storage policy to relevant staff and include educational information on the City web page.
- 6 Conduct annual reviews of the solar production and cost savings to improve operational efficiency and evaluate success.



Increased cost to the City associated with 100% renewable electricity is approximately \$25,000 to \$30,000 per year. City staff have been working with EBCE's consultants to complete an analysis of battery storage at critical facilities which is near complete. Additional staff time for measure implementation is estimated between \$12,000-\$17,000. Installation of battery storage is costly, but the City will utilize regional purchasing power to minimize the cost. It is also anticipated that battery storage could pay for itself over the course of its life.



#### Benefits of Utilizing 100% Renewable Municipal Electricity and Energy Storage

By opting the City's municipal electric accounts into EBCE's Renewable 100 power portfolio, the City of Dublin ensured that municipal electricity emissions dropped to zero. The City has already installed solar arrays at the following locations: Civic Center, Dublin Library, Public Safety Complex, the Senior Center, the Shannon Center, and all three Fire Stations. To ease the burden on the electrical grid and for the added cost savings and resilience benefits, the City is investigating the opportunity to add additional solar arrays plus battery storage to some of its facilities. Adding battery storage to solar installations allows the City to shift its power loads from peak electricity demand times to lower demand times when the cost of electricity is lower. This benefits the City by providing cost savings and helps the power grid by removing some of the load during peak hours.

Identifying additional opportunities to augment solar and install battery storage will also facilitate the development of microgrids for critical infrastructure such as police and fire stations, City Hall, and cooling centers. A microgrid is a local energy grid with control capability that can be isolated and function separately from the larger power grid. Critical City facilities are currently equipped with diesel generators that can be used in the event of a power outage. These generators work well but emit GHGs and also require refueling. Solar plus battery storage provides a GHG emissionsfree resilience option.

## Measure ML-2: Reduce Municipal Employee Commute GHG Emissions

The City of Dublin's municipal government will achieve its GHG emissions reduction and mobility goals by incentivizing municipal employee alternative transportation use as well as electric vehicle use.

Measure ML-2 involves the City developing a suite of transportation demand management tools to incentivize alternative transportation methods for employees, as well as encouraging electric vehicle or other alternatively fueled vehicle use. This builds on the City's current \$5 per day incentive program for employees who commute to work using any mode other than a single occupancy vehicle. The measure has a target of a 10% reduction in municipal employee commute GHG emissions by 2025 and a 20% reduction by 2030. Implementation will also include providing bicycles or scooters for employees to use during work hours for short business or personal trips. Success for this measure will be determined via an annual employee commute survey.

#### **Key Target Metrics**

Conduct an annual employee commute survey Reduce total employee commute GHG emissions 10% by 2025 Reduce total employee commute GHG emissions 20% by 2030

**GHG Emissions Reduction Potential** 

**65** MT CO<sub>2</sub>e by 2025

**163** MT CO<sub>2</sub>e by 2030



#### Measure ML-2 Actions

- 1 Conduct outreach to employees about current incentives for non-single occupant vehicle commuting and encourage participation in the development of a municipal TDM plan that incorporates and expands on current municipal incentives.
- 2 Conduct pilots for possible programs to incorporate into a municipal TDM plan.
- 3 Adopt and implement the municipal TDM plan and any relevant policies and programs.
- 4 Educate staff annually and provide informational packets on TDM programs for use when onboarding new staff.
- 5 Evaluate the success of the programs by conducting annual surveys of employees.



#### City Cost: \$\$\$

Costs to the City include staff and consultant time for development of the municipal TDM plan and employee commute surveys which is estimated at \$25,000-\$55,000. Implementation of the plan is expected to cost \$200 per employee on average per year. Completion of the TDM plan will provide more detail on expected implementation costs.



#### Benefits of Reducing Municipal Employee Commute GHG Emissions

Municipal employee commuting contributes to GHG emissions and also stress on staff as they drive to work in single-occupancy vehicles during commute hours. A municipal transportation demand management (TDM) plan combines multiple strategies to reduce the number of cars on the road through alternative transportation, shared vehicles, transit, and alternatives like telecommuting and alternative work schedules. TDM has the ability to decrease traffic, improve air quality and health, reduce employee stress, and potentially save the City money through lowered absenteeism and increased staff productivity<sup>1</sup>. Providing additional transit subsidies, bicycle access, and bicycle storage to municipal employees will provide economical and efficient options for municipal employees taking transit, walking, or biking as part of their commute.

<sup>&</sup>lt;sup>1</sup> https://www.nctr.usf.edu/wp-content/uploads/2012/07/416-11.pdf

## Measure ML-3: Electrify Municipal Vehicle Fleet and Equipment

The City of Dublin's municipal government will electrify at least 33% of its municipal vehicle fleet and municipal maintenance equipment by 2030.

Measure ML-3 involves electrifying the municipal vehicle fleet and equipment. The City's municipal fleet includes police and fire vehicles, some of which present an immediate opportunity to electrify depending on the vehicle's use. This policy could be extended to require or give preference to contractors to electrify their equipment and fleet including those that use larger vehicles such as maintenance trucks and street sweepers as well as maintenance equipment such as mowers and blowers.

As of 2015, the City of Dublin municipal vehicle fleet accounted for 14% of the municipal GHG emissions profile. By coupling the electrification of City vehicles with the adoption of 100% renewable electricity in Measure ML-1, this measure has the potential to reduce up to 292 MT CO<sub>2</sub>e by 2030. Success for this measure will be determined via an annual municipal electric vehicle fleet and equipment inventory.

#### **Key Target Metrics**

Electrify 15% of municipal vehicle fleet and maintenance equipment by 2025 Electrify 33% of municipal vehicle fleet and maintenance equipment by 2030

**GHG Emissions Reduction Potential** 

**44** MT CO2e by 2025

**96** MT CO<sub>2</sub>e by 2030



#### Measure ML-3 Actions

- 1 Complete a fleet and maintenance equipment electrification analysis.
- 2 Conduct outreach and education to the municipal fleet users on the results of the electrification study and provide information on the benefits of electrification.
- 3 Pilot electric vehicles (EV's) or alternative fuel vehicles for certain vehicle types and uses such as passenger vehicles used by City detectives and building inspectors and for equipment (e.g. mowers, blowers, etc.).
- 4 Update the City's Green Fleet policy to reflect the outcome of the fleet and maintenance equipment electrification analysis, outreach and pilot EV studies. Develop a policy for replacement of maintenance equipment.
- 5 Educate municipal staff on the new policies and on how to select and operate the new equipment.
- 6 Conduct follow-up surveys to evaluate the effectiveness of the vehicles and equipment to inform future policy updates.



#### City Cost: \$\$

City staff have been working with EBCE to complete a fleet electrification analysis during the development of this CAP. The analysis is close to completion. Additional staff time to coordinate implementation of pilots and policy updates are estimated at \$7,000 to \$12,000. Lifecycle costing studies show operation and maintenance of EVs are less than for internal combustion vehicles so there is the potential that implementation of fleet electrification could save the City money over the long-term.



#### Benefits of Electrified Municipal Vehicle Fleet and Equipment

Electric vehicles are cheaper to own and operate than internal combustion vehicles due to the associated operational and maintenance cost savings.<sup>2</sup> In addition, EV's do not generate air pollution, improving the health impacts on staff and residents. When coupled with 100% renewable municipal electricity from EBCE, every EV will be carbon neutral, reducing GHG emissions for the City.

Emissions from maintenance equipment also contributes to poor air quality and cumulatively are significant contributors to GHG emissions. For instance, as reported in the Chemical Society Journal<sup>3</sup>, one hour of grass cutting with a gas mower had equivalent air pollution emissions to driving 100 miles in a gas-powered car. A separate study conducted in 2011 determined that the air pollution produced in 30 minutes by a gas-powered leaf blower emits about the same number of hydrocarbons as 6,200-pound pickup truck driving 3,900 miles.<sup>4</sup> When the City demonstrates leadership by electrifying its fleet and maintenance equipment, it helps local residents and visitors breathe easier.

<sup>2</sup> http://fsec.ucf.edu/en/publications/pdf/fsec-cr-2053-17.pdf

<sup>3</sup> June 1, 2001 American Chemical Society journal article

(https://www.sciencedaily.com/releases/2001/05/010529234907.htm

<sup>&</sup>lt;sup>4</sup> https://www.edmunds.com/about/press/leaf-blowers-emissions-dirtier-thanhigh-performance-pick-up-trucks-says-edmunds-insidelinecom.html

## Measure ML-4: Total Cost of Ownership and Life-Cycle Analysis of GHG Impacts in Municipal Project Request for Proposals

The City of Dublin's municipal government will aim to ensure it is constructing projects with the lowest total cost of ownership and lowest GHG emissions for new construction projects through a requirement that all capital improvement projects include a life-cycle cost analysis and lifecycle GHG emissions analysis.

Measure ML-4 involves incorporating a life-cycle cost analysis over at least a 30-year period for all capital improvement projects. This analysis would be included as a requirement in all requests for proposals (RFPs) related to proposed municipal projects, material sourcing, construction, operation, maintenance, and disposal costs to ensure that the City invests in the most cost-effective and sustainable projects possible.

Success for this measure will be determined via adopting and implementing a new City policy regarding total cost of ownership (TCO) and lifecycle GHG emissions analysis for municipal capital improvement projects.

#### **Key Target Metrics**

Adopt new City policy regarding requirements for total cost of ownership and lifecycle GHG emissions analysis for municipal projects by 2022.

#### **GHG Emissions Reduction Potential**

Supportive



#### Measure ML-4 Actions

- 1 Create an internal stakeholder group and conduct outreach to define applicable projects and parameters related to the TCO and lifecycle GHG emissions analysis.
- 2 Develop draft language and pilot the language requiring a lifecycle GHG analysis at the appropriate stage in the capital improvement project process.
- 3 Adopt a new City policy that requires all municipal building/infrastructure projects to include requirements for TCO and lifecycle GHG emissions analysis.
- 4 Educate City staff on the new policy and long-term benefits to the environment and operating budget.
- 5 At least once per 5-year CIP cycle, evaluate the successes and failures of the analyses for refinements in future years.



#### City Cost: \$\$

Staff time to develop a City policy that includes TCO and lifecycle GHG emissions analysis for CIP projects is estimated to be approximately \$10,000 to \$15,000. This measure could result in cost savings as the updated policy will focus on delivering the lowest cost, most sustainable projects to the City over the longterm. There may be increased upfront construction costs, but those costs should be recuperated with longterm operation and maintenance savings.

#### Figure 6.5-1: Product Lifecycle Diagram



#### Benefits of Including Total Cost of Ownership and Life-Cycle Analysis of GHG Emissions in Municipal Capital Improvement Projects

Requiring capital improvement projects (CIPs) to include a life-cycle cost analysis will provide staff more complete information on true development and operational costs. A product lifecycle includes the costs associated with its purchase, use, and eventual disposal or reuse as shown in Figure 6.5-1. As the City of Dublin shifts from a growing city to a built-out city, this wholistic information is even more important from an on-going operation and maintenance perspective. This measure ensures that a dollar saved in upfront cost will not result in increased operational cost over the life of a building or project.

Lifecycle costing also has the added environmental benefit of enabling staff to consider GHG emissions alongside construction cost. Often green building practices result in lower costs over the life of a building. For example, studies show all electric buildings are more cost effective to build and maintain than standard mixed-fuel buildings.<sup>5</sup> By conducting life-cycle costing and GHG emissions analysis early in the municipal project's design phase, sustainable urban design and engineering decisions can be made. By incorporating life-cycle costing into CIPs, the City can maximize both cost effectiveness and, in most cases, GHG emissions reductions and overall sustainability.

<sup>&</sup>lt;sup>5</sup> https://localenergycodes.com/content/2019-local-energy-ordinances/

## Measure ML-5: Promote Municipal Awareness of Sustainable Goods and Services

The City of Dublin's municipal government will achieve its materials and waste management goals by promoting awareness to City staff regarding the purchase of sustainable goods and services.

Measure ML-5 promotes municipal materials management by educating staff on purchasing options for sustainable goods and services. The City of Dublin has adopted an Environmental Preferable Purchasing Policy which applies to purchases from paper to printers as well as landscape maintenance and other operation and maintenance activities. Purchasing sustainable office supplies and equipment reduces the carbon footprint of the City as well as employees' exposure to toxic chemicals that can be found in products such as conventional cleaning supplies.

Success for this measure will be determined through effective implementation of the EPPP during the municipal goods purchasing and services selection processes.

#### **Key Target Metrics**

Continue City staff education on the Environmental Preferable Purchasing Policy.

#### **GHG Reduction Potential**

Supportive

Alt and and



#### Measure ML-5 Actions

- 1 Continue outreach and education to City staff about the Environmental Preferable Purchasing Policy (EPPP), add updated EPPP documents to the intranet and develop new hire on-boarding information.
- 2 Pilot proposed new programs, as necessary.
- 3 Make updates to the existing EPPP, as necessary.
- 4 Implement a monitoring protocol or a quality check to determine effectiveness of EPPP implementation and make refinements, as necessary.



#### City Cost: \$\$

Costs to the City include on-going staff time to monitor implementation, update the policies and educate staff on the policies. Initial costs for updating the policy are estimated to be between \$5,000 to \$10,000 in staff time. On-going monitoring and education for the program are anticipated to be \$3,000 to \$5,000 annually. Hard costs associated with the Environmental Preferable Purchasing Policy are expected to be cost neutral to slightly more but will vary by product or service.



## Benefits of Promoting Municipal Awareness of Sustainable Goods and Services

Educating staff about the Environmental Preferable Purchasing Policy will provide municipal employees with the information and tools necessary to make sustainable purchasing choices and services selection decisions for municipal facilities and operations. Following the policies in the EPPP will help the City reduce its GHG emissions by ensuring the City is purchasing products that are made from recycled materials or Energy Star rated products and engaging in services and maintenance activities that reduce the use of hazardous materials. For instance, Bay-friendly Landscape Measures result in landscapes that have reduced water needs, sequester greater amounts of carbon, use less pesticides, provide better water absorption and retention, and are less maintenance intensive than traditional landscapes. Following Bay Friendly Landscape guidelines also has the additional benefit of building healthier ecosystems through healthier soils and plants.

## Measure ML-6: Enhance Municipal Carbon Sequestration Opportunities

The City of Dublin's municipal government will strive to increase carbon sequestration activities through tree planting and compost application throughout the City.

For Measure ML-6, the City of Dublin will begin to explore opportunities to engage in carbon sequestration activities. Carbon sequestration activities have the potential to remove carbon dioxide from the atmosphere and store it through biological, chemical, or physical systems. Initially this effort will primarily focus on increasing composting and compost material-reuse and increasing plant uptake through enhanced tree planting practices. To achieve this, the City will adopt new composting and mulching practices as well as review standards for tree planting to maximize carbon sequestration potential. Use of compost-based erosion control best management practices (e.g., compost-socks, berms, and blankets) will be reviewed for use at City-owned construction projects. The City will also participate in a pilot carbon sequestration project with StopWaste to determine how much carbon can be sequestered in an urban environment.

#### **Key Target Metrics**

Develop City standards for use of compost and mulch

Review and update City tree planting standards

Develop compost-based erosion control guidelines for capital improvement projects

Complete and highlight a carbon sequestration pilot project with StopWaste

#### **GHG Emissions Reduction Potential**

Supportive



#### Measure ML-6 Actions

- 1 Participate in a carbon sequestration pilot project with StopWaste to inform development of compost application standards.
- 2 Conduct outreach and create an internal stakeholder group to develop standards for tree planting.
- 3 Conduct pilot studies, as necessary, to determine if proposed tree planting standards are effective.
- 4 Finalize compost and mulch use and tree planting standards once pilot studies are complete.
- 5 Educate staff on updated policies and include policy information on the intranet.



Costs to the City would include costs to develop the policies and plans which are estimated to be between \$10,000 to\$20,000 in staff and contract maintenance time. Operational costs are expected to be marginal.



## Benefits of Enhancing Municipal Carbon Sequestration Opportunities

Enhancing carbon sequestration opportunities through increased use of compost and providing optimal growth environments for trees and other plants, has the benefit of not only increasing carbon sequestration but also enhancing resilience by mitigating for the anticipated increases in storm frequency and intensity. Trees mitigate rainfall intensity by capturing rainwater in leafy tree canopies and compost absorbs the rainwater that falls on the ground, reducing runoff rates and duration. Tree canopies also help mitigate the impacts of extreme heat days by providing shade and by cooling buildings. In addition, these enhanced carbon sequestration activities provide more beautiful and easier to maintain landscapes, increased urban green space, and more shade from fully grown, healthy trees.

## Measure ML-7: Implement the Green Stormwater Infrastructure Plan

The City of Dublin's municipal government will work to achieve its resilience goals through implementation of the City of Dublin Green Stormwater Infrastructure Plan.

Measure ML-7, implementation of the City of Dublin Green Stormwater Infrastructure (GSI) Plan, is another tool to help build the City's resilience. City Council adopted the GSI Plan on June 18, 2019 to meet mandates in the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit, Order No. R2-2015-0049 issued by the San Francisco Bay Regional Water Quality Control Board. GSI is designed to mimic nature and includes engineered plant and soil-based systems such as rain gardens (also known as bioretention areas), as well as conserved natural areas and tree planting. Instead of rainwater flowing directly from buildings and streets directly to the storm drain system, rainwater can be diverted to GSI facilities which helps to infiltrate the rainwater into soil and slow the rate at which it enters waterways, decreasing the risk of flooding. In addition, the trees and plants also provide carbon sequestration opportunities.

Success for this measure will be determined by how effectively installed GSI facilities are meeting their intended goals.

#### **Key Target Metrics**

Include green stormwater infrastructure in City projects as described in the City's Green Stormwater Infrastructure Plan

#### **GHG Emissions Reduction Potential**

Supportive



#### Measure ML-7 Actions

- 1 Implement the City's Green Stormwater Infrastructure Plan.
- 2 Provide on-going education and training to staff on the policies and standards in the GSI Plan.
- 3 Evaluate GSI installations to refine standards and details, as necessary.



#### City Cost: \$

This measure is an unfunded mandate under the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit which is required regardless of this CAP. Therefore, no cost for implementation is included in the CAP 2030. Specific details on implementation and ongoing operational costs are available in the Green Stormwater Infrastructure Plan.



#### Benefits of Implementing the Green Stormwater Infrastructure Plan

Dublin will increase its overall resilience by implementing the City of Dublin Green Stormwater Infrastructure Plan. Installation of green stormwater infrastructure in optimal locations offers several benefits, including:

- Improved stormwater management and reduced runoff to decrease localized flooding;
- Improved water quality as pollutants are removed from stormwater in GSI systems which results in healthier aquatic ecosystems;
- Increased infiltration into groundwater aquifers to help protect local water quality;
- Increased carbon sequestration opportunities and increased urban green space;
- Relief from extreme heat days; and
- Additional wildlife habitat for a healthier ecosystem.



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# WORKING<br/>towards a low<br/>carbon<br/>carbon<br/>conony.

#### 7.0 Working Towards a Low Carbon Economy

#### What is a Low Carbon Economy?

A low carbon economy is an economic system that reduces or removes GHG emissions generated from economic activity, such as making and buying products or services. When an item is purchased, a service is received, a light is turned on, or people travel, GHG emissions are generated. For example, when someone purchases an apple at the store, brings it home, eats it and then dispose of the core, those are only a few steps in that apple's total lifecycle. Before and after the purchase of that apple, many more steps that generate varying GHG emissions take place including:

- Fertilizer (which takes energy to make), or compost (which helps drawn down carbon dioxide from the atmosphere) used in the field;
- Fuel combusted to power tractors and other farm equipment;
- Water used for irrigation that takes energy to pump; and
- Transportation of the apple to the store or market.

After the apple is eaten, there are more GHG emissions from items such as the fuel used in the garbage or organics truck to the varying levels of methane emissions released at the landfill or by the composting of the apple core. The study of these





impacts is called a lifecycle analysis, and it details the true GHG emissions associated with the products and services people use every day. Lifecycle GHG emissions are in turn measured by a consumptionbased inventory, or an inventory that quantifies all the products and services consumed by a city in a year.

These consumption-based or lifecycle GHG emissions can be over two times higher than emissions from within a city boundary<sup>1</sup> and provide a more complete picture of how everyday actions impact GHG emissions (see Figure 7-1). Since GHG emissions and climate change are global issues, the GHG emissions that occur outside of Dublin effect the community just as much as emissions generated within Dublin's boundaries. This makes the reduction of lifecycle GHG emissions an opportunity to further reduce Dublin's GHG footprint.

#### In-boundary Versus Consumption-Based GHG Emissions Inventories

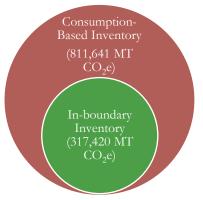
There are two primary ways to quantify GHG emissions associated with a city: in-boundary GHG emissions inventories and consumption-based, or lifecycle, GHG emissions inventories. In-boundary inventories attribute all GHG emissions to the jurisdiction in which the emissions occur. An inboundary GHG emissions inventory has been the most common type of inventory conducted to date by municipalities and is the type of inventory completed as part of this CAP update. It represents GHG emissions directly tied to actions within Dublin city limits. A consumption-based, or lifecycle, GHG emissions inventory attributes all GHG emissions from the production and transportation of goods and services to consumers, regardless of where the GHG emissions are released into the atmosphere. These inventories are more complex to calculate and methodologies for completing these calculations vary.

Considering the entire lifecycle of a product or service provides a complete picture of the product's impact on GHG emissions. While the GHG reduction measures included in CAP 2030 are based on an in-boundary GHG emissions inventory, the Dublin community can also take steps to reduce GHG emissions when making product choices. Simple changes to purchasing habits can result in significant reductions in global GHG emissions while providing additional co-benefits for the local community, such as improved health, reduced traffic congestion, and other co-benefits discussed in detail in Section 6.

#### Dublin's Estimated Consumption-Based GHG Emissions

Figure 7-1 shows the difference between the calculated Dublin in-boundary GHG emissions inventory and an estimate of the consumption-based inventory GHG emissions developed by U.C. Berkeley which uses economic input/output data and other regional datasets to estimate the use of goods and services for each census tract in the Bay Area. The additional GHG emissions come from a variety of sectors including food, services, and goods purchased within Dublin. The GHG emissions from the various goods and services per person are shown in Figure 7-2. Figure 7-3 shows the differences in consumption-based GHG emissions inventories throughout the Tri-Valley region.

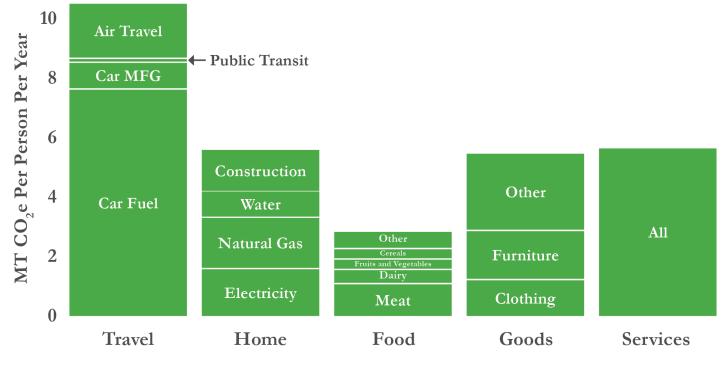
#### Figure 7-1: Dublin's Estimated Consumption-Based vs. Calculated In-boundary GHG Emissions Inventories



<sup>&</sup>lt;sup>1</sup> https://www.c40.org/researches/consumption-based-emissions



#### Figure 7-2: Dublin's Consumption-Based GHG Emissions Footprint



Source: https://coolclimate.berkeley.edu/calculator

#### Figure 7-3: Tri-Valley Regional Consumption-Based GHG Emissions



Source: https://coolclimate.berkeley.edu/calculator



#### Taking Action – Community Opportunities

Everyone in the Dublin community can take steps to reduce lifecycle GHG emissions that offer direct benefits to the local economy and public health. For instance, shopping at Dublin businesses and local events such as farmers' markets instead of purchasing goods online reduces GHG emissions associated with travel and packaging while also benefiting the local economy. Other strategies, such as hosting and participating in free Fixit clinics to repair broken items instead of buying replacements eliminates the lifecycle GHG emissions required to build and transport a new item and also saves money. Participating in meatless Mondays or eating a predominantly plant-based diet contributes to improved dietary health outcomes and also reduces GHG emissions associated with livestock production. Walking and biking to complete errands instead of taking a gasoline- or diesel-fueled vehicle provides personal health benefits in addition to improving local air quality and reducing GHG emissions.

The most significant action one can take to reduce their carbon footprint is to drive less by choosing active transportation or public transit. Over 34% of consumption-based GHG emissions (and 60% of come community GHG emissions) from transportation. As the City of Dublin works to provide more options including bicycle and scooter shares and safer ways to get around, choosing these options will do the most to reduce Dublin's carbon footprint. Transportation is also the hardest area for the City and State to make improvements. Personal behaviors help move this sector, and it is one of the only portions of the statewide GHG emissions inventory expected to increase over time. Additional actions that can be taken today to reduce lifecycle GHG emissions and improve the community are included below:



#### **Ride a Bike or Take a Stroll**

Transportation makes up the largest share of most household emissions. By riding a bike, taking a scooter, or walking to get to a destination, Dublin residents can take a big chunk of GHG emissions out of their carbon footprint while also saving money, improving health, and destressing away from traffic.

#### **Sharing is Caring**

Need a one-time tool? Have a once-a-year camping or ski trip coming up? Consider renting, trading, and sharing to avoid buying new. It's a great way to get to know your neighbors. Investigate the many apps available to help you share cars, tools, and other items.

#### **Eat Local Produce**

Upstream GHG emissions are generated by the transportation and packaging of produce from around the world to grocery stores. Residents can reduce those emissions in the following ways:

- Grown your own produce just steps from your kitchen.
- Shop for produce at the farmers' market which also supports local farmers and workers and provides consumers access to the freshest seasonal produce.
- Subscribe to a community supported agricultural box also known as a CSA. CSAs deliver a weekly box of fresh produce from one farm to a subscriber's home or a local drop off location. This also establishes a relationship with families and a local farm.

#### **Fix it First**

Before buying that new phone, vacuum, or coffee maker, try to fix it. Fixing or restoring an old item instead of buying a new one reduces GHG emissions associated with producing, transporting products to market, and disposing of them. Restore that old table, factory reset that phone, or resole your favorite shoes and save some money and significant lifecycle GHG emissions. Fix it at home or patronize one of Dublin's many repair shops to keeping spending local.









#### **Use Reusable Items**

Morning trips for coffee, shopping at the grocery store or farmers' market, and packing a lunch all present opportunities to use reusable items. Reducing the use of single-use disposables and packaging helps reduce the associated up-stream and downstream GHG emissions connected to consumption. Using reusable items such as travel coffee mugs, cloth napkins, and reusable utensils and straws also helps reduce litter and marine pollution. Reusable items often provide a better user experience; for instance. reusable beverage containers tend to keep beverages either colder or hotter for longer periods of time compared to





Photo Credits: Patch.com (bottom)



#### Second Hand is New to You

Dublin is home to a diversity of second-hand stores that sell clothing, furniture, home goods, cars, sporting equipment, books, and more. Additionally, there are many online networks to connect unwanted items with new owners. Donating or selling used goods instead of throwing them away allows items to have another life. Shopping second hand diminishes the impact of the upstream GHG emissions associated with the production of an item and delays the downstream GHG emissions resulting from the disposal of goods. Secondhand products often cost much less, which also saves residents money.

#### **Compost Food and Yard Waste**

Backyard composting of food and yard waste reduces GHG emissions from the transport and breakdown of organic waste. When compostable waste decomposes in the landfill, it breaks down anaerobically, or without oxygen, and the byproduct of that process is methane gas. Methane gas contributes even more to GHG emissions than carbon dioxide. On the other hand, the breakdown of food and yard waste in a compost pile is done aerobically, or with oxygen, and aerobic decomposition contributes less GHG emissions to the atmosphere. Different options for composting include:

- Backyard food and yard waste bin like that pictured in the photograph immediately to the left;
- Worm bins for food waste is perfect for small spaces and can provide enough compost to give houseplants a natural fertilizer boost); and
- Curbside green bins for food and yard waste which are picked up weekly by the City of Dublin's waste hauler.

Applying compost in the garden instead of using synthetic fertilizer further reduces associated GHG emissions and can actually capture carbon dioxide from the atmosphere.



#### **Plant Rich Diets**

Reducing the quantity of meat consumed has been identified as one of the most effective ways to reduce GHG emissions worldwide. Plant rich diets also tend to be healthier and can result in a decrease in chronic health problems. Consider participating in meatless Mondays or eliminating meat from one meal per day.





#### **Reduce Food Waste**

Reducing food waste is one of the leading solutions to climate change. It is also something that everyone can do today without new technology or buying a thing. When food is wasted, all of the energy, water, and resources that went into producing that food and getting it into kitchens is wasted along with the time and money people spend shopping for food. In the United States, approximately 43% of food waste occurs at home. Reduce food waste, fight climate change, and save money and time through planning and proper food storage.

#### **Low-carbon Building Materials**

The materials used to construct buildings contain embodied GHG emissions which are the emissions generated by making and transporting materials to a building site. The embodied GHG emissions of a building are substantial when assessing the whole lifecycle of a building. Identifying opportunities for reuse during renovations can help minimize building GHG emission. Specific material choices can also impact emissions such as the use of straw bales for insultation. Straw bales are made from straw waste that is a farming byproduct. Use of a waste byproduct has negative GHG emissions because it is preventing that material from becoming waste. The City of Dublin is embracing low-carbon building materials. The entrance walls of the Public Safety Complex are made of straw bales.

Keeping a strong local economy means building strong relationships within the community, making Dublin safer and more socially resilient. By participating in the activities described in this section, in-boundary GHG emissions will also go down as there is less waste to remove and fewer cars travelling through Dublin. Reducing both consumption-based and in-boundary emissions is an important step to achieving the City of Dublin's long-term GHG emissions reductions goals.



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#### 8.0 Implementing CAP 2030

CAP 2030 is the City of Dublin's roadmap to achieving its GHG emissions reduction goals which includes a 2025 milestone to determine if the City is on track to meet the State mandated goal of 40% below 1990 levels by 2030, with the ultimate goal of achieving carbon neutrality by 2045. While substantial evidence suggests that the measures and actions outlined in this CAP will achieve the 2025 and 2030 targets, uncertainty increases over time. The adoption rates of each measures, costs of technology, legislative environment, and benefits assumed in this report will continue to evolve over time. Therefore, this CAP should be viewed as a strategic framework that will be reevaluated over time. This section outlines how the City will implement the actions included in the CAP, monitor progress, and prepare updates over time.



## Who is Responsible for Implementation?

While the City of Dublin's first CAP was achieved primarily though State and City actions, CAP 2030 will require a communitywide effort. CAP 2030 focuses on making the foundational changes, infrastructure investments, and policy directives that will allow Dublin to transition to carbon neutrality. The City can update building codes, provide electric vehicle charging infrastructure and designate bike lanes, but it is up to the broader community to embrace these new services and technologies and gain the benefits outlined in this plan.

As shown in the graphic entitled How to Make Change, achieving success on climate action requires participation from the City, community partners, businesses, and Dublin residents. Making meaningful progress towards reducing Dublin's GHG emissions starts with City leadership, through policies, education, ordinances, and investments that act as catalysts for change throughout the wider community. Community partners like EBCE, LAVTA, and BayREN then support these policies with incentives and programs. Businesses can then leverage these policies to provide new services and adopt new practices. Finally, residents that have been provided with the incentives and education, can adapt behavior to lower GHG emissions communitywide. As policies and programs are developed and infrastructure is constructed, City staff will work hard to engage the Dublin community on progress and opportunities for improvement. The City looks forward to offering the community new programs that will help meet the GHG emissions reduction goals.

#### How to Make Change



Facilitate CAP implementation by streamlining permitting, passing ordinances, and planning for future infrastructure.

#### **Partners Role**



Partners such as EBCE and BayREN provide education and financial incentives to kickstart adoption and installation of new technologies.

#### **Business Role**



Develop and build new services and update skills to address new technologies. Adopt new technologies and behaviors, utilize programs and incentives, and enjoy the benefits.

#### **Residents Role**



Adopt new technologies and behaviors, utilize programs and incentives, and enjoy the benefits.



#### Cost of Implementation

This plan focuses first and foremost on measures and actions that are either no or low cost to the community. The single largest GHG emissions reduction will come from a communitywide switch to EBCE's carbon-free power portfolio at very low cost to the Dublin community. Not only will this single action reduce GHG emissions, but it will also provide the foundation for the City's long-term GHG emissions reduction plan. Other measures, such as electrification of existing buildings may be feasible today for every citizen. However, more and more resources are being provided by the State, local government, and utilities to help fund this transition. The City will seek grants, matching funds, in-kind contributions, and other resources from State, federal, and philanthropic sources to help pay for actions and limit the cost of implementation to the City and Dublin community.

Full implementation of the City's CAP will require investments on the part of the City, local households and property owners, and commercial businesses. In most cases, the expenditures will not only help to reduce GHG emissions but will also bring other valuable co-benefits as described in Section 6.

Some expenditures will not represent net cost increases, but instead will involve substituting investments to GHG emissions reducing alternatives for equipment, materials, and technologies that would otherwise have been made on less climate-friendly options. For example, residents and businesses are encouraged to make investments in water and energy conservation improvements, for which the initial expenditure on the improvements will be offset by long-term savings from reduced water or energy usage. The benefits may also provide additional, unquantified improved resilience and operational benefits. Further, the City and local partners such PG&E, EBCE, and Dublin San Ramon Services District (DSRSD) can help households and businesses make these transitions by providing rebates and other low-cost financing programs.

Below are general descriptions of principles that may guide the City's approach to funding the CAP as well as descriptions of key funding sources that the City may use. A more detailed list specifying types of funding sources can be found in Table 8-1.





#### **Funding Strategy Principles**

The CAP will be implemented over time. Funding sources for some actions can be identified at the outset, while the best means to fund other actions will be determined at the time the City is ready to implement them, depending on the resources available at the time. Several principles can help the City to determine the best approach to funding various actions, as delineated below. An overview of funding sources can be found in Table 8-1.

#### Equity

The costs of implementing the CAP should be spread as equitably as possible, taking care to limit the imposition of new costs on the segments of the community that have the least ability to shoulder increased costs. Where certain segments of the community will benefit disproportionately from an action, the costs should be spread accordingly. Where possible, funding options and resources have been included which target assistance to low- and moderateincome households.

#### **Cost-Effectiveness**

The CAP prioritizes cost-effective actions which can generate cost savings that will offset the costs to those who are required to pay for implementation. While some actions may require some initial capital outlay, whenever possible these actions should generate longterm cost savings that will repay and even generate a return on investment (ROI).

#### Leveraging Local Resources

Leveraging will involve using outside sources of funding to augment local resources to fund implementation of the CAP. The City will seek grants, matching funds, in-kind contributions, and other resources from State, federal, and philanthropic sources to help pay for actions and limit the cost to the City and community.





#### Table 8-1. Climate Action Plan Funding Matrix

| Strategy/Measure   | Source                         | Funding Program   | Uses of Funds/Notes   |
|--|--------------------------------|---|---|
| Strategy 1: Renewable and Carbon-  | -Free Electricity (CF)         |   |   |
| Measure CF-1: Opt-Up to 100%<br>Renewable and Carbon-Free<br>Electricity   | City of Dublin                 | General Fund –<br>Operating cash flow   | Minimal staff time will be required for public education. Energy cost to end users is expected to increase only minimally due to competitive rates for EBCE's renewable and carbon-free energy portfolios.  |
| Measure CF-2: Develop a<br>Renewable Resource<br>Buildout Plan             | City of Dublin/<br>EBCE        | General Fund<br>Grant, EBCE<br>Partnership  | Potential partnerships with EBCE or public/private partnerships could help cover some or all of the expected plan development and implementation costs.   |
| Strategy 2: Building Efficiency and  | l Electrification (EE)         |   |   |
| Measure EE-1: Achieve<br>All-Electric New Building<br>Construction         | City of<br>Dublin/EBCE         | General Fund or permit<br>fees – private const.<br>financing, EBCE<br>Partnership | Staff will implement and enforce electric preferred building codes. All electric buildings may create construction and occupant operations cost savings. EBCE will provide \$10,000 in 2020 to offset costs for staff time to develop electric preferred building codes for possible adoption.  |
| Measure EE-2: Implement the<br>State Building Energy<br>Disclosure Program | City of Dublin                 | General Fund  | This program would be implemented by the City and would be based on the existing State program.   |
| Measure EE-3: Streamline<br>Battery Storage Permit<br>Requirements         | City of Dublin                 | General Fund  | The City would use general funds to update the permit process for battery storage to create a more streamlined process.   |
| Measure EE-4: Develop an<br>Existing Building<br>Electrification Plan      | City of Dublin/<br>EBCE/BayREN | General Fund<br>Partner incentive<br>programs                                     | Plan development would likely be funded by the general fund. However, future grants may become available from the State or local partners for this work.  |
| Strategy 3: Sustainable Mobility an  | nd Land Use (SM)               |   |   |
| Measure SM-1: Adopt an Electric<br>Vehicle Charging Station<br>Ordinance   | City of Dublin                 | General Fund  | The City would use the general operation budget to develop this ordinance.<br>Staff would promote incentives for EV ownership as well as adopt building reach codes to<br>increase the installation of new EV charging stations.  |
| Measure SM-2: Develop an<br>Electric Vehicle Infrastructure<br>Plan        | City of Dublin                 | General Fund<br>Grant Funding<br>Public/Private<br>Partnerships                   | The City would use the general operation budget to develop the plan. Incentives and grant funding opportunities may be available for infrastructure and planning efforts. Collaborate with third party businesses to site charging facilities. City and privately-owned facilities could possibly obtain grant funding from Bay Area Air Quality Management District, PG&E, EBCE, or other sources. |



| Strategy/Measure   | Source  | Funding Program   | Uses of Funds/Notes   |
|--|---|---|---|
| Measure SM-3: Develop a<br>Transportation Demand<br>Management Plan              | Alameda County<br>Transportation<br>Commission<br>Caltrans<br>California<br>Transportation<br>Commission<br>LAVTA<br>BART<br>City of Dublin | General Fund<br>Permit Fees<br>Sustainable<br>Transportation<br>Planning Grants       | The City of Dublin could fund a portion of the transportation demand management plan<br>implementation through permit or user fees.<br>Grants encourage local and regional planning that furthers State goals and help achieve<br>California's greenhouse gas reduction targets.  |
| Measure SM-4: Develop a<br>Citywide Parking Management<br>Plan                   | City of Dublin  | General Fund  | The City would update its parking management plan as part of normal City operations.  |
| Measure SM-5: Update<br>the Bicycle and Pedestrian<br>Master Plan                | City of Dublin  | Transportation<br>Development Act<br>Article 3 Funds<br>Measure B<br>Measure BB Funds | The Metropolitan Transportation Commission collects Transportation Development Act (TDA) funds. Two percent of TDA funds are allocated to TDA Article 3 (TDA 3) funds which are redistributed to each county and must be used for bicycle and pedestrian projects. In Alameda County the TDA 3 funds are distribute to jurisdictions based on population. Measure B was approved by Alameda County voters in 1986 and renewed in 2000. It provides a one-half-cent sales tax to improve transportation throughout Alameda County. Voters passed <u>Measure BB</u> in November 2014 and collection of the initial half-cent transportation sales tax by the Board of Equalization began on April 1, 2015 and will extend through March 31, 2022. The full one-cent sales tax authorized by Measure BB will begin April 1, 2022 and will extend through March 31, 2045. Starting in July 2015, Alameda CTC began making monthly local distribution payments to local jurisdictions and transit agencies, per the <u>2014 Transportation Expenditure Plan</u> , for the following programs: local streets and roads (including county bridges), bicycle and pedestrian, transit and paratransit. |
| Measure SM-6: Continue to<br>Prioritize Transit Oriented<br>Development          | City of Dublin  | N/A   | Already being implemented by the City.  |
| Measure SM-7: Develop a Built<br>Environment that Prioritizes<br>Active Mobility | City of Dublin  | General Fund  | The City will update zoning and codes as part of City operations.   |



| Strategy/Measure  | Source   | Funding Program  | Uses of Funds/Notes  |
|---|--|--|--|
| Strategy 4 – Materials and Waste M  | Ianagement (MM)  |  |  |
| Measure MM-1: Achieve the<br>Organic Waste Reduction<br>Requirements of SB 1383 | Alameda County<br>Waste Management<br>Authority<br>CalRecycle<br>USEPA<br>CalRecycle<br>City of Dublin | Measure D Fund<br>County Payment<br>Program<br>Environmental<br>Education Grants<br>Food Waste Prevention<br>and Rescue Grant<br>Program | The Alameda County Waste Reduction and Recycling Initiative (Measure D), levies a surcharge<br>on solid waste landfilled in Alameda County. Fifty percent of Recycling Fund revenues are<br>disbursed to cities and sanitary districts, including Dublin. Funds disbursed to municipalities<br>must be used "for the continuation and expansion of municipal recycling programs" and other<br>waste diversion initiatives.<br>CalRecycle provides funding annually to support city and county efforts to increase recycling of<br>bottles and cans.<br>Grants support environmental education projects that promote environmental awareness and<br>stewardship and help provide people with the skills to take responsible actions to protect the<br>environment. This grant program provides financial support for projects that design,<br>demonstrate, and/or disseminate environmental education practices, methods, or techniques.<br>Supports new or expanding existing food waste prevention projects (source reduction or food<br>rescue for people) in California to reduce the amount of food being disposed in landfills. Dublin<br>staff collaborates with StopWaste, AVI and other partners to develop educational materials and<br>resources to educate food service businesses about waste reduction opportunities and programs.<br>Suggest we don't include specific funding amounts now because we don't know what the future<br>holds. |
| Measure MM2: Reduce<br>Embodied Emissions Associated<br>with Building Materials | City of Dublin   | Permit fees<br>Private construction<br>financing<br>General Fund   | Staff will develop and implement low embodied carbon building code. Low embodied carbon building code requirements will be included in construction costs and are expected to be approximately equal to standard building practice costs.  |
| Source: BAE Urban Economics   |  |  |  |

### DUBLIN CALIFORNIA

#### Monitoring CAP 2030

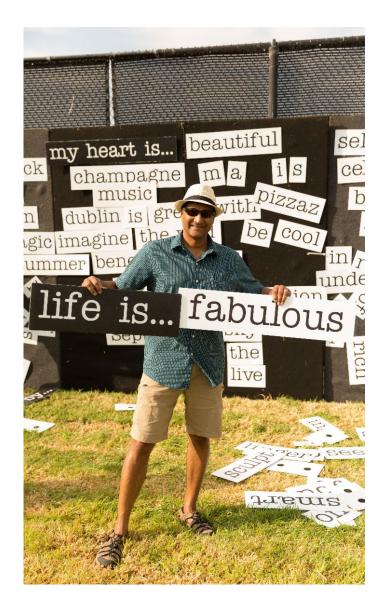
#### The Timing of Implementation

CAP 2030 monitoring will be executed by City departments and community partners working to successfully implement the identified GHG emissions reduction measures. For purposes of monitoring CAP 2030 implementation and GHG emissions reduction progress, this section outlines the schedule for: conducting GHG emissions reductions inventories; implementing the CAP 2030 measures; and reviewing the measures in CAP 2030 to determine if Dublin is on-track to meet GHG emissions reductions goals or if additional implementation measures are needed.

In order to achieve the 2025 and 2030 GHG emissions reductions targets discussed in Section 6, Dublin will need to begin implementing the CAP 2030 GHG emissions reductions actions by the end of 2020 and continue to make progress throughout the next 10 years. If the actions identified in CAP 2030 to meet the 2025 GHG emissions reduction milestone goal are not implemented, it is likely additional actions will need to be developed to meet the 2030 goal established by Senate Bill 32. The longer measure action is delayed, the more significant actions need to be taken to achieve the longer-term 2030 and 2045 GHG emissions reduction targets. Some actions such as adopting ordinances or resolutions to opt-up the community into EBCE's renewable and carbon-free power portfolio can be done on a short time table; while others, such as implementation of the Bicycle and Pedestrian Master Plan, will require longer timelines for both rollout of the infrastructure and use by the community. To help guide implementation of the actions in CAP 2030, a timeline for each measure's actions is included in Table 8-2.

#### GHG Emissions Reduction Inventory Update Timeline

The City will conduct GHG emissions reductions inventories on a routine basis but no less than every three years with the next inventory to be complete for calendar year 2022. If the 2022 GHG emissions reductions of the City are on track to reach the 2030 targets, it is anticipated that no additional CAP measure adjustments would be necessary. If the City has not made sufficient progress on GHG emissions reduction goals by 2025, a CAP update may be required to increase emissions reductions measures and maintain status as a CEQA qualified GHG emissions reduction plan. The CAP update could require additional implementation of the existing actions and/or additional actions such as shifting incentive and educational programs to mandatory requirements. A complete CAP update for post-2030 emissions reductions targets will be required, and City staff shall begin this effort in 2028.





#### Major CAP Update

In 2028, the City will begin preparing an updated Climate Action Plan to revisit and update the approach outlined in CAP 2030 and to develop new or updated measures. By the end of the decade, it is anticipated that new technologies and State mandates will be adopted that will facilitate further GHG emissions reductions, but the City will need to act in order to meet the long term 2045 carbon neutrality goal. Greater action will likely be required in transportation in the successor to CAP 2030. Transportation is expected to undergo rapid transformation in the next 10 years and 60% of GHG emissions are currently produced from this sector.



#### Dublin Will Annually Monitor Its GHG Emissions Reduction Measures Status

The City will conduct annual implementation monitoring of the GHG emissions reduction measures and report out on this progress to City Council every other year beginning in 2022. The process for monitoring and quantifying measure implementation status relies on data, specifically data for the key target metrics identified in each of the GHG reduction measures in Sections 6.1 through 6.5. Table 8-2, GHG Emissions Reduction Measures Monitoring and Reporting Program, lists how (via specific related actions), when, and which City department(s) will monitor the on-going implementation of the CAP measures. The City hopes that by committing to annual monitoring of CAP implementation progress and adjusting where necessary, Dublin will rise to meet the local and global imperative of reducing greenhouse gas emissions. In the process of meeting that challenge, Dublin will benefit from the supplemental health, economic, resiliency, and other co-benefits of the emissions reduction GHG measures. The commitments in CAP 2030 mark another milestone in the City's commitment to a sustainable future.



#### Table 8-2. GHG Emissions Reduction Measures Monitoring and Reporting Program

|   |   |                          |   | Com            | pliance Verifi | cation   |
|---|---|--------------------------|---|----------------|----------------|----------|
| GHG Emissions Reduction Measure   | Action(s) Required  | Implementation<br>Timing | Monitoring and<br>Implementation Responsibility   | In<br>Progress | Complete       | Comments |
| Strategy 1 – Renewable and Carbon-Free  | e Electricity (CF)  |                          |   |                |                |          |
| Measure CF-1: Opt-Up to 100% Renewa   | ble and Carbon-Free Electricity   |                          |   |                |                |          |
| The City of Dublin will set 100%<br>renewable and carbon-free electricity as<br>the default electricity for all Dublin<br>customers served by East Bay Community<br>Energy to unlock health and GHG<br>emissions reduction benefits associated<br>with carbon-free electricity. | Conduct community outreach on<br>benefits of opting into 100%<br>renewable and carbon-free energy.                                  | 2020                     | Environmental Services Division,<br>Economic Development Division, East<br>Bay Community Energy                             |                |                |          |
|   | Draft a resolution to join EBCE's 100% carbon-free electricity program for City Council's consideration.                            | 2020                     | Environmental Services Division   |                |                |          |
|   | Provide ongoing education and<br>support to community regarding<br>benefits.  | 2021                     | Environmental Services Division,<br>Economic Development Division,<br>Communications Division, East Bay<br>Community Energy |                |                |          |
|   | Evaluate opt-out rates and calculate GHG emissions reductions.  | On-going                 | Environmental Services Division, East<br>Bay Community Energy   |                |                |          |
| Measure CF-2: Develop a Renewable Re  | esource Buildout Plan   |                          |   |                |                |          |
| The City will leverage State and local<br>funding and partnerships to develop local<br>community solar projects in Dublin and<br>investigate development of micro-grids to<br>improve the resilience of the local<br>electricity infrastructure.                                | Coordinate with EBCE to conduct<br>outreach to key stakeholders on<br>renewable resources development<br>opportunities and hurdles. | 2021                     | Public Works Department,<br>Environmental Services Division, East<br>Bay Community Energy                                   |                |                |          |
|   | In coordination with EBCE,<br>develop the Renewable Resource<br>Buildout Plan.  | 2021                     | Environmental Services Division   |                |                |          |
|   | Conduct a pilot renewable energy<br>or electricity resilience project.  | 2022                     | Environmental Services Division,<br>Community Development Department,<br>Public Works Department                            |                |                |          |
|   | Evaluate benefits and costs of<br>pilot project, refine<br>implementation strategy if needed,<br>and continue implementation.       | 2023                     | Environmental Services Division   |                |                |          |



|  |  |                                |  | Compliance Ver |          | cation   |
|--|--|--------------------------------|--|----------------|----------|----------|
| GHG Emissions Reduction Measure  | Action(s) Required   | Implementation<br>Timing       | Monitoring and<br>Implementation Responsibility  | In<br>Progress | Complete | Comments |
| Strategy 2 - Building Efficiency and Ele   | ctrification (EE)  |                                |  |                |          |          |
| Measure EE-1: Achieve All-Electric New   | v Building Construction  |                                |  |                |          |          |
| Adopt an all-electric building reach code<br>for new construction to reduce natural gas<br>use and limit the development of new gas<br>infrastructure in the City of Dublin. | Conduct outreach to the<br>community as well as<br>builders/developers to educate<br>them on the proposed ordinance,<br>the associated GHG emissions<br>reductions, and cost benefits. | 2020                           | Environmental Services Division,<br>Community Development Department,<br>Economic Development Division |                |          |          |
|  | Draft a City Ordinance that favors<br>all-electric new construction for<br>City Council consideration.   | 2020                           | Environmental Services Division,<br>Building Division  |                |          |          |
|  | Provide training to City staff on<br>new electric preferred ordinance<br>requirements.   | 2020                           | Environmental Services Division,<br>Building Division  |                |          |          |
|  | Continue to evaluate cost effective<br>opportunities to add additional<br>building types into the<br>electrification ordinance.  | On-going (after<br>evaluation) | Environmental Services Division,<br>Community Development Department                                   |                |          |          |
| Measure EE-2: Implement the State Bui  | lding Energy Disclosure Program  |                                |  |                |          |          |
| The City of Dublin will require all<br>commercial and multifamily buildings<br>covered by AB 802 to report energy use<br>through the Energy Star Portfolio<br>Manager tool.  | Conduct outreach to owners of<br>buildings greater than 50,000<br>square feet on the requirements of<br>AB 802 and the change in<br>reporting to the City.                             | 2020                           | Environmental Services Division,<br>Community Development Department,<br>Economic Development Division |                |          |          |
|  | Implement the State Building<br>Energy Disclosure Program AB<br>802 for large commercial and<br>multi-family buildings as well as<br>voluntary residential disclosures.                | 2021                           | Environmental Services Division, Public<br>Works Department  |                |          |          |
|  | Provide education to building<br>owners on the value of additional<br>energy audits and energy<br>efficiency/electrification projects.   | 2021                           | Environmental Services Division,<br>Economic Development Division,<br>Community Development Department |                |          |          |



|  |  |                                    |  | Compliance Verification |             |          |
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| GHG Emissions Reduction Measure  | Action(s) Required   | Implementation<br>Timing           | Monitoring and<br>Implementation Responsibility  | In<br>Progress          | Complete    | Comments |
|  | Showcase building owners and<br>buildings that have exceptionally<br>high energy efficiency numbers.   | 2021                               | Environmental Services Division,<br>Economic Development Division                                |                         |             |          |
| Measure EE-3: Streamline Energy Stora  | ge Permit Requirements   |                                    |  |                         |             |          |
| The City will ensure that permitting for<br>the installation of new battery storage in<br>residential and commercial buildings is  | Review current battery storage<br>permit process to identify<br>opportunities for streamlining.  | 2021                               | Environmental Services Division,<br>Building Division  |                         |             |          |
| streamlined and clear in order to promote<br>the installation of additional energy<br>storage capacity in Dublin.  | Update and implement streamlined<br>process where appropriate for<br>battery installation.   | 2021                               | Environmental Services Division,<br>Building Division  |                         |             |          |
|  | Provide training to City staff on<br>updated battery storage permit<br>process.  | 2021                               | Building Division, Environmental<br>Services Division  |                         |             |          |
|  | Provide education and outreach to<br>the community on the benefits of<br>battery storage and the availability of<br>renewable power.   | On-going (after<br>implementation) | Environmental Services Division,<br>Communications Division                                      |                         | $\boxtimes$ |          |
|  | Reassess new opportunities for<br>streamlining the battery storage<br>permit process every few years and<br>update in response to anticipated<br>future uniformity in battery storage<br>technologies. | On-going (after<br>implementation) | Environmental Services Division,<br>Building Division, Communications<br>Division                |                         |             |          |
| Measure EE-4: Develop an Existing Bui  | ilding Electrification Plan  |                                    |  |                         |             |          |
| Develop a plan to promote the retrofit of 22% existing buildings in Dublin to all-<br>electric by 2030 and consider<br>development of existing building<br>electrification ordinances in the future. | Conduct outreach to the community<br>as well as builders/developers to<br>educate them on the benefits,<br>potential hurdles, and solutions<br>surrounding existing building<br>electrification.       | 2020                               | Environmental Services Division,<br>Community Development Department,<br>Communications Division |                         |             |          |
|  | Maintain the City website as a repository of information on the benefits and options associated with electrification.  | 2020                               | Environmental Services Division  |                         |             |          |



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| GHG Emissions Reduction Measure   | Action(s) Required   | Implementation<br>Timing       | Monitoring and<br>Implementation Responsibility  | In<br>Progress | Complete | Comments |
|   | Encourage the implementation of<br>energy efficiency and electrification<br>upgrades at the City building permit<br>counter.   | On-going                       | Environmental Services Division,<br>Community Development Department                                   |                |          |          |
|   | Promote electrification rebates and<br>no interest loans provided by the<br>State, utilities, and other<br>stakeholders.   | 2020                           | Environmental Services Division,<br>Community Development Department,<br>Public Works Department       |                |          |          |
|   | Conduct an electrification pilot<br>project at a City owned building or<br>in coordination with a local<br>stakeholder.  | 2021                           | Environmental Services Division, Public<br>Works Department  |                |          |          |
|   | Continue to evaluate costs/benefits<br>of existing building electrification<br>and consider future improvements<br>to the existing building electrification<br>plan.   | On-going (after<br>evaluation) | Environmental Services Division, Public<br>Works Department  |                |          |          |
| Strategy 3 – Sustainable Mobility and La  | and Use (SM)   |                                |  |                |          |          |
| Measure SM-1: Adopt an Electric Vehicl  | e Charging Station Ordinance   |                                |  |                |          |          |
| The City of Dublin will adopt an electric<br>vehicle (EV) charging station ordinance<br>for multifamily and commercial buildings<br>to increase access to charging stations and | Conduct outreach to the community as well as builders/developers about the ordinance.  | 2020                           | Environmental Services Division,<br>Community Development Department,<br>Economic Development Division |                |          |          |
| promote the use of electric vehicles.   | Draft an updated City ordinance<br>that requires all new commercial<br>and multifamily buildings to<br>include 25% of parking spaces as<br>"EV Ready" (conduit and<br>electrical panel capacity installed),<br>with 3% parking required to have<br>installed operable Level 2 EV<br>charging stations or a comparable<br>level of service provided by DC<br>Fast Charging or other technology<br>as appropriate. | 2020                           | Environmental Services Division,<br>Building Division  |                |          |          |



| Action(s) Required  | Implementation<br>Timing   | Monitoring and<br>Implementation Responsibility   | Compliance Verification   |   |   |
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|   |  |   | In<br>Progress  | Complete  | Comments  |
| Provide training to permit counter<br>and building code staff on the<br>updated new building EV charging<br>station requirements.                                     | 2021   | Environmental Services Division,<br>Building Division   |   |   |   |
| Provide education as needed to<br>builders and developers on the<br>requirements of the ordinance.  | 2021   | Environmental Services Division,<br>Community Development Department  |   |   |   |
| Track progress including the<br>number of chargers installed and<br>the percent of EV's in the City of<br>Dublin through the Department of<br>Motor Vehicles website. | On-going (after<br>implementation)   | Environmental Services Division   |   |   |   |
| icle Infrastructure Plan  |  |   |   |   |   |
| Conduct outreach to the<br>community and work with<br>community partners to understand<br>need for chargers and identify<br>potential locations.                      | 2021   | Environmental Services Division,<br>Communications Division, Economic<br>Development Division   |   |   |   |
| Review successes and lessons<br>learned from existing EV<br>infrastructure plan projects.   | 2021   | Environmental Services Division,<br>Economic Development Division   |   |   |   |
| Develop EV Infrastructure Plan.   | 2021   | Public Works Department   |   |   |   |
| Conduct outreach and education<br>surrounding use and availability of<br>public charging infrastructure.  | 2022   | Environmental Services Division,<br>Economic Development Division   |   |   |   |
| Track progress and adjust plan to meet the long-term metrics.   | On-going (after implementation)  | Environmental Services Division   |   |   |   |
|   | Provide training to permit counter<br>and building code staff on the<br>updated new building EV charging<br>station requirements.<br>Provide education as needed to<br>builders and developers on the<br>requirements of the ordinance.<br>Track progress including the<br>number of chargers installed and<br>the percent of EV's in the City of<br>Dublin through the Department of<br>Motor Vehicles website.<br><b>icle Infrastructure Plan</b><br>Conduct outreach to the<br>community and work with<br>community partners to understand<br>need for chargers and identify<br>potential locations.<br>Review successes and lessons<br>learned from existing EV<br>infrastructure plan projects.<br>Develop EV Infrastructure Plan.<br>Conduct outreach and education<br>surrounding use and availability of<br>public charging infrastructure.<br>Track progress and adjust plan to | Action(s) RequiredTimingProvide training to permit counter<br>and building code staff on the<br>updated new building EV charging<br>station requirements.2021Provide education as needed to<br>builders and developers on the<br>requirements of the ordinance.2021Track progress including the<br>number of chargers installed and<br>the percent of EV's in the City of<br>Dublin through the Department of<br>Motor Vehicles website.On-going (after<br>implementation)Conduct outreach to the<br>community partners to understand<br>need for chargers and identify<br>potential locations.2021Review successes and lessons<br>learned from existing EV<br>infrastructure plan projects.2021Develop EV Infrastructure Plan.2021Conduct outreach and education<br>surrounding use and availability of<br>public charging infrastructure.2021Track progress and adjust plan toOn-going (after | Provide training to permit counter<br>and building code staff on the<br>updated new building EV charging<br>station requirements.2021Environmental Services Division,<br>Building DivisionProvide education as needed to<br>builders and developers on the<br>requirements of the ordinance.2021Environmental Services Division,<br>Community Development DepartmentTrack progress including the<br>number of chargers installed and<br>the percent of EV's in the City of<br>Dublin through the Department of<br>Motor Vehicles website.On-going (after<br>implementation)Environmental Services DivisionConduct outreach to the<br>community and work with<br>community and work with<br>community and identify<br>potential locations.2021Environmental Services Division,<br>Communications Division, Economic<br>Development DivisionReview successes and lessons<br>learned from existing EV<br>infrastructure Plan.2021Environmental Services Division,<br>Economic Development DivisionDevelop EV Infrastructure Plan.2021Environmental Services Division,<br>Economic Development DivisionDevelop EV Infrastructure Plan.2021Environmental Services Division,<br>Economic Development DivisionConduct outreach and education<br>surrounding use and availability of<br>public charging infrastructure.2021Environmental Services Division,<br>Economic Development DivisionTrack progress and adjust plan toOn-going (afterEnvironmental Services Division,<br>Economic Development Division | Action(s) RequiredImplementation<br>TimingMonitoring and<br>Implementation ResponsibilityIn<br>ProgressProvide training to permit counter<br>and building code staff on the<br>updated new building EV charging<br>station requirements.2021Environmental Services Division,<br>Building Division | Action(s) RequiredImplementation<br>TimingMonitoring and<br>Implementation ResponsibilityIn<br>ProgressCompleteProvide training to permit counter<br> |



|   |  | Implementation<br>Timing           | Monitoring and<br>Implementation Responsibility   | Compliance Verification |          |          |  |
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| GHG Emissions Reduction Measure   | Action(s) Required   |                                    |   | In<br>Progress          | Complete | Comments |  |
| Measure SM-3: Develop a Transportation  | n Demand Management Plan   |                                    |   |                         |          |          |  |
| Develop a comprehensive Transportation<br>Demand Management (TDM) Plan for<br>the City of Dublin. The TDM Plan will<br>identify strategies to help facilitate the<br>move from single-occupancy vehicles to<br>less carbon intensive transportation<br>modes. | Conduct community outreach and<br>engagement around TDM<br>principals such as transit, car share,<br>shared rideables (bikes and<br>scooters), unbundling of parking,<br>and other mobility options. | 2022                               | Transportation Division, Economic<br>Development Division, Community<br>Development Department,<br>Communications |                         |          |          |  |
|   | Create guidelines and policies for<br>micro-mobility and partner with<br>other cities in the region to rollout<br>shared ridable options like electric<br>scooters and bikes.                        | 2021                               | Transportation Division, Environmental<br>Services Division   |                         |          |          |  |
|   | Develop policies to plan for self-<br>driving electric vehicles.   | 2022                               | Transportation Division   |                         |          |          |  |
|   | Conduct a shared rideables pilot in<br>coordination with other Tri-valley<br>Cities.   | 2021                               | Transportation Division, Environmental<br>Services Division   |                         |          |          |  |
|   | Draft and adopt a TDM Plan or<br>Toolkit with requirements for new<br>construction/major renovations.  | 2021                               | Transportation Division, Community<br>Development Department,<br>Environmental Services Division                  |                         |          |          |  |
|   | Conduct further outreach,<br>education, and training on the new<br>TDM requirements.   | 2023                               | Transportation Division, Community<br>Development Department,<br>Environmental Services Division                  |                         |          |          |  |
|   | Track progress over time through<br>TDM modeling and traffic counts<br>and identify new technologies such<br>as live VMT data for better<br>analysis.  | On-going (after<br>implementation) | Transportation Division   |                         |          |          |  |



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| GHG Emissions Reduction Measure  | Action(s) Required   | Implementation<br>Timing        | Monitoring and<br>Implementation Responsibility   | In<br>Progress          | Complete | Comments |
| Measure SM-4: Develop a Citywide Park  | ing Management Plan  |                                 |   |                         |          |          |
| Develop a comprehensive Parking<br>Management Plan that will specify parking<br>requirements and costing that supports   | Conduct outreach and engagement around parking management.   | 2021                            | Transportation Division,<br>Communications Division,<br>Environmental Services Division |                         |          |          |
| multi-modal transportation and a reduction in vehicle miles traveled.  | Conduct a pilot project with one area of Dublin using parking management strategies.   | 2021                            | Transportation Division, Environmental<br>Services Division                             |                         |          |          |
|  | Develop the Parking Management<br>Plan with information developed<br>from the pilot project and<br>engagement efforts.       | 2022                            | Transportation Division, City Manager's<br>Office                                       |                         |          |          |
|  | Provide education and training<br>around the Parking Management<br>Plan requirements.  | 2022                            | Transportation Division   |                         |          |          |
|  | Monitor the program over time<br>and identify benefits and hurdles<br>of the program.  | On-going (after implementation) | Transportation Division   |                         |          |          |
| Measure SM-5: Update and Implement   | the Bicycle Pedestrian Master Plan   |                                 |   |                         |          |          |
| Update the Bicycle and Pedestrian Master<br>Plan to contribute to the overall VMT<br>reduction required to meet the City's<br>climate goals. The plan will maximize the<br>convenience and safety of active<br>transportation within the City of Dublin. | Conduct outreach and engagement<br>as part of Bicycle and Pedestrian<br>Master Plan (Plan) update.                           | 2020                            | Transportation Division,<br>Communications Division,                                    |                         |          |          |
|  | Identify the vision, goals and<br>strategies for the Plan<br>development.  | 2020                            | Public Works Department,<br>Transportation Division                                     |                         |          |          |
|  | Identify gaps in the existing<br>network and opportunities for<br>latent demand.   | 2020                            | Transportation Division, Public Works<br>Department                                     |                         |          |          |
|  | Prioritize and identify near-term<br>and long-term projects to close the<br>network gap, improve safety and<br>connectivity. | 2020                            | Transportation Division, Public Works<br>Department                                     |                         |          |          |



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| GHG Emissions Reduction Measure  | Action(s) Required  | Implementation<br>Timing        | Monitoring and<br>Implementation Responsibility  | In<br>Progress          | Complete | Comments |
|  | Develop policy and program<br>recommendations to achieve Plan<br>goals.   | On-going (after implementation) | Transportation Division, Public Works<br>Department  |                         |          |          |
|  | Prepare cost estimates, identify<br>funding sources and develop an<br>implementation plan.  | On-going (after implementation) | Transportation Division, Public Works<br>Department  |                         |          |          |
|  | Track miles of bike lane and<br>number of pedestrian<br>improvements over time.   | On-going (after implementation) | Transportation Division, Public Works<br>Department  |                         |          |          |
| Measure SM-6: Continue to Prioritize T   | ransit Oriented Development   |                                 |  |                         |          |          |
| Dublin has access to two BART stations<br>and several LAVTA bus lines. Focusing<br>higher density development and amenities  | Conduct outreach and engagement<br>around transit-oriented<br>development projects.   | 2021                            | Transportation Division,<br>Communications Division, Community<br>Development Department                   |                         |          |          |
| around these transit stops can decrease<br>VMT and GHG emissions generated<br>within Dublin.   | Track number of units within <sup>1</sup> /4-<br>mile and <sup>1</sup> /2-mile of transit to<br>estimate VMT reduction over<br>time.  | 2021                            | Transportation Division, Community<br>Development Department   |                         |          |          |
| Measure SM-7: Develop a Built Environ  | ment that Prioritizes Active Mobilit  | у                               |  |                         |          |          |
| The City of Dublin will implement<br>building standards that improve the<br>pedestrian experience and create a built<br>environment that prioritizes active<br>mobility. | Conduct outreach and engagement<br>around building standards that<br>encourage activity mobility.   | 2020                            | Community Development Department,<br>Economic Development  |                         |          |          |
|  | Conduct a pilot project using<br>building principals that encourage<br>active mobility for one area of<br>Dublin.   | 2020                            | Community Development Department,<br>Economic Development Division, City<br>Manager's Office               |                         |          |          |
|  | Amend the Zoning Ordinance and<br>design guidelines and standards as<br>needed to require new<br>development and remodels that<br>modify 50% or more of a<br>commercial or multi-family<br>property, to encourage active<br>mobility. | 2021                            | Transportation Division, Planning<br>Department; Environmental Services<br>Division, City Manager's Office |                         |          |          |



|  | asure Action(s) Required  | Implementation<br>Timing           |  | Compliance Verification |          |          |
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| GHG Emissions Reduction Measure  |   |                                    | Monitoring and<br>Implementation Responsibility  | In<br>Progress          | Complete | Comments |
|  | Conduct education and training on the new requirements.   | On-going (after implementation)    | Community Development Department,<br>Economic Development Division                                       |                         |          |          |
|  | Conduct follow up surveys and engagement around impacts of new requirements.  | On-going (after implementation)    | Community Development Department   |                         |          |          |
| Strategy 4 – Materials and Waste Manag   | rement (MM)   |                                    |  |                         |          |          |
| Measure MM-1: Achieve the Organic Wa   | aste Reduction Requirements of SB   | 1383                               |  |                         |          |          |
| The City of Dublin will coordinate with<br>community stakeholders to achieve the<br>goal of organics comprising less than<br>9.35% of Dublin waste by 2025.<br>Additionally, at least 20% of currently<br>disposed edible food will be recovered for<br>human consumption by 2025. | Conduct outreach to residents and<br>food waste generators about the<br>requirements of SB 1383 and the<br>benefits of composting and<br>organics waste reduction.  | 2021                               | Environmental Services Division,<br>Economic Development Division  |                         |          |          |
|  | Collaborate with regional partners<br>like StopWaste, waste haulers,<br>food recovery organizations and<br>other cities to establish regional<br>approach to SB 1383 compliance<br>including establishing a regional<br>food waste recovery plan. | 2021                               | Environmental Services Division,<br>StopWaste, Amador Valley Industries                                  |                         |          |          |
|  | Adopt a plan and associated policies/ordinances required for the successful implementation of SB 1383.  | 2021                               | Environmental Services Division, City<br>Manager's Office, City Council                                  |                         |          |          |
|  | Work with StopWaste and other<br>regional partners to conduct<br>education on the requirements of<br>SB 1383 and implement Action 3.  | On-going (after<br>implementation) | Environmental Services Division,<br>StopWaste, Communications Division,<br>Economic Development Division |                         |          |          |
|  | Continue to monitor waste<br>collection data with regional<br>partners to track progress and<br>evaluate additional measures as<br>necessary.   | On-going (after<br>implementation) | Environmental Services Division  |                         |          |          |



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| GHG Emissions Reduction Measure  | Action(s) Required   | Implementation<br>Timing | Monitoring and<br>Implementation Responsibility  | In<br>Progress          | Complete    | Comments                            |
| Measure MM2: Reduce Embodied Emis  | ssions Associated with Building Ma   | terials                  |  |                         |             |                                     |
| The City of Dublin will require the use of<br>low carbon concrete in new construction<br>projects to reduce lifecycle GHG<br>emissions and the embodied carbon<br>associated with construction projects. | Conduct outreach to the<br>development community regarding<br>low carbon concrete using the Bay<br>Area Low Carbon Concrete Codes<br>Project.  | 2021                     | Environmental Services Division,<br>Community Development Department   |                         |             |                                     |
|  | Present a low-carbon concrete<br>ordinance to City Council based<br>on the Marin County model<br>ordinance with specifications for<br>residential and non-residential<br>development applications. | 2021                     | Community Development Department,<br>Environmental Services Division, City<br>Manager's Office, City Council |                         |             |                                     |
|  | Educate City staff, and the development community on the new reach code requirements.  | 2021                     | Environmental Services Division,<br>Community Development Department,<br>Economic Development Division       |                         |             |                                     |
|  | Keep current on new model<br>ordinances that identify other<br>building materials to target for<br>additional embodied carbon<br>reductions.   | 2022                     | Environmental Services Division,<br>Community Development Department   |                         |             |                                     |
| Strategy 5 – Municipal Leadership (ML)   |  |                          |  |                         |             |                                     |
| Measure ML-1: 100% Renewable Electri   | city for Municipal Buildings and OI  | perations                |  |                         |             |                                     |
| The City of Dublin's municipal<br>government will help achieve GHG<br>emissions reduction goals related to   | Switch all municipal electricity<br>accounts to EBCE's Renewable<br>100 power portfolio (complete).  | 2019                     | City Manager's Office, Environmental<br>Services Division  |                         | $\boxtimes$ | This task<br>has been<br>completed. |
| municipal electricity use by opting-up all<br>municipal accounts to 100% renewable<br>electricity and expanding the City's battery<br>storage capacity.  | Complete a studies and conduct<br>outreach to engage staff at critical<br>facilities about the potential to<br>install additional solar and new<br>battery storage.                                | 2020                     | Environmental Services Division; Public<br>Work Department   |                         |             |                                     |
|  | Conduct a pilot program for solar<br>and battery storage at one or more<br>locations.  | 2021                     | Public Works Department, City<br>Manager's Office  |                         |             |                                     |



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| GHG Emissions Reduction Measure  | Action(s) Required  | Implementation<br>Timing | Monitoring and<br>Implementation Responsibility   | In<br>Progress | Complete       | Comments |
|  | Develop a policy to define<br>parameters for installation of solar<br>panel arrays and battery storage.   | 2022                     | Environmental Services Division, Public<br>Works Department, City Manager's<br>Office   |                |                |          |
|  | Provide education and training on<br>the battery storage policy to<br>relevant staff and include<br>educational information on the<br>City web page.  | 2021                     | Environmental Services Division, Public<br>Works Department   |                |                |          |
|  | Conduct annual reviews of the<br>solar production and cost savings<br>to improve operational efficiency<br>and evaluate success.  | 2021                     | Environmental Services Division, Public<br>Works Department   |                |                |          |
| Measure ML-2: Reduce Municipal Emp   | loyee Commute GHG Emissions   |                          |   |                |                |          |
| The City of Dublin's municipal<br>government will achieve its GHG<br>emissions reduction and mobility goals by<br>incentivizing municipal employee<br>alternative transportation use as well as<br>electric vehicle use. | Conduct outreach to employees<br>about current incentives for non-<br>single occupant vehicle commuting<br>and encourage participation in the<br>development of a municipal TDM<br>plan that incorporates and expands<br>on current municipal incentives. | 2021                     | Environmental Services Division;<br>Human Resources Division, City<br>Manager's Office.   |                |                |          |
|  | Conduct pilots for possible<br>programs to incorporate into a<br>municipal TDM plan.  | 2021                     | Environmental Services Division;<br>Human Resources Division;<br>Transportation Division, City Manager's<br>Office                |                |                |          |
|  | Adopt and implement the<br>municipal TDM plan and any<br>relevant policies and programs.  | 2021                     | Environmental Services Division;<br>Human Resources Department;<br>Transportation Division; City Manager's<br>Office City Council |                |                |          |
|  | Educate staff annually and provide<br>informational packets on TDM<br>programs for use when on-<br>boarding new staff.  | 2021                     | Environmental Services Division;<br>Human Resources Division  |                |                |          |



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| GHG Emissions Reduction Measure  | Action(s) Required  | Implementation<br>Timing        | Monitoring and<br>Implementation Responsibility                  | In<br>Progress | Complete       | Comments |
|  | Evaluate the success of the programs by conducting annual surveys of employees.   | On-going (after implementation) | Environmental Services Division;<br>Human Resources Division     |                |                |          |
| Measure ML-3: Electrify Municipal Veh  | nicle Fleet and Equipment   |                                 |  |                |                |          |
| The City of Dublin's municipal<br>government will electrify at least 33% of<br>its municipal vehicle fleet and municipal<br>maintenance equipment by 2030. | Complete a fleet and maintenance equipment electrification analysis.  | 2020                            | Public Works Department,<br>Environmental Services Division      |                |                |          |
|  | Conduct outreach and education<br>to the municipal fleet users on the<br>results of the electrification study<br>and provide information on the<br>benefits of electrification.   | 2021                            | Public Works Department,<br>Environmental Services Division      |                |                |          |
|  | Pilot electric vehicles (EV's) or<br>alternative fuel vehicles for certain<br>vehicle types and uses such as<br>passenger vehicles used by City<br>detectives and building inspectors<br>and for equipment (e.g. mowers,<br>blowers, etc.). | 2022                            | Public Works Department, Police<br>Department, Building Division |                |                |          |
|  | Update the City's Green Fleet<br>policy to reflect the outcome of<br>the fleet and maintenance<br>equipment electrification analysis,<br>outreach and pilot EV studies.<br>Develop a policy for replacement<br>of maintenance equipment.    | 2021                            | Public Works Department,<br>Environmental Services Division      |                |                |          |
|  | Educate municipal staff on the<br>new policies and on how to select<br>and operate the new equipment.   | 2021                            | Public Works Department,<br>Environmental Services Division      |                |                |          |
|  | Conduct follow-up surveys to<br>evaluate the effectiveness of the<br>vehicles and equipment to inform<br>future policy updates.   | 2022                            | Public Works Department,<br>Environmental Services Division      |                |                |          |



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| GHG Emissions Reduction Measure  | Action(s) Required   | Implementation<br>Timing | Monitoring and<br>Implementation Responsibility   | In<br>Progress | Complete                | Comments |
| Measure ML-4: Total Cost of Ownership  | and Life-Cycle Analysis of GHG Im  | pacts in Municipa        | l Project Request for Proposals   |                |                         |          |
| The City of Dublin's municipal<br>government will aim to ensure it is<br>constructing projects with the lowest total<br>cost of ownership and lowest GHG<br>emissions for new construction projects<br>through a requirement that all capital<br>improvement projects include a life-cycle<br>cost analysis and lifecycle GHG emissions<br>analysis. | Create an internal stakeholder<br>group and conduct outreach to<br>define applicable projects and<br>parameters related to the TCO and<br>lifecycle GHG emissions analysis   | 2021                     | Public Works Department, Finance<br>Division, Environmental Services<br>Division                  |                |                         |          |
|  | Develop draft RFP language and<br>pilot the language in an RFP for a<br>capital improvement project (CIP)  | 2021                     | Public Works Department,<br>Environmental Services Division                                       |                |                         |          |
|  | Adopt a new City policy that<br>requires all municipal<br>building/infrastructure project<br>RFPs include requirements for<br>TCO and lifecycle GHG analysis   | 2021                     | Public Works Department, Finance<br>Department, City Manager's Office, City<br>Council            |                |                         |          |
|  | Educate City staff on the new<br>policy and long-term benefits to<br>the environment and operating<br>budget   | 2021                     | Public Works Department,<br>Environmental Services Division                                       |                |                         |          |
|  | At least once per 5-year CIP cycle,<br>evaluate the successes and failures<br>of the analyses for refinements in<br>future years   | 2025                     | Public Works Department, Finance<br>Division, Environmental Services<br>Division                  |                |                         |          |
| Measure ML-5: Promote Municipal Awar   | eness of Sustainable Goods and Serv  | vices                    |   |                |                         |          |
| The City of Dublin's municipal<br>government will achieve its materials and<br>waste management goals by promoting<br>awareness to City staff regarding the<br>purchasing of sustainable goods and<br>services.  | Continue outreach and education<br>to City staff about the<br>Environmental Preferable<br>Purchasing Policy (EPPP), add<br>updated EPPP documents to the<br>intranet and develop new hire on-<br>boarding information. | 2020                     | Environmental Services Division,<br>Human Resources Division,<br>Administrative Services Division |                |                         |          |
|  | Pilot proposed new programs, as necessary.   | 2021                     | Environmental Services Division   |                |                         |          |



|   |  |                                 |  | Compliance Verification |          | cation   |
|---|--|---------------------------------|--|-------------------------|----------|----------|
| GHG Emissions Reduction Measure   | Action(s) Required   | Implementation<br>Timing        | Monitoring and<br>Implementation Responsibility                        | In<br>Progress          | Complete | Comments |
|   | Make updates to the existing EPPP, as necessary.   | On-going (after implementation) | Environmental Services Division  |                         |          |          |
|   | Implement a monitoring protocol<br>or a quality check to determine<br>effectiveness of EPPP<br>implementation and make<br>refinements, as necessary. | 2025                            | Environmental Services Division,<br>Finance Department                 |                         |          |          |
| Measure ML6: Enhance Municipal Carl   | oon Sequestration Opportunities  |                                 |  |                         |          |          |
| The City of Dublin's municipal<br>government will strive to increase carbon<br>sequestration activities through tree<br>planting and compost application<br>throughout the City | Participate in a carbon<br>sequestration pilot project with<br>StopWaste.to inform development<br>of compost standards.                              | 2021                            | Public Works Department,<br>Environmental Services Division            |                         |          |          |
|   | Conduct outreach and create an<br>internal stakeholder group to<br>develop standards for tree<br>planting.   | 2021                            | Public Works Department,<br>Environmental Services Division            |                         |          |          |
|   | Conduct pilot studies, as<br>necessary, to determine if<br>proposed tree planting standards<br>are effective.  | 2021                            | Public Works Department, StopWaste,<br>Environmental Services Division |                         |          |          |
|   | Finalize composting and mulching<br>and tree planting standards once<br>pilot studies are complete.  | 2022                            | Public Works Department,<br>Environmental Services Division            |                         |          |          |
| Measure ML-7: Implement the Green St  | cormwater Infrastructure Plan  |                                 |  |                         |          |          |
| The City of Dublin's municipal<br>government will work to achieve its<br>realized and through implementation  | Implement the City's Green<br>Stormwater Infrastructure Plan.  | 2020                            | Public Works Department,<br>Environmental Services Division            |                         |          |          |
| resilience goals through implementation<br>of the City of Dublin Green Stormwater<br>Infrastructure Plan.   | Provide on-going education and<br>training to staff on the policies and<br>standards in the GSI Plan.  | 2020                            | Public Works Department,<br>Environmental Services Division            |                         |          |          |
|   | Evaluate GSI installations to refine standards and details, as necessary.  | 2020                            | Public Works Department,<br>Environmental Services Division            |                         |          |          |



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# Appendix A

Applicable Regulations

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## 1 Introduction

As the impacts of climate change are being recognized, many strategies that address climate change have emerged at the international, national, and State levels. This section provides an overview of the regulatory context at the State level relative to the City of Dublin's actions toward reducing GHG emissions.

# 2 International

## 2.1 2015 United Nations Sustainable Development Goals

The 2030 Agenda for Sustainable Development was adopted in 2015 by all United Nations Member States. It includes 17 different Sustainable Development Goals that together make up a blueprint for both developing and developed countries to contribute to a sustainable, peaceful, and prosperous world. Several of these actions relate directly to climate change, especially numbers 7 (renewable energy) and 13 (climate action).

## 2.2 Paris Agreement

The Paris Agreement is a multilateral agreement to reduce GHG emissions and limit the global temperature increase to 1.5 degrees Celsius. In 2015, the Paris Agreement was signed by the vast majority of the global community. The agreement established nationally determined contributions (NDCs) that act as individual climate goals for each signatory country. The United States ratified the agreement but has begun the process to formally withdraw by November 2020.

California remains a global leader in the effort to reduce GHG emissions and combat climate change through its mitigation and adaptation strategies. With the passage of Assembly Bill (AB) 32 in 2006, California became the first State in the United States to mandate GHG emission reductions across its entire economy. To support AB 32, California has enacted legislation, regulations, and executive orders (EO) that put it on course to achieve robust emission reductions and address the impacts of a changing climate. The following is a summary of executive and legislative actions most relevant to the CAP.

## 3.1 Senate Bill 1078

In 2002, Senate Bill (SB) 1078, established the California Renewables Portfolio Standards (RPS) Program and was accelerated in 2006 by SB 107, requiring that 20% of electricity retail sales be served by renewable energy sources by 2010. EO S-14-08 was signed in 2008 to further streamline California's renewable energy project approval process and increase the State's RPS to the most aggressive in the nation at 33% renewable power by 2020.

## 3.2 Assembly Bill 1493

In 2002, AB 1493, also known as the Pavley Law, directed the California Air Resources Board (CARB) to establish regulations to reduce GHG emission from passenger vehicles. CARB approved the first set of regulations to reduce GHG emissions from passenger vehicles in 2004, with the regulations to take effect in 2009.

## 3.3 Executive Order S-3-05

In 2005, EO S-3-05 was signed, establishing Statewide GHG emission reduction targets for the years 2020 and 2050. The Executive Order calls for the reduction of GHG emission in California to 1990 levels by 2020 and 80% below 1990 levels by 2050.

## 3.4 Assembly Bill 32

California's major initiative for reducing GHG emissions is outlined in AB 32, the "*California Global Warming Solutions Act of 2006*," which was signed into law in 2006. AB 32 codifies the Statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions.

Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO<sub>2</sub>e. The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures

#### City of Dublin Appendix A: Applicable Regulations

included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards,<sup>1</sup> and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2014 Scoping Plan update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

## 3.5 Executive Order S-1-07

Also known as the Low Carbon Fuel Standard, EO S-1-07, issued in 2007, established a statewide goal that requires fuel providers to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020. EO S-1-07 was readopted and amended in 2015 to require a 20% reduction in carbon intensity by 2030, the most stringent requirement in the nation. The new requirement aligns with California's overall 2030 target of reducing climate changing emissions 40% below 1990 levels by 2030, which was set by Senate Bill 32 and signed by the Governor in 2016.

## 3.6 Senate Bill 97

Signed in August 2007, SB 97 acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Natural Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

## 3.7 Senate Bill 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations to prepare a "sustainable communities' strategy" that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Southern California Association of Governments (SCAG), which the City of Walnut is located in, was assigned targets of an 8% reduction in GHGs from transportation sources by 2020 and a 19% reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of

<sup>&</sup>lt;sup>1</sup> On September 19, 2019 the National Highway Traffic Safety Agency (NHTSA) and the US Environmental Protection Agency (EPA) issued a final action entitled the One National Program on Federal Preemption of State Fuel Economy Standards Rule. This action finalizes Part I of the Safer, Affordable, Fuel-Efficient (SAFE) Vehicles Rule. This rule states that federal law preempts State and local tailpipe greenhouse gas (GHG) emissions standards as well as zero emission vehicle (ZEV) mandates. The SAFE Rule withdraws the Clean Air Act waiver it granted to California in January 2013 as it relates to California's GHG and zero emission vehicle programs.

subregional plans by the subregional Councils of Governments and the County Transportation Commissions to meet SB 375 requirements.

## 3.8 California Green Building Code

The California Green Building Standards Code (CALGreen) is Part 11 of the California Building Standards Code or Title24 and is the first statewide "green" building code in the US. The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The first CALGreen Code was adopted in 2009 and has been updated nearly triennially in 2013, 2016, and 2019.

## 3.9 Senate Bill X7-7

In 2009, SB X7-7 was signed, also known as the Water Conservation Act, requires all water suppliers to increase water use efficiency. This legislation sets an overall goal of reducing per capita urban water use by 20% by 2020.

## 3.10 Senate Bill 2X

In 2011, SB 2X was signed, requiring California energy providers to buy (or generate) 33% of their electricity from renewable energy sources by 2020.

## 3.11 Assembly Bill 341

AB 341 directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. As of July 2012, businesses are required to recycle and jurisdictions must implement a program that includes education, outreach, and monitoring. AB 341 also set a state-wide goal of 75% waste diversion by the year 2020.

## 3.12 Assembly Bill 32 Scoping Plan Update

In 2014, CARB approved the first update to the Scoping Plan. This update defines CARB's climate change priorities and sets the groundwork to reach the post-2020 targets set forth in EO S-3-05. The update highlights California's progress toward meeting the near-term 2020 GHG emissions reduction target, defined in the original Scoping Plan. It also evaluates how to align California's longer-term GHG reduction strategies with other statewide policy priorities, such as water, waste, natural resources, clean energy, transportation, and land use.

## 3.13 Senate Bill 350

SB 350, the Clean Energy and Pollution Reduction Act of 2015, was approved in 2015. SB 350 has two objectives: to increase the procurement of electricity from renewable sources from 33%

#### City of Dublin Appendix A: Applicable Regulations

to 50% by 2030, and to double the energy efficiency of electricity and natural gas end users through energy efficiency and conservation.

## 3.14 Executive Order B-30-15

In 2015, EO B-30-15 was signed, establishing an interim GHG emissions reduction target to reduce emissions to 40% below 1990 levels by 2030. The EO also calls for another update to the Scoping Plan.

## 3.15 Senate Bill 32

On September 8, 2016, Governor Brown signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHGs to 40% below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies such as SB 350 and SB 1383.

The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six metric tons (MT) CO<sub>2</sub>e by 2030 and two MT CO<sub>2</sub>e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub regional, or regional level), but not for specific individual projects because they include all emissions sectors in the State (CARB 2017).

## 3.16 Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane 40% below 2013 levels
- Hydrofluorocarbons 40% below 2013 levels
- Anthropogenic black carbon 50% below 2013 levels

The Bill also requires CalRecycle, in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

## 3.17 Senate Bill 100 California Renewables Portfolio Standard

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement

from eligible renewable energy resources to 33% of total retail sales by 2020, 60% by 2030, and 100% by 2045.

## 3.18 Executive Order B-55-18

On September 10, 2018, the governor issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

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# **Appendix B**

GHG Emissions Inventory and Forecast Technical Appendix

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## 1 Introduction

This technical appendix provides a complete description of the methodologies used to generate the GHG emissions forecast for the City of Dublin through 2045. It also includes a summary of the previous greenhouse gas (GHG) emissions inventories completed in 2005, 2010, and 2015. Details on the methodology for the 2015 inventory are also included to document the baseline activity that was used in the forecasting process. Emissions are forecast for the years of 2020, 2025, 2030, and 2045 to align with State and local targets. This appendix also quantifies the reduction impact that State climate change related legislation will have on Dublin's business-as-usual forecast, 1 and presents the results in an adjusted forecast for each of the target years. Although the business-as-usual forecast was not included in the CAP itself, it is discussed here to provide more clarity on the impacts of the State measures.

The inventory and forecast in this document are designed to be compliant with the ICLEI US Community Protocol (Community Protocol) as well as California Environmental Quality Act (CEQA) Guidelines Section §15183.5(b) for the requirements of a greenhouse gas emissions reduction plan. Emissions contained within this inventory include activities under the jurisdictional control or significant influence of the City of Dublin, as recommended by the Association for Environmental Professionals in preparing CEQA-compliant inventories.<sup>2</sup> The Parks Reserve Forces Training Area and other land-uses outside of the Primary Planning Area are not under the jurisdiction of the City and therefore are excluded from this document, despite being within the City Limits.

## 1.1 Executive Summary

The State of California (State) considers GHG emissions and the impacts of climate change to be a serious threat to public health, the environment, economic well-being, and California's natural resources, and has taken an aggressive stance to mitigate the impact on climate change at the State-level through the adoption of legislation and policies. Many cities have developed local climate action plans and aligned goals to correspond with State levels of emissions reduction. One of the first major State greenhouse gas-related goals, Assembly Bill (AB) 32 required a reduction of GHG emissions to 1990 levels by 2020. This was achieved in 2016<sup>3</sup> and many jurisdictions are looking to the next series of milestone targets. This document is a review of previous Dublin GHG inventories and a forecast of community emissions to 2030 and 2045 to assist the City in developing updated targets to align with State goals.

The City of Dublin has completed a GHG emissions inventory for the 2015 calendar year to measure progress toward 2020 GHG emissions reduction goals set in the first City of Dublin Climate Action Plan.<sup>4</sup> Senate Bill (SB) 32<sup>5</sup> has created 2030 as the next major milestone of greenhouse gas emissions reduction targets and from this 2015 Dublin inventory, a forecast has

<sup>&</sup>lt;sup>1</sup> Business-as-usual (BAU) is a scenario under which no further State GHG emissions reduction programs are implemented and projected population and economic growth patterns are forecasted with baseline emissions rates to determine projected emissions.

<sup>&</sup>lt;sup>2</sup> Association of Environmental Professionals. 2013. The California Supplement to the United States Community-Wide GHG Protocol.

<sup>&</sup>lt;sup>3</sup> California Air Resources Board. California Greenhouse Gas Emissions Inventory. <u>https://ww3.arb.ca.gov/cc/inventory/inventory.htm</u>

<sup>&</sup>lt;sup>4</sup> City of Dublin. 2013. City of Dublin Climate Action Plan Update. <u>https://www.ca-ilg.org/sites/main/files/file-attachments/dublin-climate-action-plan\_update\_2013.pdf</u>

<sup>&</sup>lt;sup>5</sup> Senate Bill 32 requires the State of California to reduce their overall greenhouse gas emissions 40% from 1990 levels by 2030.

#### City of Dublin Appendix B: GHG Forecasting Methodology

been developed to assist the City in target setting to remain consistent with State level goals. Two projections have been developed for the City to quantify expected GHG emissions over time, a business-as-usual (BAU) scenario and an "adjusted" scenario.

A *business-as-usual scenario* provides a forecast of how GHG emissions would change in the years 2020, 2025, 2030, and 2045 if consumption trends continue as they did in 2015 and growth were to occur as projected in the City's General Plan, absent any regulations that would reduce local GHG emissions (see discuss on Business-as-Usual Forecast below for additional information).

An *adjusted scenario* incorporates larger State and federal programs that are currently codified and are expected to continue being implemented through 2045, such as Senate Bill (SB) 100 and California Air Resources Board (CARB) tailpipe emissions standards. This forecast provides a more accurate picture of future GHG emissions growth and the GHG emissions reduction the City and community will be responsible for after State regulations have been implemented. Calculating the difference between the adjusted forecasted GHG emissions and the GHG emissions reduction targets set by the City determines the gap to be closed through local Climate Action Plan policies.

A summary of results from these forecasts as well as anticipated GHG emissions reduction from current State measures can be found in Table 1. Dublin's business-as-usual GHG emissions are projected to increase from the 2015 inventory level of 317,840 MT CO<sub>2</sub>e to 404,728 MT CO<sub>2</sub>e in 2030 and 455,949 MT CO<sub>2</sub>e in 2045. After incorporating legislative GHG emissions reductions, the City is forecast to emit 262,770 MT CO<sub>2</sub>e in 2030 and 254,733 MT CO<sub>2</sub>e in 2045 under the adjusted scenario.

| GHG Emissions Forecast        | 2015<br>(MT CO <sub>2</sub> e) | 2020<br>(MT CO <sub>2</sub> e) | 2025<br>(MT CO <sub>2</sub> e) | 2030<br>(MT CO <sub>2</sub> e) | 2045<br>(MT CO <sub>2</sub> e) |
|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Business-as-usual forecast    | 317,840                        | 342,829                        | 373,781                        | 404,728                        | 455,949                        |
| Reduction from State measures | -                              | 66,064                         | 103,836                        | 141,958                        | 201,216                        |
| Adjusted Forecast             | 317,840                        | 276,765                        | 272,347                        | 262,770                        | 254,733                        |

#### Table 1 Summary of Forecast GHG Emissions

Note: GHG Emissions have been rounded to the nearest whole number and therefore sums may not match.

## 1.2 Greenhouse Gases

The GHGs included in this inventory and projections are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). Each GHG has a different capability of trapping heat in the atmosphere, known as its global warming potential (GWP), which is normalized relative to CO<sub>2</sub> and expressed in carbon dioxide equivalent (CO<sub>2</sub>e). In general, the 100-year GWPs reported by the Intergovernmental Panel on Climate Change (IPCC) are used to estimate GHG emissions. The GWPs used in this baseline GHG emissions inventory are from IPCC Fourth Assessment Report (AR4),<sup>6</sup> provided in Table 2.

<sup>&</sup>lt;sup>6</sup> IPCC Fourth Assessment Report: Climate Change 2007. Direct Global Warming Potentials. https://www.ipcc.ch/publications\_and\_data/ar4/wg1/en/ch2s2-10-2.html

| Greenhouse Gas | Formula          | GWP (CO <sub>2</sub> e) |
|----------------|------------------|-------------------------|
| Carbon Dioxide | $CO_2$           | 1                       |
| Methane        | CH <sub>4</sub>  | 25                      |
| Nitrous Oxide  | N <sub>2</sub> O | 298                     |

Table 2 Global Warming Potentials

## 1.3 Emission Sectors

The emission sectors in the inventory and forecast consist of the five major sectors recommended by the US Community Protocol, including emissions associated with community electricity use, community natural gas use, transportation, solid waste, water and wastewater.<sup>7</sup> GHG emissions are calculated by multiplying activity data (e.g., kilowatt-hours of electricity, tons of solid waste) by an emission factor to establish CO<sub>2</sub>e emissions for each sector. For these sectors, methods used in this baseline GHG emissions inventory were based on ICLEI Community Protocol standard methods and modified with regional- or county-specific data when available.

## 1.4 Excluded Emissions

The following emissions and sectors are excluded from the baseline inventory as well as forecast emissions.

## **Consumption-based Emissions**

GHG emissions from consumption of goods within the City are excluded from the City's GHG emissions inventory and projections. Currently there exists no widely accepted standard methodology for reporting consumption-based inventories. However, strategies to reduce consumption-based emissions are addressed in Section 6.4-4, MM-2 and Section 7 of the CAP 2030.

## **Natural and Working Lands Sector**

GHG emissions from carbon sinks and sources in natural and working lands are not included in this forecast due to the lack of data and methodology. The California Air Resource Board (CARB) has included a state-level inventory of natural and working lands in the 2017 Scoping Plan Update<sup>8</sup> greenhouse gas inventory, however, at the time of the development of CAP 2030 sufficient data and tools were not available to conduct a jurisdiction-specific working lands inventory. Due to a tool under development by the Nature Conservancy and Department of Conservation,<sup>9</sup> future GHG emissions inventories and CAPs may be able to include this sector.

<sup>8</sup> California Air Resource Board. (2017). 2017 Climate Change Scoping Plan Update. https://www.arb.ca.gov/cc/scopingplan/scoping\_plan\_2017.pdf

<sup>&</sup>lt;sup>7</sup> ICLEI additionally recommends adding an agricultural sector if appropriate for agricultural communities. This was not included for Dublin due to the lack of baseline inventory data and minimal agricultural activity in the jurisdiction.

<sup>&</sup>lt;sup>9</sup> Department of Conservation. TerraCount Scenario Planning Tool. <u>https://maps.conservation.ca.gov/terracount/</u>

#### City of Dublin Appendix B: GHG Forecasting Methodology

## **Agricultural Sector**

GHG emissions from agricultural activities are not included in this inventory as the only zoned agricultural land within the City consists of Parks Reserve Forces Training Area and Santa Rita Jail, both of which are outside the jurisdiction of the City.<sup>10</sup> The ICLEI protocol and Association of Environmental Professional's (AEP) California Supplement to National Protocol<sup>11</sup> note that agricultural activity is not a required component of US Community Protocol inventories and should be included only if relevant to the community conducting the inventory. (AEP, p.19) No major agricultural activity occurs within Dublin boundaries and any potential GHG emissions would be de minimis.

## 1.5 Previous Inventories and Target Years

The State of California uses 1990 as a reference year to remain consistent with Assembly Bill (AB) 32 and Senate Bill (SB) 32, which codified the State's 2020 and 2030 GHG emissions target by directing CARB to reduce statewide emissions to 1990 levels by 2020 and 40% below 1990 levels by 2030. Dublin's initial inventory was conducted in 2005. However, the State indicated in the first update to the State Scoping Plan that local governments wishing to remain consistent with State targets could use a 15% reduction from 2005-2009 levels as a proxy for a 1990 baseline.<sup>12</sup> The 1990 proxy baseline used for target setting by the City of Dublin is 275,804 MT CO<sub>2</sub>e.

The City has previously published their 2005 and 2010 GHG inventories. However, several sector adjustments needed to be made to standardize the 2005 inventory and unpublished 2015 inventory into a consistent methodology and scope.

## 2005 Adjustments

No water GHG emissions were included in the original 2005 inventory. GHG emissions were allocated to 2005 by multiplying the 2010 per capita consumption habits (0.0446 MT CO<sub>2</sub>e per capita) by 2005 population levels to reach a total of 1,738 MT CO<sub>2</sub>e.

Off-road GHG emissions were also originally excluded from the 2005 inventory. The updated 2005 level of off-road GHG emissions were estimated using 2010 GHG emissions rates (.4027 MT  $CO_{2}e$  per capita) and the 2005 population of Dublin to calculate a total of 13,370 MT  $CO_{2}e$  from the off-road sector in 2005.

## 2015 Adjustments

Off-road GHG emissions were calculated incorrectly due to an error in interpreting the output of the OFFROAD2007 modeling tool, which led to reporting of significantly decreased emissions. GHG emissions were modeled again for the 2015 year and the total was updated to 21,247 MT CO<sub>2</sub>e.

<sup>&</sup>lt;sup>10</sup> City of Dublin. (2018). *Dublin Zoning Map.* ca-dublin2.civicplus.com/DocumentCenter/View/20627/Zoning-Map-December-2018

<sup>&</sup>lt;sup>11</sup> Association of Environmental Professionals. (2013). The California Supplement to the United States Community-Wide Greenhouse Gas (GHG) Emissions Protocol. https://califacp.org/docs/California\_Supplement\_to\_the\_National\_Protocol.pdf

<sup>&</sup>lt;sup>12</sup>Due to lack of 1990 inventory data for local governments, page 27 of CARB's 2008 Climate Change Scoping Plan identifies 15% below "current" (2005-2008) levels by 2020 as parallel with the State goals of 1990 levels by 2020, allowing local governments to back-cast to develop 1990 baselines for future GHG emissions reduction targets.

| Sector               | <b>1990</b> <sup>1</sup> | 2005    | 2010    | 2015    |
|----------------------|--------------------------|---------|---------|---------|
| Energy               |                          |         |         |         |
| Residential          |                          |         |         |         |
| Electric             | 17,312                   | 20,368  | 20,449  | 21,199  |
| Gas                  | 26,167                   | 30,785  | 35,517  | 35,997  |
| Subtotal             | 43,479                   | 51,152  | 55,966  | 57,197  |
| Commercial           |                          |         |         |         |
| Electric             | 28,943                   | 34,050  | 37,994  | 31,271  |
| Gas                  | 13,792                   | 16,226  | 22,103  | 17,138  |
| Subtotal             | 42,735                   | 50,276  | 60,097  | 48,410  |
| Industrial           |                          |         |         |         |
| Electric             | 5,507                    | 6,479   | _       | 2,357   |
| Gas                  | 2,831                    | 3,331   | _       | 3,823   |
| Subtotal             | 8,339                    | 9,810   | _       | 6,180   |
| Total Energy         | 94,552                   | 111,238 | 116,063 | 111,786 |
| Transportation       |                          |         |         |         |
| Passenger            | 110,333                  | 129,804 | 125,930 | 115,844 |
| Freight              | 47,359                   | 55,716  | 54,410  | 51,389  |
| Transit & Other      | 4,082                    | 4,803   | 5,320   | 2,581   |
| Off-road             | 11,365                   | 13,370  | 18,490  | 21,247  |
| Total Transportation | 173,139                  | 203,693 | 204,150 | 191,061 |
| Waste and Water      |                          |         |         |         |
| Waste                | 6,635                    | 7,806   | 5,329   | 12,736  |
| Water                | 1,478                    | 1,738   | 2,048   | 2,258   |
| Emissions            |                          |         |         |         |
| Total Emissions      | 275,804                  | 324,475 | 327,590 | 317,840 |
| Emissions per capita | 11.9                     | 8.3     | 7.1     | 5.5     |
| Population           | 23,229                   | 38,972  | 45,913  | 57,514  |

Table 3 Dublin Past GHG Emissions Inventories in MT CO<sub>2</sub>e

<sup>1</sup> All 1990 inventory data calculated from 2005 inventory levels per CARB guidelines.

As opposed to target setting, the GHG emissions forecast is based upon the latest available data from City GHG emissions inventories. The forecast of GHG emissions in this document was based off the most recently conducted US Community Protocol-compliant inventory, completed in 2015. The data from this document uses forecast years of 2020, 2025, 2030, and 2045 to be consistent with GHG emissions reduction targets that are currently codified or executive orders that are expected to become codified in the future.

The year 2020 is included to remain consistent with AB 32 targets, while 2030 is included to remain consistent with 2030 targets in SB 32. The year 2045 is also included to be consistent with Executive Order B-55-18, which calls for the next Climate Change Scoping Plan update to include a pathway to carbon neutrality by 2045. The year 2025 was included to assist with the development of shorter term goals for the City to achieve as milestones of progress toward long

#### City of Dublin Appendix B: GHG Forecasting Methodology

range goals. These target years may change in future climate action plan updates to reflect the most current science, targets, and climate action plan implementation ability within the City.

## **2** Baseline GHG Emissions Inventory

## 2.1 2015 GHG Emissions Inventory

An inventory of 2015 communitywide GHG emissions was performed by the City of Dublin in 2017. Rincon consultants reviewed this data for consistency with US Community Protocols and used this inventory as the basis for forecasting GHG emissions through 2045.

In 2015, the total GHG emissions from the City were 317,840 metric tons CO<sub>2</sub>e (MTCO<sub>2</sub>e), a summary of which, including activity data, can be found in Table 4. On-road transportation was the largest contributor to overall GHG emissions (45%), followed by electricity (17%), while water and wastewater contributed the least (less than 1%). The population in Dublin used in the 2015 GHG emissions inventory was 57,514 persons with an employment level of 22,758 persons.

Transportation data in 2015 consisted of five subcategories including Bay Area Rapid Transportation (BART), commercial vehicle emissions, passenger vehicle emissions, off-road vehicle emissions, and bus emissions as provided by Livermore Amador Valley Transit Authority (LAVTA). Detail of transportation subcategories activity data and GHG emissions can be found in Table 5.

Details on the methodology and totals for each inventory sector can be found below.

### Electricity

Electricity GHG emissions in 2015 were calculated using Pacific Gas & Electricity (PG&E) activity data from the Green Communities Portal and PG&E's publicly reported GHG emissions factor of 404.51 pounds CO<sub>2</sub>e/MWh from The Climate Registry.<sup>13</sup> PG&E reported total residential use of 114,960,974 kWh of electricity as well as non-residential (commercial, industrial, and other) use of 182,362,512 kWh.

### **Natural Gas**

GHG emissions for both the residential and commercial gas sectors in 2015 were developed from activity data obtained from PG&E and their reporting constant of 0.00531 MT CO<sub>2</sub>e per therm. Natural gas usage for the residential sector was 6,769,643 therms, with total emissions of 35,997 MT CO<sub>2</sub>e. The commercial sector used 4,175,004 therms in 2015 and emitted 20,961 MT CO<sub>2</sub>e.

#### Waste

Waste activity data was obtained from the CalRecycle Disposal Reporting System annual reports.<sup>14</sup> In 2015, 33,643 tons of solid waste was disposed for a total of 12,736 MT CO<sub>2</sub>e of GHG emissions.

<sup>&</sup>lt;sup>13</sup> CRIS Public Reports: The Climate Registry. <u>https://www.theclimateregistry.org/our-members/cris-public-reports/</u>

<sup>&</sup>lt;sup>14</sup> CalRecycle Disposal Reporting System. <u>https://www.calrecycle.ca.gov/LGCentral/DRS/</u>

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### Water and Wastewater

Water and wastewater service in Dublin is managed by the Dublin San Ramon Services District. Estimated electricity usage for these services was increased proportional to population growth from 2010 to 2015, leading to an estimate of 12,246,487 kWh for 2015. The 2015 PG&E GHG emissions factor was then applied to calculate GHG emissions for this sector.

### Transportation

Transportation was divided into five categories for the 2015 inventory: off-road, passenger vehicles, commercial vehicles, buses (LAVTA), and rapid transit (BART).

Off-road GHG emissions were modeled using the CARB OFFROAD2007 modeling tool at a County level and then applied to Dublin based on the percentage of population relative to the remainder of Alameda County.

Passenger vehicles miles were modeled using the Metropolitan Transportation Commission (MTC) Passenger Vehicle Data Portal<sup>15</sup> and then conditioned using the ICLEI origindestination methodology which recommends accounting for 100% of all internal to internal vehicle trips, 50% of all internal to external vehicle trips, and no pass-through vehicular trips. This totaled 875,316 average weekday vehicle mile traveled (VMT) for light duty vehicles apportioned to the City of Dublin. CalTrans data for highway exit usage within Dublin was used to develop a factor that could then be used to multiply by the average weekday VMT to establish an annual amount. After this conditioning, a GHG emissions factor was derived from the CARB EMFAC2014<sup>16</sup> emissions modeling database for both gasoline and diesel passenger vehicles and applied separately to the MTC modeling output to develop a total GHG emissions of 115,844 MT CO<sub>2</sub>e.

Commercial vehicle GHG emissions were provided for the 2015 inventory by the Metropolitan Transportation Commission for all of Alameda County. These GHG emissions were then apportioned to Dublin on their share of high-travel jobs as reported by the US Census-based Longitudinal Employer Household Dynamics (LEHD) tool.<sup>17</sup> Dublin's LEHD share for 2015 was 2.87% of the overall Alameda County employment, equating to a total GHG emissions of 51,389 MT CO<sub>2</sub>e for the commercial transportation sector.

GHG emissions from LAVTA were calculated using the overall gallons of diesel usage (440,435) and share of revenue miles within Dublin jurisdiction, totaling 442 MT CO<sub>2</sub>e in 2015.

GHG emissions from BART were provided by personal communication with Norman Wong, Environmental Engineer at BART. Total GHG emissions for 2015 were 2,139 MT CO<sub>2</sub>e.

<sup>&</sup>lt;sup>15</sup> Metropolitan Transportation Commission. CAP VMT Travel Model One. <u>http://capvmt.us-west-2.elasticbeanstalk.com/about</u>

<sup>16</sup> California Air Resource Board. EMFAC2014 Web Database. Accessed October 2017. https://www.arb.ca.gov/emfac/2014/

<sup>17</sup> US Census Bureau. OnTheMap LEHD Analysis. <u>https://onthemap.ces.census.gov/</u>

| Sector                            | Activity Data | <b>Emissions Factor</b> | Emissions (MTCO <sub>2</sub> e) |
|-----------------------------------|---------------|-------------------------|---------------------------------|
| Residential Electricity Use (MWh) | 114,961       | .184 MT CO2e/MWh        | 21,199                          |
| Commercial Electricity Use (MWh)  | 182,363       | .184 MT CO2e/MWh        | 33,628                          |
| Residential Gas Use (therms)      | 6,769,643     | 0053 MT CO2e/therm      | 35,997                          |
| Commercial Gas Use (therms)       | 4,175,004     | .0053 MT CO2e/therm     | 20,961                          |
| Waste (tons)                      | 33,643        | .378 MT CO2e/ton        | 12,736                          |
| Water/Wastewater (MWh)            | 12,246        | .184 MT CO2e/MWh        | 2,258                           |
| Transportation                    | N/A           | N/A                     | 191,061                         |
| Total                             | N/A           | N/A                     | 317,840                         |

Table 4 2015 GHG Emissions Inventory Results

### Table 5 2015 Inventory Transportation Subcategories

| Transportation Subcategories | Activity Data | <b>Emissions Factor</b> | Emissions (MTCO <sub>2</sub> e) |
|------------------------------|---------------|-------------------------|---------------------------------|
| Commercial (VMT)             | 33,603,035    | .00152 MT CO2e/mi       | 51,389                          |
| Passenger (VMT)              | 289,525,176   | .0004 MT CO2e/mi        | 115,844                         |
| Bus System (LAVTA)           | N/A           | N/A                     | 442                             |
| Rapid Transit (BART)         | N/A           | N/A                     | 2,139                           |
| Off Road                     | N/A           | N/A                     | 21,247                          |
| Total                        | N/A           | N/A                     | 191,061                         |

# 3 Forecast Methodology

A baseline GHG emissions inventory (i.e., Dublin's 2015 GHG emissions inventory) sets a reference point for a single year, but because annual GHG emissions change over time due to external factors such as population and job growth, the relative reference of a GHG emissions forecast that accounts for projected growth is needed to estimate the level of GHG emissions reductions needed in a future year. Calculating the difference between the forecasted GHG emissions and the reduction target determines the gap to be closed through local Climate Action Plan policies.

Two projections have been developed for the City to quantify expected GHG emissions over time: a business-as-usual scenario and an adjusted scenario. Both scenarios are based upon predicted growth in existing demographic units, including population and jobs growth between 2015 and 2045 in Dublin.

The adjusted GHG emissions forecast is based on the same information as the BAU scenario but also includes the legislative actions and associated GHG emissions reductions occurring due to State and federal mandates. These actions include regulatory requirements such as increasing vehicle fuel efficiency or standards to reduce the carbon intensity of electricity. The difference between the GHG emissions projected in the adjusted forecast and the GHG emissions reduction targets established for each horizon year is the amount of GHG emissions reductions which are the responsibility of the City. This "gap analysis" provides the City with the total GHG emissions reductions required as well as information on the sectors and sources that have the most GHG emissions reduction opportunities.

As shown in Figure 1, without legislative mandates, the City's GHG emissions would increase proportionally with population and economic growth. However, as mentioned, several existing legislative actions would limit the City's GHG emissions growth, causing projected GHG emissions to decrease. The legislative actions and scaling methods used to project GHG emissions are discussed in detail below.

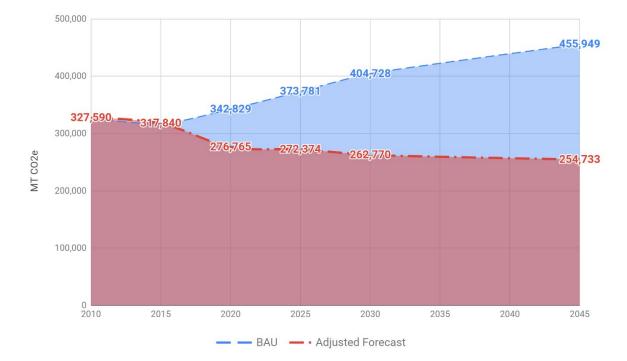


Figure 1 BAU and Adjusted Forecast

#### Table 6 Summary of GHG Emissions Forecast through 2045

| GHG Emission Forecast      | 2015<br>(MT CO <sub>2</sub> e) | 2020<br>(MT CO <sub>2</sub> e) | 2025<br>(MT CO <sub>2</sub> e) | 2030<br>(MT CO <sub>2</sub> e) | 2045<br>(MT CO <sub>2</sub> e) |
|----------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Business-as-usual forecast | 317,840                        | 342,829                        | 373,781                        | 404,728                        | 455,949                        |
| Adjusted Forecast          | 317,840                        | 276,765                        | 272,374                        | 262,770                        | 254,733                        |

## 3.1 Data Sources

The Association of Bay Area Government (ABAG), Dublin's regional planning agency, estimates and projects population for all jurisdictions in Alameda County. In 2017, ABAG adopted a Sustainable Community Strategy (SCS) entitled *Plan Bay Area 2040*, which projects regional development through 2040.<sup>18</sup> Housing, population, and employment projections were included as scenarios in this plan and given to local governments to review. The SCS was adopted by ABAG and Metropolitan Transportation Committee in 2017. The breakdown of population and employment for the City of Dublin can be found Table 7. Additional activity data used for forecasting in the business as usual and adjusted forecasts came from the City of Dublin General Plan, Metropolitan Transportation Commission (MTC), and the CARB EMissions FACtor (EMFAC) modeling tool as shown in Table 8.

<sup>18</sup> Metropolitan Transportation Committee. Plan Bay Area 2040.

http://2040.planbayarea.org/cdn/farfuture/u\_7TKELkH2s3AAiOhCyh9Q9QlWEZIdYcJzi2QDCZuIs/1510696833/sites/default/files/2017-11/Final\_Plan\_Bay\_Area\_2040.pdf Accessed: 8/20/18

#### City of Dublin Appendix B: GHG Forecasting Methodology

| Demographics                | 2015        | 2020        | 2025        | 2030        | 2045        |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|
| Population <sup>1</sup>     | 57,514      | 64,624      | 68,083      | 71,541      | 75,000      |
| Employment <sup>2</sup>     | 22,758      | 24,486      | 26,215      | 27,943      | 31,400      |
| Service Population          | 80,272      | 89,110      | 94,298      | 99,484      | 106,400     |
| Commercial VMT <sup>3</sup> | 33,603,035  | 36,154,491  | 38,707,424  | 41,258,881  | 46,363,270  |
| Passenger VMT <sup>4</sup>  | 289,525,176 | 298,205,941 | 342,840,012 | 385,303,892 | 457,307,991 |

#### Table 7 Demographic Data used for GHG Emissions Community Forecasts

<sup>1</sup> Data for 2025 and 2030 was interpolated between 2017 and 2035 build-out capacities in the City of Dublin General Plan.

<sup>2</sup> Data for 2025 and 2030 was interpolated from Plan Bay Area 2040, "preferred scenario" as reviewed October 4, 2016 by Dublin City Council.

<sup>3</sup> Commercial VMT growth scaled by increase in Dublin employment from the ABAG Plan Bay Area 2040

<sup>4</sup> Passenger VMT from Metropolitan Transportation Commissions (MTC) CAP VMT Travel Model One modeling tool.

The growth rates were applied to the 2015 GHG emissions inventory data to obtain projected emissions in 2020, 2025, 2030, and 2045. Table 8 displays the type and source of data for each GHG emission sector that was used to forecast GHG emissions within Dublin.

#### Table 8 Community Growth Rates by Sector

| Sector                       | Growth Rate                        | Source   |
|------------------------------|------------------------------------|--|
| Residential Energy           | Population                         | City of Dublin General Plan, ABAG Plan<br>BayArea 2040 (RTP/SCS) |
| Commercial/Industrial Energy | Employment                         | ABAG Plan BayArea 2040 (RTP/SCS)                                 |
| Transportation               | Vehicle Miles Traveled, Employment | BAAQMD Data Portal <sup>1</sup> , EMFAC Modeling                 |
| Solid Waste                  | Population                         | City of Dublin General Plan, ABAG Plan<br>BayArea 2040 (RTP/SCS) |
| Water Consumption            | Population                         | City of Dublin General Plan, ABAG Plan<br>BayArea 2040 (RTP/SCS) |

Sources are explained in detail in the sector-specific discussions of this document.

## 3.2 Business as Usual Forecast

The City of Dublin business-as-usual forecast provides an estimate of how GHG emissions would change in the years 2020, 2025, 2030, and 2045 if consumption trends continue as they did in 2015, absent any new regulations that would reduce local GHG emissions. Several indicator growth rates were developed from 2015 activity levels as shown in Table 9. Applying the sector specific activity data and the forecast activity levels in Table 7 give a business as usual forecast as summarized in Table 10 and Table 11.

| Sector   | Activity Data |
|--|---------------|
| Emissions per capita (MT CO <sub>2</sub> e/capita) | 5.53          |
| Residential electricity per capita (kWh/capita)    | 1998.8        |
| Commercial electricity per job (kWh/job)           | 8013.1        |
| Residential gas per capita (therms/capita)         | 117.7         |
| Therms per job (therm/job)                         | 183.45        |
| Waste emissions per capita (MT CO2e/capita)        | 0.22144       |
| Tons waste per capita (tons/capita)                | 0.58496       |
| Tons waste per SP (tons/SP)                        | 0.42          |
| CO2e emissions per ton waste (MT CO2e)             | 0.38          |
| Water + Wastewater kWh per SP (kWh/SP)             | 152.56        |
| Passenger VMT per capita (VMT/capita)              | 5033.99       |
| Commercial VMT per job (VMT/job)                   | 1476.54       |
| Commercial vehicle emissions (ton CO2e/mi)         | 0.00153       |
| Passenger vehicle emissions (ton CO2e/mi)          | 0.0004        |
| BART emissions (MT CO <sub>2</sub> e/capita)       | 0.03719       |
| Bus emissions (MT CO2e/capita)                     | 0.00769       |
| Off-road emissions (MT CO2e/capita)                | 0.369423      |

 Table 9
 Business as Usual Growth Factors

#### Table 10 City of Dublin Business-as-usual GHG Emissions Forecast by Sector (MT CO<sub>2</sub>e)

|                                   | 2015    | 2020    | 2025    | 2030    | 2045    |
|-----------------------------------|---------|---------|---------|---------|---------|
| Population                        | 64,624  | 68,083  | 71,541  | 75,000  | 75,000  |
| Jobs                              | 24,486  | 26,215  | 27,943  | 31,400  | 31,400  |
| Residential Electricity           | 21,199  | 23,701  | 24,970  | 26,238  | 27,506  |
| Commercial/Industrial Electricity | 33,628  | 36,001  | 38,543  | 41,084  | 46,166  |
| Residential Gas                   | 35,997  | 40,391  | 42,552  | 44,714  | 46,876  |
| Commercial/Industrial Gas         | 20,961  | 23,853  | 25,537  | 27,220  | 30,588  |
| Waste                             | 12,736  | 14,138  | 14,961  | 15,784  | 16,881  |
| Water/Wastewater                  | 2,258   | 2,494   | 2,640   | 2,785   | 2,978   |
| Transportation                    | 191,061 | 202,250 | 224,578 | 246,903 | 284,952 |
| Total Emissions                   | 317,840 | 342,829 | 373,781 | 404,728 | 455,949 |
| Emissions Per Capita              | 5.5     | 5.3     | 5.5     | 5.7     | 6.1     |

#### City of Dublin Appendix B: GHG Forecasting Methodology

|                | 2015    | 2020    | 2025    | 2030    | 2045    |
|----------------|---------|---------|---------|---------|---------|
| Commercial GHG | 51,389  | 55,291  | 59,195  | 63,097  | 70,903  |
| Passenger GHG  | 115,844 | 120,186 | 137,176 | 154,167 | 182,977 |
| LAVTA          | 442     | 497     | 523     | 550     | 576     |
| BART           | 2,139   | 2,403   | 2,532   | 2,661   | 2,789   |
| Off-road       | 21,247  | 23,874  | 25,151  | 26,429  | 27,707  |
| Total          | 191,061 | 202,250 | 224,578 | 246,903 | 284,952 |

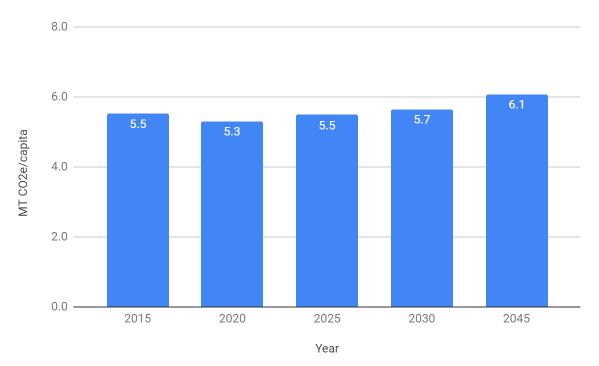
#### Table 11 City of Dublin Transportation BAU Subcategories

Under this business as usual forecast scenario, Dublin's GHG emissions are projected to be 404,728 MT CO<sub>2</sub>e by the year 2030 and reach 455,949 MT CO<sub>2</sub>e by 2045.

This increase is led primarily by a strong continued development trend until Dublin is built-out, which is anticipated to occur near 2035. After 2035, major increases in GHG emissions are largely attributed to the increased population and vehicular traffic from the greater San Francisco Bay Area traveling into Dublin. By 2045 Dublin would be expected to produce 455,949 MT CO<sub>2</sub>e under business as usual projections, an increase of 43% over 2015 emissions.

As shown in Figure 2, GHG emissions per capita in Dublin would increase from 5.5 MT CO<sub>2</sub>e per capita in 2015, to 5.7 MT CO<sub>2</sub>e per capita in 2030, and to 6.1 MT CO<sub>2</sub>e per capita in 2045 (Figure 2). Under this scenario, Dublin's GHG emissions would grow 27% over 2015 baseline levels by 2030 and would not achieve State GHG emissions reduction targets for 2030 or 2045. Figure 3 shows the same emissions forecast using absolute emissions in MT of CO<sub>2</sub>e.





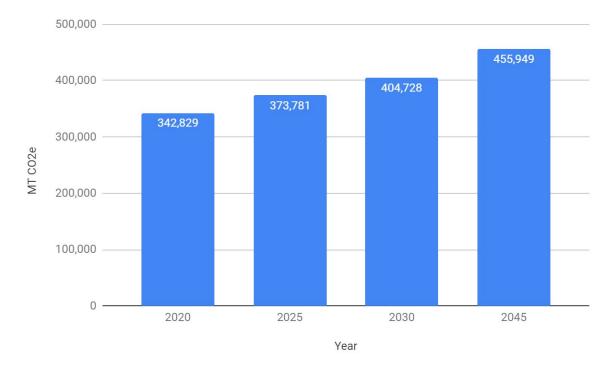


Figure 3 BAU Absolute Emissions Forecast

## 3.3 Legislative GHG Emissions Reduction Strategies

The adjusted forecast estimates future GHG emissions within Dublin under currently codified GHG emissions reduction strategies being implemented at the State and federal level. The State of California 2017 Scoping Plan Update has identified several existing State programs and policies, or known commitments required by statute that can be assumed to achieve GHG emissions reductions without City action such as increased fuel efficiency standards of motor vehicles. The known commitments described below have been factored into the projection forecasts for Dublin. A program list can be found in Table 12. A summary of the legislation is provided in the text below.

As seen in Table 12, the largest reductions realized in Dublin by State programs will occur in the transportation sector, reducing 90,400 MT CO<sub>2</sub>e by 2030 and 120,253 MT CO<sub>2</sub>e by 2045 compared to the BAU forecast through fuel efficiency and tailpipe emission standards. The second largest sector impacted by State programs will be electricity emissions from the built environment, avoiding 44,770 MT CO<sub>2</sub>e emissions by 2030 and 69,822 MT CO<sub>2</sub>e emissions by 2045 through the implementation of SB 100 Renewable Portfolio Stands which requires 100% GHG-free electricity by 2045.

|                            | Emissions (MT CO <sub>2</sub> e) |         |         |         |  |
|----------------------------|----------------------------------|---------|---------|---------|--|
| Legislation                | 2020                             | 2025    | 2030    | 2045    |  |
| SB 100                     | 31,685                           | 36,415  | 44,770  | 69,822  |  |
| Title 24                   | 617                              | 3,702   | 6,788   | 11,141  |  |
| Transportation Legislation | 33,762                           | 61,290  | 90,400  | 120,253 |  |
| Total                      | 66,064                           | 101,407 | 141,958 | 201,216 |  |

#### Table 12 Summary of Legislative GHG Emissions Reductions

## **Transportation Legislation**

Major regulations incorporated into the CARB's 2017 transportation modeling include Advanced Clean Car Standards (LEV III, ZEV program, etc.), Senate Bill 1, and Phase 2 Federal GHG Standards. Additional GHG emissions reductions were calculated for the newly promulgated Innovative Clean Transit (ICT) regulations from CARB.

Signed into law in 2002, AB 1493 (Pavley Standards) required vehicle manufactures to reduce GHG emissions from new passenger vehicles and light trucks from 2009 through 2016. Regulations were adopted by the CARB in 2004 and took effect in 2009 when the United States Environmental Protection Agency (USEPA) issued a waiver confirming California's right to implement the bill. CARB anticipates that the Pavley I standard will reduce GHG emissions from new California passenger vehicles by about 30% in 2016, while simultaneously improving fuel efficiency and reducing motorists' costs.<sup>19</sup>

Prior to 2012, mobile emissions regulations were implemented on a case-by-case basis for GHG and criteria pollutant emissions separately. In January 2012, CARB approved a new emissionscontrol program combining the control of smog, soot causing pollutants, and GHG emissions into a single coordinated package of requirements for passenger cars and light trucks model years 2017 through 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles, Zero Emissions Vehicles, and Clean Fuels Outlet programs into a single coordinated package of requirements for model years 2017 to 2025. The new standards will reduce GHG emissions by 34% in 2025.<sup>20</sup>

In December 2018, CARB adopted the Innovative Clean Transit regulations, requiring all transit agencies to develop a plan to achieve zero emission bus (ZEB) fleets on or before 2040. Starting between 2023 and 2029, transit agencies must begin purchasing only ZEB replacements and must have completed the fleet replacement program prior to 2040.

Reductions in GHG emissions from the above referenced standards were calculated using CARB's EMFAC2017 model for Alameda County with additional reductions for ICT regulations modeled by Rincon. The newly updated EMFAC2017 model integrates the estimated reductions into the mobile source emissions portion of the model.<sup>21</sup>

<sup>19</sup> CARB. Clean Car Standards – Pavley, Assembly Bill 1493. May 2013. http://www.arb.ca.gov/cc/ccms/ccms.htm

<sup>20</sup> CARB. Facts About The Advanced Clean Cars Program. December 2011.

http://www.arb.ca.gov/msprog/zevprog/factsheets/advanced\_clean\_cars\_eng.pdf

<sup>21</sup> Additional details are provided in CARB's EMFAC2017 Technical Documentation, July 2018.

<sup>(</sup>https://www.arb.ca.gov/msei/downloads/emfac2017-volume-iii-technical-documentation.pdf). Note that the Low Carbon Fuel Standard (LCFS) regulation is excluded from EMFAC2017 because most of the emissions benefits due to the LCFS come from the production cycle (upstream emissions) of the fuel rather than the combustion cycle (tailpipe). As a result, LCFS is assumed to not have a significant impact on CO<sub>2</sub> emissions from EMFAC's tailpipe emission estimates.

## California Green Building Standards Code (CalGreen, or Title 24)

Although it was not originally intended specifically to reduce GHG emissions, California Code of Regulations Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption, which in turn reduces fossil fuel consumption and associated GHG emissions. The standards are updated triennially to allow consideration and possible incorporation of new energy-efficient technologies and methods. Since the 2015 inventory year, the 2019 Title 24 Energy Efficiency Standards have come into effect, creating significantly more efficient new building stock. Starting in 2020, new residential developments are required to include on-site solar generation and near- zero net energy use. The California Energy Commission (CEC) estimates that the 2019 Title 24 standards will reduce energy consumption by 54% for residential buildings and 30% for commercial buildings, relative to the 2016 standards. The CEC further estimates that 2022 and 2025 will result in efficiency increases of 5% for both residential and non-residential uses. This diminishing return is largely due to the achievement of nearly zero net energy in the 2019 building code cycle and uncertainty in the State action plan for achieving non-residential energy efficiency savings. These percentage savings relate to heating, cooling, lighting, and water heating only and do not include other appliances, outdoor lighting that is not attached to buildings, plug loads, or other energy uses.

The calculations and GHG emissions forecast assume that all growth in the residential and commercial/industrial sectors is from new construction. As shown in Table 12, the 2019 Title 24 requirements would reduce GHG emissions by approximately 6,788 MT CO<sub>2</sub>e in 2030 and 9,230 MT CO<sub>2</sub>e in 2045.

The SB 32 Scoping Plan calls for the continuation of ongoing triennial updates to Title 24 that will yield regular increases in the mandatory energy and water savings for new construction. Future updates to Title 24 standards for residential and non-residential alterations past 2025 are not taken into consideration due to lack of data and certainty about the magnitude of energy savings that will be realized with each subsequent update.

## SB 100 California Renewables Portfolio Standard

Established in 2002 under Senate Bill 1078, enhanced in 2015 by Senate Bill 350, and accelerated in 2018 under Senate Bill 100, California's Renewables Portfolio Standard (RPS) is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, publicly owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 50% of total procurement by 2026 and 60% of total procurement by 2030. The RPS program further requires these entities to increase procurement from GHG emissions free sources to 100% of total procurement by 2045.

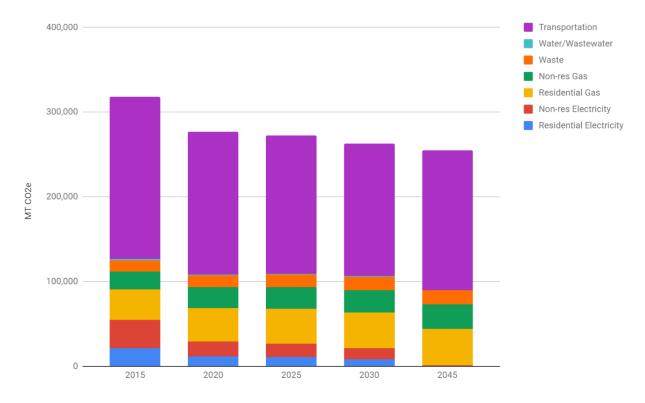
Both Pacific Gas & Electric (PG&E) and East Bay Community Energy (EBCE) provide electricity in Dublin and are subject to RPS requirements. PG&E GHG emissions factors that included compliance with RPS were used to project adjusted emissions through 2045. As shown in Table 12, the Renewables Portfolio Standard and SB 100 requirements reduce overall electricity carbon intensity and would reduce Dublin's electricity emissions by approximately 44,770 MT CO<sub>2</sub>e in 2030 and 69,822 MT CO<sub>2</sub>e in 2045.

## 3.4 Adjusted Forecast

Under the adjusted forecast, Dublin's GHG emissions are expected to gradually decrease from 317,840 MT CO<sub>2</sub>e in 2015 to a low of 254,733 MT CO<sub>2</sub>e in 2045. This corresponds to a change in per capita annual GHG emissions in Dublin from the 2015 value of 5.5 MT CO<sub>2</sub>e to 3.4 MT CO<sub>2</sub>e in 2045.

The residential and commercial electricity and water/wastewater sectors all experience a strong downward trend, approaching near zero in 2045 due to the Renewable Portfolio Standards from SB 100 as discussed above. Residential natural gas is expected to continue an upward trajectory until the 2035 buildout scenario due to strong population growth projections in Dublin. However, this trend is partially offset due to the increasingly stringent energy efficiency requirements for new homes that will be experienced in the Title 24 building code cycles. Commercial growth will also lead the commercial natural gas GHG emissions on a similar trajectory. Transportation GHG emissions are expected to decrease sharply in the next 10 to 15 years due to existing fuel efficiency requirements and fleet turnover rates. As most current regulations expire in 2025 or 2030, it is expected that GHG emissions standards will experience diminishing returns as long as VMT continues to increase, leading to lower rates of GHG emissions reduction in the transportation sector.

A summary of the Dublin's projected GHG emissions by sector and year through 2045 can be found in Figure 4 and Table 13. Further details on the growth rates and GHG emissions for each sector can be found below.



#### Figure 4 Summary of Adjusted GHG Emissions Forecast by Year

|                                   | 2015    | 2020    | 2025    | 2030    | 2045    |
|-----------------------------------|---------|---------|---------|---------|---------|
| Population                        | 57,514  | 64,624  | 68,083  | 71,541  | 75,000  |
| Jobs                              | 22,758  | 24,486  | 26,215  | 27,943  | 31,400  |
| Residential Electricity           | 21,199  | 11,505  | 10,507  | 8,202   | 525     |
| Commercial/Industrial Electricity | 33,628  | 17,502  | 16,362  | 13,055  | 890     |
| Residential Gas                   | 35,997  | 40,162  | 41,178  | 42,194  | 43,210  |
| Commercial/Industrial Gas         | 20,961  | 23,752  | 24,931  | 26,109  | 28,466  |
| Waste                             | 12,736  | 14,138  | 14,961  | 15,784  | 16,881  |
| Water/Wastewater                  | 2,258   | 1,218   | 1,148   | 923     | 62      |
| Transportation                    | 191,061 | 168,488 | 163,288 | 156,503 | 164,699 |
| Total Emissions                   | 317,840 | 276,765 | 272,374 | 262,770 | 254,733 |
| Emissions Per Capita              | 5.5     | 4.3     | 4.0     | 3.7     | 3.4     |

Table 13 Summary of Adjusted GHG Emissions Forecast by Sector (MT CO<sub>2</sub>e)

## Transportation

Transportation data were divided into five categories: on-road passenger vehicles, on-road commercial vehicles, off-road vehicles, buses run by Livermore Amador Valley Transit Authority, and Bay Area Rapid Transit GHG emissions. A breakdown of the GHG emissions projections can be found in Table . As shown in the Table 14, between 2015 and 2045, GHG emissions from transportation in will gradually decrease by 14% from 191,061 MTCO<sub>2</sub>e to 164,699 MTCO<sub>2</sub>e, accounting for VMT growth projected by MTC.

|                     | 2015    | 2020    | 2025    | 2030    | 2045    |
|---------------------|---------|---------|---------|---------|---------|
| Commercial Vehicles | 51,389  | 48,690  | 45,061  | 43,440  | 43,009  |
| Passenger Vehicles  | 115,844 | 96,549  | 95,693  | 91,244  | 94,521  |
| LAVTA               | 442     | 354     | 265     | 177     | 0       |
| BART                | 2,139   | 2,403   | 2,532   | 2,661   | 2,789   |
| Off-road            | 21,247  | 20,492  | 19,737  | 18,982  | 24,380  |
| Total               | 191,061 | 168,488 | 163,288 | 156,503 | 164,699 |

Table 14 Transportation GHG Emissions Adjusted Forecast Summary (MT CO2e)

## **On-road Vehicles**

Forecasting on-road vehicle GHG emissions was completed using the ICLEI US Community Protocol's recommended origin-destination model to establish vehicle miles traveled (VMT) and then multiplied by a vehicle's average emissions per mile that was obtained from the GHG module of CARB's Mobile Source Emissions Inventory (EMFAC2017) modeling tool. These models and results on their respective publicly available data portals, Vehicle Miles Traveled

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Data Portal<sup>22</sup> and EMFAC2017 Database<sup>23</sup>. A summary of the on-road vehicle adjusted forecast methodology can be found in Table 15 with the results for both passenger and commercial vehicles in Table 16.

The MTC origin-destination model estimates trip mileage using a demand-based modelling system that incorporates traffic and activity in the surrounding areas and factors in various demographic and economic information<sup>24</sup> including employment, vehicle types, school locations, public transit routes, population projections, and non-work or school related activities amongst other factors. Commercial VMT was forecast as an extrapolation of 2015 baseline modeling done by MTC, while passenger VMT was completed using the MTC and BAAQMD Vehicle Miles Traveled Data Portal.

| Source<br>Category     | Forecasted Activity Data<br>(Scaling Factor)  | Emissions Factor   | Applied Legislative Reductions   |
|------------------------|---|--|--|
| Passenger<br>Vehicles  | 2020, 2030, 2040 VMT obtained by<br>MTC's Travel Model One. 2045<br>VMT scaled in proportion to<br>growth in Alameda County<br>passenger vehicle traffic. | EMFAC 2017 model<br>analyzing LDA, LDT1,<br>LDT2, MDV, MH<br>passenger vehicle<br>classes. | EMFAC emission factors account for<br>legislative reductions from Advanced<br>Clean Cars, Pavley Clean Car Standards,<br>Tractor-Trailer Greenhouse Gas<br>Regulation, and adopted fuel efficiency |
| Commercial<br>Vehicles | Commercial VMT scaled as a percentage of yearly population growth in Dublin.  | EMFAC 2017 model<br>analyzing LHD1,<br>LHD2, PTO, and all T6<br>and T7 vehicle classes.    | standards for medium- and heavy- duty vehicles.  |

#### Table 15 On-road Vehicle Adjusted GHG Emissions Forecast Methodology

| Activity Data                               | 2020        | 2025        | 2030        | 2045        |
|---|-------------|-------------|-------------|-------------|
| Passenger Vehicles                          |             |             |             |             |
| Daily VMT Internal-Internal                 | 63,513      | 96,929      | 127,695     | 135,705     |
| Daily VMT Internal-External                 | 818,256     | 926,202     | 1,034,149   | 1,099,022   |
| PeMS Multiplier                             | 340.65      | 340.65      | 340.65      | 340.65      |
| Yearly VMT                                  | 300,376,132 | 342,840,012 | 385,303,892 | 457,307,991 |
| Emissions Factor (MT CO <sub>2</sub> e/VMT) | 0.000321    | 0.000279    | 0.000237    | 0.000207    |
| MT CO <sub>2</sub> e                        | 96,549      | 95,693      | 91,244      | 94,521      |
| Commercial Vehicles                         |             |             |             |             |
| Yearly VMT                                  | 36,154,491  | 38,707,424  | 41,258,881  | 46,363,270  |
| Emissions Factor (MT CO <sub>2</sub> e/VMT) | 0.00135     | 0.00116     | 0.00105     | 0.00093     |
| % Population Increase                       | 101.08%     | 101.03%     | 100.98%     | 100.00%     |
| MT CO <sub>2</sub> e                        | 48,682      | 45,044      | 43,440      | 43,009      |

#### Table 16 On-road Vehicle Adjusted GHG Emissions Forecast Results

#### Passenger Vehicles

The MTC Travel Model One results are provided in origin-destination format, as shown in Figure 5, including internal-internal trips, internal-external trips, and external-external trips. The

<sup>&</sup>lt;sup>22</sup> Metropolitan Transportation Commission. CAP VMT Travel Model One. <u>http://capvmt.us-west-2.elasticbeanstalk.com/about</u>

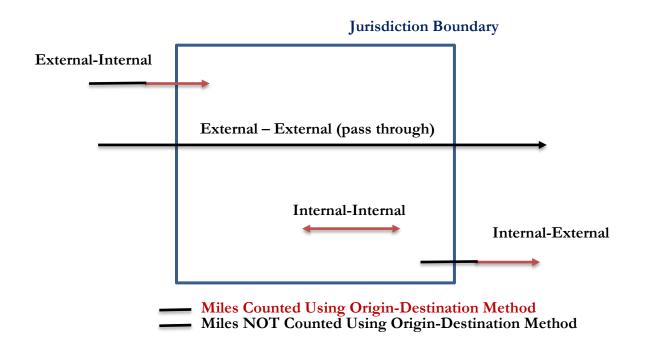
<sup>&</sup>lt;sup>23</sup> California Air Resources Board. EMFAC2017 Web Database. <u>https://www.arb.ca.gov/emfac/</u>

<sup>&</sup>lt;sup>24</sup> Metropolitan Transportation Commission. CAP VMT Travel Model One. Calculation Methodology. <u>http://capvmt.us-west-2.elasticbeanstalk.com/about</u>

MTC modelling results were adjusted to remove all external-external trips and account for only 50% of internal-external trips, per US Community Protocol's recommendation.

Travel One Model gives results for the "typical weekday" and must be multiplied by a yearly adjustor to account for reduced weekend travel. This yearly adjustor was derived from traffic data compiled by the Performance Measurement System (PeMS) database maintained by the California Department of Transportation. Data for Dublin-specific highway exits were accessed, and results were given by day of the week. To determine the multiplier from typical weekday to annual VMT, Tuesday through Thursday traffic was averaged and divided by the average of weekly traffic. This output was multiplied by 340.65, giving a PeMS multiplier shown in Table 16.

#### Figure 5 MTC Model One Origin-Destination Modeling



The MTC Travel Model One is currently only developed through 2040, so passenger vehicle VMT through 2045 was scaled in proportion to projected growth in Alameda County passenger vehicle VMT between 2040 and 2045. These data were collected from CARB 2014 EMFAC modeling and included passenger vehicle categories of LDA, LDT1, LDT1, MH, and MDV. All emissions were provided by EMFAC2017 inventory modelling GHG module.

## **Commercial Vehicles**

Commercial vehicle emissions factors and VMT were obtained through the EMFAC2017 modelling tool and scaling baseline inventory VMT to population growth respectively. GHG emissions factors from CARB's EMFAC2017 modeling tool were determined by analyzing GHG emissions and VMT for LHD1, LHD2, PTO, and all T6 and T7 vehicle classes for the years 2020, 2025, 2030, and 2045. The resulting GHG emissions were divided by VMT to determine metric tons of CO<sub>2</sub>e per mile for each year.

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EMFAC2017 modeling provided GHG emissions factors were taken from the EMFAC results and yearly VMT was derived from scaling 2015 VMT results by percentage change in Dublin population. Bus categories were removed from both VMT and GHG emissions factor calculations to account for the CARB Innovative Clean Transit (ICT) regulation. Due to legislative initiatives and market adoption of low and zero-emission passenger vehicles such as battery electric trucks, decreases in commercial vehicle emissions are expected by 2045 despite increased vehicle miles traveled.

## **Off-Road Transportation**

Off-road GHG emissions within Dublin are modeled through the use of CARB's OFFROAD2007 modeling tool.<sup>25</sup> CARB is transitioning to category-specific modeling tools; however, the transition is still in progress and maintaining a consistent methodology with baseline inventories necessitated a use of the OFFROAD2007 tool. The business as usual modeling uses a baseline emissions factor and population as a growth indicator, however actual GHG emissions are modeled using the OFFROAD2007 tool. The tool models outputs at a County level and GHG emissions are distributed to cities within Alameda County based on their relative population. The off-road adjusted GHG emissions forecast methodology is provided in Table 17 and the adjusted GHG emissions forecast results can be found in Table 18.

| Source<br>Category | Forecasted Activity<br>Data (Scaling Factor) | Emissions Factor         | Applied Legislative Reductions  |
|--------------------|--|--------------------------|---|
| Off-road           | Population growth in<br>Dublin               | 0.369423 MT CO2e/ capita | CARB OFFROAD2007 Model (models actual<br>emissions standards and in-use off-road diesel<br>vehicle regulations promulgated by CARB) |

#### Table 18 Off-road Adjusted GHG Emissions Forecast Results

| Sector   | Activity Data       | 2020   | 2025   | 2030   | 2045   |
|----------|---------------------|--------|--------|--------|--------|
| Off-road | Emissions (MT CO2e) | 20,492 | 19,737 | 18,982 | 24,380 |

## **BART and LAVTA**

BART GHG emissions were scaled as a function of population growth within Dublin from base levels of 2,139 MT CO<sub>2</sub>e (.0372 MT CO2e per capita) in 2015. BART emissions are projected to increase to 2,661 MT CO<sub>2</sub>e in 2030 and 2,789 MT CO<sub>2</sub>e in 2045. Due to the CARB Innovative Clean Transit Rule (discussed in Transportation Legislations), LAVTA emissions were forecast as a straight-line trend toward zero emissions in 2040, per the regulations. Methodologies used to calculate BART and LAVTA emissions, and the GHG emissions results are included in Table 19 and Table 20, respectively.

<sup>&</sup>lt;sup>25</sup> California Air Resources Board. OFFROAD2007

| Source Category | Forecasted Activity Data<br>(Scaling Factor) | Emissions Factor  | Applied Legislative Reductions   |
|-----------------|--|---|--|
| BART &<br>LAVTA | Population growth                            | BART0372 MT CO <sub>2</sub> e per capita<br>LAVTA00769 MT CO <sub>2</sub> e per<br>capita | Innovative Clean Transit<br>Regulations for LAVTA (straight<br>line to zero emissions in 2040) |

#### Table 19 BART and LAVTA Adjusted GHG Emissions Forecast Methodology

#### Table 20 BART and LAVTA Adjusted GHG Emissions Forecast Results

| Sector | Activity Data        | 2020                      | 2025   | 2030   | 2045   |  |
|--------|----------------------|---------------------------|--------|--------|--------|--|
| BART   | Population           | 64,624                    | 68,083 | 71,541 | 75,000 |  |
|        | Per capita emissions | .037 MT CO <sub>2</sub> e |        |        |        |  |
|        | MT CO <sub>2</sub> e | 2,403                     | 2,532  | 2,661  | 2,789  |  |
| LAVTA  | MT CO <sub>2</sub> e | 354                       | 265    | 177    | 0      |  |

### Electricity

Between 2015 and 2045, electricity GHG emissions for commercial, residential, and industrial buildings in Dublin, together representing the building energy electricity sector, are projected to decrease from 54,827 in 2015 to 1,415 MTCO<sub>2</sub>e per year (and thereafter 0 MT CO<sub>2</sub>e), despite growth in Dublin's housing and employment levels. This reflects a per capita reduction in the electricity sector from 0.95 MTCO<sub>2</sub>e per person in 2015 to 0.018 MTCO<sub>2</sub>e per person in 2045. Details are provided in Table 21 and Table 22.

GHG emissions from future electricity use were forecasted by projecting anticipated growth in residential and commercial sectors and multiplying by expected electricity emissions factors. Anticipated growth in the residential sector was projected as a function of population growth within Dublin while commercial sector energy use was projected as a function of employment projections. Legislative adjustments included in the forecast for the electricity sector include Renewable Portfolio Standards of 60% by 2030 and 100% GHG-free by 2045. Additionally, Title 24 building code updates for the 2019, 2022, and 2025 cycles were applied to all new growth within Dublin.

| Source<br>Category                        | Forecasted Activity<br>Data (Scaling Factor) | Emissions Factor   | Applied Legislative Reductions  |
|---|--|--|---|
| Residential Electricity                   | Population growth in<br>Dublin               | Assumes an electricity mix of 44%,<br>60%, and 100% GHG-free by 2025,<br>2030, and 2045 respectively for | Title 24 standards for new construction in 2019 (53% residential, 30% commercial), 2022 (5% residential, 5% commercial) and               |
| Commercial<br>& Industrial<br>Electricity | Employment growth in<br>Dublin               | PG&E emission factors per SB 100<br>RPS requirements.  | 2025 (5% residential, 5% commercial) and<br>2025 (5% residential, 5% commercial), SB<br>100 Renewable Portfolio Standards<br>requirements |

#### Table 21 Electricity Sector Adjusted GHG Emissions Forecast Methodology

#### City of Dublin Appendix B: GHG Forecasting Methodology

| Activity Data                               | 2020        | 2025        | 2030        | 2045        |
|---|-------------|-------------|-------------|-------------|
| Residential Electricity                     |             |             |             |             |
| Population                                  | 64,624      | 68,083      | 71,541      | 75,000      |
| BAU per capita kWh                          | 1,998.83    | 1,998.83    | 1,998.83    | 1,998.83    |
| BAU total kWh                               | 129,173,511 | 136,086,539 | 142,999,568 | 149,912,596 |
| Adjusted kWh (Title 24)                     | 128,440,730 | 131,689,853 | 134,938,977 | 138,188,100 |
| Emissions factor (MT CO <sub>2</sub> e/MWH) | 0.08958     | 0.07978     | 0.06079     | 0.00380     |
| MT CO <sub>2</sub> e                        | 11,505      | 10,507      | 8,202       | 525         |
| Commercial Electricity                      |             |             |             |             |
| Employment                                  | 24,486      | 26,215      | 27,943      | 31,400      |
| Per job kWh                                 | 8,013.12    | 8,013.12    | 8,013.12    | 8,013.12    |
| BAU total kWh                               | 196,209,178 | 210,063,857 | 223,910,523 | 251,611,867 |
| Adjusted kWh (Title 24)                     | 195,379,820 | 205,078,095 | 214,770,762 | 234,161,703 |
| Factor (MT CO <sub>2</sub> e/MWH)           | 0.08958     | 0.07978     | 0.06079     | 0.00380     |
| MT CO <sub>2</sub> e                        | 17,502      | 16,362      | 13,055      | 890         |

#### Table 22 Electricity Adjusted GHG Emissions Forecast Results

#### Energy Legislation

As discussed above, California has two major policies that will affect the energy efficiency of buildings in future years. The State's Title 24 Building Energy Efficiency Standards and Renewable Portfolio Standards (RPS). Title 24 Building Efficiency Standards will drastically increase residential and commercial energy efficiency as residential homes built after the 2019 California Building Code cycle will be nearing zero net energy with the State targeting commercial buildings to do the same before 2030.

Coupled with increased efficiency, SB 350 and SB 100 have drastically increased the Renewable Portfolio Standards of retail power for utilities in California. Under this legislation, California public utilities are required to reach a 44 percent% renewable mix by 2025, a 60 percent% renewable mix by 2030 and a 100 percent% GHG-free mix by 2045. Per PG&E self-reporting, PG&E's achieved 30% renewables in their energy mix in 2015 and has filed plans with CPUC to verify they are on target to achieve all RPS targets. <sup>26</sup> Forecasting out from the most recent published emissions factor (210.4 lb. CO<sub>2</sub>e/MWh), the utility's emission factors in 2025 and 2030 are projected to be 175.9 lb. CO<sub>2</sub>e/MWh and 134.0 lb. CO<sub>2</sub>e/MWh, respectively. This trend is forecast to continue to a carbon- free electricity mix in 2046, as the 2045 GHG-free requirements are not legally binding until December 31, 2045.

The most recent California Building Code standards (2016 Title 24) were adopted in December 2015 and are were in effect until December 2019. Beginning on January 1, 2020, the 2019 Title 24 standards come went into effect, which were the first to mandate solar on new residential construction where feasible. The California Energy Commission (CEC) estimates that new residential buildings built to these standards will be 53% more efficient than buildings built to the 2016 Title 24 standards. The CEC has also estimated that non-residential buildings built to 2019 building codes will be 30% more efficient than those built to the 2016, largely due to

<sup>&</sup>lt;sup>26</sup> PG&E 2015 Power Mix Report. <u>https://www.pge.com/pge\_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2016/11.16\_PowerContent.pdf</u> Accessed: 8/27/18

increasingly stringent lighting requirements. The rate of return on efficiency improvements after 2019 will decreased significantly with only a 5% expected increase in 2022 and 2025 Title 24 Codes over the previous cycle as all new buildings approach zero net energy and begin to transition away from natural gas fuel sources.<sup>27</sup>

SB 350, in addition to targeting a 50% renewable mix in California electricity by 2030, targets a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses of retail customers by 2030. Renewable portfolio standards are included in electricity emissions projections; however, the energy efficiency aspect of SB 350 is not included in the forecasts to avoid double counting with City efforts that may also promote energy efficiency in existing buildings as part of the Climate Action Plan pursuant to this document.

#### **Natural Gas**

GHG emissions from projected natural gas use were forecast using a similar methodology to the electricity sector. Anticipated natural gas use was projected for the residential and commercial sectors separately using population change and employment increase as growth indicators, respectively. These results were multiplied by a natural gas GHG emission factor of 0.005306 MT CO2 per therm of natural gas. <sup>28</sup> Unlike electricity, there are no expected increase in the efficiency of natural gas combustion and the natural gas emission factor is expected to remain relatively constant. Details are provided in Table 23 and Table 24.

Legislative adjustments applied for the natural gas sector include efficiency increases from Title 24 building code updates for new construction after each of the 2019, 2022, and 2025 code cycle updates. Specific efficiency increases for new buildings over the previous triennial cycle are discussed in the Energy Legislation section above.

| Source Category                        | Forecasted Activity Data<br>(Scaling Factor) | Emissions<br>Factor   | Applied Legislative<br>Reductions  |
|--|--|---|--|
| Residential Natural Gas                | Population growth in Dublin                  | 0.005306 MTTitle 24 standards for new<br>construction in 2019 (53%) |  |
| Commercial & Industrial Natural<br>Gas | Employment growth in<br>Dublin               | _   | residential, 30% commercial),<br>2022 (5% residential, 5%<br>commercial) and 2025 (5%<br>residential, 5% commercial) |

#### Table 23 Natural Gas Adjusted Forecast Methodology

<sup>&</sup>lt;sup>27</sup> CEC SB 350 Final Commission Report. (August 2018) <u>https://efiling.energy.ca.gov/GetDocument.aspx?tn=221631</u>

<sup>&</sup>lt;sup>28</sup> The Climate Registry. 2016 Default Emissions Factors. <u>https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf</u> Accessed: 8/20/18

#### City of Dublin Appendix B: GHG Forecasting Methodology

| Activity Data                       | 2020      | 2025      | 2030      | 2045      |
|-------------------------------------|-----------|-----------|-----------|-----------|
| Residential Gas                     |           |           |           |           |
| BAU therms                          | 7,606,569 | 8,013,652 | 8,420,736 | 8,827,820 |
| Title 24 adjusted therms            | 7,563,418 | 7,754,747 | 7,946,077 | 8,137,406 |
| Factor (MT CO <sub>2</sub> e/therm) | 0.00531   | 0.00531   | 0.00531   | 0.00531   |
| MT CO <sub>2</sub> e                | 41,178    | 42,194    | 43,210    | 43,210    |
| Commercial Gas                      |           |           |           |           |
| BAU therms                          | 4,492,009 | 4,809,198 | 27,220    | 30,588    |
| Title 24 adjusted therms            | 4,473,022 | 4,695,054 | 4,916,958 | 5,360,894 |
| Factor (MT CO <sub>2</sub> e/therm) | 0.00531   | 0.00531   | 0.00531   | 0.00531   |
| MT CO <sub>2</sub> e                | 24,931    | 26,109    | 28,466    | 28,466    |

| Table 24 N | atural Gas | Adjusted | Forecast | Results |
|------------|------------|----------|----------|---------|
|------------|------------|----------|----------|---------|

#### Waste

No landfills are located within Dublin's borders, therefore baseline solid waste GHG emissions were estimated using SW.4 of the ICLEI U.S. Community Protocol. This method uses waste disposed by a city annually multiplied by an emission factor for mixed solid waste to estimate GHG emissions totals. The forecast used a baseline emissions rate of 0.42 tons of waste per capita and an emission factor of 0.379 MT of CO<sub>2</sub>e per ton as shown in Table 25 and Table 26. GHG emissions from the waste sector will likely be less than the projected totals due to decreasing rates of organic material in the waste stream and recent legislation such as SB 1383 discussed in previous sections. However, at this time no mandate exists for individual cities and the waste reductions from these bills are incorporated into the Climate Action Plan through City GHG emissions reduction measures to avoid double counting.

| Forecasted Activity Data (Scaling Factor) | Waste Factor                 | Applied Legislative Reductions |
|---|------------------------------|--------------------------------|
| Population growth                         | 0.42 Tons per service person | N/A                            |

| Activity Data                     | 2020   | 2025   | 2030   | 2045   |
|-----------------------------------|--------|--------|--------|--------|
| Population                        | 68,083 | 71,541 | 75,000 | 75,000 |
| Waste (Tons)                      | 37,348 | 39,522 | 41,695 | 44,594 |
| Factor (MT CO <sub>2</sub> e/Ton) | 0.379  | 0.379  | 0.379  | 0.379  |
| MT CO <sub>2</sub> e              | 14,138 | 14,961 | 15,784 | 16,881 |

| Table 26 Waste Emissions A | Adjusted GHG Emissions Forecast Results |
|----------------------------|---|
|----------------------------|---|

#### Water and Wastewater

Due to increased use of the water system attributed to increases in job and population growth in Dublin, the service population was used as a scaling metric to determine water and wastewater service GHG emissions through 2045. Dublin San Ramon Services District provides water supply and wastewater treatment services for the City of Dublin. Since the GHG emissions for the 2015 inventory were an estimated value (instead of calculated), the 2010 GHG emissions inventory was used as the baseline.

Projections utilized a baseline GHG emissions factor of 152.56 kWh per service population per year for the water and wastewater sector. This was multiplied by service population growth through 2045 to find total kWh usage. Renewable Portfolio Standards for electricity generation were then applied as a legislative adjustment, as described in the Legislative Adjustment Section to determine final MT CO<sub>2</sub>e emissions as shown in Table 27 and Table 28.

Table 27 Water and Wastewater Adjusted GHG Emissions Forecast Methodology

| Forecasted Activity Data (Scaling Factor)             | <b>Emissions Factor</b>   | Applied Legislative Reductions  |
|---|---|---|
| Service population (population and employment growth) | PG&E electricity<br>emissions factors, 152.56<br>kWh per service<br>population per year | Assumes an electricity mix of 44%, 60%, and 100% GHG-free by 2025, 2030, and 2045 respectively for PG&E emission factors per SB 100 RPS requirements. |

#### Table 28 Water and Wastewater Adjusted GHG Emissions Forecast Results

| Activity Data                             | 2020       | 2025       | 2030       | 2045       |
|---|------------|------------|------------|------------|
| Service population                        | 89,110     | 94,298     | 99,484     | 106,400    |
| kwh/person                                | 152.56     | 152.56     | 152.56     | 152.56     |
| Total kWh                                 | 13,594,896 | 14,386,318 | 15,177,587 | 16,232,637 |
| Adjusted Electricity Factor (MT CO2e/kWh) | 0.0895773  | 0.0797825  | 0.0607867  | 0.0000000  |
| MT CO <sub>2</sub> e                      | 1,218      | 1,148      | 923        | 62         |

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# Appendix C

Measure Quantification Evidence

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## 1 Introduction

Section 15183.5(b)(1) of the CEQA guidelines establishes several criteria which must be met in order to allow for CEQA streamlining and to be considered a "qualified GHG reduction plan." This technical appendix provides the information pursuant to Subsection (D) which states, "measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level." This technical appendix is organized around three levels which include:

Strategy: Strategies define the high-level area of GHG reduction.

**Measures**: Measures define the core outcomes that will result in substantial reductions in GHG emissions.

Actions: Each measure is driven by sets of actions that together support and generate the GHG reductions necessary to achieve the City's goal

Measures and actions can be either quantitative or supportive and are defined as follows:

**Quantitative**: These measures and actions have substantial evidence including case studies, calculations, or other substantial evidence that prove that the implementation of said measure/action will have a measurable GHG emissions reduction when implemented. These measures/actions have been quantified based on this evidence and the reductions summed to show how Dublin will meet its 2030 and 2045 goals and meet the State target described in SB 32 of 40% below 1990 by 2030.

**Supportive:** These measures and actions may also be quantifiable and in most cases have substantial evidence to support the overall contribution to GHG emissions reduction. However, due to one of several factors including a low GHG reduction benefit, indirect GHG emissions reduction benefits, potential for double-counting, or simply a high level of difficulty in quantifying accurate GHG emissions reductions, they have not been quantified and do not contribute directly to the expected GHG emissions reduction goals and consistency with State targets. However, these measures/actions are critical to the overall success of the CAP.

Together the quantitative and supportive measures and actions listed below will help Dublin reach the goal of reducing per capita emissions from 11.87 MT CO<sub>2</sub>e in 1990<sup>1</sup> to 2.8 MT CO<sub>2</sub>e by 2030 and net zero by 2045. This equates to a 76.7% reduction in per capita GHG emissions by 2030. These goals exceed the requirements of SB 32 (a 40% reduction). The total mass communitywide GHG emissions that corresponds to the per capita goals (based on current population projections) is 197,680 MT CO<sub>2</sub>e in 2030 and carbon neutral in 2045. To reach these goals, Dublin will need to reduce GHG emissions by 65,090 MT CO<sub>2</sub>e by 2030. This technical report provides the substantial evidence that CAP measures can be expected to achieve the 2030 goal in SB 32 and provide substantial progress toward achieving the long-term reduction goal identified in the State's Executive Order (EO) B-55-18. Avoiding interference with and making substantial progress toward the long-term State targets is important as these targets have been set at levels that achieve California's fair share of international GHG emissions reduction targets

<sup>&</sup>lt;sup>1</sup> Estimated 1990 levels, equivalent to a 15% reduction below baseline 2005 GHG inventory levels, the most recent year for which a complete inventory is available and consistent with State guidance.

#### City of Dublin Appendix C: Measure Quantification Evidence

that will stabilize global climate change effects and avoid the adverse environmental consequences described in Section 2 of CAP 2030.

The City has also established a goal consistent with EO B-55-18 of achieving carbon neutrality by 2045. The measures identified in this CAP will lead to a significant reduction in GHG emissions and provide a foundation for achieving net carbon neutrality. However, achieving carbon neutrality will require significant additional changes to the technology and systems currently in place that will require further policies and programs that build on this plan including full electrification of building and transportation systems, an increased shift to shared and active mobility, carbon neutral electricity, and increased waste reduction and diversion. The measures and actions developed to meet the 2030 goals established in SB 32 provide the foundation and establishes the trajectory for this long-term transformation. However, the 2045 GHG emissions reductions quantified in this CAP are not yet enough to meet the long term 2045 goal of carbon neutrality. As the current measures and actions are implemented, the City will gain more information, new technologies will emerge, and current pilot projects and programs are anticipated to scale to the size needed to reach carbon neutrality. Furthermore, the State is expected to continue providing updated regulations and support once the 2030 target is achieved. Future CAP updates will outline new measures needed to reach the ultimate goal of carbon neutrality.

## 2 GHG Reduction Summary

In order to reach the City of Dublin's GHG emissions reduction goal (65,090 MT of CO<sub>2</sub>e by 2030) the City has identified four strategies and seven core measures which are expected to reduce communitywide emissions by an estimated 73,452 MT of CO<sub>2</sub>e in 2030. Each of the core measures has multiple actions which provide a roadmap to achieving the targets in the measures. However, actual GHG emissions reductions are difficult to quantify, as much of the implementation is outside of the City's direct control and depend on several variables including behavior change at the community level. To support the reductions outlined in the core measures, substantial evidence has been gathered from other jurisdictions, case studies, and primary research. As outlined in the implementation section of the CAP, updates to the CAP will occur on a 5-year basis during which time GHG emissions reduction progress will be quantified in GHG inventories to be completed at a frequency no less than every 3 years. If the City has not achieved GHG emissions reductions consistent with the 2025 milestone, additional measures and actions will be developed to increase GHG reductions and to work towards achieving the 2030 GHG emissions reduction targets. The list of strategies, measures, and reduction targets for both 2025 and 2030 are summarized below in Table 1. Please note that municipal GHG emissions reduction measures are not included here as they are not part of the quantified GHG emissions reduction strategy.

| Table 1  | List of Quantified and Supportive GHG Reduction Strategies and Estimated GHG |
|----------|--|
| Emissior | ns Reductions  |

| Measure   | 2025 GHG<br>Emissions<br>(MT CO <sub>2</sub> e) | 2030 GHG<br>Emissions Reductions<br>(MT CO <sub>2</sub> e) |
|---|---|--|
| Strategy 1 – Renewable and Carbon-Free Energy (CF)                    |   |  |
| CF-1: Opt-Up to 100% Renewable and Carbon-Free Electricity            | 25,525  | 20,195   |
| CF-2. Develop a Renewable Resource Buildout Plan                      | Supportive                                      | Supportive   |
| Strategy 2 – Building Efficiency and Electrification (EE)             |   |  |
| EE-1: Achieve All-Electric New Building Construction                  | 2,633   | 4,828  |
| EE-2. Implement the State Building Energy Disclosure Program          | Supportive                                      | Supportive   |
| EE-3. Streamline Battery Storage Permit Requirements                  | Supportive                                      | Supportive   |
| EE-4: Develop an Existing Building Electrification Plan               | 5,113   | 14,061   |
| Strategy 3 - Sustainable Mobility and Land Use (SM)                   |   |  |
| SM-1: Adopt an Electric Vehicle Charging Station Ordinance            | 8,537   | 26,288   |
| SM-2. Develop an EV Infrastructure Plan                               | Supportive                                      | Supportive   |
| SM-3: Develop a Transportation Demand Management Plan                 | 2,487   | 3,928  |
| SM-4. Develop a Citywide Parking Management Plan                      | Supportive                                      | Supportive   |
| SM-5: Update the Bicycle and Pedestrian Master Plan                   | 336   | 537  |
| SM-6. Continue to Prioritize Transit-Oriented Development             | Supportive                                      | Supportive   |
| SM-7. Develop a Built Environment That Prioritizes Active Mobility    | Supportive                                      | Supportive   |
| Strategy 4 - Materials and Waste Management (MM)                      |   |  |
| MM-1: Achieve the Organic Waste Diversion Requirements of SB 1383     | 3,427   | 3,615  |
| MM-2. Reduce Embodied Emissions Associated with Building<br>Materials | Supportive                                      | Supportive   |
| Reductions Needed (Emissions Gap)                                     | 21,542  | 65,090   |
| Total Measures Reduction Potential                                    | 48,058  | 73,452   |

|    |   | 2030 Target        |
|----|---|--------------------|
| M  | easure CF-1: Opt-Up to 100% Renewable and Carbon-Free Electricity.  | 20,195 MT CO2e/yr. |
| Pe | rformance Metrics:  |                    |
| •  | For all Dublin community accounts, set the default electricity source to EBCE's 100% carbon-free power portfolio by 2022. |                    |

## 3 GHG Emissions Reduction Measures and Actions

## 3.1 Strategy 1: Renewable and Carbon-Free Electricity

### Actions

- 1. Conduct community outreach on benefits of opting into 100% renewable and carbon-free energy.
- 2. Draft a resolution to join EBCE's 100% carbon-free electricity program for City Council's consideration.
- 3. Provide ongoing education and support to community regarding benefits.
- 4. Evaluate opt-out rates and calculate GHG emissions reductions.

**Evidence:** Effective July 1, 2020, East Bay Community Energy (EBCE) provides two energy choices for customers: Bright Choice which is 41% renewable and Renewable 100 which is 100% renewable. Renewable 100 is 100% renewable and carbon-free electricity with an emission factor of zero metric tons (MT) of carbon dioxide equivalent (CO<sub>2</sub>e) per kilowatt hour (kWh)<sup>2</sup>. Due to SB 100, which requires all retail electricity in California to reduce to carbon neutral by 2045, the annual GHG reduction benefit of this action decreases each year out to 2045. However, based on the forecasted electricity consumption, PG&E's emission factor in 2030, and an expected opt-out rate of 5%<sup>3</sup>, opting-up communitywide accounts to Renewable 100 is expected to save 20,195 MT of CO<sub>2</sub>e in 2030. A 5% opt-out rate was applied based on recent data that shows opt-out rates for the Bay Area are decreasing every year through 2018. EBCE has indicated that on average, the opt-out rate is 3% making the 5% rate a conservative estimate.

*Cost:* Opting-up the Dublin communitywide accounts to EBCE's Renewable 100 power portfolio will result in a cost increase of 0.01¢ per kWh more than PG&E's standard energy generation rate. Based on EBCE's Fiscal Year 2020 rates, for the average household, opting-up equates to an annual increase in electricity costs of approximately \$48 per year. At the time of this plan's adoption, EBCE's board agreed to consider a future electricity product that is carbon-free but not renewable. Exact product and cost are currently unknown. Any available carbon-free electricity options and costs will be brought to City Council for consideration.

All Dublin municipal accounts currently subscribe to EBCE's Renewable 100 electricity. Opting-up communitywide accounts will have no additional impact on the City's electricity bill. Some staff time will be required for community outreach on the communitywide opt-up process, collaboration with EBCE, and drafting a Resolution for City Council consideration. Staff time costs are estimated between \$3,000 and \$10,000 depending on the amount of outreach conducted.

<sup>&</sup>lt;sup>2</sup> <u>https://ebce.org/power-mix/</u>

<sup>&</sup>lt;sup>3</sup> <u>https://www.mcecleanenergy.org/wp-content/uploads/2018/06/June-2018\_FINAL-1.pdf</u>

## **Quantification Results Summary**

| Measure CF-1   | 2025        | 2030        |
|--|-------------|-------------|
| Forecast kWh use   | 131,689,853 | 134,938,997 |
| MT CO <sub>2</sub> e/kWh (Baseline)                        | 0.0798      | 0.0608      |
| Emissions from electricity MT CO <sub>2</sub> e (Baseline) | 26,868      | 21,258      |
| MT CO <sub>2</sub> e/kWh (With Opt-Up)                     | 0           | 0           |
| 5% (To account for opt out rate)                           | 1,343       | 1,063       |
| Net MT CO <sub>2</sub> e savings                           | 25,525      | 20,195      |

|    |   | 2030 Target |
|----|---|-------------|
| Me | easure CF-2: Develop a Renewable Resource Buildout Plan | Supportive  |
| Pe | rformance Metrics:                                      |             |
| •  | Develop the Renewable Resource Buildout Plan            |             |
| •  | Complete a renewable energy project within Dublin       |             |

### Actions

- 1. Coordinate with EBCE to conduct outreach to key stakeholders on renewable resources development opportunities and hurdles.
- 2. In coordination with EBCE, develop the Renewable Resource Buildout Plan.
- 3. Conduct a pilot renewable energy or electricity resilience project.
- 4. Evaluate benefits and costs of pilot project, refine implementation strategy if needed, and continue implementation.

*Evidence:* This measure is supportive to the overall goal of achieving 100% renewable and carbon-free electricity in Dublin. Facilitating development of local, renewable energy resources will allow Dublin to achieve more of the co-benefits associated with the switch to renewable energy. Not only will health benefits be gained regionally from less fossil fuel combustion but building renewable energy in Dublin will also provide green jobs for local workers and expand partnerships with local and regional stakeholders that support community solar. The development of micro-grids will also provide Dublin with enhanced reliability and resilience to help counteract the impacts of grid disruptions from public safety power shutoffs and other disasters. These actions will help the City future proof the energy grid and provide long-term, low-cost and clean electricity for the community.

*Cost:* There are no anticipated costs to the community. City costs for the Renewable Resource Buildout Plan include hiring a consultant to develop a plan at an expected cost of \$75,000. One-time costs for staff time to conduct outreach and work with a consultant to develop a renewable resources plan will range from \$8,000- \$12,000.

|   | 2030 Target       |
|---|-------------------|
| Measure EE-1: Achieve All-Electric New Building Construction                | 4,828 MT CO2e/yr. |
| Performance Metrics:  |                   |
| <ul> <li>Adopt a new-building electrification ordinance in 2020.</li> </ul> |                   |

## 3.2 Strategy 2: Building Efficiency and Electrification

## Actions

- 1. Conduct outreach to the community as well as builders/developers to educate them on the proposed ordinance, the associated GHG emissions reductions, and cost benefits.
- 2. Draft a City Ordinance that favors all-electric new construction for City Council consideration.
- 3. Provide training to City staff on new electric preferred ordinance requirements.
- 4. Continue to evaluate cost effective opportunities to add additional building types into the electrification ordinance.

*Evidence:* Continuing to allow natural gas in new buildings would result in an increase of GHG emissions through 2045, due to new construction in Dublin projected through 2045. Conversely, GHG emissions from electricity use will decrease to zero through the implementation of measure CE-1. The building electrification ordinance would lead to a reduction in natural gas consumption compared to baseline projections by replacing natural gas with electricity. Cost effectiveness studies have already been completed and found that allelectric construction is less expensive both to construct and on a lifecycle basis for residential construction in the City of Dublin<sup>4</sup>. The 4,828 MT CO<sub>2</sub>e reduction associated with this measure was calculated as the difference between business as usual (mixed fuel buildings) and all-electric construction with carbon neutral electricity.

*Cost:* All-electric single-family homes cost \$5,349 less to build than mixed-fuel homes and have a positive NPV<sup>5</sup> compared to mixed-fuel. Due to the federal minimum appliances modeled, utility bills for all-electric homes can increase by \$284 per year under the base case scenario with no energy efficiency appliances installed. However, utility bills decrease by \$364 dollars per year under the energy efficiency scenario. Since the California Green building Code requires solar and buildings can choose to use cost effective and efficient heat pumps, an all-electric and energy efficient home costs less both up front and over time.

All non-residential building types are significantly less expensive to build as all-electric (between \$30,000 and \$1.2 Million) when compared to a mixed-fuel version (due mainly to cost savings from avoided natural gas infrastructure). Furthermore, all building types had positive TDV cost effectiveness even using federal minimum appliances.

For the mixed-fuel Plus 5% energy efficiency margin scenario for hotels (5% more efficient) the added cost was \$21,824 and the TDV savings was \$21,305, resulting in a net increase of \$519 in lifecycle TDV costs. However, the NPV of on bill savings was positive. Using a more refined approach for the City of Dublin may increase the cost effectiveness to positive. All other non-residential building types are cost effective to build under the mixed-fuel plus energy efficiency scenario. Medium retail cost an extra \$10,409 but saved \$20,525 (savings of \$10,115). Medium office with energy efficiency (14% more efficient) cost \$66,649 but saved \$100,135 for a total

<sup>&</sup>lt;sup>4</sup> <u>https://localenergycodes.com/content/2019-local-energy-ordinances/</u>

<sup>&</sup>lt;sup>5</sup> NPV – Net Present Value is the difference between the *present value* of cash inflows and the *present value* of cash outflows over a period of time. This sum discounts the costs and benefits in the future by making them "worth" less to account for uncertainty of ever realizing those payments.

#### City of Dublin Appendix C: Measure Quantification Evidence

savings of \$33,486 over its lifetime (30 years). Table 4 summarizes the findings for non-residential building types.

Because all-electric construction is demonstrated to be less costly both up front and over time, the cost to the community was considered net positive. The cost to the City would include any costs associated with developing the ordinance, outreach to the community, and training City Staff about the new ordinance. However, with the changes to Title 24, overall training on updated requirements would be required regardless and all electric new construction has been found to be the least complicated for plan check.

Staff time will be required for community outreach, reach code development, drafting an ordinance for City Council consideration, and implementation of the new ordinance. This work is estimated to cost between \$7,000 and \$10,000.

| Measure EE-1   | 2025    | 2030      |
|--|---------|-----------|
| Forecasted new therm use                             | 754,836 | 1,383,824 |
| MT CO <sub>2</sub> e/therm                           | 0.00531 | 0.00531   |
| Forecasted new emissions from natural gas (baseline) | 2,633   | 4,828     |
| New therm use after measure EE-1                     | 0       | 0         |
| Emissions from electricity increase                  | 0       | 0         |
| Net MT CO <sub>2</sub> e savings                     | 2,633   | 4,828     |

## **Quantification Results Summary**

|                  |                      |                 |         |             | On-Bill Cost Effectiveness |                        |                         |              |                       |            |                           | TDV Cost Effectiveness |  |  |  |
|------------------|----------------------|-----------------|---------|-------------|----------------------------|------------------------|-------------------------|--------------|-----------------------|------------|---------------------------|------------------------|--|--|--|
|                  |                      | -               | -       | Average     | Annual Ut                  | ility Bill Savings     |                         | Lifetime NPV |                       |            |                           |                        |  |  |  |
|                  | Package              | Climate<br>Zone | Utility | Electricity |                            | Net Utility<br>Savings | Utility Bill<br>Savings |              | On-Bill B/C<br>Ratio2 |            | Equipment<br>Cost Savings | -                      |  |  |  |
|                  | Electric             | 12              | PG&E    | -(\$740)    | \$456                      | -(\$284)               | -(\$8,533)              | \$5,349      | 0.6                   | -(\$6,281) | \$11,872                  | 1.9                    |  |  |  |
| Single Fam Res   | Electric + EE        | 12              | PG&E    | -(\$92)     | \$456                      | \$364                  | \$10,918                | -(\$6,172)   | 1.8                   | \$9,913    | \$352                     | >1                     |  |  |  |
| Single Faill Res | Mixed fuel + EE      | 12              | PG&E    | -(\$92)     | \$456                      | \$364                  | \$10,918                | -(\$6,172)   | 1.8                   | \$9,913    | \$352                     | >1                     |  |  |  |
|                  | Neutral Cost Package | 12              | PG&E    | -(\$362)    | \$456                      | \$94                   | \$2,828                 | \$0          | >1                    | \$2,196    | \$6,525                   | >1                     |  |  |  |
|                  | Electric             | 12              | PG&E    | -(\$277)    | \$155                      | -(\$122)               | -(\$3,665)              | \$2,337      | 0.6                   | -(\$3,557) | \$5,899                   | 1.7                    |  |  |  |
| Multi Family     | Electric + EE        | 12              | PG&E    | -(\$11)     | \$155                      | \$144                  | \$4,316                 | -(\$1,498)   | 2.9                   | \$2,759    | \$2,064                   | >1                     |  |  |  |
|                  | Mixed fuel + EE      | 12              | PG&E    | -(\$11)     | \$155                      | \$144                  | \$4,316                 | -(\$1,498)   | 2.9                   | \$2,759    | \$2,064                   | >1                     |  |  |  |
|                  | Neutral Cost Package | 12              | PG&E    | -(\$82)     | \$155                      | \$73                   | \$2,184                 | \$0          | >1                    | \$739      | \$3,564                   | >1                     |  |  |  |

## **Residential Building Cost Effectiveness Study Results**<sup>6/7</sup>

#### Nonresidential Building Cost Effectiveness Study Results<sup>8</sup>

|               |                     |         |         |         |          |                       |            |              | Lifecycle    |            |           |            |            |             |
|---------------|---------------------|---------|---------|---------|----------|-----------------------|------------|--------------|--------------|------------|-----------|------------|------------|-------------|
|               |                     | Climate |         | Elect   | Gas      | <b>GHG Reductions</b> | Compliance | Incremental  | Utility Cost | \$TDV      | B/C Ratio | B/C        | NPV (On-   |             |
| Building Type | Package             | Zone    | Utility | Savings | savings  | (Mtons)               | Margin     | Cost         | Savings      | Savings    | (on-bill) | Ratio(TDV) | bill)      | NPV (TDV)   |
|               | Mixed Fuel +EE      | CZ12    | PG&E    | 41,521  | -466     | 8.4                   | 14%        | \$66,649     | \$161,594    | \$100,135  | 2.4       | 1.5        | \$94,945   | \$33,486    |
| Med Office    | Electric            | CZ12    | PG&E    | -43,411 | 3,327.00 | 4.1                   | -5%        | (\$68,343    | (\$85,856)   | (\$35,463) | 0.8       | 1.9        | (\$17,512) | \$32,880    |
|               | Mixed Fuel +EE      | CZ12    | PG&E    | 3,675   | 214      | 2.34                  | 4%         | \$10,409     | \$29,653     | \$20,525   | 2.8       | 8 2        | \$19,243   | \$10,115    |
| Med Retail    | Electric            | CZ12    | PG&E    | -19,471 | 2309     | 7.28                  | -0.10%     | (\$32,504    | (\$14,153)   | (\$461)    | 2.3       | 70.4       | \$18,351   | \$32,042    |
|               | Mixed Fuel +EE      | CZ12    | PG&E    | 5,276   | 327      | 0.9                   | 5%         | \$21,824     | \$22,356     | \$21,305   | 1         | . 0.98     | \$532      | (\$519)     |
|               | Electric            | CZ12    | PG&E    | -99,472 | 10403    | 32.08                 | -10%       | (\$1,297,425 | (\$340,801)  | (\$45,565) | 3.8       | 28.5       | \$956,624  | \$1,251,860 |
| Hotel         | Mixed Fuel +EE+PV+B | CZ12    | PG&E    | 131,226 | 327      | 2804%                 | 5%         | \$229,194    | \$425,029    | \$338,026  | 1.9       | \$2        | \$195,835  | \$108,832   |

<sup>&</sup>lt;sup>6</sup> Lifetime NPV – Lifetime net present value (NPV) is the sum of costs and benefits over 30 years where future costs and benefits are "discounted" or reduced to account for uncertainty.

<sup>&</sup>lt;sup>7</sup> On-Bill B/C Ratio – This refers to the benefit/cost ratio when just looking at energy bills over the lifetime (30 years). An On-Bill BC ratio of 1 or greater is a positive payback. All numbers adjusted to Net Present Value (meaning future benefits are discounted compared to today's costs).

<sup>8 &</sup>lt;u>https://localenergycodes.com/content/2019-local-energy-ordinances/</u>

#### Measure EE-2: Implement the State Building Energy Disclosure Program

#### Performance Metrics:

- Implement the State Building Energy Disclosure Program
- Track emissions and energy consumption data over time

#### Actions:

- 1. Conduct outreach to owners of buildings greater than 50,000 square feet on the requirements of AB 802 and the change in reporting to the City.
- 2. Implement the State Building Energy Disclosure Program AB 802 for large commercial and multi-family buildings as well as voluntary residential disclosures.
- 3. Provide education to building owners on the value of additional energy audits and energy efficiency/electrification projects.
- 4. Showcase building owners and buildings that have exceptionally high energy efficiency numbers.

*Evidence:* Nationwide, buildings that engage in voluntary building energy disclosure and benchmarking, show energy efficiency increases of between 3% and 14%<sup>9</sup>. Furthermore, an EPA analysis of the Energy Star Program in 2012 found an average decrease in energy use of 7%<sup>10</sup> among buildings that self-reported energy consumption. This measure would require large (50,000 sq. ft. and larger) buildings to benchmark and disclose their energy use and would provide a voluntary program for smaller buildings. This program could be expanded over time to include more building sizes and types as needed.

*Cost:* This action does not mandate any energy efficiency upgrades and only requires mandatory reporting for large buildings. Reporting is free under the energy star portfolio manager tool, although some building owners may elect to hire a consultant to complete the report which would be between \$1,000 and \$2,000 dollars. The reporting and benchmarking process could uncover energy efficiency opportunities that result in an average 7% energy savings as noted above. Furthermore, studies show that buildings with increased energy efficiency and/or sustainability achieve higher rents and occupancy rates<sup>11</sup>. Therefore, this measure is considered no cost to the community.

City staff will promote self-reporting under the AB 802 program (Energy Star Portfolio Manager). This process is expected to take minimal staff time totaling under \$5,000 for promotion and monitoring in the first year. Staff time for promotion and monitoring will be ongoing but should decrease over time and related costs in future years are anticipated to decrease to \$2,000 to \$4,000 annually. Staff and community partners will be able to review community reported data to get a better understanding of energy efficiency upgrade opportunities and progress.

<sup>&</sup>lt;sup>9</sup> https://betterbuildingssolutioncenter.energy.gov/sites/default/files/

attachments/Benchmarking Transparency Resource PDF Final 2.14.pdf

<sup>&</sup>lt;sup>10</sup> https://www.epa.gov/sites/production/files/2015-08/documents/overview\_of\_epas\_energy\_star\_portfolio\_manager.pdf

<sup>&</sup>lt;sup>11</sup> Jackson, 2009; Pivo and Fisher, 2010; Fuerst and McAllister, 2011; Eichholtz et al., 2010 and 2013; Devine and Kok, 2015

|    |   | 2030 Target |
|----|---|-------------|
| Me | easure EE-3: Streamline Battery Storage Permit Requirements | Supportive  |
| Pe | rformance Metrics:  |             |
|    | Review and streamline battery storage permit process        |             |

#### Actions

- 1. Review current battery storage permit process to identify opportunities for streamlining.
- 2. Update and implement streamlined process where appropriate for battery installation.
- 3. Provide training to City staff on updated battery storage permit process.
- 4. Provide education and outreach to the community on the benefits of battery storage and the availability of renewable power.
- 5. Reassess new opportunities for streamlining the battery storage permit process every few years and update in response to anticipated future uniformity in battery storage technologies.

*Evidence:* Battery costs have been decreasing steadily each year allowing more and more homes and businesses to take advantage of battery energy storage benefits. Batteries can provide cost savings due to the ability to conduct "rate arbitrage" or storing energy when the costs are low and discharging when the costs are high, saving households and businesses money on their energy bills while also reducing GHG emissions. Batteries can also provide resilience benefits allowing buildings to operate during power shutoffs and grid disruptions. Current programs like the California Self Generation Credit provide substantial rebates for battery installations.<sup>12</sup>

*Cost:* Streamlining the permit process should ultimately save on community costs as it would simplify the permit application process and associated time involved to obtain a permit. Costs associated with installing batteries at individual locations was not included in this analysis due to the highly variable costs associated with installation location and size of the battery.

City cost associated with battery storage permit streamlining are anticipated to be between \$7,000 and \$10,000. Anticipated costs will be from staff time for review and possible updating of the battery storage permit application. Future staff time may be saved due to potential application streamlining.

|                      |  | 2030 Target                 |
|----------------------|--|-----------------------------|
| Μ                    | easure EE-4: Develop an Existing Building Electrification Plan           | 14,061 MT CO <sub>2</sub> e |
| Performance Metrics: |  |                             |
| -                    | Use less than 11.07 million therms of natural gas annually by 2025 (-8%) |                             |
| •                    | Use less than 9.39 million therms of natural gas annually by 2030 (-22%) |                             |

## Actions

1. Conduct outreach to the community as well as builders/developers to educate them on the benefits, potential hurdles, and solutions surrounding existing building electrification.

<sup>&</sup>lt;sup>12</sup> <u>https://www.cpuc.ca.gov/sgip/</u>

#### City of Dublin Appendix C: Measure Quantification Evidence

- 2. Maintain the City website as a repository of information on the benefits and options associated with electrification.
- 3. Encourage the implementation of energy efficiency and electrification upgrades at the City building permit counter.
- 4. Promote electrification rebates and no interest loans provided by the State, utilities, and other stakeholders.
- 5. Conduct an electrification pilot project at a City owned building or in coordination with a local stakeholder.
- 6. Continue to evaluate costs/benefits of existing building electrification and consider future improvements to the existing building electrification plan.

*Evidence:* The impacts associated with outreach for electrification have not been well documented due to the cutting-edge nature of the strategy. Electrification has only begun to gain popularity in California mostly due to the implementation of SB 100 and the expansion of community choice aggregation programs. While it is not clear how the community will respond to electrification, energy efficiency outreach has been conducted since as early as the 1970's. While it is difficult to determine the exact effects of outreach on electrification, some research has been conducted on the effects of outreach and education on energy efficiency. One study in New York showed that out of the 8,991 people who participated in informational programs, 69% implemented the recommended practices<sup>13</sup>. Another research meta-analysis reviewed dozens of papers covering various energy efficiency, water efficiency, and waste outreach and found that education-only campaigns could produce between 10-12% energy savings. Further retrofit opportunities and strategies will also be identified through the completion of EE-4 in order to bridge the gap to achieve the goal of retrofitting 22% of existing buildings all electric.

Electrification is a new idea and not well understood by the community. The education associated with this action as well as the Climate Action Plan itself will help facilitate adoption of all-electric technologies. The City will evaluate progress on achieving CAP GHG emissions reductions interim and long-term goals and adopt more voluntary or potentially mandatory measures if necessary, to meet its goals.

Due to the recent updates to the CEC rules (three-prong test), over \$1 billion dollars in funding is now available for electrification in California<sup>14</sup>. This major change will allow partners like BayREN, which currently provides funding through energy efficiency programs, to support electrification. BayREN programs have facilitated energy efficiency upgrades at tens of thousands of units since 2013 and provided nearly \$6,000,000 in direct implementation of energy efficiency programs. With the change to the three-prong test, these dollars will be available for electrification projects in support of Dublin's goals.<sup>15</sup>

As a backstop to voluntary measures, the City will consider future improvements to the program based on progress in 2025. Improvements would be contingent on cost effectiveness and would need to be further evaluated before being pursued. However, if during the CAP implementation review process the City discovers it is not on track to reduce natural gas emissions required to

<sup>13</sup> https://www.joe.org/joe/2009december/pdf/JOE\_v47\_6a6.pdf

<sup>&</sup>lt;sup>14</sup> https://www.nrdc.org/experts/merrian-borgeson/ca-billion-efficiency-now-open-electrification

<sup>&</sup>lt;sup>15</sup> https://docs.wixstatic.com/ugd/1ef210\_88d6308fe95d42b3a4e7010cd8db4d91.pdf?index=true

meet long-term goals, supplementary mandatory measures could provide the additional reductions necessary.

An example of a potential supplementary mandatory measures is a requirement to switch existing gas water and space heating to electric heating. Residential and commercial water heating account for 34% of natural gas use in buildings. Space heating accounts for 40% of natural gas use in buildings<sup>16</sup>. Natural gas hot water heater life expectancy is approximately 10 years.<sup>17</sup> Therefore, if the City adopts a mandatory switch to electric heat pump water heaters in 2025, the City should see a 34% decrease in natural gas use from hot water heater electrification by 2035. Natural gas furnace lifecycles are expected to be between 15-20 years with an average of 18 years<sup>18</sup>. Therefore, under a mandatory electric retrofit program, the City would expect to see an additional 40% reduction in natural gas consumption by 2043. Assuming a linear replacement of existing HVAC and hot water heating equipment starting in 2025, the City should expect to see a 28% decrease in natural gas emissions from a mandatory electric retrofit ordinance by 2030.

*Cost:* The cost of electrifying an existing building is variable depending on several key factors including the need to replace electric panels and other infrastructure like transformers. However, current studies have found that when replacing both heating and air conditioning at the same time with a heat pump (which provides both heating and cooling functions) a lifecycle cost savings is possible in the Bay Area.<sup>19 20</sup> For water heaters, retrofits from gas to heat pumps generally resulted in a net cost increase. However, it should be noted that this is before savings from incentives are applied. With changes to the three-prong test Dublin residents could see incentives between \$1,000 and \$3,000, similar to what is found in Sacramento Municipal Utility District territory.<sup>21</sup> Rebates of this magnitude would make these retrofits cost effective. According to the E3 report, <sup>22</sup> 84% of single-family households and 8% of multifamily households would achieve lifecycle cost savings by completing a retrofit of the HVAC and hot water heater. An additional 16% of single-family homes and 39% of multifamily homes would see lifecycle costs of less than \$100 a year. Therefore, this measure is considered to be low cost (\$0-\$10,000) assuming a majority of retrofits would come from buildings where it is currently cost effective to do so.

City costs will be also be incurred. On-going staff time will be required to keep electric retrofit information current and promote electrification rebates provided by regional partners. This is estimated to cost roughly \$5,000 annually.

<sup>&</sup>lt;sup>16</sup> https://www.synapse-energy.com/sites/default/files/Decarbonization-Heating-CA-Buildings-17-092-1.pdf

<sup>&</sup>lt;sup>17</sup> <u>https://www.lowes.com/n/how-to/when-to-replace-a-water-heater</u>

<sup>&</sup>lt;sup>18</sup> <u>https://www.thisoldhouse.com/ideas/how-long-things-last</u>

<sup>&</sup>lt;sup>19</sup> <u>https://rmi.org/insight/the-economics-of-electrifying-buildings/</u>

<sup>&</sup>lt;sup>20</sup> https://www.ethree.com/wp-content/uploads/2019/04/E3\_Residential\_Building\_Electrification\_in\_California\_April\_2019.pdf

<sup>&</sup>lt;sup>21</sup> <u>https://www.smud.org/en/Rebates-and-Savings-Tips</u>

<sup>22</sup> https://www.ethree.com/wp-content/uploads/2019/04/E3\_Residential\_Building\_Electrification\_in\_California\_April\_2019.pdf

## **Quantification Results Summary**

| Measure EE-4                                     | 2025       | 2030       |
|--|------------|------------|
| Estimated existing 2020 natural gas use (therms) | 12,036,440 | 12,036,440 |
| Percent reduction due to EE-4                    | 8%         | 22%        |
| Therm reduction from EE-4 (includes EE-1)        | 962,915    | 2,648,017  |
| MT CO <sub>2</sub> e/therm                       | 0.00531    | 0.00531    |
| Net MT CO <sub>2</sub> e savings                 | 5,113      | 14,061     |

| Measure SM-1: Adopt an Electric Vehicle Charging Station Ordinance | 2030 Target<br>26,288 MT CO <sub>2</sub> e |
|--|--|
| Performance Metrics:   |  |
| <ul> <li>Adopt EV Charger ordinance in 2021</li> </ul>             |  |
| <ul> <li>12% EV ownership by 2025</li> </ul>                       |  |
| • 33% EV ownership by 2030   |  |

## 3.3 Strategy 3: Sustainable Mobility and Land Use

## Actions

- 1. Conduct outreach to the community as well as builders/developers about the ordinance.
- 2. Draft an updated City ordinance that requires all new commercial and multifamily buildings to include 25% of parking spaces as "EV Ready" (conduit and electrical panel capacity installed), with 3% parking required to have installed operable Level 2 EV charging stations or a comparable level of service provided by DC Fast Charging or other technology as appropriate.
- 3. Provide training to permit counter and building code staff on the updated new building EV charging station requirements.
- 4. Provide education as needed to builders and developers on the requirements of the ordinance.
- 5. Track progress including the number of chargers installed and the percent of EV's in Dublin through the Department of Motor Vehicles website.

*Evidence:* The City cannot directly impact the adoption of electric vehicles within the community. However, the City can ensure that the required infrastructure for EV adoption is provided at a level that facilitates a minimum 30% EV adoption rate. Studies have shown that a lack of multifamily and commercial charging stations are major hurdles to EV adoption. CARB projects at least a 10% increase of EV chargers are required to meet the adoption rate of 15% EV ownership in 2025. <sup>23</sup> At a minimum, an additional 10% increase in installed chargers would then be required to meet 30% EV ownership. To ensure the buildings in Dublin are "future proof" to the greatest extent feasible, 25% of multifamily and commercial parking spaces will be EV ready to support a 30% adoption of EV's. Due to measure CF-1, a transition to electric vehicles means those vehicles will have zero emissions. Under the EMFAC model used to calculate GHG emissions for SM-1, a 4.19% EV adoption rate was assumed for 2020.

<sup>23</sup> https://ww3.arb.ca.gov/cc/greenbuildings/pdf/tcac2018.pdf

Therefore, a 33% EV adoption rate in 2030 would equate to a 29% decrease in GHG emissions from passenger vehicle VMT compared to the forecast.

*Cost:* Installation of EV charging station infrastructure during building construction can save up to \$5,500 for two parking spaces.<sup>24</sup> While installation with new construction costs approximately \$400 per parking spot, retrofit projects can cost upwards of \$2,700 per space. Therefore, including charging infrastructure as part of new construction projects will lead to significant long-term savings of up to 76%.<sup>1</sup>

Staff time to develop and implement an EV charging station ordinance is expected to cost \$8,000-\$14,000 in one-time staff costs.

| Quantification | Results S | ummary |
|----------------|-----------|--------|
|----------------|-----------|--------|

| Measure SM-1  | 2025        | 2030        |
|---|-------------|-------------|
| Projected passenger VMT                                   | 342,840,012 | 385,303,892 |
| Projected emissions from passenger VMT                    | 95,693      | 91,224      |
| Target EV adoption %                                      | 12%         | 33%         |
| Projected EV adoption % (EMFAC Baseline)                  | 3%          | 4%          |
| Increase over projection (%)                              | 9%          | 29%         |
| Emission factor internal combustion vehicle (MT CO2e/VMT) | 0.0002791   | 0.0002067   |
| Emission factor EV (MT CO <sub>2</sub> e/VMT)             | 0.0         | 0.0         |
| Emissions after SM-1 Reductions                           | 87,156      | 64,956      |
| Net MT CO <sub>2</sub> e savings                          | 8,537       | 26,288      |

|   | 2030 Target |
|---|-------------|
| Measure SM-2: Develop an Electric Vehicle Infrastructure Plan | Supportive  |
| Performance Metrics:  |             |
| • 68 new public EV chargers by 2025                           |             |
| • 184 new EV chargers by 2030                                 |             |

## Actions

- 1. Conduct outreach to the community and work with community partners to understand need for chargers and identify potential locations.
- 2. Review successes and lessons learned from existing EV infrastructure plan projects.
- 3. Develop EV Infrastructure Plan.
- 4. Conduct outreach and education surrounding use and availability of public charging infrastructure.
- 5. Track progress and adjust plan to meet the long-term metrics.

*Evidence:* The City's role in EV adoption is ensuring the proper infrastructure is in place to support the transition to EV's. Research by the International Council on Clean Transportation shows that a ratio of 1 EV charger to 27 EV's is sufficient to support EV adoption when supported by home and work charging stations. To reach the goal of 30% EV's by 2030, Dublin

<sup>&</sup>lt;sup>24</sup> https://fremont.gov/DocumentCenter/View/31450/PEV-Infrastructure-Cost-Effectiveness-Report\_Energy-Solutions\_July-2016

#### City of Dublin Appendix C: Measure Quantification Evidence

residents would need to own 9,911 EV's (DMV Data). This means that a total of 184 twoheaded chargers would be required to maintain the ratio of 1:27 given the City's current inventory of 120 EV charging plugs.<sup>25</sup>

*Cost:* The City would have several options for implementing this action including the use of public/private partnerships and grants. To make this action more financially feasible and encourage efficient use of the chargers themselves, the City should make all new charging stations fee based (pay to use), which has been the City's practice since 2014. Free charging results in over-charging and can reduce the availability of chargers. However, costs compared to fossil fuel vehicles would still be lower to the community.<sup>26</sup> Energy.gov eGallon calculator estimates that refueling EV's costs \$1.36 per "egallon" in 2019 while a similar vehicle that runs on gasoline cost \$3.40 per gallon.

Costs to develop an EV infrastructure plan are anticipated to be between \$35,000 to \$65,0000. Costs to the City to install and maintain publicly available charging stations are anticipated to be in excess of \$100,000. Exact costs are dependent on regional group purchase opportunities and grant funding. The report published in 2019 by Rocky Mountain Institute "Reducing EV Charging Infrastructure Costs" provides additional insights into strategies to reduce this cost. Partnering with third parties to provide this service to the community could also further reduce city costs.

| Me  | asure SM-3: Develop a Transportation Demand Management (TDM) Plan | 2030 Target<br>3,928 MT CO2e |
|-----|---|------------------------------|
| Per | formance Metrics:   |                              |
| -   | Develop TDM Plan by 2022  |                              |
| •   | Reduce VMT by 20 million miles by 2025                            |                              |
| -   | Reduce VMT by 30 million miles by 2030                            |                              |

# Actions

- 1. Conduct community outreach and engagement around TDM principals such as transit, car share, shared rideables (bikes and scooters), unbundling of parking, and other mobility options.
- 2. Create guidelines and policies for micro-mobility and partner with other cities in the region to rollout shared ridable options like electric scooters and bikes.
- 3. Develop policies to plan for self-driving electric vehicles.
- 4. Conduct a shared rideables pilot in coordination with other Tri-valley Cities.
- 5. Draft and adopt a TDM Plan or Toolkit with requirements for new construction/major renovations.
- 6. Conduct further outreach, education, and training on the new TDM requirements.
- 7. Track progress over time through TDM modeling and traffic counts and identify new technologies such as live vehicle miles traveled (VMT) data for better analysis.

<sup>25</sup> www.plugshare.com/location/52686

<sup>&</sup>lt;sup>26</sup> <u>https://www.energy.gov/maps/egallon</u>

*Evidence:* The GHG reductions from SM-3 stem from two major actions. The actions are reduced parking requirements and the adoption of a transportation demand management policy that would increase the use of shared rideables such as scooters and bikes. GHG emissions reductions for reduced parking availability were quantified using California Air Pollution Control Officers Association data provided by CARB.<sup>27</sup> The analysis took the estimated VMT for the City and assumed a 30% share of total VMT was from commute trips which was broken out from the available trips for the calculation.<sup>28</sup> Commute trips were used as the TDM plan would focus mainly on employee commute within Dublin. However, the program may also result in broader reductions. Therefore, this is assumed to be a conservative estimate. The resulting trips were then multiplied by 8.75%, the average reduction from parking reduction measures.<sup>29</sup> This analysis also assumed that 5% of Dublin would phase-in annually over time for full adoption in 2038. Parking programs that could meet these requirements would include decreased parking requirements for new development and unbundled parking programs for existing development. In 2030 it was estimated that parking programs would reduce emissions by 1,437 MT of CO<sub>2</sub>e compared to baseline.

Emissions reductions for shared rideables were quantified using preliminary data from rollout in other regions. The analysis took the estimated VMT for Dublin and assumed a 30% share of total passenger vehicle VMT which was used as the potential pool of VMT to be reduced due to the focus on commute management.<sup>29</sup> Of those trips, an assumed 4% adoption rate of shared mobility in the first year grows by 2% each year over time to 26% in 2030.<sup>30</sup> Of these trips, it is assumed that only 35% would offset a single occupancy vehicle trip.<sup>31</sup> The resulting VMT was multiplied by the expected VMT emission factor in that year. In 2030, it was estimated that micro-mobility would reduce emissions by 2,491 MT CO<sub>2</sub>e compared to baseline.

*Cost:* The TDM Plan will be developed by the City. No direct costs to the community are expected. Some TDM measures may have cost impacts to the community but they are currently unknown and will be addressed during TDM Plan development. Shared rideable trips are usually a few dollars depending on distance and are generally less expensive than driving.<sup>32</sup> A recent study estimated that a 3-mile journey in Chicago's traffic would cost \$6 in a car versus \$5.07 by scooter. The study by DePaul University was partially funded by scooter company Bird. The cost to the City would be minimal after the initial planning effort which would require staff time.

One-time City staff costs for working with a consultant to develop a TDM plan are estimated to be \$10,000 to \$15,000. Collaborating with regional partners to pilot shared rideables in the Tri-Valley is estimated to be \$15,000 to \$20,000. Consultant services to develop a TDM plan or toolkit are estimated at \$200,000. Implementation costs cannot be estimated until the plan has been completed

<sup>&</sup>lt;sup>27</sup><u>https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/capcoa\_quantifying\_ghg\_measures.pdf</u>

<sup>&</sup>lt;sup>28</sup> https://www.planbayarea.org/sites/default/files/pdf/Draft\_EIR\_Chapters/2.1\_Transportation.pdf

<sup>&</sup>lt;sup>29</sup> <u>https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/capcoa\_quantifying\_ghg\_measures.pdf</u>

<sup>&</sup>lt;sup>30</sup> https://www.curbed.com/2018/7/24/17607698/electric-scooter-bird-lime-spin-adoption-transit

<sup>&</sup>lt;sup>31</sup> <u>https://www.portlandoregon.gov/transportation/article/709713</u>

<sup>&</sup>lt;sup>32</sup> <u>https://www.nerdwallet.com/blog/loans/auto-loans/will-great-scooter-invasion-help-save-money-environment/</u>

# **Quantification Results Summary**

| Measure SM-3  | 2025        | 2030        |
|---|-------------|-------------|
| Projected passenger VMT                                       | 342,840,012 | 385,303,892 |
| Percent of trips going to external commute                    | 30%         | 30%         |
| Commute VMT   | 102,852,004 | 115,591,168 |
| Percent reduction from parking supply reduction               | 8.75%       | 8.75%       |
| VMT Reduced from parking supply reduction                     | 8,999,550   | 10,114,227  |
| Emission factor internal combustion vehicle (MT CO2e/VMT)     | 0.0002791   | 0.0002067   |
| MT CO <sub>2</sub> e savings (decreased parking requirements) | 879         | 1,437       |
| Commute VMT   | 102,852,004 | 115,591,168 |
| Percent of trips that offset a single occupancy vehicle trip  | 35%         | 35%         |
| Shared rideable adoption                                      | 16%         | 26%         |
| VMT reduced through shared rideable adoption                  | 5,759,712   | 10,518,796  |
| MT CO <sub>2</sub> e savings (shared rideables)               | 1,608       | 2,491       |
| Net MT CO <sub>2</sub> e savings                              | 2,487       | 3,928       |

|   | 2030 Target |
|---|-------------|
| Measure SM-4: Develop a Citywide Parking Management Plan    | Supportive  |
| Performance Metrics:  |             |
| <ul> <li>Develop Parking Management Plan by 2022</li> </ul> |             |

### Actions

- 1. Conduct outreach and engagement around parking management.
- 2. Conduct a pilot project with one area of Dublin using parking management strategies.
- 3. Develop the Parking Management Plan with information developed from the pilot project and engagement efforts.
- 4. Provide education and training around the Parking Management Plan requirements.
- 5. Monitor the program over time and identify benefits and hurdles of the program.

Evidence: SM-4 is quantified along with SM-3.

*Cost:* The Parking Management Plan could increase the costs of parking in some areas of Dublin. However, these specifics would be identified during development of the plan. A parking management plan is estimated to cost the City between \$200,000 to \$600,000 depending on the scope of the plan.

|    |   | 2030 Target              |
|----|---|--------------------------|
| Me | easure SM-5: Update the Bicycle and Pedestrian Master Plan        | 537 MT CO <sub>2</sub> e |
| Pe | rformance Metrics:  |                          |
| -  | Update the Bicycle and Pedestrian Master Plan                     |                          |
| -  | Identify miles of bike lane and number of pedestrian improvements |                          |
| -  | Implement the Bicycle and Pedestrian Master Plan                  |                          |

# Actions

- 1. Conduct outreach and engagement as part of Bicycle and Pedestrian Master Plan (Plan) update.
- 2. Identify the vision, goals and strategies for the Plan development.
- 3. Identify gaps in the existing network and opportunities for latent demand.
- 4. Prioritize and identify near-term and long-term projects to close the network gap, improve safety and connectivity.
- 5. Develop policy and program recommendations to achieve Plan goals.
- 6. Prepare cost estimates, identify funding sources and develop an implementation plan.
- 7. Track miles of bike lane and number of pedestrian improvements over time.

*Evidence:* It was assumed that at least 10 miles of bike lane would be added as part of the Bicycle and Pedestrian Master Plan Update. Based on California Air Pollution Control Officers Association guidance the City can expect to see a 0.075% increase in bike VMT per mile of bikeway added.<sup>33</sup> Based on the passenger commute VMT and the 0.075% VMT reduction, an estimated 205 MT of CO<sub>2</sub>e is expected to be reduced by 2030. In addition, the mode shift associated with Bay Area Rapid Transit's (BART) active transportation goals for the two Dublin BART Stations are 30% by 2030. Based on current BART ridership and average passenger VMT per capita, Dublin would expect to see an additional 332 MT of CO<sub>2</sub>e from these efforts. The total MT CO<sub>2</sub>e expected to be reduced in 2030 from bicycle and pedestrian mode shift is 537 MT of CO<sub>2</sub>e.

*Cost:* There are no expected community costs associated with this measure. Development of the Bicycle and Pedestrian Master Plan Update (Bike/Ped Plan) began in December 2019 with consultant assistance which will cost the City \$348,247. Funds have already been allocated and funded through Transportation Development Act Article 3 funds, Measure B funds and Measure BB funds. To implement the Bike/Ped Plan, the City could utilize a bond measure or fee to help fund active transportation projects, but these options are not included in this analysis. City costs to develop bike lanes could range from \$1 to \$5 a foot for striping and up to \$10 to \$27 per foot for bicycle boulevards. The costs can range drastically depending on if bike lanes are included in other road maintenance or not.<sup>34</sup> A full cost analysis would be completed as part of the Bike/Ped Plan.

<sup>&</sup>lt;sup>33</sup> http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

<sup>&</sup>lt;sup>34</sup> https://activelivingresearch.org/sites/activelivingresearch.org/files/Dill\_Bicycle\_Facility\_Cost\_June2013.pdf

# **Quantification Results Summary**

| Measure SM-5   | 2025        | 2030        |
|--|-------------|-------------|
| Miles of new bike lane   | 10          | 10          |
| VMT reduced per mile of bike lane                                    | 0.075%      | 0.075%      |
| Estimated passenger commute VMT (30% of total)                       | 102,852,004 | 115,591,168 |
| VMT reduced from bikes   | 77,139      | 86,693      |
| Emission factor internal combustion vehicle (MT CO2e/VMT)            | 0.0002791   | 0.0002067   |
| MT CO <sub>2</sub> e savings (new bike lane)                         | 215         | 205         |
| Average passenger VMT (per capita)                                   | 5,036       | 5,386       |
| BART Ridership   | 9,396       | 9,869       |
| Percent of BART ridership using active transportation (baseline)     | 18%         | 18%         |
| Percent of BART ridership using active transportation<br>(with Plan) | 25%         | 30%         |
| VMT reduction from BART program                                      | 3,312,159   | 6,378,155   |
| Emission factor internal combustion vehicle (MT CO2e/VMT)            | 0.0002791   | 0.0002067   |
| MT CO <sub>2</sub> e savings (BART initiatives)                      | 121         | 332         |
| Net MT CO <sub>2</sub> e savings                                     | 336         | 537         |

| Measure SM-6: Continue to Prioritize Transit Oriented Development (TOD) | 2030 Target<br>Supportive |
|---|---------------------------|
| Performance Metrics:  |                           |
| Number of TOD units constructed in Dublin                               |                           |

# Actions

- 1. Conduct outreach and engagement around transit-oriented development projects.
- 2. Track number of units within <sup>1</sup>/<sub>4</sub>-mile and <sup>1</sup>/<sub>2</sub>-mile of transit to estimate VMT reduction over time.

*Evidence:* By focusing growth along transit corridors, the City of Dublin can manage growth in a way that limits increases in traffic and vehicle miles traveled and develop residences and businesses in locations that provide access to active and public transit options without the requirement of owning a car. These changes will help lower air quality impacts from vehicles. It will also incentivize people to walk and bike, another health benefit. Transit-oriented development can be cheaper for both residents and for developers who can take advantage of State incentives. Transit-oriented development also provides equity benefits by providing lower cost units that do not require vehicle ownership.

*Cost:* Transit-oriented development would have minimal to no cost on the community. This measure does not expand on what the City is already doing, therefore there are no new associated costs for this measure.

|   | 2030 Target |
|---|-------------|
| Measure SM-7: Develop a Built Environment that Prioritizes Active Mobility                  | Supportive  |
| Performance Metrics:  |             |
| <ul> <li>Updated zoning regulations and standards to prioritize active mobility.</li> </ul> |             |

# Actions

- 1. Conduct outreach and engagement around building standards that encourage activity mobility.
- 2. Conduct a pilot project using building principals that encourage active mobility for one area of Dublin.
- 3. Amend the Zoning Ordinance and design guidelines and standards as needed to require new development and remodels that modify 50% or more of a commercial or multi-family property, to encourage active mobility.
- 4. Conduct education and training on the new requirements.
- 5. Conduct follow up surveys and engagement around impacts of new requirements.

*Evidence:* Cityscapes designed for walking and biking help create a better sense of place. Requiring new developments that encourage active mobility will result in usable streetscapes and provide for a walkable downtown decreasing vehicle emissions and incentivizing walking and biking. Increasing walkability has also been shown to increase revenue at local retail stores and support small businesses.<sup>35</sup>

*Cost:* The development and implementation of building requirements that encourage active mobility would have minimal to no cost on the community. Some changes in the cost of development are possible depending on the end requirement; however, most of the design elements that encourage active mobility require different layouts and better use of space in buildings rather than changes to the building itself.

City costs to develop new requirements to prioritize active mobility in the built environment are estimated to cost \$35,000 to \$50,000 for a combination of City staff and consultant time.

|     |  | 2030 Target                |
|-----|--|----------------------------|
| Me  | easure MM-1: Achieve the Organic Waste Reduction Requirements of SB 1383 | 3,615 MT CO <sub>2</sub> e |
| Per | rformance Metrics:   |                            |
| -   | Comply with SB 1383 organic waste reduction requirements                 |                            |
| -   | Reduction in solid waste sent to the landfill                            |                            |

<sup>&</sup>lt;sup>35</sup> https://www.strongtowns.org/journal/2018/1/16/why-walkable-streets-are-more-economically-productive

# 3.4 Strategy 4: Materials and Waste Management

# Actions

- 1. Conduct outreach to residents and food waste generators about the requirements of SB 1383 and the benefits of composting and organics waste reduction.
- 2. Collaborate with regional partners like StopWaste, waste haulers, food recovery organizations and other cities to establish regional approach to SB 1383 compliance including establishing a regional food waste recovery plan.
- 3. Adopt a plan and associated policies/ordinances required for the successful implementation of SB 1383.
- 4. Work with StopWaste and other regional partners to conduct education on the requirements of SB 1383 and implement Action 3.
- 5. Continue to monitor waste collection data with regional partners to track progress and evaluate additional measures as necessary.

*Evidence:* The requirements and actions associated with SB 1383 have been developed to produce a 75% reduction in organics by the State of California.<sup>36</sup> Therefore, by taking the actions required, the City of Dublin can expect to achieve a similar reduction level. The GHG emissions reductions associated with a 75% reduction in organics was calculated using the 2014 waste characterization study for the County of Alameda pursuant to the SB 1383 guidelines. A 75% reduction was applied in 2025 and continued through 2030 and the reduced amount was multiplied by the EPA's emission factor for organics from the WARM model.<sup>37</sup> Total GHG emissions reductions are estimated to be 3,427 MT of CO<sub>2</sub>e in 2025 and 3,615 MT of CO<sub>2</sub>e in 2030.

*Cost:* The costs associated with implementing SB 1383 are expected to be \$20.9 billion statewide of which \$400 million in 2022, \$115 million in 2025, and \$96 million beyond 2025 will be paid by local governments (spread over the State). CalRecycle estimates that implementation of all program requirements will cost each resident approximately \$17 annually and each business \$662 annually. Organics and recycling are already included in the City's current waste hauler franchise agreement so the total implementation cost may be less. The cost to the City is not quantified as implementation will be covered under other program budgets as SB 1383 compliance is mandatory.

<sup>&</sup>lt;sup>36</sup> <u>https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\_id=201520160SB1383</u>

<sup>&</sup>lt;sup>37</sup> <u>https://www.epa.gov/sites/production/files/2019-06/documents/warm\_v15\_organics.pdf</u>

# **Quantification Results Summary**

| Measure MM-1                                   | 2025   | 2030   |
|--|--------|--------|
| Waste generation estimate                      | 39,522 | 41,695 |
| Percent organic (2014)                         | 0.218  | 0.218  |
| Tons of organic waste per year                 | 8,620  | 9,094  |
| 75% of annual organic waste                    | 6,465  | 6,821  |
| Emission factor (MT CO2e/ton of organic waste) | 0.53   | 0.53   |
| Net MT CO <sub>2</sub> e savings               | 3,427  | 3,615  |

| Me | easure MM-2: Reduce the Embodied GHG Emissions Associated with Building                        | 2030 Target |
|----|--|-------------|
| Ma | aterials   | Supportive  |
| Pe | rformance Metrics:   |             |
| •  | Adopt an ordinance mandating low-embodied emissions concrete for building applications by 2023 |             |

# Actions

- 1. Conduct outreach to the development community regarding low carbon concrete using the Bay Area Low Carbon Concrete Codes Project.
- 2. Present a low-carbon concrete reach code to City Council based on the Marin County model ordinance with specifications for residential and non-residential development applications.
- 3. Educate City Staff, and the development community on the new reach code requirements.
- 4. Keep current on new model ordinances that identify other building materials to target for additional embodied carbon reductions.

*Evidence:* This measure is supportive at this time. Lifecycle GHG emissions using a consumption-based inventory are not supported by the State GHG reduction targets and no clear methodology for consumption-based inventories has been adopted. However, embedded emissions from concrete are between 6% to 10% of global GHG emissions and represents the largest GHG emissions source from any single material.<sup>38</sup> This measure may be quantified in the future but is not part of this CAP's quantified GHG reductions.

*Cost:* Low carbon concrete is approximately equal in cost to standard high carbon concrete due to a currently available significant local supply of fly ash in the Bay Area

City staff time will be required to update the City of Dublin Building Code and implement the new requirements. A low carbon concrete building code update can be based on the work completed by Marin County under a grant from the Bay Area Air Quality Management District. Costs for staff time is estimated between \$10,000 and \$15,000.

<sup>&</sup>lt;sup>38</sup> <u>https://materialspalette.org/concrete/</u>

# 4 Municipal Measures

Municipal measures are not included in the City's quantified GHG emissions reductions because the City is a subset of community emissions. Therefore, the municipal measures referenced below serve to show the feasibility of the community measures and allow the City to take a leadership role in addressing climate change.

|  | 2030 Target     |
|--|-----------------|
| Measure ML-1: 100% Renewable Electricity for Municipal Buildings and Operations    | 156 MT CO2e/yr. |
| Performance Metrics:   |                 |
| <ul> <li>Opt-up all municipal accounts to EBCE Renewable 100 (Complete)</li> </ul> |                 |
| Establish a battery storage policy for municipal facilities                        |                 |

# Actions

- 1. Switch all municipal electricity accounts to EBCE's Renewable 100 power portfolio (complete).
- 2. Complete a studies and conduct outreach to engage staff at critical facilities about the potential to install additional solar and new battery storage.
- 3. Conduct a pilot program for solar and battery storage at one or more locations.
- 4. Develop a policy to define parameters for installation of solar panel arrays and battery storage.
- 5. Provide education and training on the battery storage policy to relevant staff and include educational information on the City web page.
- 6. Conduct annual reviews of the solar production and cost savings to improve operational efficiency and evaluate success.

*Evidence:* This action was completed in July 2019 and reduced all of the City's electricity emissions to zero. No updated inventory for municipal energy consumption was conducted for the CAP update, but in 2015 municipal electricity consumption was 2,566,566 kWh which would result in approximately 230 MT of CO<sub>2</sub>e in 2020. Therefore, opting up to EBCE's Renewable 100 energy portfolio reduced GHG emissions by an estimated 230 MT of CO<sub>2</sub>e per year.

**Cost:** Increased cost to the City associated with 100% renewable electricity is approximately \$25,000 per year. City staff have been working with EBCE's consultants to complete an analysis of battery storage at critical facilities which is near complete. Additional staff time for measure implementation is estimated between \$12,000 to \$17,000. Installation of battery storage is costly, but the City will utilize regional purchasing power to minimize cost. It is also anticipated that battery storage could pay for itself over the course of its life through rate arbitrage.

|    |  | 2030 Target     |
|----|--|-----------------|
| Me | easure ML-2: Reduce Municipal Employee Commute GHG Emissions | 163 MT CO2e/yr. |
| Pe | rformance Metrics:   |                 |
| -  | Conduct an annual employee commute survey                    |                 |
| -  | Reduce total employee commute GHG emissions 10% by 2025      |                 |
| -  | Reduce total employee commute GHG emissions 20% by 2030      |                 |

# Actions

- 1. Conduct outreach to employees about current incentives for non-single occupant vehicle commuting and encourage participation in the development of a municipal TDM plan that incorporates and expands on current municipal incentives.
- 2. Conduct pilots for possible programs to incorporate into a municipal TDM plan.
- 3. Adopt and implement the municipal TDM plan and any relevant policies and programs.
- 4. Educate staff annually and provide informational packets on TDM programs for use when on-boarding new staff.
- 5. Evaluate the success of the programs by conducting annual surveys of employees.

*Evidence:* The City would first conduct a TDM analysis and commute survey to determine the most effective methods for enhancing and augmenting existing incentives to reduce employee commute GHG emissions by 20% by 2030. Studies show that a combination of services and monetary incentives can achieve VMT reduction for employees by up to 24.5% and adding parking pricing can further decrease VMT 20% to 30%.<sup>39</sup>

*Cost:* Costs to the City include staff and consultant time for development of the municipal TDM plan and employee commute surveys which is estimated at \$25,000 to \$55,000. Implementation of the plan is expected to cost \$200 per employee on average per year. Completion of the TDM plan will provide more detail on expected implementation costs.

|   |  | 2030 Target    |
|---|--|----------------|
| Μ | leasure ML-3: Electrify Municipal Vehicle Fleet and Equipment  | 96 MT CO2e/yr. |
| P | erformance Metrics:  |                |
| - | Electrify 15% of municipal vehicle fleet and equipment by 2025 |                |
| - | Electrify 33% of municipal vehicle fleet and equipment by 2030 |                |

# Actions

- 1. Complete a fleet and maintenance equipment electrification analysis.
- 2. Conduct outreach and education to the municipal fleet users on the results of the electrification study and provide information on the benefits of electrification.
- 3. Pilot electric vehicles (EV's) or alternative fuel vehicles for certain vehicle types and uses such as passenger vehicles used by City detectives and building inspectors and for equipment (e.g. mowers, blowers, etc.).

<sup>&</sup>lt;sup>39</sup> <u>https://smartgrowthamerica.org/app/legacy/documents/state-of-the-practice-tdm.pdf</u>

#### City of Dublin Appendix C: Measure Quantification Evidence

- 4. Update the City's Green Fleet policy to reflect the outcome of the fleet and maintenance equipment electrification analysis, outreach and pilot EV studies. Develop a policy for replacement of maintenance equipment.
- 5. Educate municipal staff on the new policies and on how to select and operate the new equipment.
- 6. Conduct follow-up surveys to evaluate the effectiveness of the vehicles and equipment to inform future policy updates.

*Evidence:* In 2015, the City fleet emitted 292 MT of CO<sub>2</sub>e. Switching 33% of these vehicle trips to an EV or other alternatively fueled vehicle would result in a reduction of 96 MT of CO<sub>2</sub>e. In order to maximize cost effectiveness, EV's will be switched out at time of replacement based on life cycle costs. Additional equipment and contract fleet vehicles will be converted to EV as required to meet the target.

*Cost:* City staff have been working with EBCE to complete a fleet electrification analysis during the development of this CAP. The analysis is close to completion. Additional staff time to coordinate implementation of pilots and policy updates are estimated at \$7,000 to \$12,000. Lifecycle cost studies show operation and maintenance of EVs is less than for internal combustion vehicles so there is the potential that implementation of fleet electrification could save the City money over the long-term.

| ML-4: Total Cost of Ownership and Life-Cycle Analysis of GHG Impacts in Municipal  | 2030 Target |
|--|-------------|
| Project Request for Proposals  | Supportive  |
| Performance Metrics:   |             |
| <ul> <li>Adopt new City policy regarding requirements for total cost of ownership and lifecycle GHG<br/>emissions analysis for municipal projects by 2022</li> </ul> |             |

# Actions

- 1. Create an internal stakeholder group and conduct outreach to define applicable projects and parameters related to the TCO and lifecycle GHG emissions analysis.
- 2. Develop draft language and pilot the language requiring a lifecycle GHG analysis at the appropriate stage in the capital improvement project process.
- 3. Adopt a new City policy that requires all municipal building/infrastructure projects to include requirements for TCO and lifecycle GHG emissions analysis.
- 4. Educate City staff on the new policy and long-term benefits to the environment and operating budget.
- 5. At least once per 5-year CIP cycle, evaluate the successes and failures of the analyses for refinements in future years.

*Evidence:* Requiring capital improvement projects (CIPs) to include a life-cycle cost analysis will provide staff more complete information on true development and operational costs. A product lifecycle includes the costs associated with its purchase, use, and eventual disposal or reuse. As the City of Dublin shifts from a growing city to a built-out city, this wholistic information is even more important from an on-going operation and maintenance perspective. This measure ensures that a dollar saved in upfront cost will not result in increased operational cost over the life of a building or project.

Lifecycle costing also has the added environmental benefit of enabling staff to consider GHG emissions alongside construction cost. Often green building practices result in lower costs over the life of a building. For example, studies show all electric buildings are more cost effective to build and maintain than standard mixed-fuel buildings. By conducting life-cycle costing and GHG emissions analysis early in the municipal project's design phase, sustainable urban design and engineering decisions can be made. By incorporating life-cycle costing into CIPs, the City can maximize both cost effectiveness and, in most cases, GHG emissions reductions and overall sustainability. The point of this measure is to reduce life-cycle costs which will also support sustainable decisions, more durable materials, all-electric construction, and electric vehicles

*Cost:* Staff time to develop a City policy that includes TCO and lifecycle GHG emissions analysis for CIP projects is estimated to be approximately \$10,000 to \$15,000. This measure could result in cost savings as the updated policy will focus on delivering the lowest cost, most sustainable projects to the City over the long-term. There may be increased upfront construction costs, but those costs should be recuperated with long-term operation and maintenance savings.

|   | 2030 Target |
|---|-------------|
| ML-5: Promote Municipal Awareness of Sustainable Goods and Services             | Supportive  |
| Performance Metrics:  |             |
| Continue City staff education on the Environmental Preferable Purchasing Policy |             |

# Actions

- 1. Continue outreach and education to City staff about the Environmental Preferable Purchasing Policy (EPPP), add updated EPPP documents to the intranet and develop new hire on-boarding information.
- 2. Pilot proposed new programs, as necessary.
- 3. Make updates to the existing EPPP, as necessary.
- 4. Implement a monitoring protocol or a quality check to determine effectiveness of EPPP implementation and make refinements, as necessary.

*Evidence:* Educating staff about the Environmental Preferable Purchasing Policy will provide municipal employees with the information and tools necessary to make sustainable purchasing choices and services selection decisions for municipal facilities and operations. Following the policies in the EPPP will help the City reduce its GHG emissions by ensuring the City is purchasing products that are made from recycled materials or Energy Star rated products and engaging in services and maintenance activities that reduce the use of hazardous materials. For instance, Bay-friendly Landscape Measures result in landscapes that have reduced water needs, sequester greater amounts of carbon, use less pesticides, provide better water absorption and retention, and are less maintenance intensive than traditional landscapes. Following Bay Friendly Landscape guidelines also has the additional benefit of building healthier ecosystems through healthier soils and plants.

*Cost:* Costs to the City include on-going staff time to monitor implementation, update the policies and educate staff on the policies. Initial costs for updating the policy are estimated to be between \$5,000 to \$10,000 in staff time. On-going monitoring and education for the program are anticipated to be \$3,000 to \$5,000 annually. Hard costs associated with the Environmental

#### City of Dublin Appendix C: Measure Quantification Evidence

Preferable Purchasing Policy are expected to be cost neutral to slightly more but will vary by product or service.

|     |   | 2030 Target |
|-----|---|-------------|
| MI  | 6: Enhance Municipal Carbon Sequestration Opportunities                           | Supportive  |
| Per | formance Metrics:   |             |
| -   | Develop City standards for use of compost and mulch                               |             |
| -   | Review and update City tree planting standards                                    |             |
| -   | Develop compost-based erosion control guidelines for capital improvement projects |             |
| -   | Complete and highlight a carbon sequestration pilot project with StopWaste        |             |

# Actions

- 1. Participate in a carbon sequestration pilot project with StopWaste to inform development of compost standards.
- 2. Conduct outreach and create an internal stakeholder group to develop standards for tree planting.
- 3. Conduct pilot studies, as necessary, to determine if proposed tree planting standards are effective.
- 4. Finalize composting and mulching and tree planting standards once pilot studies are complete.
- 5. Educate staff on updated policies and include policy information on the intranet.

*Evidence:* Enhancing carbon sequestration opportunities through increased use of compost and providing optimal growth environments for trees and other plants, has the benefit of not only increasing carbon sequestration but also enhancing resilience by mitigating the anticipated increases in storm frequency and intensity. Trees reduce rainfall intensity by capturing rainwater in leafy tree canopies and compost absorbs the rainwater that falls on the ground, reducing runoff rates and duration. Tree canopies also help mitigate the impacts of extreme heat days by providing shade and by cooling buildings. In addition to these enhanced carbon sequestration activities, trees contribute to more beautiful and easier to maintain landscapes, increased urban green space, and cooler areas, particularly from the shade of fully grown, healthy trees.

*Cost:* This measure is an unfunded mandate under the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit which is required regardless of this CAP, therefore no implementation cost is included in the CAP 2030. Specific details on implementation and ongoing operational costs are available in the Green Stormwater Infrastructure Plan.

|  | 2030 Target |
|--|-------------|
| ML-7: Implement the Green Stormwater Infrastructure Plan   | Supportive  |
| Performance Metrics:   |             |
| <ul> <li>Include green stormwater infrastructure in City projects as described in the City's Green<br/>Stormwater Infrastructure Plan</li> </ul> |             |

# Actions

- 1. Implement the City's Green Stormwater Infrastructure Plan.
- 2. Provide on-going education and training to staff on the policies and standards in the GSI Plan.
- 3. Evaluate GSI installations to refine standards and details, as necessary.

*Evidence:* Dublin will increase its overall resilience by implementing the City of Dublin Green Stormwater Infrastructure Plan. Installation of green stormwater infrastructure in optimal locations offers several benefits, including:

- Improved stormwater management and reduced runoff to decrease localized flooding;
- Water quality improvement as pollutants are removed from stormwater in GSI systems which results in healthier aquatic ecosystems;
- Increased infiltration into groundwater aquifers to help protect local water quality;
- Increased carbon sequestration opportunities and increased urban green space;
- Relief from extreme heat days; and
- Additional wildlife habitat for a healthier ecosystem.

*Cost:* This measure is an unfunded mandate under the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit which is required regardless of this CAP. Therefore, implementation of this measure is required, Costs are expected to be significant over time. Specific details on implementation and ongoing operational costs are available in the Green Stormwater Infrastructure Plan.

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# Appendix D

Survey Results



June 14, 2019, 3:40 PM

# Contents

| i.   | Summary of responses | 2  |
|------|----------------------|----|
| ii.  | Survey questions     | 28 |
| iii. | Individual responses | 32 |

# **Summary Of Responses**

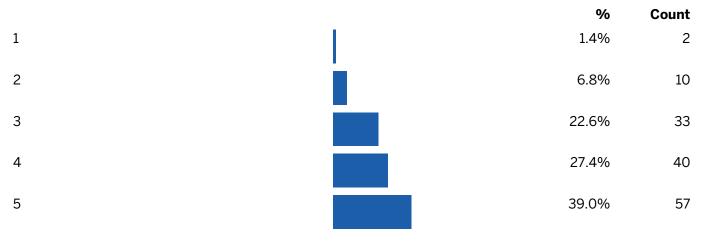
| As of June 14, 2019, 3:40 PM, this for | rum had: | Topic Start |
|--|----------|-------------|
| Attendees:                             | 139      | November 5  |
| Responses:                             | 147      |             |
| Hours of Public Comment:               | 7.4      |             |

#### QUESTION 1

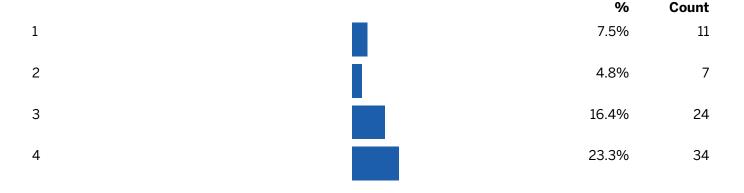
On which environmental area should the City focus its resources? Please rank the level of priority for each topic. (1 equals lowest priority and 5 equals highest priority.)

5, 2018, 12:23 PM

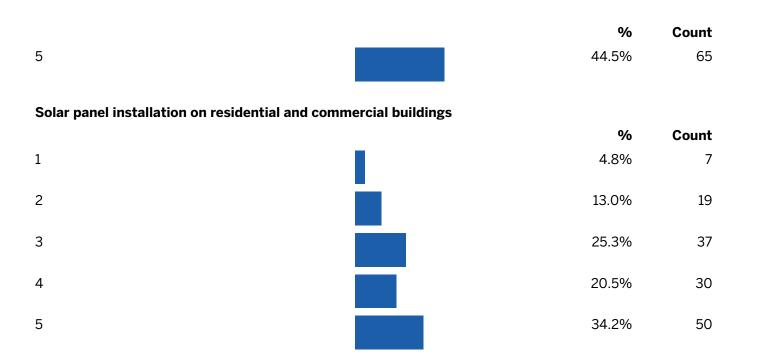
Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.



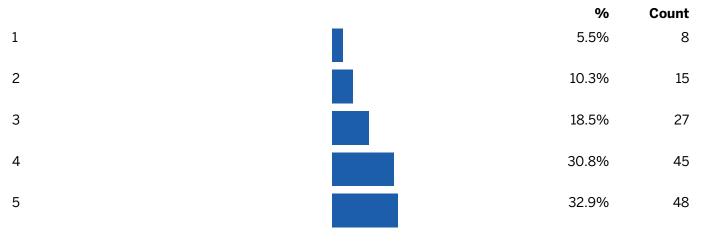
Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied



# **City of Dublin Climate Action Plan Survey for Residents** What should the City of Dublin's priorities be in updating our Climate Action Plan?



Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.



#### Driverless transportation focused on shared mobility

|   | %     | Count |
|---|-------|-------|
| 1 | 37.7% | 55    |
| 2 | 14.4% | 21    |
| 3 | 19.2% | 28    |

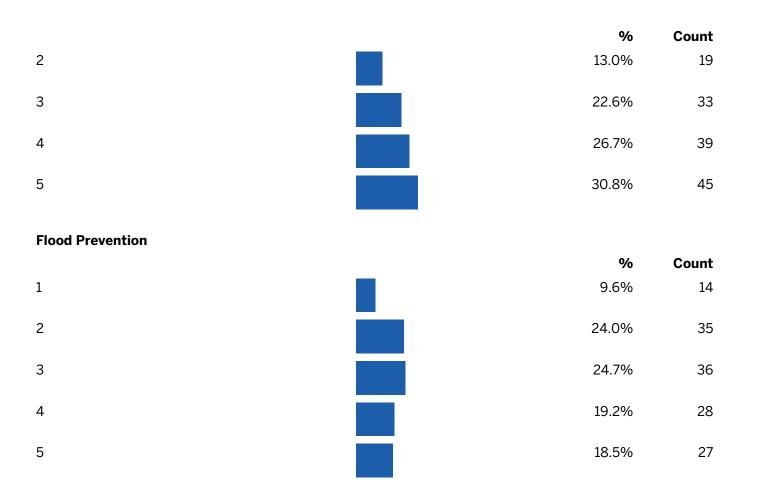
What should the City of Dublin's priorities be in updating our Climate Action Plan?

|   | %  | Count                                      |
|---|--|--|
| 4   | 11.0%  | 16   |
| 5   | 13.7%  | 20   |
| Electric vehicle (EV) charging station infrastructure           |  |  |
|   | %  | Count                                      |
| 1   | 12.3%  | 18   |
| 2   | 21.9%  | 32   |
| 3   | 24.0%  | 35   |
| 4   | 21.2%  | 31   |
| 5   | 17.1%  | 25   |
|   |  |  |
| Bicycle/Pedestrian infrastructure                               |  |  |
| Bicycle/Pedestrian infrastructure                               | %  | Count                                      |
| Bicycle/Pedestrian infrastructure                               | <b>%</b><br>6.8%                                     | <b>Count</b><br>10                         |
|   |  |  |
| 1   | 6.8%   | 10   |
| 1 2   | 6.8%<br>10.3%  | 10<br>15                                   |
| 1<br>2<br>3   | 6.8%<br>10.3%<br>24.0%                               | 10<br>15<br>35                             |
| 1<br>2<br>3<br>4  | 6.8%<br>10.3%<br>24.0%<br>24.7%                      | 10<br>15<br>35<br>36                       |
| 1     1       2     1       3     1       4     1       5     1 | 6.8%<br>10.3%<br>24.0%<br>24.7%                      | 10<br>15<br>35<br>36                       |
| 1     1       2     1       3     1       4     1       5     1 | 6.8%<br>10.3%<br>24.0%<br>24.7%<br>32.2%             | 10<br>15<br>35<br>36<br>47                 |
| 12345Water Conservation   | 6.8%<br>10.3%<br>24.0%<br>24.7%<br>32.2%<br><b>%</b> | 10<br>15<br>35<br>36<br>47<br><b>Count</b> |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|   |       | %     | Count |
|---|-------|-------|-------|
| 3   |       | 16.4% | 24    |
| 4   |       | 22.6% | 33    |
| 5   |       | 46.6% | 68    |
| Waste Reduction and Recycling                 |       |       |       |
|   |       | %     | Count |
| 1   |       | 4.1%  | 6     |
| 2   |       | 8.9%  | 13    |
| 3   |       | 17.1% | 25    |
| 4   |       | 26.0% | 38    |
| 5   |       | 41.1% | 60    |
| Landscapes and Open Space                     |       |       |       |
|   |       | %     | Count |
| 1   |       | 2.7%  | 4     |
| 2   |       | 8.9%  | 13    |
| 3   |       | 23.3% | 34    |
| 4   |       | 24.0% | 35    |
| 5   |       | 35.6% | 52    |
| Stormwater pollution prevention/creek protect | ction |       |       |
|   |       | %     | Count |
| 1   |       | 4.1%  | 6     |

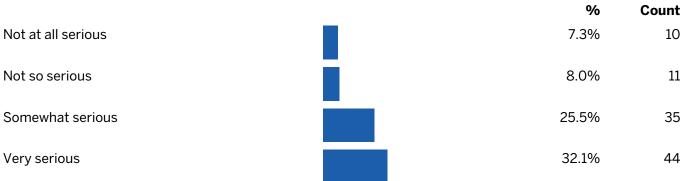
What should the City of Dublin's priorities be in updating our Climate Action Plan?



#### **QUESTION 2**

How problematic do you think each of the following climate-related hazards will be for Dublin in the future?

# Increased temperatures and heat waves



What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Extremely serious                   | <b>%</b><br>25.5% | Count<br>35 |
|-------------------------------------|-------------------|-------------|
| Increased wildfire                  |                   |             |
| Not at all serious                  | <b>%</b><br>5.1%  | Count<br>7  |
| Not so serious                      | 8.8%              | 12          |
| Somewhat serious                    | 21.2%             | 29          |
| Very serious                        | 28.5%             | 39          |
| Extremely serious                   | 35.8%             | 49          |
| Flooding and more severe rainstorms |                   |             |
| Not at all serious                  | <b>%</b><br>4.4%  | Count<br>6  |
|                                     | <u> </u>          | -           |
| Not so serious                      | 24.8%             | 34          |
| Somewhat serious                    | 45.3%             | 62          |
| Very serious                        | 16.8%             | 23          |
| Extremely serious                   | 6.6%              | 9           |
| Mudslide/landslide                  |                   |             |
|                                     | %                 | Count       |
| Not at all serious                  | 6.6%              | 9           |
| Not so serious                      | 26.3%             | 36          |
| Somewhat serious                    | 28.5%             | 39          |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|                    | %                | Count      |
|--------------------|------------------|------------|
| Very serious       | 10.9%            | 15         |
| Extremely serious  | 3.6%             | 5          |
| Drought            | %                | Count      |
| Not at all serious | 2.2%             | 3          |
| Not so serious     | 5.8%             | 8          |
| Somewhat serious   | 17.5%            | 24         |
| Very serious       | 32.8%            | 45         |
| Extremely serious  | 40.1%            | 55         |
| Poor air quality   |                  | •          |
| Not at all serious | <b>%</b><br>2.2% | Count<br>3 |
| Not so serious     | 7.3%             | 10         |
| Somewhat serious   | 21.9%            | 30         |
| Very serious       | 27.7%            | 38         |
| Extremely serious  | 39.4%            | 54         |

#### QUESTION 3

How concerned are you about the impacts of climate change (listed in the previous question) on the following areas?

#### **Public health**

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|                                  | %     | Count |
|----------------------------------|-------|-------|
| Not at all concerned             | 5.7%  | 8     |
| Not so concerned                 | 10.0% | 14    |
| Somewhat concerned               | 20.0% | 28    |
| Very concerned                   | 37.9% | 53    |
| Extremely concerned              | 26.4% | 37    |
| Homes and property values        |       |       |
|                                  | %     | Count |
| Not at all concerned             | 10.7% | 15    |
| Not so concerned                 | 20.0% | 28    |
| Somewhat concerned               | 34.3% | 48    |
| Very concerned                   | 17.1% | 24    |
| Extremely concerned              | 17.1% | 24    |
| Well-being of future generations |       |       |
|                                  | %     | Count |
| Not at all concerned             | 5.7%  | 8     |
| Not so concerned                 | 6.4%  | 9     |
| Somewhat concerned               | 13.6% | 19    |
| Very concerned                   | 27.1% | 38    |
| Extremely concerned              | 46.4% | 65    |

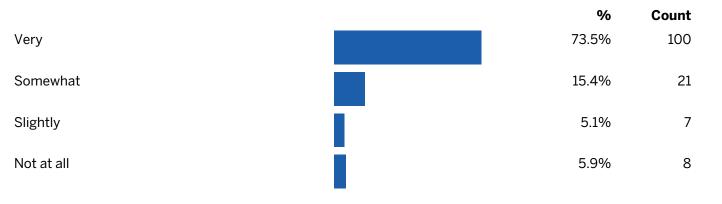
#### Economic vitality of Dublin community

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|   | %                | Count       |
|---|------------------|-------------|
| Not at all concerned                          | 10.7%            | 15          |
| Not so concerned                              | 12.9%            | 18          |
| Somewhat concerned                            | 27.1%            | 38          |
| Very concerned                                | 31.4%            | 44          |
| Extremely concerned                           | 17.1%            | 24          |
|   |                  |             |
| Public infrastructure                         |                  |             |
| Public infrastructure                         | %                | Count       |
| Public infrastructure<br>Not at all concerned | <b>%</b><br>9.3% | Count<br>13 |
|   |                  |             |
| Not at all concerned                          | 9.3%             | 13          |
| Not at all concerned<br>Not so concerned      | 9.3%             | 13<br>18    |

#### QUESTION 4

How important is it that the City of Dublin implements programs and policies that protect the environment?



What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **QUESTION 5**

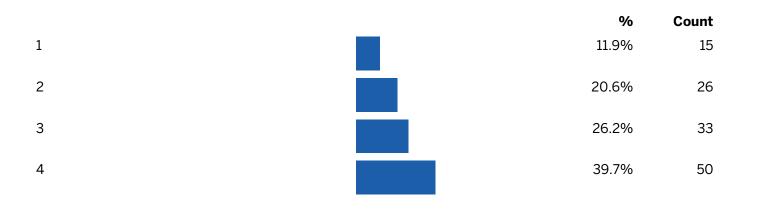
# What motivates you most to invest in energy upgrades for your home? Please rank the reasons below from lowest to highest motivation. (1 equals lowest motivation and 5 equals highest.)

#### Lower my environmental impact

|                               | 0     | % Count |
|-------------------------------|-------|---------|
| 1                             | 11.9  | % 15    |
| 2                             | 12.7' | % 16    |
| 3                             | 28.6  | % 36    |
| 4                             | 46.0  | % 58    |
| Make my home more comfortable |       |         |
|                               | (     | % Count |
| 1                             | 11.1  |         |
| 2                             | 19.0  | % 24    |
| 3                             | 40.5  | % 51    |
| 4                             | 27.8  | % 35    |
| Save money on utility bills   |       |         |
|                               | (     | % Count |
| 1                             | 2.4   | % 3     |
| 2                             | 7.9   | % 10    |
| 3                             | 31.0  | % 39    |
| 4                             | 57.9  | % 73    |
|                               |       |         |

#### Improve indoor air quality

What should the City of Dublin's priorities be in updating our Climate Action Plan?



#### QUESTION 6

What have you done (or what do you want to do) to reduce energy usage at your residence?

#### Install a high-efficiency heating and air conditioning system

|                    | %     | Count |
|--------------------|-------|-------|
| Completed          | 45.7% | 58    |
| Want to do         | 25.2% | 32    |
| Want to learn more | 12.6% | 16    |
| Not interested     | 11.8% | 15    |

#### Seal air leaks in walls, windows, ducts, etc.

|                    | %     | Count |
|--------------------|-------|-------|
| Completed          | 48.0% | 61    |
| Want to do         | 30.7% | 39    |
| Want to learn more | 10.2% | 13    |
| Not interested     | 7.9%  | 10    |

#### Install a high-efficiency water heater

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|   | %     | Count |
|---|-------|-------|
| Completed   | 46.5% | 59    |
| Want to do  | 26.8% | 34    |
| Want to learn more                                  | 11.8% | 15    |
| Not interested                                      | 11.8% | 15    |
| Plant shade trees                                   |       |       |
|   | %     | Count |
| Completed   | 42.5% | 54    |
| Want to do  | 18.9% | 24    |
| Want to learn more                                  | 7.1%  | 9     |
| Not interested                                      | 25.2% | 32    |
| Change light bulbs to energy-efficient models (LED) |       |       |
|   | %     | Count |
| Completed   | 85.0% | 108   |
| Want to do  | 9.4%  | 12    |
| Not interested                                      | 4.7%  | 6     |
| Replace appliances with energy-efficient models     |       |       |
|   | %     | Count |
| Completed   | 59.1% | 75    |

Completed59.1%75Want to do29.1%37Want to learn more3.1%4

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|   | %     | Count |
|---|-------|-------|
| Not interested                                  | 6.3%  | 8     |
| Upgrade your home's insulation                  |       |       |
|   | %     | Count |
| Completed                                       | 33.1% | 42    |
| Want to do                                      | 37.8% | 48    |
| Want to learn more                              | 9.4%  | 12    |
| Not interested                                  | 17.3% | 22    |
|   |       |       |
| Install solar panels                            | %     | Count |
| Completed                                       | 21.3% | 27    |
| Want to do                                      | 31.5% | 40    |
| Want to learn more                              | 15.0% | 19    |
| Not interested                                  | 27.6% | 35    |
| Install high-efficiency windows (double-paned)  |       |       |
| install light efficiency windows (double panea) | %     | Count |
| Completed                                       | 76.4% | 97    |
| Want to do                                      | 12.6% | 16    |
| Want to learn more                              | 3.9%  | 5     |
| Not interested                                  | 6.3%  | 8     |
|   |       |       |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### QUESTION 7

Would you be willing to switch to all electric appliances (i.e., on-demand hot water, electric or induction stoves, electric furnace)?



#### QUESTION 8

#### What are some of the barriers that would keep you from completing energy upgrades?

# Do not own the property

|                         | %                | Count             |
|-------------------------|------------------|-------------------|
| Least important         | 50.0%            | 62                |
| Somewhat important      | 4.0%             | 5                 |
| More important          | 6.5%             | 8                 |
| Most important          | 16.9%            | 21                |
|                         |                  |                   |
| Cost                    |                  |                   |
| Cost                    | %                | Count             |
| Cost<br>Least important | <b>%</b><br>7.3% | <b>Count</b><br>9 |
|                         |                  |                   |
| Least important         | 7.3%             | 9                 |

#### Time and effort

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|  | %     | Count      |
|--|-------|------------|
| Least important  | 16.1% | 20         |
| Somewhat important                                     | 29.8% | 37         |
| More important   | 33.1% | 41         |
| Most important   | 13.7% | 17         |
| Minimal financial or energy savings                    |       |            |
|  | %     | Count      |
| Least important  | 16.1% | 20         |
| Somewhat important                                     | 25.0% | 31         |
| More important   | 28.2% | 35         |
| Most important   | 25.8% | 32         |
| Concern upgraded technologies will not perform as well |       |            |
|  | %     | Count      |
| Least important  | 26.6% | 33         |
| Somewhat important                                     | 29.0% | 36         |
| More important   | 24.2% | 30         |
| Most important   | 16.1% | 20         |
| Safety issues  | •     | <b>.</b> . |
|  | %     | Count      |
| Least important  | 36.3% | 45         |
| Somewhat important                                     | 24.2% | 30         |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|                | %     | Count |
|----------------|-------|-------|
| More important | 21.8% | 27    |
| Most important | 10.5% | 13    |

#### QUESTION 9

#### What have you already done (or what do you want to do) to reduce water usage?

#### Install water-conserving faucets and showerheads

|                    | %     | Count |
|--------------------|-------|-------|
| Have done          | 69.4% | 86    |
| Want to do         | 12.1% | 15    |
| Want to learn more | 6.5%  | 8     |
| Not interested     | 8.9%  | 11    |

#### Replace older toilets with a new low-flow model

|                    | %     | Count |
|--------------------|-------|-------|
| Have done          | 67.7% | 84    |
| Want to do         | 14.5% | 18    |
| Want to learn more | 6.5%  | 8     |
| Not interested     | 10.5% | 13    |

#### Adjust timers or install a new water-efficient irrigation system

|            | %     | Count |
|------------|-------|-------|
| Have done  | 65.3% | 81    |
| Want to do | 11.3% | 14    |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|   | %     | Count |  |
|---|-------|-------|--|
| Want to learn more  | 3.2%  | 4     |  |
| Not interested  | 16.1% | 20    |  |
| Replace lawns with drought-resistant plants (use xeriscaping) |       |       |  |
|   | %     | Count |  |
| Have done   | 36.3% | 45    |  |
| Want to do  | 28.2% | 35    |  |
| Want to learn more  | 8.1%  | 10    |  |
| Not interested  | 24.2% | 30    |  |
| Modify the length of showers to conserve water                |       |       |  |
|   | %     | Count |  |
| Have done   | 59.7% | 74    |  |
| Want to do  | 12.9% | 16    |  |
| Want to learn more  | 1.6%  | 2     |  |
| Not interested  | 23.4% | 29    |  |
|   |       |       |  |

#### **QUESTION 10**

How often do you typically use the following methods to run errands and get to other non-work destinations?

| Personal Car     |       |       |
|------------------|-------|-------|
|                  | %     | Count |
| All of the time  | 60.3% | 76    |
| Most of the time | 33.3% | 42    |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|                  | %                | Count |
|------------------|------------------|-------|
| Some of the time | 4.0%             | 5     |
| Never            | 2.4%             | 3     |
|                  | •                |       |
| Lyft/Uber        | %                | Count |
| Some of the time | 50.8%            | 64    |
| Never            | 38.9%            | 49    |
|                  |                  |       |
| Carpool          |                  |       |
| All of the time  | <b>%</b><br>0.8% | Count |
|                  |                  |       |
| Most of the time | 4.0%             | 5     |
| Some of the time | 28.6%            | 36    |
| Never            | 57.1%            | 72    |
|                  |                  |       |
| Walk             | %                | Count |
| All of the time  | 1.6%             | 2     |
| Most of the time | 7.9%             | 10    |
|                  | •                |       |
| Some of the time | 70.6%            | 89    |
| Never            | 15.1%            | 19    |
| Bike             |                  |       |
| DIKE             | %                | Count |
| All of the time  | 1.6%             | 2     |
|                  | ·                |       |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|                  | %     | Count |
|------------------|-------|-------|
| Most of the time | 2.4%  | 3     |
| Some of the time | 31.0% | 39    |
| Never            | 55.6% | 70    |
| Bus              |       |       |
|                  | %     | Count |
| Most of the time | 2.4%  | 3     |
| Some of the time | 10.3% | 13    |
| Never            | 77.8% | 98    |
| BART             |       |       |
|                  | %     | Count |
| All of the time  | 2.4%  | 3     |
| Most of the time | 7.1%  | 9     |
| Some of the time | 53.2% | 67    |
| Never            | 27.8% | 35    |
|                  |       |       |

#### **QUESTION 11**

#### How often do you typically use the following methods to get to work?

#### **Personal Car**

|                  | %     | Count |
|------------------|-------|-------|
| All of the time  | 64.2% | 70    |
| Most of the time | 10.1% | 11    |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|                  | %        | Count |
|------------------|----------|-------|
| Some of the time | 11.0%    | 12    |
| Never            | 13.8%    | 15    |
| l with /11h av   |          |       |
| Lyft/Uber        | %        | Count |
| Some of the time | 14.7%    | 16    |
| Never            | 70.6%    | 77    |
| Carpool          |          |       |
|                  | %        | Count |
| All of the time  | 3.7%     | 4     |
| Most of the time | 0.9%     | 1     |
| Some of the time | 5.5%     | 6     |
| Never            | 75.2%    | 82    |
| Walk             |          |       |
|                  | %        | Count |
| All of the time  | 2.8%     | 3     |
| Most of the time | 3.7%     | 4     |
| Some of the time | 16.5%    | 18    |
| Never            | 63.3%    | 69    |
| Bike             |          |       |
|                  | <b>%</b> | Count |
| All of the time  | 1.8%     | 2     |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|                  | %     | Count |
|------------------|-------|-------|
| Most of the time | 0.9%  | 1     |
| Some of the time | 9.2%  | 10    |
| Never            | 72.5% | 79    |
| Bus              |       |       |
|                  | %     | Count |
| All of the time  | 1.8%  | 2     |
| Most of the time | 1.8%  | 2     |
| Some of the time | 3.7%  | 4     |
| Never            | 76.1% | 83    |
| BART             |       |       |
|                  | %     | Count |
| All of the time  | 10.1% | 11    |
| Most of the time | 5.5%  | 6     |
| Some of the time | 13.8% | 15    |
| Never            | 57.8% | 63    |
|                  |       |       |

# **QUESTION 12**

# If you typically walk or bike for travel, what motivates you to do so (check all that apply)?

|                                     | %     | Count |
|-------------------------------------|-------|-------|
| Exercise                            | 82.1% | 87    |
| Reduce my impact on the environment | 30.2% | 32    |

# **City of Dublin Climate Action Plan Survey for Residents** What should the City of Dublin's priorities be in updating our Climate Action Plan?

% Count Dislike driving/finding parking 12.3% 13 15.1% 16 Save money Do not own a car 0.9% 1 Less stressful 15.1% 16 Feels safer 1.9% 2 17.9% I don't walk or bike for non-commute travel 19

# **QUESTION 13**

If you use a privately-owned vehicle as your primary mode of transportation, what are some of the main reasons for this choice?

|   | %     | Count |
|---|-------|-------|
| Quickest travel time  | 73.6% | 89    |
| Convenience   | 78.5% | 95    |
| Feeling of greater safety   | 33.1% | 40    |
| Public transit is not close enough to my home   | 20.7% | 25    |
| Public transit is not close enough to my work   | 18.2% | 22    |
| Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool) | 21.5% | 26    |
| Other   | 18.2% | 22    |

# **QUESTION 14**

If you do not currently carpool to work, please select all the applicable reasons that prevent you from doing so.

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|  | %     | Count |
|--|-------|-------|
| No or limited carpooling services available      | 24.3% | 25    |
| l am unemployed/retired/working from home        | 33.0% | 34    |
| I need a car to run errands during break periods | 16.5% | 17    |
| I need a car to drop off/pick up family members  | 24.3% | 25    |
| Other  | 29.1% | 30    |

# **QUESTION 15**

# What would convince you to ride a bicycle more often? (check all that apply)

|   | %     | Count |
|---|-------|-------|
| Shorter distance from my home to my destination | 32.1% | 36    |
| More bicycle lanes and trails                   | 40.2% | 45    |
| More bicycle parking                            | 23.2% | 26    |
| Slower traffic speeds                           | 17.0% | 19    |
| Bike Share program                              | 4.5%  | 5     |
| Nothing   | 33.0% | 37    |
| Other   | 16.1% | 18    |

# QUESTION 16

# What would convince you to walk more often? (check all that apply)

|                 | %     | Count |
|-----------------|-------|-------|
| Wider sidewalks | 26.8% | 30    |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| More sidewalk lighting and safety38.4%43Traffic safety improvements at pedestrian<br>crossings29.5%33Higher visibility crosswalks26.8%30More frequent crosswalks15.2%17Reducing crossing distance12.5%14More stores and services in my neighborhood48.2%54More shaded sidewalks36.6%41Nothing11.6%13Other16.1%18 |   | %     | Count |
|--|---|-------|-------|
| crossings26.8%30Higher visibility crosswalks15.2%17More frequent crosswalks15.2%17Reducing crossing distance12.5%14More stores and services in my neighborhood48.2%54More shaded sidewalks36.6%41Nothing11.6%13  | More sidewalk lighting and safety           | 38.4% | 43    |
| More frequent crosswalks15.2%17Reducing crossing distance12.5%14More stores and services in my neighborhood48.2%54More shaded sidewalks36.6%41Nothing11.6%13   |   | 29.5% | 33    |
| Reducing crossing distance12.5%14More stores and services in my neighborhood48.2%54More shaded sidewalks36.6%41Nothing11.6%13  | Higher visibility crosswalks                | 26.8% | 30    |
| More stores and services in my neighborhood48.2%54More shaded sidewalks36.6%41Nothing11.6%13   | More frequent crosswalks                    | 15.2% | 17    |
| More shaded sidewalks36.6%41Nothing11.6%13   | Reducing crossing distance                  | 12.5% | 14    |
| Nothing 11.6% 13   | More stores and services in my neighborhood | 48.2% | 54    |
|  | More shaded sidewalks                       | 36.6% | 41    |
| Other 16.1% 18   | Nothing                                     | 11.6% | 13    |
|  | Other                                       | 16.1% | 18    |

# QUESTION 17

| What is your zip code? |     |
|------------------------|-----|
| Answered               | 113 |
| Skipped                | 34  |

# QUESTION 18

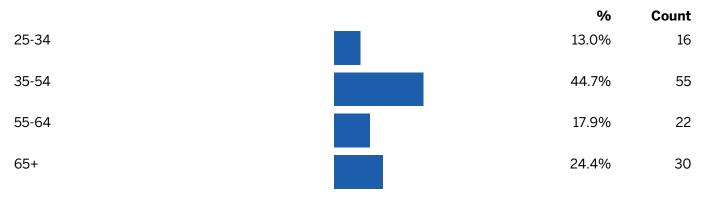
# Do you own or rent your home?

|      | %     | Count |
|------|-------|-------|
| Own  | 87.1% | 108   |
| Rent | 12.9% | 16    |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# **QUESTION 19**

What is your age?



# **QUESTION 20**

How did you hear about this survey?

| City employee%CountCity website16.1%2210.9%15 |
|---|
|   |
| City website 10.9% 15                         |
|   |
| City flyer         1.5%         2             |
| Peachjar 5.1% 7                               |
| City Tweet 2.9% 4                             |
| Friend/Neighbor 8.8% 12                       |
| Other 68.6% 94                                |

# QUESTION 21

Please share any additional ideas or comments about how Dublin can meet our goal of protecting human health and our environment.

Answered 50

| City of Dublin Climate Action Plan Survey for Residents                             |
|---|
| What should the City of Dublin's priorities be in updating our Climate Action Plan? |
|   |

| Skipped     | 97  |  |
|-------------|-----|--|
|             |     |  |
|             |     |  |
| QUESTION 22 |     |  |
| -           |     | you can help increase the environmental sustainability of ike to learn more about and your contact information.) |
| Answered    | 17  |  |
| Skipped     | 130 |  |
|             |     |  |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# **Survey Questions**

# **QUESTION 1**

On which environmental area should the City focus its resources? Please rank the level of priority for each topic. (1 equals lowest priority and 5 equals highest priority.)

#### **Row choices**

- · Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.
- Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied
- · Solar panel installation on residential and commercial buildings
- Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.
- Driverless transportation focused on shared mobility
- Electric vehicle (EV) charging station infrastructure
- Bicycle/Pedestrian infrastructure
- Water Conservation
- · Waste Reduction and Recycling
- Landscapes and Open Space
- Stormwater pollution prevention/creek protection
- Flood Prevention

#### **Column choices**

- 1
- 2
- 3
- 4
- 5

## **OUESTION 2**

How problematic do you think each of the following climate-related hazards will be for Dublin in the future?

#### Row choices

- · Increased temperatures and heat waves
- Increased wildfire
- · Flooding and more severe rainstorms
- Mudslide/landslide
- Drought
- Poor air quality

#### **Column choices**

Not at all serious

- Not so serious
- · Somewhat serious
- · Very serious
- Extremely serious

#### **OUESTION 3**

How concerned are you about the impacts of climate change (listed in the previous question) on the following areas?

#### Row choices

- Public health
- · Homes and property values
- Well-being of future generations
- · Economic vitality of Dublin community
- Public infrastructure

#### Column choices

- · Not at all concerned
- Not so concerned
- · Somewhat concerned
- Very concerned
- · Extremely concerned

#### **QUESTION 4**

How important is it that the City of Dublin implements programs and policies that protect the environment?

- Very
- Somewhat
- Slightly
- Not at all
- No opinion

#### **OUESTION 5**

What motivates you most to invest in energy upgrades for your home? Please rank the reasons below from lowest to highest motivation. (1 equals lowest motivation and 5 equals highest.)

#### **Row choices**

- · Lower my environmental impact
- · Make my home more comfortable
- · Save money on utility bills

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Improve indoor air quality

# **Column choices**

- 1
- 2
- 3
- 4

# QUESTION 6

# What have you done (or what do you want to do) to reduce energy usage at your residence?

#### **Row choices**

- · Install a high-efficiency heating and air conditioning system
- Seal air leaks in walls, windows, ducts, etc.
- · Install a high-efficiency water heater
- Plant shade trees
- Change light bulbs to energy-efficient models (LED)
- Replace appliances with energy-efficient models
- Upgrade your home's insulation
- Install solar panels
- Install high-efficiency windows (double-paned)

#### **Column choices**

- Completed
- Want to do
- · Want to learn more
- Not interested

# QUESTION 7

Would you be willing to switch to all electric appliances (i.e., ondemand hot water, electric or induction stoves, electric furnace)?

- Yes
- No
- Maybe

# QUESTION 8

What are some of the barriers that would keep you from completing energy upgrades?

#### **Row choices**

- Do not own the property
- Cost
- Time and effort

- · Minimal financial or energy savings
- · Concern upgraded technologies will not perform as well
- Safety issues

#### **Column choices**

- · Least important
- Somewhat important
- More important
- Most important

#### **QUESTION 9**

# What have you already done (or what do you want to do) to reduce water usage?

#### **Row choices**

- · Install water-conserving faucets and showerheads
- Replace older toilets with a new low-flow model
- Adjust timers or install a new water-efficient irrigation system
- · Replace lawns with drought-resistant plants (use xeriscaping)
- Modify the length of showers to conserve water

## Column choices

- Have done
- Want to do
- Want to learn more
- Not interested

# **QUESTION 10**

# How often do you typically use the following methods to run errands and get to other non-work destinations?

#### **Row choices**

- Personal Car
- Lyft/Uber
- Carpool
- Walk
- Bike
- Bus
- BART

# Column choices

- All of the time
- Most of the time
- Some of the time
- Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **QUESTION 11**

# How often do you typically use the following methods to get to work?

#### **Row choices**

- Personal Car
- Lyft/Uber
- Carpool
- Walk
- Bike
- Bus
- BART

# **Column choices**

- All of the time
- Most of the time
- Some of the time
- Never

# QUESTION 12

If you typically walk or bike for travel, what motivates you to do so (check all that apply)?

- Exercise
- Reduce my impact on the environment
- Dislike driving/finding parking
- Save money
- Do not own a car
- Less stressful
- Feels safer
- I don't walk or bike for non-commute travel

# **QUESTION 13**

If you use a privately-owned vehicle as your primary mode of transportation, what are some of the main reasons for this choice?

- Quickest travel time
- Convenience
- Feeling of greater safety
- Public transit is not close enough to my home
- Public transit is not close enough to my work
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)
- Other

#### **QUESTION 14**

# If you do not currently carpool to work, please select all the applicable reasons that prevent you from doing so.

- No or limited carpooling services available
- I am unemployed/retired/working from home
- I need a car to run errands during break periods
- I need a car to drop off/pick up family members
- Other

# **QUESTION 15**

# What would convince you to ride a bicycle more often? (check all that apply)

- · Shorter distance from my home to my destination
- More bicycle lanes and trails
- More bicycle parking
- Slower traffic speeds
- Bike Share program
- Nothing
- Other

# **QUESTION 16**

# What would convince you to walk more often? (check all that apply)

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- Reducing crossing distance
- · More stores and services in my neighborhood
- More shaded sidewalks
- Nothing
- Other

# **QUESTION 17**

# What is your zip code?

#### **QUESTION 18**

# Do you own or rent your home?

- Own
- Rent

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# **QUESTION 19**

# What is your age?

- 18-24
- 25-34
- 35-54
- 55-64
- 65+

# **QUESTION 20**

# How did you hear about this survey?

- City employee
- City website
- City flyer
- TV30
- Peachjar
- City Tweet
- Facebook
- Friend/Neighbor
- Other

# **QUESTION 21**

Please share any additional ideas or comments about how Dublin can meet our goal of protecting human health and our environment.

# **QUESTION 22**

Would you be interested in learning more about ways you can help increase the environmental sustainability of Dublin? (If so, please include the topic(s) you would like to learn more about and your contact information.)

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# **Individual Responses**

# Name not shown

December 19, 2018, 8:23 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 4

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Very serious Drought: Very serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Not so concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Somewhat concerned

# **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

# Question 7

Yes

# **Question 8**

Do not own the property: Most important Cost: Most important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Most of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## **Question 12**

• I don't walk or bike for non-commute travel

## **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my home

# **Question 14**

- No or limited carpooling services available
- I need a car to run errands during break periods
- I need a car to drop off/pick up family members

#### **Question 15**

- · Shorter distance from my home to my destination
- More bicycle lanes and trails
- More bicycle parking

# **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- More stores and services in my neighborhood

#### **Question 17**

94550

#### **Question 18**

• Rent

# **Question 19**

• 25-34

# **Question 20**

Friend/Neighbor

# **Question 21**

No response

# **Question 22**

No response

# Sarah Diringer

January 4, 2019, 2:30 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4 Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Waste Reduction and Recycling: 3 Stormwater pollution provention (created protection 5

Stormwater pollution prevention/creek protection: 5 Flood Prevention: 4

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Very serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

# Question 4

Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 1

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Seal air leaks in walls, windows, ducts, etc.: Not interested Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

# **Question 8**

Do not own the property: Least important Cost: More important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Most of the time Bike: Some of the time Bus: Some of the time BART: Most of the time

#### **Question 11**

Personal Car: Some of the time BART: Most of the time

#### **Question 12**

- Exercise
- Reduce my impact on the environment
- Dislike driving/finding parking
- Less stressful

#### Question 13

• Other - Public transit (BART) takes a LONG time to get to work. There aren't seats in the morning on BART by even W. Dublin/Pleasanton.

#### **Question 14**

- No or limited carpooling services available
- Other time restrictions

# **Question 15**

- · Shorter distance from my home to my destination
- More bicycle lanes and trails

#### **Question 16**

- More stores and services in my neighborhood
- More shaded sidewalks

# **Question 17**

94568

# **Question 18**

• Own

# **Question 19**

• 25-34

# **Question 20**

• Other - City News Flash Email

# **Question 21**

 Water conservation and efficiency is increasingly important. Continuing outreach and courses on climate-appropriate and native plants in the area would be helpful to know what to plant instead of lawn!
 Energy efficiency and solar should not be incentivized using citydollars. These strategies are cost effective for home and business owners. Instead, put funds towards solar in public buildings that will save money for the city over time. (3) Our public trail system (e.g., Iron Horse) is perfectly placed but oh-so ugly. Increasing tree cover and drinking water stops along these paths might dramatically increase use.

# Question 22

- Drought tolerant landscaping

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Name not available

January 4, 2019, 2:35 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Very serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

# **Question 7**

Maybe

### **Question 8**

Do not own the property: Somewhat important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Exercise

Save money

## **Question 13**

- Convenience
- Feeling of greater safety

# **Question 14**

• I need a car to run errands during break periods

#### **Question 15**

· Shorter distance from my home to my destination

#### **Question 16**

• More stores and services in my neighborhood

#### **Question 17**

94568

**Question 18** 

• Own

#### **Question 19**

• 35-54

# **Question 20**

· City website

# **Question 21**

No response

# **Question 22**

No response

# Name not available

January 4, 2019, 2:37 PM

# Question 1

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3

Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 2 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 2 Waste Reduction and Recycling: 2 Landscapes and Open Space: 1 Stormwater pollution prevention/creek protection: 3

#### **Question 2**

Flood Prevention: 4

Increased temperatures and heat waves: Not so serious Increased wildfire: Not at all serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Not at all serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Not so concerned Well-being of future generations: Not at all concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

# **Question 4**

Not at all

# **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 2

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Not interested Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to do

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install high-efficiency windows (double-paned): Want to do

#### **Question 7**

• No

## **Question 8**

Cost: Least important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience

# Question 14

#### • Other - not interested

## **Question 15**

Nothing

# **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- More frequent crosswalks
- More stores and services in my neighborhood

#### **Question 17**

94568

#### **Question 18**

• Own

## **Question 19**

• 35-54

#### **Question 20**

Other - nextdoor email

# **Question 21**

No response

# Question 22

No response

# Name not shown

January 4, 2019, 2:41 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 4 Waste Reduction and Recycling: 2 Landscapes and Open Space: 1 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 1

# Question 2

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Somewhat serious

## **Question 3**

Public health: Extremely concerned Homes and property values: Not so concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

# **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 1 Save money on utility bills: 3 Improve indoor air quality: 2

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to learn more Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

# **Question 7**

• Yes

## Question 8

Do not own the property: Most important Cost: More important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Want to learn more Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Most of the time

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

## **Question 12**

- Exercise
- · Reduce my impact on the environment
- Save money
- Less stressful

#### Question 13

- · Public transit is not close enough to my home
- Public transit is not close enough to my work
- Other No effective public transportation from east bay to south bay (BART to San Jose)

What should the City of Dublin's priorities be in updating our Climate Action Plan?

No or limited carpooling services available

## **Question 15**

Shorter distance from my home to my destination

#### **Question 16**

• Other - We live on the outer edge of Dublin, there's not really an option other than driving except to the local park. Also doesn't have a walking friendly downtown area like Livermore or Walnut Creek

#### **Question 17**

94568

#### **Question 18**

• Rent

#### **Question 19**

• 25-34

# **Question 20**

City Tweet

# **Question 21**

School buses! Every morning there are tons of cars and huge backups on Amador Valley Blvd that spill out onto Dougherty Rd and back that up too. It makes kids late to school and others late to work, and leaves dozens of vehicles just idling in traffic, increasing emissions throughout the area. Each school bus could get potentially 20-40 of those cars off the road, and if they are clean energy buses (electric, fuel cell, etc) they would dramatically reduce our city's carbon footprint.

# **Question 22**

Yes, primarily through reducing traffic congestion and converting the city to clean sources of electricity. James Williams, sqx.jwilliams@gmail.com

# Name not available

January 4, 2019, 2:53 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Very serious Poor air quality: Extremely serious

# Question 3

Public health: Very concerned Homes and property values: Not so concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

# **Question 4**

Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Want to do

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Maybe

## **Question 8**

Do not own the property: Most important Cost: Most important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Most of the time Bus: Some of the time BART: Some of the time

# **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Never Bike: All of the time Bus: Never BART: Never

# **Question 12**

- Exercise
- Reduce my impact on the environment
- Dislike driving/finding parking
- Save money

#### Less stressful

# **Question 13**

No response

#### **Question 14**

No response

#### **Question 15**

- More bicycle lanes and trails
- More bicycle parking
- Slower traffic speeds
- Bike Share program

#### **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- Reducing crossing distance
- · More stores and services in my neighborhood
- More shaded sidewalks

# **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 35-54

#### **Question 20**

Other - Nextdoor

# **Question 21**

No response

# **Question 22**

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Name not shown

January 4, 2019, 2:57 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 2

# Question 2

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 4 Save money on utility bills: 3 Improve indoor air quality: 1

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

### **Question 8**

Do not own the property: Most important Cost: More important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

# Question 11

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### • Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my work
- Other Family life shuttling kids and running errands is not conducive to public transport in suburbs

#### **Question 14**

- No or limited carpooling services available
- I need a car to run errands during break periods
- · I need a car to drop off/pick up family members
- Other I frequently have work meetings and appointments that require my car

#### **Question 15**

• Other - Will only bike for exercise and time with family. Time is main constraint.

#### **Question 16**

- More stores and services in my neighborhood
- More shaded sidewalks
- Other More free time.

#### **Question 17**

94568

#### Question 18

• Rent

#### **Question 19**

• 35-54

#### **Question 20**

Other - Nextdoor

# **Question 21**

Improve recycling programs. I understand there is currently a severe shortage of demand for raw recycled materials, and much of what is being "recycled" ends up in landfill. Establish a joint program with neighboring communities to recycle food waste as local livestock feed, especially for pigs. We did it for 1000's of years, we can learn to do so again.

## **Question 22**

No response

# Name not shown

January 4, 2019, 3:01 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Waste Reduction and Recycling: 5 Stormwater pollution prevention/creek protection: 5

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Extremely serious Mudslide/landslide: Very serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

# **Question 4**

• Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Install a high-efficiency water heater: Completed   | No response    |
|---|----------------|
| Plant shade trees: Completed<br>Change light bulbs to energy-efficient models (LED): Completed<br>Replace appliances with energy-efficient models: Completed  | Question 16    |
| Upgrade your home's insulation: Completed<br>Install solar panels: Want to learn more   | No response    |
| Install high-efficiency windows (double-paned): Completed   | Question 17    |
| Question 7  | 94568          |
| • Yes   | Question 18    |
| Question 8  | • Own          |
| Cost: Most important<br>Time and effort: More important   | Question 19    |
| Minimal financial or energy savings: Most important<br>Concern upgraded technologies will not perform as well: Somewhat   | • 35-54        |
| important<br>Safety issues: More important  | Question 20    |
| Outstien 0  | • City website |
| Question 9  | Question 21    |
| Install water-conserving faucets and showerheads: Want to do<br>Replace older toilets with a new low-flow model: Have done<br>Adjust timers or install a new water-efficient irrigation system: Have done | No response    |
| Replace lawns with drought-resistant plants (use xeriscaping): Want to do<br>Modify the length of showers to conserve water: Have done  | Question 22    |
|   | No response    |
| Question 10   |                |
|   |                |

Personal Car: All of the time Carpool: Most of the time

### **Question 11**

Personal Car: All of the time Carpool: All of the time

#### **Question 12**

Exercise

# **Question 13**

Quickest travel time

## **Question 14**

No response

#### **Question 15**

| No response    |  |  |
|----------------|--|--|
| Question 16    |  |  |
| No response    |  |  |
| Question 17    |  |  |
| 94568          |  |  |
| Question 18    |  |  |
| • Own          |  |  |
| Question 19    |  |  |
| • 35-54        |  |  |
| Question 20    |  |  |
| • City website |  |  |
| Question 21    |  |  |

# Name not available

January 4, 2019, 3:12 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 4

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Yes

# **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Most important

Concern upgraded technologies Safety issues: Least important

# Question 9

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### Question 11

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

• I don't walk or bike for non-commute travel

# **Question 13**

- Feeling of greater safety
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)
- Other Lack of Safe 'All Ages' bike paths. Downtown areas are dominated by vehicular traffic. Need Wide 'family' friendly sidewalks, 'All Ages' protected bike lanes (for kids).

# **Question 14**

- I need a car to drop off/pick up family members
- Other Meetings

- · Shorter distance from my home to my destination
- More bicycle lanes and trails
- Slower traffic speeds

What should the City of Dublin's priorities be in updating our Climate Action Plan?

 Other - Safe family friendly Regional Bike infastructure (Davis was awesome- never drove for 4 years!) Greenbelt system, seperated bike paths, tunnels under roadways, neighborhoods with direct bike connections to schools.

#### **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- Reducing crossing distance
- · More stores and services in my neighborhood
- More shaded sidewalks
- Other All of the Above! Make 'defenseless' pedestrians the priority not the car.

#### **Question 17**

94568

**Question 18** 

• Own

#### **Question 19**

• 35-54

#### **Question 20**

No response

#### **Question 21**

Numerous neighbors have removed their street trees due to 'laziness' of raking leaves which creates additional heat island issues. Numerous neighbors removed or have no front yard landscaping after the droughts which has impacts to values, but also no environmental habitat. Numerous neighbors have removed their parkway landscape strips and paved them over creating more impervious surfaces/ runoff. Provide incentives for landscaping / shade trees/ sustainability. City Bike / E scooter program? Look at opportunities to increase safe streets to school, better / safer pedestrian / bike linkages thru the community/ destinations such as schools and shopping from the neighboorhoods, review the 'Why' do Thousands of kids in Menlo Park/ Palo Alto bike to school and in Dublin maybe a select handful?, provide synthetic sports fields on the west side of town (city hall) so we can minimize driving to the east side of town, Better / safer ped/ bike access to the Iron Horse Trail system, review opportunities for stormwater treatment gardens (in

current no parking zones in front of Dublin Elementary, West fire station, Regional Street, etc..), Implement more complete street/ Green street program elements, Implement parking lot/ paved shade requirements-Sacramento and San Diego, Review wind patterns and air pollution dispertion along freeway cooridors, Incorporate Bay Friendly Maintenance practices,.....

# **Question 22**

yes. the outdoor environment. Chuck@dgates.com

# Name not available

January 4, 2019, 3:14 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 2 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 1

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Extremely serious

#### Question 3

Public health: Somewhat concerned Homes and property values: Not at all concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 1

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to learn more Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Most important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

## Question 12

Exercise

#### **Question 13**

• Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

## **Question 14**

· I need a car to drop off/pick up family members

#### **Question 15**

- More bicycle lanes and trails
- Slower traffic speeds

#### **Question 16**

- · More sidewalk lighting and safety
- More shaded sidewalks

#### **Question 17**

94568

#### Question 18

• Own

# **Question 19**

• 55-64

## **Question 20**

City employee

#### **Question 21**

Focus on school transit and educate kids on biking walking

# **Question 22**

No response

# Name not available

January 4, 2019, 3:17 PM

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 3 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Somewhat serious Poor air quality: Not so serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Not so concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

#### **Question 4**

• Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested Seal air leaks in walls, windows, ducts, etc.: Not interested Install a high-efficiency water heater: Not interested Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Not interested Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Do not own the property: Most important Cost: Least important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Some of the time Walk: Most of the time

#### **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

- Exercise
- · Reduce my impact on the environment

#### **Question 13**

Convenience

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| <ul> <li>I am unemployed/retired/working from home</li> </ul> | Water Conservation: 5<br>Waste Reduction and Recycling: 5<br>Landscapes and Open Space: 4<br>Stormwater pollution prevention/creek protection: 4 |  |
|---|--|--|
| Question 15   |  |  |
| More bicycle lanes and trails                                 | Flood Prevention: 4  |  |
| Question 16   | Question 2   |  |
| More stores and services in my neighborhood                   | Increased temperatures and heat waves: Very serious<br>Increased wildfire: Not so serious  |  |
| Question 17   | Flooding and more severe rainstorms: Not so serious<br>Mudslide/landslide: Somewhat serious  |  |
| 94568   | Drought: Very serious<br>Poor air quality: Very serious  |  |
| Question 18   | Question 3   |  |
| • Rent  | Public health: Somewhat concerned  |  |
| Question 19   | Homes and property values: Somewhat concerned<br>Well-being of future generations: Somewhat concerned  |  |
| • 65+   | Economic vitality of Dublin community: Somewhat concerned<br>Public infrastructure: Somewhat concerned   |  |
| Question 20   | Question 4   |  |
| City website  | • Very   |  |
| Question 21   | Question 5   |  |
| No response   | Lower my environmental impact: 2<br>Make my home more comfortable: 3   |  |
| Question 22   | Save money on utility bills: 3   |  |
| No response   | Improve indoor air quality: 2  |  |
|   | Question 6   |  |

Name not shown

January 4, 2019, 3:22 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 4

# Question 6

Install a high-efficiency heating and air conditioning system: Not interested Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Want to learn more Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Not interested Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Not interested Install solar panels: Not interested Install high-efficiency windows (double-paned): Not interested

# **Question 7**

Maybe

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety
- Other Safety on BART had poor experience once

# **Question 14**

No or limited carpooling services available

- I need a car to run errands during break periods
- Other Self employed; live close to office

#### **Question 15**

Nothing

#### **Question 16**

Other - More time

#### **Question 17**

94568

# **Question 18**

• Own

# **Question 19**

• 65+

# **Question 20**

Other - Next door.com

#### **Question 21**

Note: many of the Qs above do not take condo ownership into accout; on many, we don't have a choice; Haz waste disposal option for things like paint cans/WD-40 aerosol cans; we don't have waste pickup days like SFR neighborhoods and taking time off work and driving to Livermore for a few cans makes no sense. So, they stack up in garages or get disposed of incorrectly. Help!.

#### **Question 22**

See abovce. But, little time to devote.

# Name not available

January 4, 2019, 3:25 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 4

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 2

# Question 2

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

# **Question 4**

Somewhat

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

# **Question 7**

• No

# **Question 8**

Cost: More important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Most of the time

# **Question 11**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Most of the time Bike: Never Bus: Never BART: Most of the time

# **Question 12**

Exercise

# **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety
- Public transit is not close enough to my home

# Question 14

• I am unemployed/retired/working from home

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Ouestion 15**

| Shorter distance from my home to my destination   | Landscapes and Ope                              |
|---|---|
| Other - I live on a hill and it is a lot of work to bike up it. Maybe ill get a ebike someday | Stormwater pollutior<br>Flood Prevention: 3     |
| Question 16   | Question 2                                      |
| More sidewalk lighting and safety   | Increased temperatu                             |
| <ul> <li>More stores and services in my neighborhood</li> </ul>                               | Increased wildfire: Ve<br>Mudslide/landslide: I |
| Question 17   | Drought: Somewhat<br>Poor air quality: Extre    |
| No response   |   |
|   | Question 3                                      |
| Question 18   | Public health: Extrem                           |
| • Own   | Homes and property<br>Well-being of future g    |
| Question 19   | Economic vitality of I<br>Public infrastructure |
| • 35-54   | Question 4                                      |
| Question 20   | • Very  |
| Other - nextdoor  |   |
|   | Question 5                                      |
| Question 21   | Lower my environme                              |
| No response   | Make my home more<br>Save money on utility      |
| Question 22   | Improve indoor air qu                           |
| No response   | Overtion 6                                      |
| no response   | Question 6                                      |
|   | Install a high-efficien                         |

# **Stephen Wright**

January 4, 2019, 3:31 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 4

Bicycle/Pedestrian infrastructure: 3 Water Conservation: 3 en Space: 3 on prevention/creek protection: 3

ures and heat waves: Very serious erv serious Not so serious serious remely serious

mely concerned y values: Not so concerned generations: Extremely concerned Dublin community: Very concerned e: Very concerned

ental impact: 4 re comfortable: 3 ty bills: 2 uality: 4

igh-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Yes

# **Question 8**

Cost: Most important Time and effort: More important

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Most of the time Bus: Never BART: Most of the time

#### **Question 11**

No response

#### **Question 12**

- Exercise
- Reduce my impact on the environment

#### **Question 13**

- · Quickest travel time
- Convenience
- Public transit is not close enough to my home

#### **Question 14**

• I am unemployed/retired/working from home

# **Question 15**

- More bicycle lanes and trails
- More bicycle parking
- Slower traffic speeds

# **Question 16**

- · More stores and services in my neighborhood
- More shaded sidewalks

# Question 17

94568

# **Question 18**

• Own

# Question 19

• 65+

# Question 20

• City flyer

# **Question 21**

No response

# Question 22

No response

# Name not available

January 4, 2019, 3:39 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Mudslide/landslide: Not so serious Drought: Very serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

# **Question 4**

• Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to learn more Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

# **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Most important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Most important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Most of the time

# **Question 11**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: All of the time

# **Question 12**

- Exercise
- · Reduce my impact on the environment

# Question 13

- Quickest travel time
- Convenience
- Feeling of greater safety

# Question 14

- No or limited carpooling services available
- Other carpooling is complicated and lots of dependency

# Question 15

- · Shorter distance from my home to my destination
- More bicycle lanes and trails
- More bicycle parking

- Wider sidewalks
- · More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks

What should the City of Dublin's priorities be in updating our Climate Action Plan?

- More frequent crosswalks
- More shaded sidewalks

#### **Question 17**

94568

#### Question 18

• Own

# **Question 19**

• 35-54

#### **Question 20**

Other - NextDoor

#### **Question 21**

Work with public utility on safety of electrical infrastructure especially those closest to areas with lots of trees and vegetation. Be prepared and ready to give residents breathing mask when air quality is extremely poor. Do Dublin Pride more often to get resident care more about the city and volunteer and clean the city. Use technology, create mobile apps, website that encourage and allow residents easy, quick, access to information and participate, Create volunteer opportunity, a lot of resident i know wants to volunteer for fun events that help community

#### **Question 22**

Yes!

# Name not available

January 4, 2019, 4:03 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 3

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

# Question 4

• Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

Yes

# **Question 8**

Do not own the property: Most important

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Cost: Most important Time and effort: Least important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Some of the time Lyft/Uber: Some of the time Carpool: Never Walk: All of the time Bike: All of the time Bus: Never BART: Some of the time

#### **Question 11**

No response

#### **Question 12**

- Exercise
- · Reduce my impact on the environment
- Dislike driving/finding parking
- Less stressful

# **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my home
- Other I am retired. I am able to walk to all of my shopping.

## **Question 14**

No response

# **Question 15**

- More bicycle lanes and trails
- More bicycle parking
- Other more public awareness for Bicycle safety.

#### **Question 16**

- Nothing
- Other I walk to do all of my shopping.

# **Question 17**

94568

# **Question 18**

• Own

# Question 19

• 65+

# Question 20

Other - Nextdoor app

# **Question 21**

STOP ALLOWING SO MUCH BUILDING

# **Question 22**

No response

# Name not shown

January 4, 2019, 4:05 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 5

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Very serious Drought: Not so serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Extremely concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

## **Question 7**

• Yes

# **Question 8**

Do not own the property: Least important Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Most of the time Bike: Some of the time Bus: Never BART: Never

#### Question 11

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never BART: Never

### **Question 12**

Exercise

#### **Question 13**

- · Quickest travel time
- · Feeling of greater safety
- Public transit is not close enough to my work

#### **Question 14**

- I need a car to run errands during break periods
- · I need a car to drop off/pick up family members

#### **Question 15**

• More bicycle lanes and trails

# **Question 16**

No response

# **Question 17**

94568

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 18**

• Rent

#### **Question 19**

• 35-54

#### **Question 20**

- Friend/Neighbor
- Other NextDoor. App

#### **Question 21**

Please hurry and build the high school.

#### **Question 22**

No response

# Name not available

January 4, 2019, 4:10 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 3 Waste Reduction and Recycling: 3 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 1

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Not at all serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not at all serious Drought: Very serious Poor air quality: Somewhat serious

#### Question 3

Public health: Not so concerned Homes and property values: Somewhat concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### Question 4

Somewhat

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested Seal air leaks in walls, windows, ducts, etc.: Not interested Install a high-efficiency water heater: Not interested Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Want to learn more Upgrade your home's insulation: Not interested Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### Question 8

Do not own the property: Least important Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Not interested

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Never

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

- Exercise
- Reduce my impact on the environment

#### **Question 13**

• Other - Bart is slow, gross and unsafe. Tired of homeless and criminals using the system. Totally unsecured system. Trains go too slow. Dublin to SFO is 1.5 hours... too ling

#### **Question 14**

• Other - No one leaves and returns when i do

#### **Question 15**

- More bicycle lanes and trails
- Other Safer drivers. Dublins new residents have horible driving skills. Not safe to share the road with them at all

#### **Question 16**

- · Wider sidewalks
- Other Bikes are a better way to get around. More paths and trails are needed. Riding or walking near cars is dangerous.

#### Question 17

94568

#### **Question 18**

# • Own

### **Question 19**

• 35-54

#### **Question 20**

Friend/Neighbor

#### **Question 21**

Dont build more homes.

#### **Question 22**

Na

### **Allen Toweill**

January 4, 2019, 4:40 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 2 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Not so serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Very serious Poor air quality: Not so serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Public health: Not so concerned Homes and property values: Not at all concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Slightly

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 1 Save money on utility bills: 4 Improve indoor air quality: 1

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Not interested

Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to learn more Install solar panels: Not interested Install high-efficiency windows (double-paned): Want to learn more

#### **Question 7**

• Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to learn more Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### Question 12

Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety
- Other Bart isn't safe anymore

#### Question 14

• Other - too short a distance at the moment to worry about coordinating - I am only 10 miles from work

#### **Question 15**

- · Shorter distance from my home to my destination
- More bicycle lanes and trails

#### **Question 16**

- · More stores and services in my neighborhood
- More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

#### • Own

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 19**

• 35-54

#### **Question 20**

City website

#### **Question 21**

The new east bay community energy program is yet another way to raise energy costs for all Californians while making a claim that green energy is cheaper, in this case by eroding the traditional fuel consumer base to increase their costs, and provide cover for what will eventually be higher green energy costs over time. If people feel climate issues of various types are a threat let them contribute an amount from their paycheck each month to their chosen concern(s). I would donate towards drought prevention. Also, most climate change is addressed at the state level through programs like LCFS and Cap and Trade, although those programs as written are way too far out in front of what is required by the Paris Accord and will raise gasoline costs for everyone by over a dollar per gallon in the coming years.

#### Question 22

No response

# Name not available

January 4, 2019, 4:47 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 4

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Somewhat serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Extremely concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to learn more Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Yes

#### **Question 8**

Cost: Most important Time and effort: More important Concern upgraded technologies will not perform as well: Least important

#### **Question 9**

Safety issues: Most important

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

# Question 10

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Some of the time BART: Some of the time

#### **Question 11**

Personal Car: NeverQuestion 21Lyft/Uber: NeverNo responseCarpool: NeverNo responseWalk: Most of the timeUuestion 22Bike: NeverQuestion 22Bus: Most of the timeNo responseBART: Most of the timeNo response

#### **Question 12**

#### Exercise

- Reduce my impact on the environment
- Less stressful

#### **Question 13**

No response

#### **Question 14**

• No or limited carpooling services available

#### **Question 15**

- · Shorter distance from my home to my destination
- Slower traffic speeds

#### **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- More stores and services in my neighborhood
- More shaded sidewalks

| 94568              |
|--------------------|
| Question 18        |
| • Own              |
| Question 19        |
| • 25-34            |
| Question 20        |
| • Other - Nextdoot |
| Question 21        |

**Question 17** 

### Name not available

January 4, 2019, 5:06 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

#### **Question 2**

Increased temperatures and heat waves: Not so serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Mudslide/landslide: Not at all serious Drought: Very serious Poor air quality: Very serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Not so concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Not so concerned

#### **Question 4**

Somewhat

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 2 Save money on utility bills: 4 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Never

#### **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

Nothing

#### **Question 16**

- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- · More stores and services in my neighborhood
- More shaded sidewalks

#### **Question 17**

94568

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Question 18  | Question 3   |
|--------------|--|
| • Own        | Public health: Very concerned<br>Homes and property values: Very concerned                               |
| Question 19  | Well-being of future generations: Very concerned   |
|              | Economic vitality of Dublin community: Extremely concerned<br>Public infrastructure: Extremely concerned |
| • 35-54      |  |
| Question 20  | Question 4   |
| • City Tweet | • Very   |
| Question 21  | Question 5   |
| No response  | Lower my environmental impact: 2   |
|              | Make my home more comfortable: 2   |
| Question 22  | Save money on utility bills: 4   |
|              | Improve indoor air quality: 3  |
| No response  |  |
|              | Question 6   |

#### Name not available January 4, 2019, 5:16 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 3

#### **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not at all serious Drought: Extremely serious Poor air quality: Very serious

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to learn more Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

#### **Question 7**

Maybe

### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: More important Safety issues: More important

### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more Modify the length of showers to conserve water: Not interested

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

• I don't walk or bike for non-commute travel

#### **Question 13**

- · Quickest travel time
- Convenience

#### **Question 14**

- I need a car to run errands during break periods
- I need a car to drop off/pick up family members

#### **Question 15**

- Shorter distance from my home to my destination
- More bicycle lanes and trails
- More bicycle parking

#### **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- · Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More stores and services in my neighborhood

# **Question 17**

94568

| Question 10      |  |
|------------------|--|
| • Own            |  |
| Question 19      |  |
| • 35-54          |  |
| Question 20      |  |
| Other - nextdoor |  |
| Question 21      |  |

**Ouestion 18** 

No response

#### **Question 22**

No response

# Name not available

January 4, 2019, 5:19 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 2 Waste Reduction and Recycling: 2 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 1

#### **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Very serious Flooding and more severe rainstorms: Not at all serious Mudslide/landslide: Somewhat serious Drought: Somewhat serious Poor air quality: Somewhat serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 3**

Public health: Not so concerned Homes and property values: Not so concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

#### **Question 4**

Not at all

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested

Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Want to learn more Plant shade trees: Not interested

Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to learn more Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

#### Question 10

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Some of the time

#### **Question 12**

· I don't walk or bike for non-commute travel

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety
- Public transit is not close enough to my home
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

Other - Work from home mostly

#### **Question 15**

Shorter distance from my home to my destination

#### **Question 16**

· More stores and services in my neighborhood

#### **Question 17**

94568

#### **Question 18**

• Own

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 19**

• 35-54

#### **Question 20**

City employee

#### **Question 21**

No response

#### **Question 22**

No response

### Name not shown

January 4, 2019, 5:31 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Not so serious

#### **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Yes

#### **Question 8**

Do not own the property: Least important Cost: Somewhat important Time and effort: Least important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Want to do

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time BART: All of the time

#### **Question 12**

• I don't walk or bike for non-commute travel

#### **Question 13**

- Quickest travel time
- Convenience
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

No response

#### **Question 15**

- · Shorter distance from my home to my destination
- More bicycle lanes and trails

#### **Question 16**

- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Reducing crossing distance

#### **Question 17**

94568

#### **Question 18**

• Own

### **Question 19**

• 25-34

#### Question 20

City website

#### **Question 21**

No response

#### **Question 22**

No response

# Name not available

January 4, 2019, 7:34 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 4

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Very serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Least important Cost: Somewhat important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: All of the time Walk: Never Bike: Never Bus: Never BART: Some of the time

#### Question 11

Personal Car: All of the time Lyft/Uber: Never Carpool: All of the time Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

No response

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

Nothing

#### **Question 16**

Nothing

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 55-64

#### Question 20

Other - Next door Ap

#### **Question 21**

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 22**

No response

# Name not available

January 4, 2019, 8:19 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Very serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 4 Improve indoor air quality: 1

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to learn more Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Do not own the property: Least important Cost: More important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Walk: Some of the time Bike: Some of the time **Bus: Never** BART: Never

#### **Question 12**

- Exercise
- Reduce my impact on the environment

#### **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

· Other - Live within 2 miles. Carpool would be inconvenient

#### **Question 15**

- More bicycle lanes and trails
- · Slower traffic speeds

#### **Question 16**

• Other - Walk home is uphill, into the sun and wind. Time constraints are a factor

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 55-64

#### **Question 20**

Other - Nextdoor app

#### **Question 21**

Slow or stop

#### **Question 22**

No response

#### Name not shown January 4, 2019, 9:10 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Somewhat serious Poor air quality: Somewhat serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Not so concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

#### **Question 4**

Somewhat

#### **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Want to learn more

# Question 7

Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to learn more Replace older toilets with a new low-flow model: Want to learn more Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more

Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

#### Exercise

#### Question 13

- Quickest travel time
- Convenience
- Feeling of greater safety
- · Public transit is not close enough to my home
- Public transit is not close enough to my work
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

· I need a car to drop off/pick up family members

#### **Question 15**

Nothing

#### **Question 16**

- More sidewalk lighting and safety
- Reducing crossing distance
- More stores and services in my neighborhood

#### **Question 17**

94568

#### Question 18

• Own

#### **Question 19**

• 35-54

#### **Question 20**

• Other - email

#### **Question 21**

It is a time consuming and intimidating task to research landscapers for lawn replacement or solar panel companies. It would be helpful if the city had a program where they vetted service providers and provided consultations. Cost is a huge factor, so a program that provided group pricing would be helpful.

What should the City of Dublin's priorities be in updating our Climate Action Plan?

No response

# Name not available

January 4, 2019, 9:20 PM

### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 4

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Somewhat serious Poor air quality: Somewhat serious

### **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 3

#### Question 6

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Most important Cost: More important Time and effort: More important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: More important

### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Want to do

### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Question 12   | Question 22              |
|---|--------------------------|
| -<br>No response  | No response              |
|   |                          |
| Question 13   | Name not available       |
| Quickest travel time  | January 4, 2019, 9:58 PM |
| Convenience   |                          |
| Feeling of greater safety   | Question 1               |
| Public transit is not close enough to my work   | No response              |
| <ul> <li>Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking<br/>for BART/carpool)</li> </ul> |                          |
|   | Question 2               |
| Question 14   | No response              |
| <ul> <li>I need a car to run errands during break periods</li> </ul>  | Quartier 2               |
| <ul> <li>I need a car to drop off/pick up family members</li> </ul>   | Question 3               |
|   | No response              |
| Question 15   | Question 4               |
| <ul> <li>Shorter distance from my home to my destination</li> </ul>   |                          |
| More bicycle lanes and trails   | No response              |
| More bicycle parking  | Question 5               |
| Question 16   | No response              |
| Wider sidewalks   |                          |
| More sidewalk lighting and safety   | Question 6               |
| Traffic safety improvements at pedestrian crossings   | No response              |
| Higher visibility crosswalks  |                          |
| More shaded sidewalks   | Question 7               |
| Question 17   | No response              |
| Question 17   |                          |
| 94568   | Question 8               |
| Question 18   | No response              |
|   | Question 9               |
| • Own   |                          |
| Question 19   | No response              |
| <b>E</b>  | Question 10              |
| • 35-54   | No response              |
| Question 20   | No response              |
|   | Question 11              |
| Other - Nextdoor  | -<br>No response         |
| Question 21   |                          |
|   | Question 12              |
| No response   |                          |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| No response   | Solar panel installation on residential and commercial buildings: 2<br>Develop local community solar energy sources by promoting installation            |
|---|--|
| Question 13   | of solar carports, rooftop solar on large commercial business parks, etc.: 2   |
| No response   | Driverless transportation focused on shared mobility: 1<br>Electric vehicle (EV) charging station infrastructure: 1                                      |
| Question 14   | Bicycle/Pedestrian infrastructure: 5<br>Water Conservation: 5  |
| No response   | Waste Reduction and Recycling: 5<br>Landscapes and Open Space: 5   |
| Question 15   | Stormwater pollution prevention/creek protection: 5<br>Flood Prevention: 5   |
| No response   | Flood Flevention. 5  |
| Question 16   | Question 2   |
| No response   | Increased temperatures and heat waves: Somewhat serious<br>Increased wildfire: Somewhat serious<br>Flooding and more severe rainstorms: Somewhat serious |
| Question 17   | Mudslide/landslide: Somewhat serious   |
| No response   | Drought: Extremely serious<br>Poor air quality: Extremely serious  |
| Question 18   | Question 3   |
| No response   | Public health: Very concerned<br>Homes and property values: Extremely concerned  |
| Question 19   | Well-being of future generations: Very concerned   |
| No response   | Economic vitality of Dublin community: Extremely concerned Public infrastructure: Very concerned   |
| Question 20   | Question 4   |
| No response   | • Very   |
| Question 21   | Question 5   |
| No response   | Lower my environmental impact: 3   |
| Question 22   | Make my home more comfortable: 2<br>Save money on utility bills: 4   |
| No response   | Improve indoor air quality: 1  |
|   | - Question 6   |
| Name not available  | Install a high-efficiency heating and air conditioning system: Not   |
| January 4, 2019, 11:30 PM   | interested<br>Seal air leaks in walls, windows, ducts, etc.: Want to learn more  |
| Question 1  | Install a high-efficiency water heater: Want to learn more<br>Plant shade trees: Not interested  |
| Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 | Change light bulbs to energy-efficient models (LED): Completed   |

Replace appliances with energy-efficient models: Want to do

Upgrade your home's insulation: Not interested

Install solar panels: Not interested

Install high-efficiency windows (double-paned): Not interested

lighting, etc., once occupied: 3

Advanced energy efficiency requirements for new commercial and

residential construction resulting in low energy use for heating, cooling,

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Most important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: More important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Never Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

#### **Question 13**

 Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

• I am unemployed/retired/working from home

#### Question 15

• Other - Bike lanes separate from car lanes.

#### **Question 16**

• More stores and services in my neighborhood

#### **Question 17**

94568

#### Question 18

• Own

#### Question 19

• 55-64

#### **Question 20**

City website

#### **Question 21**

No response

#### **Question 22**

No response

### Name not available

January 5, 2019, 1:39 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5

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What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

#### **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Extremely serious Mudslide/landslide: Extremely serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Yes

#### **Question 8**

Do not own the property: Most important Cost: Most important Time and effort: More important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Never

#### Question 11

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never

#### **Question 12**

• I don't walk or bike for non-commute travel

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety
- Public transit is not close enough to my home
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

· I need a car to drop off/pick up family members

#### **Question 15**

Nothing

What should the City of Dublin's priorities be in updating our Climate Action Plan?

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- Reducing crossing distance
- · More stores and services in my neighborhood
- More shaded sidewalks
- Other Hire more policemen and have them give citations to reckless drivers. Dublin is turning into Fremont

#### **Question 17**

94568

#### **Question 18**

No response

#### **Question 19**

• 35-54

#### **Question 20**

• Friend/Neighbor

#### **Question 21**

Please have more law enforcement and discipline the people on traffic rules. Make it mandatory for residents under 25 to take traffic safety programs in defensive driving. Also more health monitoring of restaurants. Ethnic restaurants are unclean. Grocery stores need to have their carts and outside walkways clean.

#### **Question 22**

Have a year round better and bigger farmer's market. The Marin farmer's market of Fremont is great.

# Name not available

January 5, 2019, 4:47 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

#### Question 2

Increased temperatures and heat waves: Not at all serious Increased wildfire: Not at all serious Flooding and more severe rainstorms: Not at all serious Mudslide/landslide: Not at all serious Drought: Not so serious Poor air quality: Somewhat serious

#### **Question 3**

Public health: Not at all concerned Homes and property values: Not at all concerned Well-being of future generations: Not at all concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Question 7  | Question 15   |
|---|---|
| • No  | Nothing   |
| Question 8  | Question 16   |
| Cost: More important<br>Time and effort: Somewhat important   | Higher visibility crosswalks  |
| Minimal financial or energy savings: More important<br>Concern upgraded technologies will not perform as well: More important                     | Question 17   |
| Safety issues: Somewhat important   | 94568   |
| Question 9  | Question 18   |
| Install water-conserving faucets and showerheads: Have done<br>Replace older toilets with a new low-flow model: Want to do                        | • Own   |
| Adjust timers or install a new water-efficient irrigation system: Have done<br>Replace lawns with drought-resistant plants (use xeriscaping): Not | Question 19   |
| interested<br>Modify the length of showers to conserve water: Have done   | • 55-64   |
| Question 10   | Question 20   |
| Personal Car: Most of the time<br>Lyft/Uber: Never  | Other - Nextdoor  |
| Carpool: Never  | Question 21   |
| Walk: Some of the time  | No response   |
| Bike: Never<br>Bus: Never   |   |
| BART: Some of the time  | Question 22   |
|   | No response   |
| Question 11   |   |
| Personal Car: Most of the time  | Name not available  |
| Lyft/Uber: Never  | January 5, 2019, 8:04 AM  |
| Carpool: Never<br>Walk: Some of the time  |   |
| Bus: Never  | Question 1  |
| BART: Never   | Energy efficiency upgrades for residential and commercial buildings to  |
| Question 12   | reduce a building's energy use for heating, cooling, lighting, etc.: 4<br>Advanced energy efficiency requirements for new commercial and      |
| • Exercise  | residential construction resulting in low energy use for heating, cooling,<br>lighting, etc., once occupied: 5                                |
| Question 13   | Solar panel installation on residential and commercial buildings: 3<br>Develop local community solar energy sources by promoting installation |
| Quickest travel time  | of solar carports, rooftop solar on large commercial business parks, etc.: 3  |
| Feeling of greater safety   | Driverless transportation focused on shared mobility: 1   |
| 0   | Electric vehicle (EV) charging station infrastructure: 3  |
| Question 14   | Bicycle/Pedestrian infrastructure: 3<br>Water Conservation: 3   |
| I need a car to run errands during break periods  | Waste Reduction and Recycling: 3  |
|   | Landscapes and Open Space: 5  |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Stormwater pollution prevention/creek protection: 4 Flood Prevention: 4

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Very serious

#### **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 4 Save money on utility bills: 3 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Yes

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Least important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

#### **Question 12**

No response

#### **Question 13**

- Quickest travel time
- Convenience
- · Feeling of greater safety

#### **Question 14**

· Other - Running errands before or after work

#### **Question 15**

- · Slower traffic speeds
- Other Get a bike, feeling notvsafe on the road

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Name not shown           | Install a high-efficiency heating and air conditioning system: (                            |
|--------------------------|---|
|                          | Question 6  |
| No response              | Improve indoor air quality: 3   |
| Question 22              | Save money on utility bills: 1  |
|                          | Make my home more comfortable: 3  |
| No response              | Lower my environmental impact: 3  |
| •                        | Question 5  |
| Question 21              |   |
| Other - Next door Dublin | • Very  |
| Question 20              | Question 4  |
|                          | Public infrastructure: Somewhat concerned   |
| • 55-64                  | Economic vitality of Dublin community: Not so concerned                                     |
| Question 19              | Well-being of future generations: Extremely concerned                                       |
|                          | Homes and property values: Not so concerned   |
| • Own                    | Public health: Very concerned   |
|                          | Question 3  |
| Question 18              |   |
|                          | Poor air quality: Extremely serious   |
| 94568                    | Drought: Extremely serious  |
| Question 17              | Flooding and more severe rainstorms: Not so serious<br>Mudslide/landslide: Somewhat serious |
|                          | Increased wildfire: Not so serious  |
| More shaded sidewalks    | Increased temperatures and heat waves: Not so serious                                       |

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Do not own the property: Least important Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Most important Safety issues: Least important

#### **Question 9**

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Bicycle/Pedestrian infrastructure: 4

Waste Reduction and Recycling: 5

Landscapes and Open Space: 3

Water Conservation: 5

Flood Prevention: 1

**Question 2** 

January 5, 2019, 9:23 AM

lighting, etc., once occupied: 4

Energy efficiency upgrades for residential and commercial buildings to

residential construction resulting in low energy use for heating, cooling,

Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.:

reduce a building's energy use for heating, cooling, lighting, etc.: 2

Advanced energy efficiency requirements for new commercial and

Solar panel installation on residential and commercial buildings: 2

Driverless transportation focused on shared mobility: 1

Electric vehicle (EV) charging station infrastructure: 2

Stormwater pollution prevention/creek protection: 5

**Question 1** 

4

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Some of the time Bus: Never BART: Never

#### **Question 12**

Exercise

#### **Question 13**

Feeling of greater safety

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

• Other - Very difficult to ride in high density traffic and high level of aggressive drivers coming off the freeway

#### **Question 16**

• Other - My medical condition makes walking a problem, so I walk at the mall. Biking in warm weather is my preference, but I fear the traffic on San Ramon Blvd, Dublin Blvd, and Amador Valley

### **Question 17**

94568

#### Question 18

• Own

#### Question 19

• 65+

#### **Question 20**

Other - Nextdoor

#### **Question 21**

More awareness of wind abatement in outdoor personal apaces

#### **Question 22**

No response

#### Name not shown

January 5, 2019, 10:17 AM

#### Question 1

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 1 Flood Prevention: 1

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Not at all serious Mudslide/landslide: Not so serious Drought: Very serious Poor air quality: Somewhat serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more

Seal air leaks in walls, windows, ducts, etc.: Not interested Install a high-efficiency water heater: Not interested Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to learn more Upgrade your home's insulation: Not interested Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

No

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to learn more Replace older toilets with a new low-flow model: Want to learn more Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: Some of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: All of the time

#### **Question 12**

- Exercise
- · Reduce my impact on the environment
- Dislike driving/finding parking
- Save money
- Less stressful
- Feels safer

#### **Question 13**

- · Quickest travel time
- Convenience
- · Public transit is not close enough to my home
- · Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Ouestion 14**

· No or limited carpooling services available

#### **Question 15**

- · Shorter distance from my home to my destination
- · More bicycle lanes and trails
- More bicycle parking

- · More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### • More stores and services in my neighborhood

· More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 25-34

#### Question 20

Other - Nextdoor

#### **Question 21**

No response

#### **Question 22**

No response

# Name not shown

January 5, 2019, 10:28 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 4

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Somewhat serious Poor air quality: Somewhat serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Not so concerned

#### Question 4

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 4

### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

### Question 8

Do not own the property: Least important Cost: More important Time and effort: Least important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

No response

#### **Question 13**

No response

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

No response

#### **Question 16**

- More frequent crosswalks
- More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

### Question 19

• 35-54

#### **Question 20**

Friend/Neighbor

#### **Question 21**

No response

#### **Question 22**

No response

#### Name not available

January 5, 2019, 12:24 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 2

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 2 Waste Reduction and Recycling: 2 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

#### **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Extremely serious Mudslide/landslide: Not at all serious Drought: Not so serious Poor air quality: Not so serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Public health: Not so concerned Homes and property values: Not at all concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

#### **Question 4**

Slightly

#### **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: More important Cost: Most important Time and effort: More important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: All of the time

Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### Question 11

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: Some of the time

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- · Feeling of greater safety
- Public transit is not close enough to my work

#### **Question 14**

No response

#### **Question 15**

• More bicycle lanes and trails

#### **Question 16**

· Wider sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 55-64

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 20**

- City Tweet
- Other Email

#### **Question 21**

No response

### **Question 22**

No response

# Name not available

January 5, 2019, 3:22 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 5

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### Question 4

Somewhat

#### Question 5

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Not interested Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Cost: Most important Time and effort: Most important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Some of the time

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my work

#### **Question 14**

• Other - My begin time varies so it is hard to get a car pool

#### **Question 15**

No response

#### **Question 16**

No response

#### Question 17

94568

#### **Question 18**

• Own

#### **Question 19**

• 35-54

#### **Question 20**

Other - Next Door

#### **Question 21**

Halt extra building of family units/homes in West Dublin. We already are limited in grocery stores and our schools are packed.

#### **Question 22**

No response

# Name not available

January 5, 2019, 3:41 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5

Flood Prevention: 3

#### **Question 2**

Increased temperatures and heat waves: Not so serious Increased wildfire: Very serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Very serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### Question 4

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 3

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Yes

#### **Question 8**

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

#### Question 13

- Quickest travel time
- Convenience
- Feeling of greater safety
- Public transit is not close enough to my work

#### **Question 14**

I am unemployed/retired/working from home

#### **Question 15**

No response

#### **Question 16**

- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks

#### **Question 17**

No response

#### Question 18

• Own

- Question 19
- 55-64

#### Question 20

Friend/Neighbor

#### **Question 21**

No response

#### **Question 22**

No response

# John Ellis

January 5, 2019, 3:58 PM

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 5 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 4

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Very serious

#### **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to learn more Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

| • No |  |
|------|--|
|------|--|

#### **Question 8**

Do not own the property: Most important Cost: Most important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Most of the time Bike: Never Bus: Some of the time BART: Never

#### **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Save money  | Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, |
|---|---|
| Less stressful  | lighting, etc., once occupied: 5  |
|   | Solar panel installation on residential and commercial buildings: 2   |
| Question 13   | Develop local community solar energy sources by promoting installation  |
| Quickest travel time  | of solar carports, rooftop solar on large commercial business parks, etc.:  |
| -   | 2   |
| Convenience   | Driverless transportation focused on shared mobility: 2   |
| Question 14   | Electric vehicle (EV) charging station infrastructure: 2<br>Bicycle/Pedestrian infrastructure: 5  |
| Question 14   | Water Conservation: 5   |
| Other - Retired don't work  | Waste Reduction and Recycling: 4  |
|   | Landscapes and Open Space: 4  |
| Question 15   | Stormwater pollution prevention/creek protection: 3   |
|   | Flood Prevention: 3   |
| Nothing   |   |
|   | Question 2  |
| Question 16   | Increased temperatures and heat waves: Somewhat serious   |
| Wider sidewalks   | Increased wildfire: Somewhat serious  |
| maci sidewalks  | Flooding and more severe rainstorms: Somewhat serious   |
| Question 17   | Mudslide/landslide: Not so serious  |
| •   | Drought: Very serious   |
| 94568   | Poor air quality: Extremely serious   |
| Over the 10   |   |
| Question 18   | Question 3  |
| • Own   | Public health: Very concerned   |
|   | Homes and property values: Not at all concerned   |
| Question 19   | Well-being of future generations: Extremely concerned   |
|   | Economic vitality of Dublin community: Not at all concerned<br>Public infrastructure: Not at all concerned                                |
| • 65+   | Public Infrastructure. Not at all concerned   |
| Question 20   | Question 4  |
| Friend/Neighbor   | • Very  |
|   |   |
| Question 21   | Question 5  |
| No response   | Lower my environmental impact: 4  |
|   | Make my home more comfortable: 1  |
| Question 22   | Save money on utility bills: 3  |
| No response   | Improve indoor air quality: 4   |
| Noresponse  | Question C  |
|   | Question 6  |
| Name not shown  | Install a high-efficiency heating and air conditioning system: Want to learn  |
| January 5, 2019, 5:14 PM  | more<br>Seal air leaks in walls, windows, ducts, etc.: Not interested   |
|   | Install a high-efficiency water heater: Not interested  |
| Question 1  | Plant shade trees: Not interested   |
| Energy officiency upgrades for recidential and commercial buildings to  | Change light bulbs to energy-efficient models (LED): Completed  |
| Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 | Replace appliances with energy-efficient models: Completed  |
| reaction a banding 5 chergy use for neating, cooling, lighting, etc., 5   |   |
|   |   |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Upgrade your home's insulation: Not interested Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Yes

#### **Question 8**

Cost: Most important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to learn more Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Some of the time Bus: Never BART: Never

#### **Question 11**

Personal Car: Some of the time Bike: Most of the time Bus: Never BART: Never

#### **Question 12**

- Exercise
- Reduce my impact on the environment

#### **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

· No or limited carpooling services available

#### **Question 15**

- More bicycle lanes and trails
- Slower traffic speeds

#### **Question 16**

More stores and services in my neighborhood

#### **Question 17**

94568

#### **Question 18**

• Own

#### Question 19

• 35-54

#### **Question 20**

Other - Nextdoor

#### **Question 21**

Do more to encourage walking and cycling including having stores etc nearby.

#### **Question 22**

No response

# Name not available

January 5, 2019, 10:28 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 1

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 3 Waste Reduction and Recycling: 3 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 1 Save money on utility bills: 3 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Most important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Some of the time Bus: Never BART: Never

#### Question 12

- Exercise
- · Reduce my impact on the environment

#### Question 13

- Quickest travel time
- Convenience
- · Public transit is not close enough to my home
- Public transit is not close enough to my work
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### Question 14

• Other - Don't have smartphone / don't know how

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 15**

- Shorter distance from my home to my destination
- More bicycle lanes and trails
- Other More ways to bike with fewer traffic lights

#### **Question 16**

• More stores and services in my neighborhood

#### **Question 17**

94568

# Question 18

• Own

# **Question 19**

• 25-34

# Question 20

Friend/Neighbor

# **Question 21**

Dublin needs more public transit options. I would consider taking a bus, but if I have to walk 20 minutes then take a bus (or two) and walk 20 minutes more, I'd rather drive.

# **Question 22**

No response

# Name not shown

January 6, 2019, 9:53 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1

Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 1 Waste Reduction and Recycling: 4 Landscapes and Open Space: 1 Stormwater pollution prevention/creek protection: 1 Flood Prevention: 1

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not at all serious Drought: Extremely serious Poor air quality: Very serious

# **Question 3**

Public health: Not so concerned Homes and property values: Not at all concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

# **Question 4**

Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 2 Save money on utility bills: 1 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

# Question 7

• Yes

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Do not own the property: Most important Cost: Least important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Some of the time

# **Question 11**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Some of the time

#### **Question 12**

• I don't walk or bike for non-commute travel

# **Question 13**

- Convenience
- Other Not enough parking at BART. We need more multi-level structures, so that people without monthly permit could find parking

# **Question 14**

No response

# **Question 15**

• Other - Protected bike lanes, not just a line on the road. It is dangerous to ride alongside the cars

# **Question 16**

· More stores and services in my neighborhood

# **Question 17**

94568

# Question 18

• Rent

# **Question 19**

• 35-54

# **Question 20**

Other - Dublin City email

# **Question 21**

Great job, thank you!

# **Question 22**

I would like to know how I can make my rental apartment more weatherresistant. Maybe the city needs to work with landlords. Our windows and doors are old and not insulated enough.

# Name not available January 7, 2019, 10:08 AM

# Question 1

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 4

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Somewhat serious

#### **Question 3**

Public health: Extremely concerned Homes and property values: Not so concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### **Question 4**

• Very

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more

Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Want to learn more Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to learn more

Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Yes

#### **Question 8**

Do not own the property: Least important

Cost: Most important Time and effort: Most important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Most of the time Walk: Never Bike: Never Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### Question 12

Exercise

#### **Question 13**

- Public transit is not close enough to my work
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

- No or limited carpooling services available
- I need a car to run errands during break periods

What should the City of Dublin's priorities be in updating our Climate Action Plan?

· Shorter distance from my home to my destination

#### **Question 16**

- Wider sidewalks
- Higher visibility crosswalks

#### **Question 17**

94568

#### **Question 18**

• Own

# **Question 19**

• 35-54

# **Question 20**

City website

# **Question 21**

No response

# **Question 22**

No response

# Name not available

January 8, 2019, 5:39 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 1

#### **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Somewhat concerned

# **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 1 Save money on utility bills: 3 Improve indoor air quality: 2

# **Question 6**

No response

# **Question 7**

No response

# **Question 8**

Do not own the property: Most important

# **Question 9**

No response

# **Question 10**

Personal Car: Most of the time Walk: Some of the time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Personal Car: All of the time

#### **Question 12**

No response

# **Question 13**

Feeling of greater safety

# **Question 14**

• I need a car to drop off/pick up family members

#### **Question 15**

- More bicycle lanes and trails
- Slower traffic speeds

#### **Question 16**

- Wider sidewalks
- · More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- · More shaded sidewalks

# **Question 17**

94568

#### **Question 18**

• Rent

# **Question 19**

• 35-54

# **Question 20**

Peachjar

# **Question 21**

Go fossil fuel free as a city and plant many trees on bald hills.

# **Question 22**

No response

# Name not available

January 8, 2019, 8:57 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5

Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

# **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Yes

#### **Question 8**

Do not own the property: Least important Cost: Least important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: Some of the time

# **Question 12**

No response

#### **Question 13**

Convenience

#### **Question 14**

• I am unemployed/retired/working from home

# **Question 15**

No response

# **Question 16**

No response

# **Question 17**

94568

# **Question 18**

• Own

# Question 19

• 35-54

#### **Question 20**

Other - Murray Elementary School flyer

# **Question 21**

STOP the residencial development... and in case you don't wanna do it, make the developers to built "green houses" with : solar panels, charging stations in their parking lots, a recycling water system within their communities. For the people that we are not part of these new communities/ developments you can start a campaign about climate change making sure we all have at least LED lightbulbs, insulation, small toilets and smart irrigation systems. The same way the city of Dublin has made the agreements with the developers to built more and more houses, you can try to get a deal with companies to trade old lightbulbs to new LED lightbulbs with some kind of discount or rebate. Same thing with isolation and smarts irrigation systems. After all, we are part of the Silicon Valley there are many many companies that have many products and services 100% green.

# **Question 22**

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Name not available

January 8, 2019, 9:27 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 3 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Not so serious

# **Question 3**

Public health: Very concerned Homes and property values: Not so concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more

Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to learn more Install solar panels: Not interested Install high-efficiency windows (double-paned): Want to do

#### **Question 7**

• Yes

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Most of the time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 12**

| Exercise  |
|---|
| Question 13   |
| Quickest travel time  |
| Convenience   |
| <ul> <li>Public transit is not close enough to my home</li> </ul> |
| Question 14   |
| <ul> <li>No or limited carpooling services available</li> </ul>   |
| Question 15   |

- More bicycle parking
- Other showers at destination

#### **Question 16**

| • More sidewalk lighting and safety |
|-------------------------------------|
|-------------------------------------|

**Question 17** 

94568

#### **Question 18**

• Own

#### **Question 19**

• 65+

#### **Question 20**

• Other - Next Door

# **Question 21**

No response

# **Question 22**

No response

# Name not available

January 8, 2019, 9:32 PM

#### Question 1

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

#### **Question 4**

Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to do

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Most important Cost: Most important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Not interested

Replace lawns with drought-resistant plants (use xeriscaping): Not interested

Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Most of the time Bike: Never Bus: Never BART: Some of the time

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: Some of the time

#### **Question 12**

• Exercise

- Reduce my impact on the environment
- Save money

#### **Question 13**

- Convenience
- Feeling of greater safety
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

• I need a car to run errands during break periods

#### **Question 15**

Nothing

#### **Question 16**

No response

# **Question 17**

No response

#### **Question 18**

Rent

# **Question 19**

No response

# **Question 20**

City flyer

#### **Question 21**

No response

#### **Question 22**

No response

# Name not shown

January 9, 2019, 6:05 PM

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 3 Waste Reduction and Recycling: 1 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 1 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Very serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Very serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Very concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Most important Cost: More important Time and effort: Least important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

BART: All of the time

#### **Question 12**

- Exercise
- · Reduce my impact on the environment
- Dislike driving/finding parking
- Less stressful

- Quickest travel time
- Convenience

What should the City of Dublin's priorities be in updating our Climate Action Plan?

• Other - The "school" bus to DHS gets too crowded, takes longer, and is unreliable.

#### **Question 14**

• Other - Husband drives his car to BART station but doesn't carpool to BART because his schedule is too unpredictable.

#### **Question 15**

- · Shorter distance from my home to my destination
- More bicycle lanes and trails
- More bicycle parking
- · Slower traffic speeds

#### **Question 16**

• Other - I prefer to ride my bike unless my destination is so close it's pointless to bike.

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 35-54

#### **Question 20**

Peachjar

# **Question 21**

(1) Insist that future development or redevelopment of concrete structures use "carbon concrete" which permanently traps unwanted carbon in the cement. (2) Capture and store rain water instead of it going down the storm drains.

# **Question 22**

No response

# Name not available

January 11, 2019, 11:27 AM

#### Question 1

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 2 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1 Solar panel installation on residential and commercial buildings: 1 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 1 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 2 Waste Reduction and Recycling: 2 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 4

# **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Not so serious Poor air quality: Not so serious

#### **Question 3**

Public health: Not at all concerned Homes and property values: Not at all concerned Well-being of future generations: Not at all concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

#### **Question 4**

• Not at all

#### Question 5

Lower my environmental impact: 1 Make my home more comfortable: 2 Save money on utility bills: 4 Improve indoor air quality: 1

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Not interested Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Not interested Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Cost: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never

# **Question 11**

No response

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

I am unemployed/retired/working from home

# **Question 15**

# Question 16

Nothing

Nothing

# **Question 17**

94568

# **Question 18**

• Own

# Question 19

• 65+

# **Question 20**

Other - Nextdoor

# **Question 21**

With PG&E filing for 3 additional rate increases in the past few months it is unbelievable people keep pushing "electricity" - who can afford this state anymore

# Question 22

No response

# Name not available

January 16, 2019, 6:25 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 3 Waste Reduction and Recycling: 4

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 4

#### **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Somewhat serious Poor air quality: Very serious

#### **Question 3**

Public health: Not at all concerned Homes and property values: Not at all concerned Well-being of future generations: Not at all concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

#### **Question 4**

Slightly

# **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

#### **Question 6**

Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Install high-efficiency windows (double-paned): Want to do

#### **Question 7**

Maybe

#### **Question 8**

Cost: Most important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time

#### **Question 11**

Personal Car: All of the time

#### **Question 12**

· I don't walk or bike for non-commute travel

# **Question 13**

- · Quickest travel time
- Convenience
- Feeling of greater safety

#### **Question 14**

• I am unemployed/retired/working from home

# **Question 15**

Nothing

# **Question 16**

- · More sidewalk lighting and safety
- · Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- · More stores and services in my neighborhood
- More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

# **Question 19**

• 65+

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Other - Mailer survey card

# **Question 21**

No more building the stack & pack housing developments

#### **Question 22**

No response

# Name not shown

February 6, 2019, 2:46 PM

# **Question 1**

Bicycle/Pedestrian infrastructure: 2 Water Conservation: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 1

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

# **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 1 Save money on utility bills: 3 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed

Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

# Question 7

Maybe

# Question 8

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

- Exercise
- Reduce my impact on the environment
- Dislike driving/finding parking
- Save money
- Less stressful

# Question 13

- Quickest travel time
- Convenience
- Feeling of greater safety

# **Question 14**

- I need a car to run errands during break periods
- I need a car to drop off/pick up family members

#### **Question 15**

• Shorter distance from my home to my destination

#### **Question 16**

Nothing

# **Question 17**

94568

# **Question 18**

• Own

# Question 19

• 35-54

# **Question 20**

Other - Nextdoor.com

# **Question 21**

Being that the production of animal agriculture has the greatest impact on our environment (more than the entire transportation sector) I would be interested in seeing plant-based education for our residents with facts about how making small diet changes can have a large impact. For instance, it takes about 660 gallons of water to make one burger (that's enough water to shower for 2 months). People need to know these things so they can make the greatest impact possible! http://www.cowspiracy.com/facts/ + https://www.thegreenprintproject.com/

#### Question 22

Please incorporate education on how we can make a difference in our community and the world by making easy diet change choices!

# Name not shown

February 25, 2019, 3:59 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 2

Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 2 Waste Reduction and Recycling: 2 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 3

# **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Not at all serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Not so serious Poor air quality: Not so serious

# **Question 3**

Public health: Not at all concerned Homes and property values: Not at all concerned Well-being of future generations: Not at all concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

# **Question 4**

Not at all

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 1 Save money on utility bills: 4 Improve indoor air quality: 1

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Not interested Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

# **Question 8**

Do not own the property: More important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Not interested

Replace lawns with drought-resistant plants (use xeriscaping): Not interested

Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

#### Question 11

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety
- Other Public Transit is unsafe, unreliable, and not cost effective or time effective

#### **Question 14**

• I need a car to run errands during break periods

# **Question 15**

- Shorter distance from my home to my destination
- Nothing

#### **Question 16**

Nothing

# **Question 17**

No response

#### **Question 18**

Rent

#### **Question 19**

• 25-34

# Question 20

City website

What should the City of Dublin's priorities be in updating our Climate Action Plan?

No response

#### **Question 22**

No response

# Name not available

March 27, 2019, 11:05 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 4 Waste Reduction and Recycling: 2 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Somewhat serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

# **Question 4**

• Very

**Question 5** 

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

# Question 7

• Yes

# **Question 8**

Do not own the property: More important Cost: More important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Walk: Some of the time BART: Most of the time

# **Question 11**

Personal Car: Most of the time Lyft/Uber: Some of the time BART: Some of the time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| • Exercise  | of solar carports, rooftop solar on large commercial business parks, etc.:  |
|---|---|
| Question 13   | 5<br>Driverless transportation focused on shared mobility: 2  |
| Public transit is not close enough to my work   | Electric vehicle (EV) charging station infrastructure: 5<br>Bicycle/Pedestrian infrastructure: 5<br>Water Conservation: 4   |
| Question 14   | Waste Reduction and Recycling: 4<br>Landscapes and Open Space: 5  |
| I am unemployed/retired/working from home   | Stormwater pollution prevention/creek protection: 5<br>Flood Prevention: 5  |
| Question 15   | Question 2  |
| More bicycle lanes and trails   | Increased temperatures and heat waves: Somewhat serious   |
| Question 16   | Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious  |
| No response   | Mudslide/landslide: Very serious<br>Drought: Somewhat serious   |
| Question 17   | Poor air quality: Somewhat serious  |
| 94568   | Question 3  |
| Question 18<br>No response  | Public health: Extremely concerned<br>Homes and property values: Extremely concerned<br>Well-being of future generations: Extremely concerned   |
|   | Economic vitality of Dublin community: Extremely concerned  |
| Question 19   | Public infrastructure: Extremely concerned  |
| • 35-54   | Question 4  |
| Question 20   | • Very  |
| • City employee   | Question 5  |
| Question 21   | Lower my environmental impact: 4<br>Make my home more comfortable: 4  |
| No response   | Save money on utility bills: 4<br>Improve indoor air quality: 4   |
| Question 22   |   |
| No response   | Question 6<br>Install a high-efficiency heating and air conditioning system: Completed  |
| <b>Name not available</b><br>March 27, 2019, 11:10 AM   | Seal air leaks in walls, windows, ducts, etc.: Want to do<br>Install a high-efficiency water heater: Completed<br>Plant shade trees: Want to do<br>Change light bulbs to energy-efficient models (LED): Completed<br>Replace appliances with energy-efficient models: Completed |
| Question 1  | Upgrade your home's insulation: Completed   |
| Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 | Install solar panels: Completed<br>Install high-efficiency windows (double-paned): Completed  |

# **Question 7**

Solar panel installation on residential and commercial buildings: 5

Develop local community solar energy sources by promoting installation

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: More important Safety issues: Most important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Most of the time Bike: All of the time Bus: Most of the time BART: All of the time

#### **Question 11**

Personal Car: Most of the time Lyft/Uber: Some of the time

#### **Question 12**

• Exercise

#### **Question 13**

Convenience

# **Question 14**

• No or limited carpooling services available

#### **Question 15**

• More bicycle lanes and trails

# **Question 16**

Wider sidewalks

# Traffic safety improvements at pedestrian crossings

#### **Question 17**

No response

#### **Question 18**

• Own

#### **Question 19**

• 25-34

#### **Question 20**

- City employee
- Other The Wave

# **Question 21**

No response

# **Question 22**

No response

# Name not available

March 27, 2019, 11:14 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4 Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 4 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 2

Flood Prevention: 4

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Not so serious Poor air quality: Extremely serious

# **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Do not own the property: More important Cost: More important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Most important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Some of the time BART: Some of the time

#### **Question 11**

Personal Car: Never Carpool: Most of the time Walk: Some of the time Bike: Some of the time Bus: Most of the time BART: Most of the time

# **Question 12**

- Exercise
- Reduce my impact on the environment
- Less stressful

# **Question 13**

- Convenience
- Feeling of greater safety
- · Public transit is not close enough to my home

# **Question 14**

No response

# **Question 15**

Slower traffic speeds

#### **Question 16**

- · More stores and services in my neighborhood
- More shaded sidewalks

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### No response

#### **Question 18**

• Own

#### **Question 19**

• 35-54

# **Question 20**

- City employee
- Other The Wave

#### **Question 21**

No response

# **Question 22**

No response

# Name not available

March 27, 2019, 11:17 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 2 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 2 Waste Reduction and Recycling: 2 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Extremely serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

#### **Question 4**

Very

#### Question 5

Lower my environmental impact: 3 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

# **Question 8**

Cost: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

• Dislike driving/finding parking

#### **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my home

#### **Question 14**

• No or limited carpooling services available

#### **Question 15**

- More bicycle lanes and trails
- Slower traffic speeds

#### **Question 16**

• More stores and services in my neighborhood

#### **Question 17**

No response

#### **Question 18**

• Own

#### **Question 19**

• 35-54

# Question 20

- City employee
- Other The Wave

# **Question 21**

No response

#### **Question 22**

No response

# Name not available

March 27, 2019, 11:21 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

#### **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Extremely concerned

#### Question 4

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Yes

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: All of the time

Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Never

#### **Question 12**

- Exercise
- · Reduce my impact on the environment

#### Question 13

- · Quickest travel time
- Convenience
- Feeling of greater safety

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

- · Shorter distance from my home to my destination
- More bicycle parking

#### **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- More shaded sidewalks

# **Question 17**

94568

#### **Question 18**

• Own

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 19**

• 25-34

#### **Question 20**

- City employee
- Other The Wave

# **Question 21**

Community Garden?

# **Question 22**

Composting, farming, solar panels

# Name not available

March 27, 2019, 11:22 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

# **Question 3**

Public health: Very concerned

Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Extremely concerned

# **Question 4**

Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

# **Question 7**

# **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested

Modify the length of showers to conserve water: Want to do

Yes

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Never

# **Question 12**

- Exercise
- Reduce my impact on the environment

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety

#### **Question 14**

• I am unemployed/retired/working from home

# **Question 15**

- · Shorter distance from my home to my destination
- More bicycle parking

#### **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- More shaded sidewalks

# **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 25-34

#### **Question 20**

- City employee
- Other The Wave

#### **Question 21**

Community Garden?

#### **Question 22**

Composting, farming, solar panels

# Name not available

March 27, 2019, 11:25 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3 Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 3

Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 3

#### **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Very serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Somewhat concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Extremely concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

# **Question 7**

• No

# **Question 8**

Do not own the property: Most important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: More important Safety issues: Most important Question 9

# Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Not interested

Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time

Lyft/Uber: Some of the time Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: Never

# Question 11

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Some of the time BART: Never

#### **Question 12**

· I don't walk or bike for non-commute travel

#### **Question 13**

- Quickest travel time
- Convenience

# **Question 14**

· I need a car to drop off/pick up family members

# **Question 15**

Shorter distance from my home to my destination

# **Question 16**

• Wider sidewalks

# **Question 17**

94568

# **Question 18**

• Own

# **Question 19**

• 25-34

# **Question 20**

#### 118 | www.opentownhall.com/6908

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### City employee

Other - The Wave

#### **Question 21**

Fire safety.

# **Question 22**

Hksherwani@gmail.com

# Name not available

March 27, 2019, 11:30 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 5

# Question 2

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Extremely serious Mudslide/landslide: Very serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Not at all concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### Question 4

Somewhat

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Not interested Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# Question 7

• Yes

# **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Bike: Never Bus: Some of the time BART: Some of the time

#### **Question 11**

Personal Car: All of the time

#### **Question 12**

- Exercise
- Dislike driving/finding parking

#### **Question 13**

- Quickest travel time
- Convenience
- · Other Bus do not work properly

#### **Question 14**

• I need a car to drop off/pick up family members

#### **Question 15**

- · More bicycle lanes and trails
- Bike Share program

#### **Question 16**

- Traffic safety improvements at pedestrian crossings
- Reducing crossing distance

# **Question 17**

No response

#### **Question 18**

• Own

# **Question 19**

• 35-54

# **Question 20**

- City employee
- Other The Wave

# **Question 21**

Build less! In the last 8 years, Dublin has been building left and right. Traffic is horrible. You guys said ok to IKEA and now you are asking how to eliminate gas pollution that is caused by emissions, so please do NOT build any more.

#### **Question 22**

No response

# Name not available

March 27, 2019, 11:32 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation

of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 3

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Yes

# **Question 8**

Do not own the property: Most important Cost: More important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Walk: Some of the time Bike: Some of the time BART: Some of the time

# **Question 11**

Personal Car: Most of the time Lyft/Uber: Some of the time Walk: Some of the time Bike: Some of the time

#### **Question 12**

- Exercise
- · Reduce my impact on the environment

#### **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

No response

# **Question 15**

- Shorter distance from my home to my destination
- More bicycle lanes and trails

# **Question 16**

- Higher visibility crosswalks
- More stores and services in my neighborhood
- More shaded sidewalks

# **Question 17**

No response

# **Question 18**

No response

# **Question 19**

No response

# Question 20

No response

# **Question 21**

No response

# **Question 22**

No response

Name not available March 27, 2019, 11:35 AM

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 3

#### **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Somewhat serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Not so concerned Homes and property values: Not so concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Yes

#### **Question 8**

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Least important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

- Exercise
- · Reduce my impact on the environment

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 13**

| Question 15   | residential construction resulting in low energy use for heating, cooling,                        |
|---|---|
| Quickest travel time  | lighting, etc., once occupied: 3  |
| Convenience   | Develop local community solar energy sources by promoting installation                            |
| Feeling of greater safety                                       | of solar carports, rooftop solar on large commercial business parks, etc.:                        |
| · reening of greater safety                                     | 4   |
| Question 14   | Driverless transportation focused on shared mobility: 1   |
| Question 14   | Electric vehicle (EV) charging station infrastructure: 2  |
| <ul> <li>No or limited carpooling services available</li> </ul> | Bicycle/Pedestrian infrastructure: 4  |
|   | Water Conservation: 5   |
| Question 15   | Waste Reduction and Recycling: 5  |
| Question 19   | Landscapes and Open Space: 4  |
| Nothing   | Stormwater pollution prevention/creek protection: 5   |
| Question 16   | Question 2  |
| · More frequent crosswalks                                      | Increased temperatures and heat waves: Not so serious   |
| More frequent crosswalks  | Increased wildfire: Not so serious  |
| More shaded sidewalks   | Flooding and more severe rainstorms: Not so serious   |
|   | Mudslide/landslide: Not at all serious  |
| Question 17   | Drought: Very serious   |
| 94568   | Poor air quality: Somewhat serious  |
| Question 18   | Question 3  |
| •   | Public health: Not so concerned   |
| • Own   | Homes and property values: Not so concerned   |
|   | Well-being of future generations: Somewhat concerned  |
| Question 19   | Economic vitality of Dublin community: Not so concerned   |
|   | Public infrastructure: Not so concerned   |
| • 35-54   |   |
| a   | Question 4  |
| Question 20   |   |
| City employee   | • Very  |
| Other - The Wave  |   |
| • Other - The wave  | Question 5  |
| Question 21   | Lower my environmental impact: 4  |
| Question 21   | Save money on utility bills: 4  |
| No response   |   |
| Question 22   | Question 6  |
| No recording  | Install a high-efficiency heating and air conditioning system: Want to do                         |
| No response   | Seal air leaks in walls, windows, ducts, etc.: Not interested                                     |
|   | Install a high-efficiency water heater: Want to learn more  |
| Name net eveilable  | Plant shade trees: Not interested   |
| Name not available  | Change light bulbs to energy-efficient models (LED): Completed                                    |
| March 27, 2019, 11:39 AM  | Replace appliances with energy-efficient models: Want to do                                       |
|   | Upgrade your home's insulation: Not interested  |
| Question 1  | Install solar panels: Not interested<br>Install high-efficiency windows (double-paned): Completed |
|   |   |

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3

# **Question 7**

Advanced energy efficiency requirements for new commercial and

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### No response

#### **Question 8**

Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important

#### **Question 9**

Replace older toilets with a new low-flow model: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done

#### **Question 10**

Personal Car: All of the time Walk: Some of the time

# **Question 11**

No response

#### **Question 12**

- Dislike driving/finding parking
- Less stressful

#### **Question 13**

- Convenience
- Other Young kids, car seat, changing schedules, time efficiency

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

No response

#### **Question 16**

No response

#### **Question 17**

94568

# **Question 18**

• Own

#### **Question 19**

• 35-54

#### **Question 20**

- City employee
- Other The Wave

#### **Question 21**

No response

# **Question 22**

Our family is pretty knowledgeable about environmental sustainability due to current/former education and employment (natural resources planning, environmental engineering)

# Name not available

March 27, 2019, 11:41 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 4

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Somewhat concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency water heater: Completed Change light bulbs to energy-efficient models (LED): Completed Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Maybe

# **Question 8**

Cost: Most important Time and effort: More important Minimal financial or energy savings: More important

# **Question 9**

Install water-conserving faucets and showerheads: Want to do Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time

#### **Question 12**

No response

# **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my work

#### **Question 14**

- No or limited carpooling services available
- · I need a car to drop off/pick up family members

#### **Question 15**

No response

# **Question 16**

- · More stores and services in my neighborhood
- More shaded sidewalks

# **Question 17**

94568

# Question 18

• Own

# **Question 19**

• 35-54

# **Question 20**

- City employee
- Other The Wave

# **Question 21**

Build less homes

# **Question 22**

No response

Name not available March 27, 2019, 11:44 AM

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Bicycle/Pedestrian infrastructure: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Extremely serious Drought: Very serious Poor air quality: Extremely serious

# **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Change light bulbs to energy-efficient models (LED): Completed Upgrade your home's insulation: Completed

# **Question 7**

• No

#### Question 8

Do not own the property: More important Cost: Somewhat important

#### **Question 9**

No response

# **Question 10**

Personal Car: All of the time Walk: Some of the time Bus: Some of the time

# **Question 11**

Personal Car: All of the time Walk: Some of the time Bus: Some of the time

#### **Question 12**

Exercise

# **Question 13**

Convenience

#### **Question 14**

• I am unemployed/retired/working from home

# **Question 15**

- · Shorter distance from my home to my destination
- More bicycle lanes and trails

# **Question 16**

No response

# **Question 17**

94568

# **Question 18**

• Own

# **Question 19**

• 35-54

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Question 20   | Question 6    |
|---|---------------|
| City employee   | No response   |
| Other - The Wave  |               |
|   | Question 7    |
| Question 21   | No response   |
| No response   | 0             |
| Quanting 22   | Question 8    |
| Question 22   | No response   |
| No response   | Question 9    |
|   | - No response |
| Name not available  | 1016500136    |
| March 27, 2019, 11:49 AM  | Question 10   |
| Question 1  | No response   |
| Question 1  |               |
| Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 | Question 11   |
| Advanced energy efficiency requirements for new commercial and  | No response   |
| residential construction resulting in low energy use for heating, cooling,  |               |
| lighting, etc., once occupied: 4<br>Solar panel installation on residential and commercial buildings: 2                                       | Question 12   |
| Develop local community solar energy sources by promoting installation  | No response   |
| of solar carports, rooftop solar on large commercial business parks, etc.:<br>4   |               |
| Driverless transportation focused on shared mobility: 2   | Question 13   |
| Electric vehicle (EV) charging station infrastructure: 3  | No response   |
| Bicycle/Pedestrian infrastructure: 3<br>Water Conservation: 5   | o             |
| Waste Reduction and Recycling: 4  | Question 14   |
| Landscapes and Open Space: 5  | No response   |
| Stormwater pollution prevention/creek protection: 4<br>Flood Prevention: 5  | Question 15   |
|   | -             |
| Question 2  | No response   |
| No response   | Question 16   |
|   | No response   |
| Question 3  |               |
| No response   | Question 17   |
|   | No response   |
| Question 4  |               |
| No response   | Question 18   |
| Question 5  | No response   |
| Question 5  |               |
| No response   | Question 19   |
|   | No response   |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Question 20   | No response |
|---|-------------|
| No response   | Question 7  |
| Question 21   | No response |
| No response   | Question 8  |
| Question 22   | No response |
| No response   |             |
|   | Question 9  |
| Name not available  | No response |
| March 27, 2019, 11:49 AM  | Question 10 |
| Question 1  | No response |
| Energy efficiency upgrades for residential and commercial buildings to  |             |
| reduce a building's energy use for heating, cooling, lighting, etc.: 5  | Question 11 |
| Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling,   | No response |
| lighting, etc., once occupied: 5  | Question 12 |
| Solar panel installation on residential and commercial buildings: 5<br>Develop local community solar energy sources by promoting installation<br>of solar carports, rooftop solar on large commercial business parks, etc.: | No response |
| 2<br>Driverlage transportation focused on shared mobility 2   | Question 13 |
| Driverless transportation focused on shared mobility: 2<br>Electric vehicle (EV) charging station infrastructure: 2<br>Bicycle/Pedestrian infrastructure: 5   | No response |
| Water Conservation: 4   | Question 14 |
| Waste Reduction and Recycling: 3<br>Landscapes and Open Space: 4  | No response |
| Stormwater pollution prevention/creek protection: 3   | 0 11 15     |
| Flood Prevention: 3   | Question 15 |
| Question 2  | No response |
| No response   | Question 16 |
|   | No response |
| Question 3  |             |
| No response   | Question 17 |
| Question 4  | No response |
| No response   | Question 18 |
| Question F  | No response |
| Question 5  | 0           |
| No response   | Question 19 |
| Question 6  | No response |
|   |             |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 20**

No response

# **Question 21**

No response

# **Question 22**

No response

# Name not available

March 27, 2019, 11:52 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Very concerned Homes and property values: Not so concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### Question 4

Very

#### Question 5

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Completed Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Not interested Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

# Question 7

Maybe

# **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: Some of the time Lyft/Uber: Never Carpool: All of the time Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

- Exercise
- Reduce my impact on the environment
- Dislike driving/finding parking

#### **Question 13**

- Quickest travel time
- Convenience
- · Feeling of greater safety
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

No response

# **Question 15**

- · Shorter distance from my home to my destination
- More bicycle lanes and trails
- Slower traffic speeds

# **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- More stores and services in my neighborhood
- More shaded sidewalks

# **Question 17**

94568

#### **Question 18**

| Question 19                              |
|--|
| • 35-54                                  |
|  |
| Question 20                              |
| Question 20 <ul> <li>Peachjar</li> </ul> |

• Own

# Question 21

No response

# Question 22

No response

# Name not available

March 27, 2019, 11:52 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 5 Waste Reduction and Recycling: 2 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Very serious Drought: Somewhat serious Poor air quality: Somewhat serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Public health: Not at all concerned Homes and property values: Not at all concerned Well-being of future generations: Not at all concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

#### **Question 4**

Somewhat

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 1 Save money on utility bills: 1 Improve indoor air quality: 1

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Not interested Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Do not own the property: Least important Cost: Somewhat important Time and effort: More important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Not interested

Replace lawns with drought-resistant plants (use xeriscaping): Not interested

Modify the length of showers to conserve water: Not interested

#### Question 10

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

• Exercise

**Question 13** 

No response

#### **Question 14**

No response

# **Question 15**

No response

#### **Question 16**

No response

# **Question 17**

No response

#### **Question 18**

• Own

#### **Question 19**

• 65+

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### City employee

Other - Senior Center

#### **Question 21**

No response

# Question 22

No response

# Name not available

March 27, 2019, 11:55 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# Question 2

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### Question 4

Somewhat

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

# Question 7

Yes

# **Question 8**

Do not own the property: Most important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Most of the time Bike: Some of the time Bus: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### BART: Some of the time

#### **Question 11**

No response

# **Question 12**

Exercise

# **Question 13**

- Convenience
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

• Other - Retired

#### **Question 15**

- · Shorter distance from my home to my destination
- More bicycle lanes and trails

# **Question 16**

- Traffic safety improvements at pedestrian crossings
- More frequent crosswalks
- More stores and services in my neighborhood

# **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 55-64

# **Question 20**

- City employee
- Other Senior Center

# Question 21

No response

#### Question 22

No response

# Name not available

March 27, 2019, 11:56 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 5

Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 4 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Very serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

# **Question 4**

# Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 1

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Save money on utility bills: 3 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Somewhat important Cost: More important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Never

#### **Question 11**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

# **Question 12**

- Exercise
- · Reduce my impact on the environment
- Less stressful

# **Question 13**

- Quickest travel time
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

· Other - I would need to learn how to bike again.

#### **Question 16**

More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 35-54

#### **Question 20**

Peachjar

#### **Question 21**

Please reduce use of plastic. Ban plastic bags, straws and containers for the city of Dublin.

# **Question 22**

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Name not available

March 27, 2019, 11:58 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Very serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Yes

#### **Question 8**

Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Exercise

• I don't walk or bike for non-commute travel

#### **Question 13**

- Quickest travel time
- Convenience
- · Feeling of greater safety
- Public transit is not close enough to my home
- Public transit is not close enough to my work
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

• Other - Don't work

#### **Question 15**

Nothing

#### **Question 16**

• More sidewalk lighting and safety

# **Question 17**

No response

#### **Question 18**

• Own

#### Question 19

• 65+

#### **Question 20**

- City employee
- Other Senior Center

# **Question 21**

More water fountains in parks and walkways

# **Question 22**

No response

# Name not available March 27, 2019, 12:01 PM

**Ouestion 1** 

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4 Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Extremely serious Mudslide/landslide: Extremely serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

# Question 4

Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Not

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### interested

Seal air leaks in walls, windows, ducts, etc.: Not interested Install a high-efficiency water heater: Not interested Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Not interested Replace appliances with energy-efficient models: Not interested Upgrade your home's insulation: Not interested Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Not interested

# Question 7

Maybe

# **Question 8**

Do not own the property: More important Cost: More important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Most important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to learn more Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Some of the time BART: Some of the time

#### **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Some of the time BART: Some of the time

#### **Question 12**

- Exercise
- Save money

#### **Question 13**

Quickest travel time

# Question 14

- I am unemployed/retired/working from home
- I need a car to drop off/pick up family members

# **Question 15**

Nothing

#### **Question 16**

• Other - Myself- just do it.

# **Question 17**

94568

# Question 18

Rent

#### **Question 19**

• 65+

# **Question 20**

- City employee
- Other Senior Center

#### **Question 21**

No response

# **Question 22**

No response

# Name not available

March 27, 2019, 12:55 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to

What should the City of Dublin's priorities be in updating our Climate Action Plan?

reduce a building's energy use for heating, cooling, lighting, etc.: 2 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 1 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 3 Waste Reduction and Recycling: 3 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 3

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Not so serious Poor air quality: Very serious

# **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

# **Question 4**

Somewhat

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

No response

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Some of the time BART: Never

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

No response

#### **Question 13**

- · Quickest travel time
- Public transit is not close enough to my work

#### **Question 14**

• I need a car to run errands during break periods

What should the City of Dublin's priorities be in updating our Climate Action Plan?

I need a car to drop off/pick up family members

#### **Question 15**

Nothing

#### **Question 16**

- Wider sidewalks
- Traffic safety improvements at pedestrian crossings
- Other 1) Have the vehicle stop lines separate from the pedestrian crossing lines (so that vehicle are not too close to the pedestrians). 2) stop all traffic during crossing do not allow right turns (most scary) and allow users to cross all sides (like SFO)

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 35-54

# **Question 20**

Peachjar

# **Question 21**

We should also look into another form of pollution - LIGHT pollution. We need to reduce the amount of light pollution we have in the city. Ensure that any new public lighting minimizes it - especially light radiating upwards, reducing night sky visibility.

#### **Question 22**

No response

# Name not available

March 27, 2019, 2:57 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling,

#### lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Extremely serious Mudslide/landslide: Extremely serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

# **Question 4**

Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Not interested Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 7**

No response

# **Question 8**

Do not own the property: More important Cost: Somewhat important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: More important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Want to do

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

# **Question 11**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

No response

#### **Question 13**

- Convenience
- Feeling of greater safety
- Public transit is not close enough to my home
- Public transit is not close enough to my work

#### **Question 14**

• No or limited carpooling services available

#### **Question 15**

More bicycle parking

# Question 16

- · More sidewalk lighting and safety
- · Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- · More stores and services in my neighborhood

#### **Question 17**

94568

#### **Question 18**

No response

#### **Question 19**

No response

#### **Question 20**

- City employee
- Other Senior Center

#### Question 21

No response

#### **Question 22**

No response

Name not available March 27, 2019, 3:00 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.:

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# 5

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 3 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 3

# **Question 2**

Increased wildfire: Extremely serious Flooding and more severe rainstorms: Extremely serious Mudslide/landslide: Very serious Drought: Very serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Extremely concerned

# **Question 4**

• Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested

Seal air leaks in walls, windows, ducts, etc.: Not interested

Install a high-efficiency water heater: Not interested

Plant shade trees: Not interested

Change light bulbs to energy-efficient models (LED): Not interested Replace appliances with energy-efficient models: Not interested Upgrade your home's insulation: Not interested Install solar panels: Not interested

Install high-efficiency windows (double-paned): Not interested

# **Question 7**

No response

# Question 8

Do not own the property: Somewhat important Cost: Somewhat important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: Most important

# **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Want to learn more Adjust timers or install a new water-efficient irrigation system: Want to learn more Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more Modify the length of showers to conserve water: Want to learn more

# **Question 10**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Most of the time Bike: Never Bus: Most of the time BART: Most of the time

# **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: All of the time Bike: Never Bus: All of the time BART: All of the time

# **Question 12**

- Exercise
- Save money

# **Question 13**

Convenience

# **Question 14**

• I need a car to run errands during break periods

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| No response  | Question 2   |
|--|--|
| Question 16 • Wider sidewalks                        | Flooding and more severe rainstorms: Somewhat serious<br>Drought: Very serious<br>Poor air quality: Extremely serious  |
| Question 17  | Question 3   |
| 94568  | Public health: Very concerned<br>Homes and property values: Somewhat concerned   |
| Question 18  | Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Very concerned   |
| • Rent   | Public infrastructure: Extremely concerned   |
| Question 19  | Question 4   |
| • 55-64  | • Very   |
| Question 20  | Question 5   |
| Other - Senior Center                                | Lower my environmental impact: 3<br>Make my home more comfortable: 4<br>Save money on utility bills: 3   |
| Question 21  | Improve indoor air quality: 4  |
| No response  | Question 6   |
| Question 22<br>No response                           | Install a high-efficiency heating and air conditioning system: Completed<br>Seal air leaks in walls, windows, ducts, etc.: Want to do<br>Install a high-efficiency water heater: Completed<br>Change light bulbs to energy-efficient models (LED): Completed |
| <b>Name not available</b><br>March 27, 2019, 3:08 PM | Replace appliances with energy-efficient models: Completed<br>Upgrade your home's insulation: Want to do<br>Install high-efficiency windows (double-paned): Completed  |
| Owerting 1   | Question 7   |

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Flood Prevention: 4

# **Question 7**

Maybe

# **Question 8**

No response

#### **Question 9**

No response

#### **Question 10**

Personal Car: All of the time Carpool: Some of the time Walk: Some of the time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Question 11   | Energy efficiency upgrades for residential and commercial buildings to  |
|---|---|
|   | reduce a building's energy use for heating, cooling, lighting, etc.: 4  |
| No response   | Advanced energy efficiency requirements for new commercial and  |
| Question 12   | residential construction resulting in low energy use for heating, cooling,  |
|   | lighting, etc., once occupied: 4<br>Solar panel installation on residential and commercial buildings: 4                               |
| • Exercise  | Develop local community solar energy sources by promoting installation  |
|   | of solar carports, rooftop solar on large commercial business parks, etc.:  |
| Question 13   | 4<br>Deiverlage two constantions for succed an allowed markility of 1   |
| Other - I'm retired and time differ for events no bus to activity | Driverless transportation focused on shared mobility: 1<br>Electric vehicle (EV) charging station infrastructure: 2                   |
|   | Bicycle/Pedestrian infrastructure: 4  |
| Question 14   | Water Conservation: 5   |
| No response   | Waste Reduction and Recycling: 4  |
|   | Landscapes and Open Space: 3<br>Stormwater pollution prevention/creek protection: 4   |
| Question 15   | Flood Prevention: 4   |
| No response   |   |
| Noresponse  | Question 2  |
| Question 16   | Increased temperatures and heat waves: Very serious   |
|   | Increased wildfire: Very serious  |
| No response   | Flooding and more severe rainstorms: Very serious   |
| Question 17   | Drought: Extremely serious  |
| Question 17   | Poor air quality: Extremely serious   |
| 94568   | Over the 2  |
|   | Question 3  |
| Question 18   | Public health: Very concerned   |
| • Own   | Homes and property values: Somewhat concerned<br>Well-being of future generations: Extremely concerned                                |
|   | Economic vitality of Dublin community: Very concerned   |
| Question 19   | Public infrastructure: Very concerned   |
| • 65+   |   |
|   | Question 4  |
| Question 20   | • Very  |
|   |   |
| Other - Energy Workshop   | Question 5  |
| Question 21   | Lower my environmental impact: 2  |
| •   | Make my home more comfortable: 3  |
| No response   | Save money on utility bills: 3  |
| Question 22   | Improve indoor air quality: 3   |
| •   | Question C  |
| No response   | Question 6  |
|   | Install a high-efficiency heating and air conditioning system: Completed<br>Seal air leaks in walls, windows, ducts, etc.: Want to do |
| Name not available  | Install a high-efficiency water heater: Not interested  |
| March 27, 2019, 3:10 PM   | Plant shade trees: Not interested   |
|   | Change light bulbs to energy-efficient models (LED): Completed  |
| Question 1  | Replace appliances with energy-efficient models: Completed  |
|   |   |
|   |   |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Upgrade your home's insulation: Want to do<br>Install solar panels: Want to learn more<br>Install high-efficiency windows (double-paned): Completed | Question 16<br>No response          |
|---|-------------------------------------|
| Question 7<br>• No  | <b>Question 17</b><br>94568         |
| Question 8<br>Cost: More important  | Question 18 <ul> <li>Own</li> </ul> |
| Time and effort: More important<br>Concern upgraded technologies will not perform as well: Least important  | Question 19                         |

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Some of the time BART: Some of the time

# **Question 11**

No response

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

No response

#### **Question 15**

No response

# se 7

# 8

# 9

• 65+

# **Question 20**

Other - Energy Workshop

# **Question 21**

No response

# **Question 22**

No response

# Name not available

March 27, 2019, 3:13 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4

Flood Prevention: 2

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Increased temperatures and heat waves: Very serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Somewhat serious Drought: Very serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 1 Save money on utility bills: 3 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more

Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to learn more Install solar panels: Not interested

Install high-efficiency windows (double-paned): Completed

#### **Question 7**

No response

#### **Question 8**

No response

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: All of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### Question 12

No response

#### **Question 13**

- · Quickest travel time
- Convenience

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

Nothing

#### **Question 16**

- Wider sidewalks
- · More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- Reducing crossing distance
- · More stores and services in my neighborhood
- More shaded sidewalks

#### Question 17

# 94568

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 18**

• Own

#### **Question 19**

• 65+

#### **Question 20**

Other - Energy Workshop

# **Question 21**

No response

# Question 22

No response

# Name not available

March 27, 2019, 3:16 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Somewhat serious Drought: Very serious Poor air quality: Extremely serious

# **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

• Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 1 Save money on utility bills: 3 Improve indoor air quality: 2

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to learn more Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

# **Question 7**

No response

# **Question 8**

No response

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Bus: Never BART: All of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

No response

# **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

Nothing

# **Question 16**

- More sidewalk lighting and safety
- · Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- Reducing crossing distance
- More stores and services in my neighborhood
- More shaded sidewalks

#### **Question 17**

94568

# **Question 18**

• Own

# **Question 19**

• 65+

# Question 20

Other - Energy Workshop

# **Question 21**

No response

# Question 22

No response

# Name not available

March 27, 2019, 3:19 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 2 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 2

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

# Question 2

Increased temperatures and heat waves: Not so serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Very

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### Question 7

Maybe

#### **Question 8**

Do not own the property: Least important Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never

#### **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

#### **Question 13**

- · Quickest travel time
- Convenience
- Feeling of greater safety

#### **Question 14**

No response

#### **Question 15**

- Nothing
- **Question 16**
- Nothing

# Question 17

No response

# **Question 18**

• Own

#### **Question 19**

• 65+

#### **Question 20**

• Other - Energy Workshop

# **Question 21**

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

No response

# Name not available

March 27, 2019, 3:21 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1 Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 1 Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 1 Waste Reduction and Recycling: 1 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

# Question 2

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

# **Question 4**

No response

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Yes

# **Question 8**

Cost: Most important Time and effort: Least important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Some of the time BART: Some of the time

# **Question 11**

No response

# **Question 12**

Exercise

# **Question 13**

Quickest travel time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Convenience  | of solar carports, rooftop solar on large commercial business parks, etc.:   |
|--|--|
| Feeling of greater safety  | 4<br>Driverless transportation focused on shared mobility: 4   |
|  | Electric vehicle (EV) charging station infrastructure: 4   |
| Question 14  | Bicycle/Pedestrian infrastructure: 5   |
| No response  | Water Conservation: 5  |
|  | Waste Reduction and Recycling: 5<br>Landscapes and Open Space: 4   |
| Question 15  | Stormwater pollution prevention/creek protection: 4  |
| Nothing  | Flood Prevention: 5  |
|  |  |
| Question 16  | Question 2   |
| Nothing  | No response  |
| Nothing  |  |
| Question 17  | Question 3   |
| 94568  | Public health: Very concerned  |
| 5-500  | Homes and property values: Somewhat concerned  |
| Question 18  | Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Extremely concerned  |
|  | Public infrastructure: Very concerned  |
| • Own  |  |
|  |  |
| Question 19  | Question 4   |
| Question 19  |  |
| <b>Question 19</b><br>• 65+  | • Very   |
| • 65+  |  |
|  | • Very<br>Question 5   |
| • 65+  | • Very   |
| • 65+<br><b>Question 20</b><br>• Other - Energy Workshop   | • Very<br><b>Question 5</b><br>Lower my environmental impact: 4<br>Make my home more comfortable: 4<br>Save money on utility bills: 4  |
| • 65+<br>Question 20   | • Very<br><b>Question 5</b><br>Lower my environmental impact: 4<br>Make my home more comfortable: 4  |
| • 65+<br><b>Question 20</b><br>• Other - Energy Workshop   | • Very<br><b>Question 5</b><br>Lower my environmental impact: 4<br>Make my home more comfortable: 4<br>Save money on utility bills: 4<br>Improve indoor air quality: 4   |
| <ul> <li>65+</li> <li>Question 20</li> <li>Other - Energy Workshop</li> <li>Question 21</li> <li>No response</li> </ul>  | • Very<br><b>Question 5</b><br>Lower my environmental impact: 4<br>Make my home more comfortable: 4<br>Save money on utility bills: 4<br>Improve indoor air quality: 4<br><b>Question 6</b>  |
| • 65+<br>Question 20<br>• Other - Energy Workshop<br>Question 21   | • Very<br><b>Question 5</b><br>Lower my environmental impact: 4<br>Make my home more comfortable: 4<br>Save money on utility bills: 4<br>Improve indoor air quality: 4<br><b>Question 6</b><br>Install a high-efficiency heating and air conditioning system: Completed  |
| <ul> <li>65+</li> <li>Question 20</li> <li>Other - Energy Workshop</li> <li>Question 21</li> <li>No response</li> </ul>  | • Very<br><b>Question 5</b><br>Lower my environmental impact: 4<br>Make my home more comfortable: 4<br>Save money on utility bills: 4<br>Improve indoor air quality: 4<br><b>Question 6</b>  |
| <ul> <li>65+</li> <li>Question 20</li> <li>Other - Energy Workshop</li> <li>Question 21</li> <li>No response</li> <li>Question 22</li> </ul>   | <ul> <li>Very</li> <li>Question 5</li> <li>Lower my environmental impact: 4<br/>Make my home more comfortable: 4<br/>Save money on utility bills: 4<br/>Improve indoor air quality: 4</li> <li>Question 6</li> <li>Install a high-efficiency heating and air conditioning system: Completed<br/>Seal air leaks in walls, windows, ducts, etc.: Completed<br/>Install a high-efficiency water heater: Completed<br/>Plant shade trees: Completed</li> </ul>   |
| <ul> <li>65+</li> <li>Question 20</li> <li>Other - Energy Workshop</li> <li>Question 21</li> <li>No response</li> <li>Question 22</li> <li>No response</li> </ul>  | <ul> <li>Very</li> <li>Question 5</li> <li>Lower my environmental impact: 4</li> <li>Make my home more comfortable: 4</li> <li>Save money on utility bills: 4</li> <li>Improve indoor air quality: 4</li> <li>Question 6</li> <li>Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed</li> <li>Change light bulbs to energy-efficient models (LED): Completed</li> </ul>  |
| <ul> <li>65+</li> <li>Question 20</li> <li>Other - Energy Workshop</li> <li>Question 21</li> <li>No response</li> <li>Question 22</li> </ul>   | <ul> <li>Very</li> <li>Question 5</li> <li>Lower my environmental impact: 4</li> <li>Make my home more comfortable: 4</li> <li>Save money on utility bills: 4</li> <li>Improve indoor air quality: 4</li> <li>Question 6</li> <li>Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed</li> <li>Plant shade trees: Completed</li> <li>Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed</li> </ul>  |
| <ul> <li>65+</li> <li>Question 20 <ul> <li>Other - Energy Workshop</li> </ul> </li> <li>Question 21 <ul> <li>No response</li> </ul> </li> <li>Question 22 <ul> <li>No response</li> </ul> </li> </ul> <li>Name not available</li>  | <ul> <li>Very</li> <li>Question 5</li> <li>Lower my environmental impact: 4</li> <li>Make my home more comfortable: 4</li> <li>Save money on utility bills: 4</li> <li>Improve indoor air quality: 4</li> <li>Question 6</li> <li>Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed</li> <li>Change light bulbs to energy-efficient models (LED): Completed</li> </ul>  |
| <ul> <li>65+</li> <li>Question 20 <ul> <li>Other - Energy Workshop</li> </ul> </li> <li>Question 21 <ul> <li>No response</li> </ul> </li> <li>Question 22 <ul> <li>No response</li> </ul> </li> </ul> <li>Name not available</li>  | <ul> <li>Very</li> <li>Question 5</li> <li>Lower my environmental impact: 4</li> <li>Make my home more comfortable: 4</li> <li>Save money on utility bills: 4</li> <li>Improve indoor air quality: 4</li> <li>Question 6</li> <li>Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed</li> <li>Plant shade trees: Completed</li> <li>Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Not interested</li> </ul>   |
| <ul> <li>• 65+</li> <li>Question 20</li> <li>• Other - Energy Workshop</li> <li>Question 21</li> <li>No response</li> <li>Question 22</li> <li>No response</li> <li>Name not available</li> <li>March 27, 2019, 3:25 PM</li> </ul> | <ul> <li>Very</li> <li>Question 5</li> <li>Lower my environmental impact: 4<br/>Make my home more comfortable: 4<br/>Save money on utility bills: 4<br/>Improve indoor air quality: 4</li> <li>Question 6</li> <li>Install a high-efficiency heating and air conditioning system: Completed<br/>Seal air leaks in walls, windows, ducts, etc.: Completed<br/>Install a high-efficiency water heater: Completed</li> <li>Plant shade trees: Completed</li> <li>Change light bulbs to energy-efficient models (LED): Completed</li> <li>Replace appliances with energy-efficient models: Completed</li> <li>Upgrade your home's insulation: Not interested</li> <li>Install solar panels: Completed</li> </ul> |

Advanced energy efficiency requirements for new commercial and residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation

# Question 8

• Yes

Do not own the property: Least important

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

No response

#### **Question 12**

- Exercise
- Save money

#### **Question 13**

Convenience

#### **Question 14**

No response

#### **Question 15**

More bicycle parking

#### **Question 16**

• More sidewalk lighting and safety

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 65+

# **Question 20**

Other - Energy Workshop

#### **Question 21**

No response

#### **Question 22**

No response

# Name not available

March 27, 2019, 3:28 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 1

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Very serious Flooding and more severe rainstorms: Not so serious Drought: Very serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Not interested Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

# **Question 7**

• No

# **Question 8**

| Do not own the property: Least important                         |
|--|
| Cost: Somewhat important   |
| Time and effort: Somewhat important                              |
| Minimal financial or energy savings: More important              |
| Concern upgraded technologies will not perform as well: Somewhat |
| important  |
| Safety issues: Least important                                   |

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never

#### BART: Some of the time

# **Question 11**

No response

# **Question 12**

- Exercise
- Save money

# Question 13

Convenience

#### **Question 14**

No response

#### **Question 15**

Bike Share program

#### **Question 16**

· More stores and services in my neighborhood

# **Question 17**

94568

# **Question 18**

• Own

# Question 19

• 65+

# **Question 20**

Other - Energy Workshop

# **Question 21**

No response

# Question 22

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Name not available

March 27, 2019, 3:30 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 4

# Question 2

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

# **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Very concerned

# **Question 4**

No response

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 2 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed

Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to learn more Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

#### Question 8

Cost: Most important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Want to learn more Adjust timers or install a new water-efficient irrigation system: Want to learn more Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more Modify the length of showers to conserve water: Have done

# **Question 10**

No response

# **Question 11**

No response

# **Question 12**

No response

# **Question 13**

No response

# **Question 14**

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| No response  | Question 2   |
|--|--|
| Question 16  | Increased temperatures and heat waves: Somewhat serious<br>Increased wildfire: Somewhat serious  |
| No response  | Flooding and more severe rainstorms: Not so serious<br>Drought: Very serious<br>Poor air quality: Extremely serious  |
| Question 17  | Foor all quality. Extremely senous   |
| 94568  | Question 3   |
| Question 18  | Public health: Somewhat concerned<br>Homes and property values: Somewhat concerned   |
| • Own  | Well-being of future generations: Very concerned<br>Economic vitality of Dublin community: Somewhat concerned  |
| Question 19  | Public infrastructure: Somewhat concerned  |
| • 65+  | Question 4   |
| Question 20  | Somewhat   |
| Other - Energy Workshop                              | Question 5   |
| Question 21  | Lower my environmental impact: 3<br>Make my home more comfortable: 3   |
| No response  | Save money on utility bills: 4<br>Improve indoor air quality: 3  |
| Question 22  | Question 6   |
| No response  | Install a high-efficiency heating and air conditioning system: Want to do<br>Seal air leaks in walls, windows, ducts, etc.: Want to do   |
| <b>Name not available</b><br>March 27, 2019, 3:33 PM | Install a high-efficiency water heater: Completed<br>Plant shade trees: Want to do<br>Change light bulbs to energy-efficient models (LED): Completed<br>Replace appliances with energy-efficient models: Completed |
| Question 1   | Upgrade your home's insulation: Want to do   |

#### Question 1

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 3 Waste Reduction and Recycling: 4 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 2

# **Question 7**

Install solar panels: Completed

• No

#### **Question 8**

Do not own the property: Least important Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Least important

Install high-efficiency windows (double-paned): Completed

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

No response

#### **Question 12**

• Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my work

#### **Question 14**

• I am unemployed/retired/working from home

# **Question 15**

- More bicycle lanes and trails
- More bicycle parking
- Slower traffic speeds
- Bike Share program

#### **Question 16**

- Higher visibility crosswalks
- More stores and services in my neighborhood

#### Question 17

94568

#### **Question 18**

• Own

# Question 19

• 65+

# **Question 20**

Other - Energy Workshop

# **Question 21**

No response

#### **Question 22**

No response

# Name not available

March 27, 2019, 3:36 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 3 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Very concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Very concerned

#### **Question 4**

Very

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Want to learn more Upgrade your home's insulation: Completed Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Maybe

# **Question 8**

Cost: Most important Time and effort: Most important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

# **Question 9**

Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time BART: Some of the time

#### **Question 11**

No response

#### Question 12

Exercise

# **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety

# **Question 14**

No response

# **Question 15**

Nothing

# **Question 16**

- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- · More stores and services in my neighborhood

# **Question 17**

94568

# Question 18

• Own

# **Question 19**

• 65+

# **Question 20**

Other - Energy Workshop

# **Question 21**

No response

# **Question 22**

No response

# Name not available

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# March 27, 2019, 3:40 PM

# Question 1

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

# Question 2

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Drought: Very serious Poor air quality: Very serious

# **Question 3**

Public health: Somewhat concerned Homes and property values: Extremely concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

# **Question 4**

• Very

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more

Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Yes

# Question 8

Do not own the property: Least important Cost: Least important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Most of the time Bike: Never Bus: Never BART: Some of the time

# Question 11

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Most of the time Bike: Never Bus: Never BART: Some of the time

What should the City of Dublin's priorities be in updating our Climate Action Plan?

|  | Advanced energy efficiency requirements for new commercial and  |
|--|---|
| • Exercise   | residential construction resulting in low energy use for heating, cooling,                                    |
| Save money   | lighting, etc., once occupied: 5  |
| Question 13  | Solar panel installation on residential and commercial buildings: 3   |
| Question 13  | Develop local community solar energy sources by promoting installation  |
| Quickest travel time   | of solar carports, rooftop solar on large commercial business parks, etc.: 4                                  |
| Convenience  | Driverless transportation focused on shared mobility: 1   |
|  | Electric vehicle (EV) charging station infrastructure: 2  |
| Question 14  | Bicycle/Pedestrian infrastructure: 5  |
| No or limited carpooling services available                            | Water Conservation: 5   |
|  | Waste Reduction and Recycling: 4<br>Landscapes and Open Space: 5  |
| Question 15  | Stormwater pollution prevention/creek protection: 4   |
|  | Flood Prevention: 3   |
| Nothing  |   |
|  | Question 2  |
| Question 16  | Increased temperatures and heat waves: Somewhat serious   |
| Nothing  | Increased wildfire: Somewhat serious  |
|  | Flooding and more severe rainstorms: Very serious   |
| Question 17  | Drought: Extremely serious  |
| 94568  | Poor air quality: Extremely serious   |
|  |   |
| Question 18  | Question 3  |
|  | Public health: Somewhat concerned   |
| • Own  | Homes and property values: Not so concerned   |
|  | Well-being of future generations: Very concerned<br>Economic vitality of Dublin community: Somewhat concerned |
| Question 19  | Public infrastructure: Somewhat concerned   |
| • 65+  |   |
|  | Question 4  |
| Question 20  |   |
| Other Freuer Werkeher  | • Very  |
| Other - Energy Workshop  | Oursehiere E  |
| Question 21  | Question 5  |
|  | Lower my environmental impact: 4  |
| No response  | Make my home more comfortable: 1<br>Save money on utility bills: 4  |
|  | Improve indoor air quality: 2   |
| Question 22  |   |
| No response  | Question 6  |
|  | Change light bulbs to energy-efficient models (LED): Completed  |
| Name not available   | Install solar panels: Want to do  |
| March 27, 2019, 3:44 PM  | Install high-efficiency windows (double-paned): Not interested  |
|  |   |
| Question 1   | Question 7  |
| •  | Vee   |
| Energy efficiency upgrades for residential and commercial buildings to | • Yes   |
| reduce a building's energy use for heating, cooling, lighting, etc.: 3 |   |
|  |   |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 8**

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

#### **Question 9**

No response

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time

#### **Question 12**

No response

# **Question 13**

Quickest travel time

#### **Question 14**

No response

#### **Question 15**

No response

# **Question 16**

· More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

# **Question 19**

• 35-54

# **Question 20**

Other - Energy Workshop

# **Question 21**

No response

# **Question 22**

No response

# Name not available

March 27, 2019, 3:46 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Not at all serious Flooding and more severe rainstorms: Not so serious Drought: Somewhat serious Poor air quality: Very serious

# **Question 3**

Public health: Somewhat concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Homes and property values: Somewhat concerned

#### **Question 4**

No response

#### **Question 5**

Save money on utility bills: 2 Improve indoor air quality: 2

#### **Question 6**

Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

# **Question 7**

• No

#### **Question 8**

Cost: Somewhat important Time and effort: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: All of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

# **Question 12**

No response

# **Question 13**

- Quickest travel time
- Convenience

# **Question 14**

No response

#### **Question 15**

- More bicycle lanes and trails
- Slower traffic speeds

#### **Question 16**

No response

# **Question 17**

No response

# **Question 18**

• Own

# **Question 19**

• 35-54

# **Question 20**

No response

# **Question 21**

No response

# **Question 22**

No response

# Name not available

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# March 27, 2019, 3:50 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 Solar panel installation on residential and commercial buildings: 5 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 4 Waste Reduction and Recycling: 3 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Drought: Very serious Poor air quality: Very serious

# **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

# **Question 4**

Slightly

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 2 Save money on utility bills: 4 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Want to do

#### **Question 7**

Yes

# Question 8

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

#### **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: All of the time Bike: Never Bus: Never BART: All of the time

#### **Question 12**

Exercise

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Quickest travel time   | Develop local community solar energy sources by promoting installation  |
|--|---|
| Convenience  | of solar carports, rooftop solar on large commercial business parks, etc.:                                      |
| Feeling of greater safety  | 4<br>Duiverlage transmertation forward on charad machility 2  |
|  | Driverless transportation focused on shared mobility: 2   |
| Question 14  | Electric vehicle (EV) charging station infrastructure: 2  |
| Question 14  | Bicycle/Pedestrian infrastructure: 3<br>Water Conservation: 5   |
| No response  |   |
|  | Waste Reduction and Recycling: 5<br>Landscapes and Open Space: 4  |
| Question 15  | Stormwater pollution prevention/creek protection: 4   |
|  | Flood Prevention: 1   |
| Nothing  |   |
|  |   |
| Question 16  | Question 2  |
|  | Increased temperatures and heat waves: Extremely serious  |
| No response  | Increased wildfire: Extremely serious   |
|  | Flooding and more severe rainstorms: Somewhat serious   |
| Question 17  | Drought: Extremely serious  |
| 94568  | Poor air quality: Very serious  |
| 34300  |   |
|  | Question 3  |
| Question 18  | •   |
| • Own  | Public health: Extremely concerned  |
| • Gwil   | Homes and property values: Not so concerned   |
|  | Well-being of future generations: Extremely concerned   |
| Question 19  | Economic vitality of Dublin community: Not so concerned   |
| • 35-54  | Public infrastructure: Not so concerned   |
| 33 34  |   |
| Question 20  | Question 4  |
| Question 20  |   |
| No response  | • Very  |
|  |   |
| Question 21  | Question 5  |
|  | Lower my environmental impact: 4  |
| No response  | Make my home more comfortable: 3  |
|  | Save money on utility bills: 2  |
| Question 22  | Improve indoor air quality: 1   |
| No response  |   |
|  | Question 6  |
|  |   |
| Name not available   | Install a high-efficiency heating and air conditioning system: Not<br>interested                                |
| March 27, 2019, 3:53 PM  |   |
| ,,   | Seal air leaks in walls, windows, ducts, etc.: Want to do<br>Install a high-efficiency water heater: Want to do |
| Our other 1  | Plant shade trees: Completed  |
| Question 1   | Change light bulbs to energy-efficient models (LED): Completed  |
| Energy efficiency upgrades for residential and commercial buildings to     | Replace appliances with energy-efficient models: Completed  |
| reduce a building's energy use for heating, cooling, lighting, etc.: 5     | Upgrade your home's insulation: Completed   |
| Advanced energy efficiency requirements for new commercial and             | Install solar panels: Want to do  |
| residential construction resulting in low energy use for heating, cooling, | Install high-efficiency windows (double-paned): Not interested  |
| lighting at a appa accuriad. F   |   |

# **Question 7**

Solar panel installation on residential and commercial buildings: 4

lighting, etc., once occupied: 5

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Maybe

# **Question 8**

Do not own the property: Least important Cost: More important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

# **Question 11**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Most of the time Bike: Never Bus: Never BART: Never

#### **Question 12**

| <ul><li>Exercise</li><li>Reduce my impact on the environment</li></ul> | Energy efficiency upgrades for residential and commercial buildings reduce a building's energy use for heating, cooling, lighting, etc.: 3<br>Advanced energy efficiency requirements for new commercial and           |
|--|--|
| Question 13  | residential construction resulting in low energy use for heating, cool lighting, etc., once occupied: 3  |
| <ul><li> Quickest travel time</li><li> Convenience</li></ul>           | Solar panel installation on residential and commercial buildings: 3<br>Develop local community solar energy sources by promoting installa<br>of solar carports, rooftop solar on large commercial business parks,<br>3 |
| Question 14  | 5<br>Driverless transportation focused on shared mobility: 1<br>Electric vehicle (EV) charging station infrastructure: 2   |

# Other - I walk to work

# **Question 15**

- More bicycle lanes and trails
- · More bicycle parking

# **Question 16**

· More stores and services in my neighborhood

#### **Question 17**

94568

# **Question 18**

• Own

# **Ouestion 19**

35-54

# **Question 20**

Other - Energy Workshop

# **Question 21**

No response

# **Question 22**

No response

# Name not available

March 27, 2019, 3:56 PM

# **Question 1**

gs to oling, Illation s, etc.:

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 4 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 4

# **Question 2**

Increased temperatures and heat waves: Not so serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Drought: Extremely serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Somewhat concerned Homes and property values: Very concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

# **Question 4**

Very

# **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Want to learn more Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to learn more Upgrade your home's insulation: Want to learn more Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Yes

# **Question 8**

Do not own the property: Least important

Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

# **Question 12**

• I don't walk or bike for non-commute travel

# Question 13

- Quickest travel time
- Convenience

# **Question 14**

• Other - Don't want to

# **Question 15**

Nothing

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## **Question 16**

- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks

## **Question 17**

94568

## **Question 18**

• Own

## Question 19

• 35-54

## **Question 20**

• Other - Energy Workshop

## **Question 21**

No response

## **Question 22**

No response

# Name not available

March 27, 2019, 4:03 PM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 3 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4

## Flood Prevention: 5

## **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Very serious Drought: Somewhat serious Poor air quality: Very serious

## **Question 3**

Public health: Not so concerned Homes and property values: Not so concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Not so concerned

## **Question 4**

Very

## **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 2 Save money on utility bills: 2 Improve indoor air quality: 2

## **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

## **Question 7**

• No

## **Question 8**

Cost: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: More important Safety issues: Least important

## **Question 9**

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Want to do

## **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

## **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

No response

#### **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

• No or limited carpooling services available

## **Question 15**

- More bicycle lanes and trails
- Slower traffic speeds

## **Question 16**

• Higher visibility crosswalks

## **Question 17**

94568

## Question 18

• Own

## Question 19

• 55-64

## **Question 20**

Other - Energy Workshop

## **Question 21**

No response

## **Question 22**

No response

## Name not shown

March 27, 2019, 6:50 PM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 4

## **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Very serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## **Question 3**

Public health: Very concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

## **Question 4**

Very

## **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

## **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

## **Question 7**

Maybe

## Question 8

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Most important Safety issues: More important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done

Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more

Modify the length of showers to conserve water: Have done

## Question 10

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

## **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Some of the time

## **Question 12**

- Exercise
- · Reduce my impact on the environment

## **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my home
- Public transit is not close enough to my work
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

## Question 14

- No or limited carpooling services available
- · I need a car to drop off/pick up family members

## **Question 15**

- More bicycle lanes and trails
- More bicycle parking

## **Question 16**

- Wider sidewalks
- · More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### • More stores and services in my neighborhood

More shaded sidewalks

## **Question 17**

94568

## Question 18

• Own

## **Question 19**

• 35-54

## Question 20

• Peachjar

## **Question 21**

Plant more trees.

## **Question 22**

No response

## Name not available

March 29, 2019, 7:38 AM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 2

## **Question 2**

Increased temperatures and heat waves: Not so serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Not so serious Drought: Somewhat serious Poor air quality: Not so serious

## **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

## **Question 4**

No response

## **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 2 Save money on utility bills: 2 Improve indoor air quality: 2

## **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Not interested Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Want to learn more

## **Question 7**

• Maybe

## **Question 8**

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

## **Question 9**

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Not interested

Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

| Question 10   | <b>Name not available</b><br>March 29, 2019, 7:40 AM  |
|---|---|
| No response   |   |
| Question 11   | Question 1  |
| No response   | Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 1<br>Advanced energy efficiency requirements for new commercial and   |
| Question 12   | residential construction resulting in low energy use for heating, cooling,  |
| No response   | lighting, etc., once occupied: 1<br>Solar panel installation on residential and commercial buildings: 1<br>Deviate local community color energy courses by promoting installation   |
| Question 13   | Develop local community solar energy sources by promoting installation<br>of solar carports, rooftop solar on large commercial business parks, etc.:  |
| No response   | 2<br>Driverless transportation focused on shared mobility: 3  |
| Question 14   | Electric vehicle (EV) charging station infrastructure: 2<br>Bicycle/Pedestrian infrastructure: 3  |
| No response   | Water Conservation: 2<br>Waste Reduction and Recycling: 2   |
|   | Landscapes and Open Space: 2  |
| Question 15   | Stormwater pollution prevention/creek protection: 2   |
| No response   | Flood Prevention: 3   |
|   |   |
| Question 16   | Question 2  |
| Question 16<br>No response  | Increased temperatures and heat waves: Extremely serious  |
|   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious   |
|   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious   |
| No response   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious   |
| No response Question 17   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious<br>Drought: Very serious  |
| No response<br>Question 17<br>94568   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious<br>Drought: Very serious<br>Poor air quality: Very serious<br><b>Question 3</b><br>Public health: Very concerned  |
| No response Question 17 94568 Question 18   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious<br>Drought: Very serious<br>Poor air quality: Very serious<br><b>Question 3</b><br>Public health: Very concerned<br>Homes and property values: Somewhat concerned   |
| No response Question 17 94568 Question 18   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious<br>Drought: Very serious<br>Poor air quality: Very serious<br><b>Question 3</b><br>Public health: Very concerned  |
| No response Question 17 94568 Question 18 • Own   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious<br>Drought: Very serious<br>Poor air quality: Very serious<br><b>Question 3</b><br>Public health: Very concerned<br>Homes and property values: Somewhat concerned<br>Well-being of future generations: Very concerned   |
| No response Question 17 94568 Question 18 Own Question 19   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious<br>Drought: Very serious<br>Poor air quality: Very serious<br><b>Question 3</b><br>Public health: Very concerned<br>Homes and property values: Somewhat concerned<br>Well-being of future generations: Very concerned<br>Economic vitality of Dublin community: Very concerned  |
| No response Question 17 94568 Question 18 Own Question 19 • 55-64   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious<br>Drought: Very serious<br>Poor air quality: Very serious<br><b>Question 3</b><br>Public health: Very concerned<br>Homes and property values: Somewhat concerned<br>Well-being of future generations: Very concerned<br>Economic vitality of Dublin community: Very concerned<br>Public infrastructure: Very concerned |
| No response           Question 17           94568           Question 18           • Own           Question 19           • 55-64           Question 20 | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Mudslide/landslide: Somewhat serious<br>Drought: Very serious<br>Poor air quality: Very serious<br><b>Question 3</b><br>Public health: Very concerned<br>Homes and property values: Somewhat concerned<br>Well-being of future generations: Very concerned<br>Economic vitality of Dublin community: Very concerned<br>Public infrastructure: Very concerned |

No response

**Question 22** 

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 3

## **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Want to learn more Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Completed

Upgrade your home's insulation: Want to do Install solar panels: Want to do

Install high-efficiency windows (double-paned): Completed

## **Question 7**

• Yes

## **Question 8**

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

## **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

## **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

## **Question 11**

No response

## **Question 12**

## Exercise

## **Question 13**

- Quickest travel time
- Convenience

## **Question 14**

- I am unemployed/retired/working from home
- Other Work at home

## **Question 15**

No response

## **Question 16**

· More stores and services in my neighborhood

## **Question 17**

94568

## Question 18

• Own

## Question 19

• 55-64

## Question 20

Other - Energy Workshop

## **Question 21**

No response

## **Question 22**

No response

# Name not available

March 29, 2019, 7:43 AM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 3

#### **Question 2**

No response

## **Question 3**

No response

#### **Question 4**

Somewhat

#### **Question 5**

No response

## **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Want to do

## **Question 7**

• No

## **Question 8**

Do not own the property: Somewhat important Cost: Least important Time and effort: Least important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: More important Safety issues: More important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Want to do

## **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

## **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

## Question 12

- Exercise
- Save money

## Question 13

· Quickest travel time

#### **Question 14**

• Other - Commute is 1.9 miles

## **Question 15**

• More bicycle lanes and trails

## **Question 16**

Nothing

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 17**

94568

## **Question 18**

• Own

## **Question 19**

• 55-64

## Question 20

Other - Energy Workshop

## **Question 21**

No response

## Question 22

No response

## Name not available

March 29, 2019, 7:46 AM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

## **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Very serious Mudslide/landslide: Not so serious Drought: Extremely serious Poor air quality: Somewhat serious

## **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

## **Question 4**

No response

## **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 1

## **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Not interested Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

## Question 7

Maybe

## **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

## Question 10

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Some of the time

## **Question 12**

Exercise

## **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

• I am unemployed/retired/working from home

## **Question 15**

- Shorter distance from my home to my destination
- More bicycle lanes and trails

#### **Question 16**

· More stores and services in my neighborhood

#### **Question 17**

94568

#### **Question 18**

• Own

## **Question 19**

• 55-64

## **Question 20**

Other - Energy Workshop

## **Question 21**

Provide significant incentives for individual solar panels.

## **Question 22**

No response

# Name not available

March 29, 2019, 7:49 AM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 2 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1 Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 1 Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 1 Waste Reduction and Recycling: 1 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 3

## **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Drought: Very serious Poor air quality: Very serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Public infrastructure: Somewhat concerned

## **Question 4**

Very

## **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

## **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to learn more Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

## **Question 7**

• Yes

## **Question 8**

Cost: Most important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: More important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

## **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Never

## Bus: Never BART: Some of the time

## **Question 11**

Personal Car: All of the time

## Question 12

No response

## **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my work

## **Question 14**

- No or limited carpooling services available
- I am unemployed/retired/working from home

## **Question 15**

Other - Better fitness

## **Question 16**

More shaded sidewalks

## **Question 17**

94568

## Question 18

• Own

## **Question 19**

• 55-64

## Question 20

Other - Energy Workshop

## **Question 21**

Make recycled water accessible

## **Question 22**

What should the City of Dublin's priorities be in updating our Climate Action Plan?

No response

## Name not available

March 29, 2019, 2:43 PM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 4

## **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not at all serious Drought: Somewhat serious Poor air quality: Not at all serious

## **Question 3**

Public health: Very concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Very concerned

## **Question 4**

Somewhat

## **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 2 Improve indoor air quality: 2

## **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Not interested Install solar panels: Not interested Install high-efficiency windows (double-paned): Want to learn more

## **Question 7**

Yes

## **Question 8**

Do not own the property: Least important Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Somewhat important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

## **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Never

## **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## **Question 12**

• Exercise

## **Question 13**

- Quickest travel time
- Convenience

## **Question 14**

• I am unemployed/retired/working from home

## **Question 15**

More bicycle lanes and trails

## **Question 16**

- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings

## **Question 17**

94568

## **Question 18**

• Own

## **Question 19**

• 55-64

## Question 20

Other - Energy Workshop

## **Question 21**

Very excited about Re San Ramon repair of the Re bike/walking pair

## **Question 22**

No response

## Name not available

March 29, 2019, 2:48 PM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation

of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

## **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Drought: Very serious Poor air quality: Somewhat serious

## **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### Question 4

Somewhat

## **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 2 Save money on utility bills: 4 Improve indoor air quality: 4

## **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Upgrade your home's insulation: Not interested<br>Install solar panels: Completed<br>Install high-efficiency windows (double-paned): Completed | <b>Question 17</b><br>94568 |
|--|-----------------------------|
| Question 7   | Question 18                 |
| No response  | • Own                       |
| Question 8   | Question 19                 |
| Cost: Least important<br>Time and effort: Least important  | • 55-64                     |
| Minimal financial or energy savings: Somewhat important  | Question 20                 |
| Concern upgraded technologies will not perform as well: Most important<br>Safety issues: More important  | No response                 |
| Question 9   | Question 21                 |
| Install water-conserving faucets and showerheads: Have done<br>Replace older toilets with a new low-flow model: Have done                      | Give out free storage       |
| Adjust timers or install a new water-efficient irrigation system: Have done<br>Modify the length of showers to conserve water: Have done       | Question 22                 |
| moully the length of showers to conserve water. Have done  | No response                 |
| Question 10  |                             |
| Personal Car: All of the time  | Name not availa             |
| Question 11  | March 29, 2019,             |
| Personal Car: Some of the time   | Question 1                  |
| Carpool: All of the time   | Energy efficiency up        |

## **Question 12**

No response

## **Question 13**

• Public transit is not close enough to my home

• Public transit is not close enough to my work

#### **Question 14**

No response

## **Question 15**

· Shorter distance from my home to my destination

## **Question 16**

• Higher visibility crosswalks

Other - Energy Workshop

ge batteries to solar customers

## lable

, 2:51 PM

pgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 4

Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 2 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 3 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 2

## **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Drought: Very serious Poor air quality: Very serious

## **Question 3**

Public health: Extremely concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

## **Question 4**

Very

## **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

## **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Not interested Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Completed Install high-efficiency windows (double-paned): Not interested

## **Question 7**

Maybe

## **Question 8**

Cost: Most important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: Most important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

## **Question 10**

Personal Car: All of the time Walk: Some of the time Bus: Some of the time

## Question 11

Personal Car: All of the time Walk: All of the time BART: All of the time

## **Question 12**

No response

## **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my home

## **Question 14**

Other - BART more convenient, flexibility of time to get to work and leave

## **Question 15**

More bicycle parking

## **Question 16**

Other - Drivers are too aggressive at some crosswalks

## **Question 17**

No response

## **Question 18**

• Own

#### **Question 19**

• 55-64

## **Question 20**

Other - Energy Workshop

## **Question 21**

| Too much urban sprawl  | Question 8                |
|--|---------------------------|
| Question 22  | No response               |
| No response  | Question 9                |
|  | No response               |
| Name not available   | ·                         |
| March 29, 2019, 2:53 PM  | Question 10               |
|  | No response               |
| Question 1   | Question 11               |
| Energy efficiency upgrades for residential and commercial buildings to<br>reduce a building's energy use for heating, cooling, lighting, etc.: 5<br>Advanced energy efficiency requirements for new commercial and | No response               |
| residential construction resulting in low energy use for heating, cooling,<br>lighting, etc., once occupied: 4   | Question 12               |
| Solar panel installation on residential and commercial buildings: 5<br>Develop local community solar energy sources by promoting installation  | No response               |
| of solar carports, rooftop solar on large commercial business parks, etc.: 5   | Question 13               |
| Driverless transportation focused on shared mobility: 5<br>Electric vehicle (EV) charging station infrastructure: 5  | No response               |
| Bicycle/Pedestrian infrastructure: 5   | Question 14               |
| Water Conservation: 4<br>Waste Reduction and Recycling: 5<br>Landscapes and Open Space: 4  | No response               |
| Stormwater pollution prevention/creek protection: 5  | Question 15               |
| Flood Prevention: 5  | No response               |
| Question 2   | Question 16               |
| No response  | No response               |
| Question 2   | ·                         |
| Question 3   | Question 17               |
| No response  | No response               |
| Question 4   | Question 18               |
| No response  | No response               |
| Question 5   |                           |
| -<br>No response   | Question 19               |
|  | No response               |
| Question 6   | Question 20               |
| No response  | • Other - Library tabling |
| Question 7   |                           |
| No response  | Question 21               |

| No response   | Question 8              |
|---|-------------------------|
| Quality 22  | No response             |
| Question 22   |                         |
| No response   | Question 9              |
|   | No response             |
| Name not available  |                         |
| March 29, 2019, 2:54 PM   | Question 10             |
|   | No response             |
| Question 1  |                         |
| Energy efficiency upgrades for residential and commercial buildings to  | Question 11             |
| reduce a building's energy use for heating, cooling, lighting, etc.: 4  | No response             |
| Advanced energy efficiency requirements for new commercial and  |                         |
| residential construction resulting in low energy use for heating, cooling,  | Question 12             |
| lighting, etc., once occupied: 5<br>Solar panel installation on residential and commercial buildings: 4             | No response             |
| Develop local community solar energy sources by promoting installation  |                         |
| of solar carports, rooftop solar on large commercial business parks, etc.:  | Question 13             |
| 4<br>Driverlage transportation featured on shared mobility 4  | No response             |
| Driverless transportation focused on shared mobility: 4<br>Electric vehicle (EV) charging station infrastructure: 5 | noresponse              |
| Bicycle/Pedestrian infrastructure: 5  | Question 14             |
| Water Conservation: 5   | -                       |
| Waste Reduction and Recycling: 5  | No response             |
| Landscapes and Open Space: 5<br>Stormwater pollution prevention/creek protection: 4                                 | Question 15             |
| Flood Prevention: 4   | Question 15             |
|   | No response             |
| Question 2  | 0 11 10                 |
| No response   | Question 16             |
|   | No response             |
| Question 3  |                         |
| -<br>No response  | Question 17             |
|   | No response             |
| Question 4  |                         |
| -<br>No response  | Question 18             |
| no response   | No response             |
| Question 5  |                         |
| -<br>No response  | Question 19             |
| no response   | No response             |
| Ouestion 6  |                         |
| -<br>No response  | Question 20             |
| No response   | Other - Library tabling |
| Question 7  |                         |
|   | Question 21             |
| No response   |                         |

| No response   | Question 8                |
|---|---------------------------|
|   | No response               |
| Question 22   |                           |
| No response   | Question 9                |
|   | No response               |
| Name not available  |                           |
| March 29, 2019, 2:55 PM   | Question 10               |
|   | No response               |
| Question 1  |                           |
| Energy efficiency upgrades for residential and commercial buildings to  | Question 11               |
| reduce a building's energy use for heating, cooling, lighting, etc.: 5<br>Advanced energy efficiency requirements for new commercial and      | No response               |
| residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3                                   | Question 12               |
| Solar panel installation on residential and commercial buildings: 3<br>Develop local community solar energy sources by promoting installation | No response               |
| of solar carports, rooftop solar on large commercial business parks, etc.: 5  | Question 13               |
| Driverless transportation focused on shared mobility: 3<br>Electric vehicle (EV) charging station infrastructure: 4                           | No response               |
| Bicycle/Pedestrian infrastructure: 5  | Question 14               |
| Water Conservation: 4   | No response               |
| Waste Reduction and Recycling: 3<br>Landscapes and Open Space: 3  |                           |
| Stormwater pollution prevention/creek protection: 3   | Question 15               |
| Flood Prevention: 3   | No response               |
|   |                           |
| Question 2  | Question 16               |
| No response   | No response               |
| Question 3  | Question 17               |
| No response   | -                         |
|   | No response               |
| Question 4  | Question 18               |
| No response   | No response               |
| Question 5  | 0                         |
| No response   | Question 19               |
|   | No response               |
| Question 6  | Question 20               |
| No response   | • Other - Library tabling |
| Question 7  | Question 21               |
| No response   | Question 21               |

| No response   | Question 6   |
|---|--------------|
| Question 22   | No response  |
| No response   | Question 7   |
|   | No response  |
| Name not available  |              |
| March 29, 2019, 2:56 PM   | Question 8   |
| Question 1  | No response  |
| Energy efficiency upgrades for residential and commercial buildings to  | Question 9   |
| reduce a building's energy use for heating, cooling, lighting, etc.: 5<br>Advanced energy efficiency requirements for new commercial and      | No response  |
| residential construction resulting in low energy use for heating, cooling,<br>lighting, etc., once occupied: 2                                | Question 10  |
| Solar panel installation on residential and commercial buildings: 5<br>Develop local community solar energy sources by promoting installation | No response  |
| of solar carports, rooftop solar on large commercial business parks, etc.:<br>3   | Question 11  |
| Driverless transportation focused on shared mobility: 5<br>Electric vehicle (EV) charging station infrastructure: 5                           | No response  |
| Bicycle/Pedestrian infrastructure: 3<br>Water Conservation: 3   | Question 12  |
| Water Conservation: 5<br>Waste Reduction and Recycling: 3<br>Landscapes and Open Space: 5   | No response  |
| Stormwater pollution prevention/creek protection: 3   | Question 13  |
| Flood Prevention: 2   | No response  |
| Question 2  |              |
| Increased temperatures and heat waves: Somewhat serious   | Question 14  |
| Increased wildfire: Very serious  | No response  |
| Flooding and more severe rainstorms: Somewhat serious   | Outpution 1E |
| Drought: Extremely serious<br>Poor air quality: Extremely serious   | Question 15  |
|   | No response  |
| Question 3  | Question 16  |
| Public health: Very concerned   | No response  |
| Homes and property values: Extremely concerned<br>Well-being of future generations: Extremely concerned                                       |              |
| Economic vitality of Dublin community: Extremely concerned  | Question 17  |
| Public infrastructure: Somewhat concerned   | No response  |
| Question 4  | Question 18  |
| • Somewhat  | No response  |
| Question 5  | Question 19  |
| No response   | No response  |
|   |              |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 20**

Other - Library tabling

## **Question 21**

No response

#### **Question 22**

No response

## Name not available

March 29, 2019, 2:57 PM

## **Question 1**

| Energy efficiency upgrades for residential and commercial buildings to<br>reduce a building's energy use for heating, cooling, lighting, etc.: 5<br>Advanced energy efficiency requirements for new commercial and<br>residential construction resulting in low energy use for heating, cooling,<br>lighting, etc., once occupied: 5<br>Solar panel installation on residential and commercial buildings: 2<br>Develop local community solar energy sources by promoting installation<br>of solar carports, rooftop solar on large commercial business parks, etc.:<br>5 |
|--|
| Driverless transportation focused on shared mobility: 5  |
| Electric vehicle (EV) charging station infrastructure: 3   |
| Bicycle/Pedestrian infrastructure: 4   |
| Water Conservation: 5  |
| Waste Reduction and Recycling: 3   |
|  |
| Landscapes and Open Space: 3   |
| Stormwater pollution prevention/creek protection: 2  |
| Flood Prevention: 1  |
|  |
| Question 2   |
| Increased temperatures and heat waves: Not so serious  |
| Increased wildfire: Extremely serious  |
| Flooding and more severe rainstorms: Not at all serious  |
| Drought: Extremely serious   |
|  |
| Poor air quality: Not so serious   |
|  |

## **Question 3**

Public health: Not so concerned Homes and property values: Extremely concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

## **Question 4**

Somewhat

## **Question 5**

No response

**Question 6** 

No response

#### **Question 7**

No response

#### **Question 8**

No response

#### **Question 9**

No response

## **Question 10**

No response

## **Question 11**

No response

#### **Question 12**

No response

## Question 13

No response

# Question 14

## **Question 15**

No response

## **Question 16**

No response

# Question 17

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 18**

No response

## **Question 19**

No response

## **Question 20**

Other - Library tabling

## **Question 21**

No response

## Question 22

No response

## Name not available

March 29, 2019, 3:00 PM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

## **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

## **Question 3**

Public health: Not so concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

## **Question 4**

Somewhat

## **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

## **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

## **Question 7**

• No

## **Question 8**

Cost: More important Time and effort: Least important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

## **Question 9**

Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Not interested

## **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time

| Walk: Never   | Question 21  |
|---|--|
| Bike: Never   | No response  |
| Bus: Never  | ite response   |
| BART: Never   | Question 22  |
| Question 11   | No response  |
| Personal Car: All of the time                                   |  |
| Lyft/Uber: Never  |  |
| Carpool: Never  | Name not available   |
| Walk: Never   | March 29, 2019, 3:01 PM  |
| Bike: Never   |  |
| Bus: Never  | Outotion 1   |
| BART: Some of the time  | Question 1   |
|   | Energy efficiency upgrades for residential and commercial buildings to     |
| Question 12   | reduce a building's energy use for heating, cooling, lighting, etc.: 5     |
| Question 12   | Advanced energy efficiency requirements for new commercial and             |
| Exercise  | residential construction resulting in low energy use for heating, cooling, |
| Less stressful  | lighting, etc., once occupied: 5   |
|   | Solar panel installation on residential and commercial buildings: 5        |
| Our other 12  | Develop local community solar energy sources by promoting installation     |
| Question 13   | of solar carports, rooftop solar on large commercial business parks, etc.: |
| Quickest travel time  | 3  |
| •   | Driverless transportation focused on shared mobility: 3                    |
| Convenience   | Electric vehicle (EV) charging station infrastructure: 5                   |
|   | Bicycle/Pedestrian infrastructure: 5                                       |
| Question 14   | Water Conservation: 3  |
| Nie zwiiweiten enweneiwe enwinen evolutie                       | Waste Reduction and Recycling: 3   |
| <ul> <li>No or limited carpooling services available</li> </ul> | Landscapes and Open Space: 2   |
|   | Stormwater pollution prevention/creek protection: 3                        |
| Question 15   | Flood Prevention: 3  |
| Nothing   | Question 2   |
|   | Increased temperatures and heat waves: Very serious                        |
| Question 16   | Increased wildfire: Extremely serious                                      |
| Nothing   | Flooding and more severe rainstorms: Somewhat serious                      |
| Nothing   | Mudslide/landslide: Somewhat serious                                       |
| Our other 17  | Poor air quality: Very serious   |
| Question 17   |  |
| 94568   | Question 3   |
|   | Public health: Very concerned  |
| Question 18   | Homes and property values: Not so concerned                                |
| - Our   | Well-being of future generations: Somewhat concerned                       |
| • Own   | Economic vitality of Dublin community: Not so concerned                    |
|   | Public infrastructure: Somewhat concerned                                  |
| Question 19   |  |
| No response   | Question 4   |
| - ···   | -  |
| Question 20   | • Somewhat   |
| Other - library tabling   | Question 5   |

| No response  | Question 19   |
|--------------|---|
|              | No response   |
| Question 6   |   |
| No response  | Question 20   |
|              |   |
| Question 7   | Other - Library tabling   |
|              |   |
| No response  | Question 21   |
| Quality Q    | No response   |
| Question 8   |   |
| No response  | Question 22   |
|              | No response   |
| Question 9   |   |
| No response  |   |
|              | Name not available  |
| Question 10  | March 29, 2019, 3:03 PM   |
| No response  |   |
|              | Question 1  |
| Question 11  | Energy efficiency upgrades for residential and commercial buildings to                                      |
| -            | reduce a building's energy use for heating, cooling, lighting, etc.: 4                                      |
| No response  | Advanced energy efficiency requirements for new commercial and  |
| Outstien 12  | residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 |
| Question 12  | Solar panel installation on residential and commercial buildings: 5   |
| No response  | Develop local community solar energy sources by promoting installation                                      |
|              | of solar carports, rooftop solar on large commercial business parks, etc.:                                  |
| Question 13  | 3   |
| No response  | Driverless transportation focused on shared mobility: 5   |
|              | Electric vehicle (EV) charging station infrastructure: 4<br>Bicycle/Pedestrian infrastructure: 3            |
| Question 14  | Water Conservation: 5   |
|              | Waste Reduction and Recycling: 3  |
| No response  | Landscapes and Open Space: 4  |
| Our other 15 | Stormwater pollution prevention/creek protection: 4   |
| Question 15  | Flood Prevention: 3   |
| No response  |   |
|              | Question 2  |
| Question 16  | No response   |
| No response  |   |
|              | Question 3  |
| Question 17  | Public health: Very concerned   |
| No response  | Homes and property values: Very concerned   |
|              | Well-being of future generations: Extremely concerned   |
| Question 18  | Economic vitality of Dublin community: Very concerned   |
|              | Public infrastructure: Somewhat concerned   |
| No response  | Question 4  |
|              | Question 4  |

|             | Question 18   |
|-------------|---|
| • Very      | No response   |
| Question 5  |   |
| No response | Question 19   |
|             | No response   |
| Question 6  |   |
| No response | Question 20   |
| Question 7  | Other - Library tabling   |
| No response | Question 21   |
|             | No response   |
| Question 8  |   |
| No response | Question 22   |
| Question 9  | No response   |
| No response |   |
| Noresponse  | Name not available  |
| Question 10 | March 29, 2019, 3:05 PM   |
| No response | Question 1  |
|             | Energy efficiency upgrades for residential and commercial buildings to  |
| Question 11 | reduce a building's energy use for heating, cooling, lighting, etc.: 4  |
| No response | Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling,     |
| Question 12 | lighting, etc., once occupied: 5  |
| No response | Solar panel installation on residential and commercial buildings: 5<br>Develop local community solar energy sources by promoting installation |
|             | of solar carports, rooftop solar on large commercial business parks, etc.:  |
| Question 13 | 4<br>Driverless transportation focused on shared mobility: 1  |
| No response | Electric vehicle (EV) charging station infrastructure: 4  |
| Question 14 | Bicycle/Pedestrian infrastructure: 5<br>Water Conservation: 5   |
| No response | Waste Reduction and Recycling: 5  |
|             | Landscapes and Open Space: 5<br>Stormwater pollution prevention/creek protection: 5   |
| Question 15 | Flood Prevention: 3   |
| No response |   |
| Question 16 | Question 2  |
| Question 16 | No response   |
| No response | Question 3  |
| Question 17 | Public health: Very concerned   |
| No response | Homes and property values: Somewhat concerned   |
|             | Well-being of future generations: Extremely concerned   |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Economic vitality of Dublin community: Very concerned<br>Public infrastructure: Somewhat concerned | Question 17<br>No response   |
|--|--|
| Question 4   | Question 18  |
| • Very   | No response  |
| Question 5   | Question 19  |
| No response  | No response  |
| Question 6   | Question 20  |
| No response  | Other - Library tabling  |
| Question 7   | Question 21  |
| No response  | No response  |
| Question 8   | Question 22  |
| No response  | No response  |
| Question 9   |  |
| No response  | Name not available<br>March 29, 2019, 3:09 PM  |
| Question 10  |  |
| No response  | <b>Question 1</b><br>Energy efficiency upgrades for residential and commercial buildings to  |
| Question 11  | reduce a building's energy use for heating, cooling, lighting, etc.: 3<br>Advanced energy efficiency requirements for new commercial and             |
| No response  | residential construction resulting in low energy use for heating, cooling,   |
| Question 12  | lighting, etc., once occupied: 5<br>Solar panel installation on residential and commercial buildings: 4  |
| No response  | Develop local community solar energy sources by promoting installation<br>of solar carports, rooftop solar on large commercial business parks, etc.: |
| Question 13  | 3<br>Driverless transportation focused on shared mobility: 3   |
| No response  | Electric vehicle (EV) charging station infrastructure: 3<br>Bicycle/Pedestrian infrastructure: 4   |
| Question 14  | Water Conservation: 4<br>Waste Reduction and Recycling: 3  |
| No response  | Landscapes and Open Space: 3<br>Stormwater pollution prevention/creek protection: 3  |
| Question 15  | Flood Prevention: 3  |
| No response  | Question 2   |
| Question 16  | Increased temperatures and heat waves: Very serious<br>Increased wildfire: Very serious  |
| No response  | Flooding and more severe rainstorms: Not so serious  |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Drought: Very serious Poor air quality: Somewhat serious

## **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

## **Question 4**

Very

## **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 2 Improve indoor air quality: 2

## **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to learn more Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

## **Question 7**

• Yes

## **Question 8**

Cost: More important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

## Question 10

Personal Car: All of the time

## **Question 11**

Personal Car: All of the time

## **Question 12**

- Exercise
- · Reduce my impact on the environment

## **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my home
- Public transit is not close enough to my work
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

## **Question 14**

• No or limited carpooling services available

#### **Question 15**

- · Shorter distance from my home to my destination
- More bicycle parking

## Question 16

- · Wider sidewalks
- More shaded sidewalks

## **Question 17**

94568

## **Question 18**

• Own

## Question 19

• 35-54

## **Question 20**

Other - Library tabling

| Question 21   | No response  |
|---|--------------|
| No response   | Question 6   |
| Question 22   | No response  |
| No response   |              |
|   | Question 7   |
| Name not available  | No response  |
| March 29, 2019, 3:10 PM   | Question 8   |
|   | •            |
| Question 1  | No response  |
| Energy efficiency upgrades for residential and commercial buildings to educe a building's energy use for heating, cooling, lighting, etc.: 5                | Question 9   |
| Advanced energy efficiency requirements for new commercial and esidential construction resulting in low energy use for heating, cooling,                    | No response  |
| ighting, etc., once occupied: 4<br>Solar panel installation on residential and commercial buildings: 4  | Question 10  |
| Develop local community solar energy sources by promoting installation<br>of solar carports, rooftop solar on large commercial business parks, etc.         |              |
|   | Question 11  |
| Driverless transportation focused on shared mobility: 2<br>Electric vehicle (EV) charging station infrastructure: 4<br>Bicycle/Pedestrian infrastructure: 4 | No response  |
| Vater Conservation: 4   | Question 12  |
| Vaste Reduction and Recycling: 5<br>.andscapes and Open Space: 5  | No response  |
| Stormwater pollution prevention/creek protection: 4   | Question 17  |
| lood Prevention. 1  | Question 13  |
| Question 2  | No response  |
| ncreased temperatures and heat waves: Very serious  | Question 14  |
| ncreased wildfire: Very serious<br>Flooding and more severe rainstorms: Somewhat serious  | No response  |
| Drought: Extremely serious<br>Poor air quality: Somewhat serious  | Question 15  |
| oor an quanty. Somewhat schous  | No response  |
| Question 3  | 110 10000130 |
| Public health: Very concerned   | Question 16  |
| Homes and property values: Not so concerned<br>Vell-being of future generations: Somewhat concerned   | No response  |
| Economic vitality of Dublin community: Not at all concerned<br>Public infrastructure: Somewhat concerned  | Question 17  |
|   | No response  |
| Question 4  |              |
| • Very  | Question 18  |
| Y OLY   |              |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 19**

No response

## **Question 20**

Other - Library tabling

## **Question 21**

No response

## **Question 22**

No response

## Name not available

March 29, 2019, 3:11 PM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 5 Waste Reduction and Recycling: 4 Landscapes and Open Space: 1 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2 **Question 2** Increased temperatures and heat waves: Somewhat serious Increased wildfire: Not at all serious Flooding and more severe rainstorms: Not so serious **Drought: Extremely serious** Poor air quality: Very serious

## **Question 3**

Public health: Somewhat concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not at all concerned

#### **Question 4**

Very

## **Question 5**

No response

## Question 6

No response

## **Question 7**

No response

## **Question 8**

No response

## Question 9

No response

## **Question 10**

No response

## Question 11

No response

Question 12 No response

# Question 13

No response

## Question 14

No response

Question 15 No response

# Question 16

| Question 17   | Drought: Very serious   |
|---|---|
| No response   | Poor air quality: Very serious  |
|   | Question 3  |
| Question 18   | Public health: Very concerned   |
| No response   | Homes and property values: Very concerned   |
| Question 19   | Well-being of future generations: Very concerned<br>Economic vitality of Dublin community: Very concerned |
| No response   | Public infrastructure: Very concerned   |
|   | Question 4  |
| Question 20   | -   |
| Other - Library tabling   | • Very  |
| Question 21   | Question 5  |
| -<br>No response  | No response   |
|   |   |
| Question 22   | Question 6  |
| No response   | No response   |
|   | Question 7  |
| Name not available  | No response   |
| March 29, 2019, 3:14 PM   |   |
| Question 1  | Question 8  |
| -<br>Energy efficiency upgrades for residential and commercial buildings to   | No response   |
| reduce a building's energy use for heating, cooling, lighting, etc.: 2  | Question 9  |
| Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling,     | No response   |
| lighting, etc., once occupied: 5  |   |
| Solar panel installation on residential and commercial buildings: 5<br>Develop local community solar energy sources by promoting installation | Question 10   |
| of solar carports, rooftop solar on large commercial business parks, etc.:  | No response   |
| o<br>Driverless transportation focused on shared mobility: 5  | Question 11   |
| Electric vehicle (EV) charging station infrastructure: 3<br>Bicycle/Pedestrian infrastructure: 4  | No response   |
| Water Conservation: 4   |   |
| Waste Reduction and Recycling: 2<br>Landscapes and Open Space: 5  | Question 12   |
| Stormwater pollution prevention/creek protection: 3   | No response   |
| Flood Prevention: 2   | Question 13   |
| Question 2  | No response   |
| Increased temperatures and heat waves: Extremely serious  | No response   |
| Increased wildfire: Extremely serious   | Question 14   |
| Flooding and more severe rainstorms: Not so serious   | No response   |
|   |   |

| Question 15  | Stormwater pollution prevention/creek protection: 4  |
|--|--|
| No response  | Flood Prevention: 4  |
|  | Question 2   |
| Question 16  | Increased temperatures and heat waves: Very serious  |
| No response  | Increased wildfire: Very serious   |
| Ouestion 17  | Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious                |
| No response  | Poor air quality: Very serious   |
|  |  |
| Question 18  | Question 3   |
| No response  | Public health: Very concerned<br>Homes and property values: Somewhat concerned                 |
| Question 10  | Well-being of future generations: Very concerned   |
| Question 19  | Economic vitality of Dublin community: Very concerned<br>Public infrastructure: Very concerned |
| No response  |  |
| Question 20  | Question 4   |
| Other - Library tabling  | • Very   |
|  | Question 5   |
| Question 21  | -  |
| No response  | No response  |
| Question 22  | Question 6   |
| No response  | No response  |
|  |  |
| Name not available   | Question 7   |
| March 29, 2019, 3:16 PM  | No response  |
|  | Question 8   |
| Question 1   | No response  |
| Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5        |  |
| Advanced energy efficiency requirements for new commercial and   | Question 9   |
| residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5  | No response  |
| Solar panel installation on residential and commercial buildings: 4  | Question 10  |
| Develop local community solar energy sources by promoting installation<br>of solar carports, rooftop solar on large commercial business parks, etc.: | No response  |
| 4  |  |
| Driverless transportation focused on shared mobility: 2<br>Electric vehicle (EV) charging station infrastructure: 4                                  | Question 11  |
| Bicycle/Pedestrian infrastructure: 4   | No response  |
| Water Conservation: 5<br>Waste Reduction and Recycling: 5  |  |
| Landscapes and Open Space: 4   | Question 12  |
|  | No response  |
|  |  |

| Question 13   | 3   |
|---|---|
| No response   | Driverless transportation focused on shared mobility: 5<br>Electric vehicle (EV) charging station infrastructure: 3<br>Bicycle/Pedestrian infrastructure: 4 |
| Question 14   | Water Conservation: 4   |
| No response   | Waste Reduction and Recycling: 5  |
|   | Landscapes and Open Space: 2  |
| Question 15   | Stormwater pollution prevention/creek protection: 3<br>Flood Prevention: 3  |
| No response   |   |
|   | Question 2  |
| Question 16   | Increased temperatures and heat waves: Extremely serious  |
| No response   | Increased wildfire: Very serious  |
|   | Flooding and more severe rainstorms: Somewhat serious<br>Drought: Somewhat serious  |
| Question 17   | Poor air quality: Very serious  |
| No response   |   |
|   | Question 3  |
| Question 18   | Public health: Very concerned   |
| No response   | Homes and property values: Not so concerned   |
|   | Well-being of future generations: Very concerned  |
| Question 19   | Economic vitality of Dublin community: Somewhat concerned<br>Public infrastructure: Very concerned  |
| No response   |   |
|   | Question 4  |
| Question 20   |   |
|   | • Very  |
| Other - Library tabling   | Question 5  |
| Question 21   |   |
|   | No response   |
| No response   |   |
| Question 22   | Question 6  |
|   | No response   |
| No response   |   |
|   | Question 7  |
| Name not available  | No response   |
| March 29, 2019, 3:17 PM   |   |
|   | Question 8  |
| Question 1  | No response   |
| Question 1  |   |
| Energy efficiency upgrades for residential and commercial buildings to  |   |
| Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4   | Question 9  |
| Energy efficiency upgrades for residential and commercial buildings to  |   |
| Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4<br>Advanced energy efficiency requirements for new commercial and   | Question 9<br>No response   |
| Energy efficiency upgrades for residential and commercial buildings to<br>reduce a building's energy use for heating, cooling, lighting, etc.: 4<br>Advanced energy efficiency requirements for new commercial and<br>residential construction resulting in low energy use for heating, cooling,<br>lighting, etc., once occupied: 4<br>Solar panel installation on residential and commercial buildings: 2 | Question 9  |
| Energy efficiency upgrades for residential and commercial buildings to<br>reduce a building's energy use for heating, cooling, lighting, etc.: 4<br>Advanced energy efficiency requirements for new commercial and<br>residential construction resulting in low energy use for heating, cooling,<br>lighting, etc., once occupied: 4  | Question 9<br>No response   |

| Question 11                                   | Energy efficiency upgrades for residential and commercial buildings to                                      |
|---|---|
|   | reduce a building's energy use for heating, cooling, lighting, etc.: 5                                      |
| No response                                   | Advanced energy efficiency requirements for new commercial and  |
| Question 12                                   | residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3 |
|   | Solar panel installation on residential and commercial buildings: 3   |
| No response                                   | Develop local community solar energy sources by promoting installation                                      |
| Question 13                                   | of solar carports, rooftop solar on large commercial business parks, etc.: 3                                |
| No response                                   | Driverless transportation focused on shared mobility: 2   |
| Noresponse                                    | Electric vehicle (EV) charging station infrastructure: 4  |
| Question 14                                   | Bicycle/Pedestrian infrastructure: 4<br>Water Conservation: 4   |
| No response                                   | Waste Reduction and Recycling: 4  |
|   | Landscapes and Open Space: 4  |
| Question 15                                   | Stormwater pollution prevention/creek protection: 3   |
| No response                                   | Flood Prevention: 4   |
|   | Question 2  |
| Question 16                                   | Increased temperatures and heat waves: Somewhat serious   |
| No response                                   | Increased wildfire: Extremely serious   |
|   | Flooding and more severe rainstorms: Extremely serious  |
| Question 17                                   | Drought: Very serious   |
| No response                                   | Poor air quality: Extremely serious   |
|   | Question 3  |
| Question 18                                   |   |
| No response                                   | Public health: Extremely concerned<br>Homes and property values: Extremely concerned                        |
|   | Well-being of future generations: Extremely concerned   |
| Question 19                                   | Economic vitality of Dublin community: Extremely concerned  |
| No response                                   | Public infrastructure: Extremely concerned  |
|   | Question 4  |
| Question 20                                   | Question 4  |
| Other Librer tebling                          | • Very  |
| Other - Library tabling                       | Question 5  |
| Question 21                                   | -   |
| No response                                   | No response   |
|   | Question 6  |
| Question 22                                   | -   |
| No response                                   | No response   |
|   | Question 7  |
|   | No response   |
| Name not available<br>March 29, 2019, 3:18 PM | ואו ובאטוואב  |
| 10101123, 2013, 3.101101                      | Question 8  |
| Question 1                                    | No response   |
|   | 101050000   |
|   |   |

| Question 9  | No response  |
|---|--|
| No response   |  |
|   | Name not available   |
| Question 10   | March 29, 2019, 3:19 PM  |
| No response   |  |
| Question 11   | Question 1   |
| No response   | Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5  |
| Notesholise   | Advanced energy efficiency requirements for new commercial and   |
| Question 12   | residential construction resulting in low energy use for heating, cooling,   |
| No response   | lighting, etc., once occupied: 5<br>Solar panel installation on residential and commercial buildings: 2  |
|   | Develop local community solar energy sources by promoting installation   |
| Question 13   | of solar carports, rooftop solar on large commercial business parks, etc.:<br>4  |
| No response   | Driverless transportation focused on shared mobility: 1  |
| Ouesties 14   | Electric vehicle (EV) charging station infrastructure: 4<br>Bicycle/Pedestrian infrastructure: 5   |
| Question 14   | Water Conservation: 5  |
| No response   | Waste Reduction and Recycling: 5<br>Landscapes and Open Space: 3   |
| Question 15   | Stormwater pollution prevention/creek protection: 2  |
| -<br>No response  | Flood Prevention: 2  |
|   | Question 2   |
|   |  |
| Question 16   |  |
| Question 16<br>No response  | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious  |
| No response   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious   |
| No response Question 17   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious   |
| No response   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious   |
| No response Question 17 No response   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious   |
| No response Question 17 No response Question 18   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious<br><b>Question 3</b><br>Public health: Extremely concerned   |
| No response Question 17 No response   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious<br><b>Question 3</b><br>Public health: Extremely concerned<br>Homes and property values: Extremely concerned   |
| No response Question 17 No response Question 18   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious<br><b>Question 3</b><br>Public health: Extremely concerned<br>Homes and property values: Extremely concerned<br>Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Extremely concerned  |
| No response Question 17 No response Question 18 No response   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious<br><b>Question 3</b><br>Public health: Extremely concerned<br>Homes and property values: Extremely concerned<br>Well-being of future generations: Extremely concerned  |
| No response Question 17 No response Question 18 No response Question 19 No response   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious<br><b>Question 3</b><br>Public health: Extremely concerned<br>Homes and property values: Extremely concerned<br>Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Extremely concerned  |
| No response Question 17 No response Question 18 No response Question 19 No response Question 20   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious<br><b>Question 3</b><br>Public health: Extremely concerned<br>Homes and property values: Extremely concerned<br>Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Extremely concerned<br>Public infrastructure: Extremely concerned  |
| No response Question 17 No response Question 18 No response Question 19 No response   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious<br><b>Question 3</b><br>Public health: Extremely concerned<br>Homes and property values: Extremely concerned<br>Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Extremely concerned<br>Public infrastructure: Extremely concerned  |
| No response Question 17 No response Question 18 No response Question 19 No response Question 20   | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious<br>Flooding and more severe rainstorms: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious<br><b>Question 3</b><br>Public health: Extremely concerned<br>Homes and property values: Extremely concerned<br>Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Extremely concerned<br>Public infrastructure: Extremely concerned  |
| No response Question 17 No response Question 18 No response Question 19 No response Question 20 • Other - Library tabling                       | <ul> <li>Increased temperatures and heat waves: Extremely serious<br/>Increased wildfire: Extremely serious</li> <li>Flooding and more severe rainstorms: Very serious</li> <li>Drought: Extremely serious</li> <li>Poor air quality: Extremely serious</li> <li><b>Question 3</b></li> <li>Public health: Extremely concerned</li> <li>Homes and property values: Extremely concerned</li> <li>Well-being of future generations: Extremely concerned</li> <li>Economic vitality of Dublin community: Extremely concerned</li> <li>Public infrastructure: Extremely concerned</li> <li>Wether the extremely concerned</li> <li>Very</li> </ul> |
| No response<br>Question 17<br>No response<br>Question 18<br>No response<br>Question 19<br>No response<br>Question 20<br>Other - Library tabling | <ul> <li>Increased temperatures and heat waves: Extremely serious<br/>Increased wildfire: Extremely serious</li> <li>Flooding and more severe rainstorms: Very serious</li> <li>Drought: Extremely serious</li> <li>Poor air quality: Extremely serious</li> <li><b>Question 3</b></li> <li>Public health: Extremely concerned</li> <li>Homes and property values: Extremely concerned</li> <li>Well-being of future generations: Extremely concerned</li> <li>Conomic vitality of Dublin community: Extremely concerned</li> <li>Public infrastructure: Extremely concerned</li> <li>Wetres</li> <li>Question 5</li> </ul>                    |
| No response Question 17 No response Question 18 No response Question 19 No response Question 20 • Other - Library tabling Question 21           | <ul> <li>Increased temperatures and heat waves: Extremely serious</li> <li>Increased wildfire: Extremely serious</li> <li>Flooding and more severe rainstorms: Very serious</li> <li>Drought: Extremely serious</li> <li>Poor air quality: Extremely serious</li> </ul> <b>Question 3</b> Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Conomic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned Wellsc infrastructure: Extremely concerned Wellsc infrastructure: Extremely concerned No response       |

| Quality 7        |   |
|------------------|---|
| Question 7       | Other - Library tabling   |
| No response      | Question 21   |
| Question 8       | -<br>No response  |
| No response      |   |
|                  | Question 22   |
| Question 9       | No response   |
| No response      |   |
|                  |   |
| Question 10      | Name not available<br>March 29, 2019, 3:58 PM   |
| No response      | March 29, 2019, 5.56 PM   |
|                  | Question 1  |
| Question 11      |   |
| No response      | Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 |
|                  | Advanced energy efficiency requirements for new commercial and  |
| Question 12      | residential construction resulting in low energy use for heating, cooling,  |
| No response      | lighting, etc., once occupied: 5  |
|                  | Solar panel installation on residential and commercial buildings: 4<br>Develop local community solar energy sources by promoting installation |
| Question 13      | of solar carports, rooftop solar on large commercial business parks, etc.:  |
| -<br>No response | 5   |
| Notesponse       | Driverless transportation focused on shared mobility: 3   |
| Question 14      | Electric vehicle (EV) charging station infrastructure: 3<br>Bicycle/Pedestrian infrastructure: 4  |
|                  | Water Conservation: 5   |
| No response      | Waste Reduction and Recycling: 5  |
| Question 15      | Landscapes and Open Space: 4  |
|                  | Stormwater pollution prevention/creek protection: 5<br>Flood Prevention: 3  |
| No response      |   |
| Question 16      | Question 2  |
| -                | Increased temperatures and heat waves: Very serious   |
| No response      | Increased wildfire: Extremely serious   |
| Question 17      | Flooding and more severe rainstorms: Somewhat serious<br>Mudslide/landslide: Somewhat serious   |
|                  | Drought: Extremely serious  |
| No response      | Poor air quality: Very serious  |
| Question 18      |   |
|                  | Question 3  |
| No response      | Public health: Very concerned   |
| Question 19      | Homes and property values: Somewhat concerned   |
|                  | Well-being of future generations: Very concerned<br>Economic vitality of Dublin community: Somewhat concerned                                 |
| No response      | Public infrastructure: Somewhat concerned   |
| Question 20      |   |
| Ancount TA       | Question 4  |
|                  |   |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## Very

## **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

## **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to learn more Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

## Question 7

Maybe

#### **Question 8**

Do not own the property: Least important Cost: More important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Least important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to learn more Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Walk: Some of the time Bike: Some of the time BART: Some of the time

#### **Question 11**

No response

## Question 12

- Exercise
- · Reduce my impact on the environment

## **Question 13**

- Quickest travel time
- Convenience
- Other transporting 3 kids around

#### **Question 14**

• I am unemployed/retired/working from home

## **Question 15**

More bicycle lanes and trails

## **Question 16**

· More stores and services in my neighborhood

#### **Question 17**

94568

#### Question 18

• Own

#### Question 19

• 35-54

#### **Question 20**

No response

#### **Question 21**

No response

## **Question 22**

No response

# Name not shown

March 30, 2019, 9:23 PM

## **Question 1**

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 3 Water Conservation: 1 Waste Reduction and Recycling: 1 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 3

## **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

#### **Question 3**

Public health: Not so concerned Homes and property values: Not at all concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

## **Question 4**

Not at all

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Not interested Replace appliances with energy-efficient models: Not interested Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

## **Question 7**

Maybe

## **Question 8**

Do not own the property: Most important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Somewhat important

## **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Not interested

## **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

## **Question 11**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Most of the time

## **Question 12**

Exercise

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## Less stressful

## **Question 13**

- Quickest travel time
- Convenience
- · Feeling of greater safety
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)
- Other BART is unsafe. Criminals from Santa Rita and homeless ride
   on BART

## **Question 14**

• Other - Don't like other people

## **Question 15**

- Shorter distance from my home to my destination
- More bicycle parking

## **Question 16**

- · More stores and services in my neighborhood
- More shaded sidewalks
- Other Not so hot outside

#### **Question 17**

94568

#### **Question 18**

• Rent

#### **Question 19**

• 35-54

## **Question 20**

Other - School email

## **Question 21**

Stop building those huge stack & pack, Soviet Union style ugly buildings. This creates overcrowding inside of Dublin, especially the schools. I'm very frustrated that the schools are over crowded. Solve these problems first and foremost!

#### **Question 22**

Lessing the overcrowding of the schools and city. That would help the environmental sustainability of Dublin.

## Name not shown

March 31, 2019, 12:26 AM

## Question 1

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 4 Waste Reduction and Recycling: 3 Landscapes and Open Space: 3

Stormwater pollution prevention/creek protection: 2 Flood Prevention: 2

## **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Very serious Poor air quality: Somewhat serious

## **Question 3**

Public health: Extremely concerned Homes and property values: Somewhat concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Not so concerned

#### **Question 4**

Somewhat

## **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 3

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Improve indoor air quality: 2

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Not interested Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to do Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested

Replace lawns with drought-resistant plants (use xeriscaping): Not interested

Modify the length of showers to conserve water: Want to do

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

### **Question 11**

Personal Car: Never Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: All of the time BART: All of the time

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

# **Question 14**

Other - I take bus and BART

#### Question 15

- More bicycle lanes and trails
- More bicycle parking
- Other Better protection from drivers, e.g. guard rails

# **Question 16**

- Wider sidewalks
- Traffic safety improvements at pedestrian crossings
- Reducing crossing distance
- More shaded sidewalks

# **Question 17**

94568

# Question 18

• Own

# **Question 19**

• 35-54

- Peachjar
- Question 21

What should the City of Dublin's priorities be in updating our Climate Action Plan?

No response

## **Question 22**

No response

# Name not available

April 3, 2019, 11:05 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 2 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1

Solar panel installation on residential and commercial buildings: 1 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 2 Waste Reduction and Recycling: 2 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Somewhat serious Poor air quality: Very serious

# **Question 3**

Public health: Not so concerned Homes and property values: Not so concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

# **Question 4**

Slightly

**Question 5** 

Lower my environmental impact: 1 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 2

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Not interested Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Not interested Upgrade your home's insulation: Not interested Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

# Question 7

• Maybe

# **Question 8**

Do not own the property: Most important Cost: More important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Carpool: Never Walk: Never **Bike: Never** Bus: Never BART: Never

#### **Question 12**

I don't walk or bike for non-commute travel

#### **Question 13**

- · Quickest travel time
- Convenience
- · Feeling of greater safety

#### **Question 14**

• I am unemployed/retired/working from home

# **Question 15**

Nothing

#### **Question 16**

More stores and services in my neighborhood

• Other - Having a schools near where we live

#### **Question 17**

94568

#### **Question 18**

Rent

#### **Question 19**

35-54

#### **Question 20**

City Tweet

# **Question 21**

I would rather see the city concentrate more on stopping high density housing and improving infrastructure to keep up with the already over built city.

#### **Question 22**

No response

# Name not available April 19, 2019, 7:00 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 5

Landscapes and Open Space: 3

Stormwater pollution prevention/creek protection: 3

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Extremely serious Mudslide/landslide: Very serious Drought: Extremely serious

#### **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Extremely concerned

# **Question 4**

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 2 Improve indoor air quality: 1

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• Yes

#### **Question 8**

Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

No response

# **Question 12**

No response

# **Question 13**

Convenience

# Question 14

• I am unemployed/retired/working from home

#### Question 15

Nothing

#### **Question 16**

Nothing

# **Question 17**

94568

#### **Question 18**

• Own

# Question 19

• 65+

#### **Question 20**

City employee

#### **Question 21**

Climate Change is happening now and is going to get a lot worse unless we, at all levels of Government, make stopping the burning of fossil fuel the absolute number one priority.

#### **Question 22**

No response

# **Steven Dunbar**

April 19, 2019, 7:25 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 2

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 2

# Question 2

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Extremely serious

## **Question 3**

Public health: Extremely concerned Homes and property values: Not so concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

# **Question 4**

#### Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 2 Improve indoor air quality: 1

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Not interested Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install high-efficiency windows (double-paned): Want to do

# **Question 7**

• Yes

#### **Question 8**

Do not own the property: Most important Cost: Somewhat important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: More important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Never Lyft/Uber: Never Carpool: Some of the time Walk: Some of the time Bike: Most of the time Bus: Most of the time BART: Most of the time

# **Question 11**

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: All of the time Bus: Some of the time BART: Never

# Question 12

- Exercise
- Reduce my impact on the environment
- Dislike driving/finding parking
- Save money
- Do not own a car

# **Question 13**

No response

# **Question 14**

Other - Live very close and work different hours than other workers
 and coworkers

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## **Question 15**

- More bicycle lanes and trails
- More bicycle parking
- Slower traffic speeds
- Bike Share program
- Other Better (BikeLink) bike parking at bus stops, BikeLink at ACE, faster bus system for combined trips, better late bus hours, better lighting on trails, police call boxes, protected bike lanes, secure ground floor bike parking at my 2nd story apartment

#### **Question 16**

- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- Reducing crossing distance
- More stores and services in my neighborhood
- More shaded sidewalks
- Wider sidewalks
- Other Better bus system, bike share availability, emergency ride home

## **Question 17**

94550

#### **Question 18**

• Rent

#### Question 19

• 25-34

#### **Question 20**

City employee

#### **Question 21**

When designing these surveys, give factual information first (what % of emissions is transportation or deliveries, etc). Do not absolve yourself of responsibility in transportation to regional governments or LAVTA because city design reinforces transportation choices. Consider that autonomous vehicles may induce more miles traveled unless there are very strong incentives to share. Consider equity of poorer cities that you affect. Plan for 2030, not 2050. Increase safety for children biking, walking, or taking transit to school for both their safety and for emissions reduction.

#### **Question 22**

Anything the TriValley is doing in sustainable transportation, I want to hear about. Steven Dunbar, you can find my email from city records from past emails to council.

# Name not shown

April 25, 2019, 7:57 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation

of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 2 Flood Prevention: 3

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Not so serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Not so concerned Homes and property values: Not so concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

# **Question 4**

Very

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| No response      | Question 19   |
|------------------|---|
|                  | No response   |
| Question 6       |   |
| No response      | Question 20   |
| Quality 7        | No response   |
| Question 7       |   |
| No response      | Question 21   |
| Question 8       | No response   |
|                  |   |
| No response      | Question 22   |
| Question 9       | No response   |
| •                |   |
| No response      | Name not shown  |
| Question 10      | April 28, 2019, 10:51 AM  |
| -<br>No response |   |
|                  | Question 1  |
| Question 11      | Energy efficiency upgrades for residential and commercial buildings to  |
| No response      | reduce a building's energy use for heating, cooling, lighting, etc.: 5<br>Advanced energy efficiency requirements for new commercial and      |
|                  | residential construction resulting in low energy use for heating, cooling,  |
| Question 12      | lighting, etc., once occupied: 5  |
| No response      | Solar panel installation on residential and commercial buildings: 5<br>Develop local community solar energy sources by promoting installation |
|                  | of solar carports, rooftop solar on large commercial business parks, etc.:  |
| Question 13      | 5<br>Deixenlage terms articlica for used on changed merility 2  |
| No response      | Driverless transportation focused on shared mobility: 3<br>Electric vehicle (EV) charging station infrastructure: 4                           |
|                  | Bicycle/Pedestrian infrastructure: 5  |
| Question 14      | Water Conservation: 1   |
| No response      | Waste Reduction and Recycling: 5<br>Landscapes and Open Space: 5  |
|                  | Stormwater pollution prevention/creek protection: 5   |
| Question 15      | Flood Prevention: 5   |
| No response      | Our offers 2  |
|                  | Question 2  |
| Question 16      | Increased temperatures and heat waves: Very serious<br>Increased wildfire: Very serious   |
| No response      | Flooding and more severe rainstorms: Not so serious   |
| Oursetion 17     | Mudslide/landslide: Not so serious  |
| Question 17      | Drought: Somewhat serious<br>Poor air quality: Extremely serious  |
| No response      | r oor an quanty. Extremely serious  |
| Question 18      | Question 3  |
|                  | Public health: Very concerned   |
| No response      | Homes and property values: Not so concerned   |
|                  |   |

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Somewhat concerned

#### Question 4

Very

# **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Most important Safety issues: More important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to learn more Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested

Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

## **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: All of the time

#### **Question 12**

- Exercise
- Reduce my impact on the environment
- Save money

# **Question 13**

Convenience

# **Question 14**

• I need a car to drop off/pick up family members

# **Question 15**

Shorter distance from my home to my destination

# **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More stores and services in my neighborhood
- More shaded sidewalks

#### **Question 17**

94568

# **Question 18**

• Own

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 19**

• 35-54

# **Question 20**

• City website

# **Question 21**

I think there's enough public art around the city and I hope the public art money could be used to focus on the improvements of the future downtown. Great architecture is art! The 680 freeway overpass that cuts through the downtown area is a massive structure that needs to be studied to improve its presence (architecture) in the heart of our city (but no additional murals please). And downtown Christmas lights along Dublin Boulevard in the holidays is also delightful! But overall, I'm very happy with all the improvements and very proud of our city and the staff. Congratulations!

# **Question 22**

No response

# Name not shown

June 7, 2019, 12:12 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 4 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 2

# Question 2

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Extremely serious Poor air quality: Very serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Extremely concerned Public infrastructure: Very concerned

# **Question 4**

Very

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 4 Improve indoor air quality: 2

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

# **Question 7**

• Yes

# **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: Least important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Want to learn more Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Modify the length of showers to conserve water: Have done

## **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

• I don't walk or bike for non-commute travel

# **Question 13**

- Quickest travel time
- Convenience

# **Question 14**

• I need a car to drop off/pick up family members

#### **Question 15**

Nothing

# **Question 16**

More stores and services in my neighborhood

#### **Question 17**

94568

## Question 18

• Own

#### **Question 19**

# Question 20 Other - Twitter

• 35-54

# **Question 21**

No response

# **Question 22**

No response

# Name not available

June 7, 2019, 1:04 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 3 Waste Reduction and Recycling: 3 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 2

Stormwater pollution prevention/cree Flood Prevention: 3

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Very serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Somewhat serious Poor air quality: Extremely serious

# **Question 3**

Public health: Somewhat concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Public infrastructure: Somewhat concerned

#### **Question 4**

Somewhat

## **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

#### **Question 8**

Do not own the property: Least important Cost: More important Time and effort: Most important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: More important Safety issues: More important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to learn more

Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Want to learn more

## **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: All of the time

#### **Question 12**

- Exercise
- · Reduce my impact on the environment

#### **Question 13**

Quickest travel time

#### **Question 14**

• I need a car to drop off/pick up family members

# **Question 15**

· Shorter distance from my home to my destination

# **Question 16**

- More sidewalk lighting and safety
- Higher visibility crosswalks
- More frequent crosswalks
- More stores and services in my neighborhood
- More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

# **Question 19**

• 25-34

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 20**

City website

# **Question 21**

No response

# **Question 22**

No response

# **FAYE GUARIENTI**

June 7, 2019, 2:34 PM

# **Question 1**

Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Waste Reduction and Recycling: 4 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Very serious Drought: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Extremely concerned

# **Question 4**

• Very

# Question 5

Lower my environmental impact: 4 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

# **Question 8**

Cost: Most important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Most of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never BART: Most of the time

# **Question 11**

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Exercise

• Reduce my impact on the environment

#### **Question 13**

- Quickest travel time
- Convenience
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

No response

#### **Question 15**

- Shorter distance from my home to my destination
- More bicycle lanes and trails
- More bicycle parking
- Slower traffic speeds

#### **Question 16**

- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- Reducing crossing distance
- More stores and services in my neighborhood

#### **Question 17**

94568

#### **Question 18**

• Own

#### **Question 19**

• 65+

#### **Question 20**

- Friend/Neighbor
- Other city email

# **Question 21**

In some places in Dublin, it's not safe to ride my bike. Heading west on Dublin Blvd, for example, the bike lane simply runs out with no warning. The sidewalk was just redone in that are and I wonder why something wasn't done about the bike lane/signage.

# Question 22

No response

# Name not shown

June 7, 2019, 2:50 PM

# **Question 1**

Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 1 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 1 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 1 Waste Reduction and Recycling: 5 Landscapes and Open Space: 3 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Not so serious Drought: Not at all serious Poor air quality: Not at all serious

# **Question 3**

Public health: Not at all concerned Homes and property values: Not at all concerned Well-being of future generations: Not at all concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

# **Question 4**

Not at all

# **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 4 Save money on utility bills: 3

What should the City of Dublin's priorities be in updating our Climate Action Plan?

### Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Want to learn more Plant shade trees: Want to learn more Change light bulbs to energy-efficient models (LED): Not interested Replace appliances with energy-efficient models: Not interested Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

#### • No

#### **Question 8**

| Do not own the property: Least important                               |
|--|
| Cost: Least important  |
| Time and effort: Least important                                       |
| Minimal financial or energy savings: Least important                   |
| Concern upgraded technologies will not perform as well: Most important |
| Safety issues: Most important  |

#### **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

## **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

# **Question 12**

· I don't walk or bike for non-commute travel

#### **Question 13**

· Other - Private, clean, SAFE, and comfortable

#### **Question 14**

• Other - I have zero desire to drive with other people

#### **Question 15**

Nothing

#### **Question 16**

Nothing

## **Question 17**

94568

#### Question 18

• Own

#### Question 19

• 35-54

# **Question 20**

Other - email

#### **Question 21**

try protecting the neighborhoods from actual crime before you look to urban myth for ways to spend money

#### **Question 22**

no

Name not available June 7, 2019, 3:04 PM

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 2 Solar panel installation on residential and commercial buildings: 1 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 1 Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 3 Waste Reduction and Recycling: 3 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 2

#### **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Somewhat serious Poor air quality: Very serious

# **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Not so concerned

#### **Question 4**

Somewhat

#### **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Want to learn more

Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Want to learn more Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Not interested

#### **Question 7**

• No

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Somewhat important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Most important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to learn more Replace older toilets with a new low-flow model: Want to learn more Adjust timers or install a new water-efficient irrigation system: Want to learn more Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: All of the time

# **Question 12**

• I don't walk or bike for non-commute travel

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Quickest travel time

- Convenience
- · Public transit is not close enough to my home
- · Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

• I need a car to drop off/pick up family members

#### **Question 15**

| • | Shorter | distance | from | my   | home | to r | ny  | destinatio | n   |
|---|---------|----------|------|------|------|------|-----|------------|-----|
|   | 0       |          |      | •••• |      |      | ••• |            | • • |

· More bicycle parking

#### **Ouestion 16**

| <ul> <li>More sidewalk lighting and safety</li> <li>More stores and services in my neighborhood</li> </ul> | Question 2   |
|--|--|
| More shaded sidewalks  | Increased temperatures and heat wave<br>Increased wildfire: Extremely serious    |
| Question 17  | Flooding and more severe rainstorms:<br>Mudslide/landslide: Somewhat serious     |
| 94568  | Drought: Very serious<br>Poor air quality: Extremely serious                     |
| Question 18  | Question 3   |
| • Own  | Public health: Extremely concerned<br>Homes and property values: Not so co       |
| Question 19  | Well-being of future generations: Extre<br>Economic vitality of Dublin community |
| • 25-34  | Public infrastructure: Somewhat conce  |
| Question 20  | Question 4   |
| Other - Nextdoor   | • Very   |
| Question 21  | Question 5   |

No response

# **Question 22**

No response

# Name not shown

June 7, 2019, 4:22 PM

## **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 3 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 3 Waste Reduction and Recycling: 3 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 1 Flood Prevention: 1

es: Extremely serious Very serious S

ncerned emely concerned : Not so concerned erned

#### Question 5

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to learn more Install a high-efficiency water heater: Completed Plant shade trees: Completed

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

• I don't walk or bike for non-commute travel

#### **Question 13**

- Quickest travel time
- Convenience

# **Question 14**

- I need a car to run errands during break periods
- I need a car to drop off/pick up family members
- Other No desire to rely on other unreliable people

#### **Question 15**

Nothing

#### **Question 16**

- More sidewalk lighting and safety
- More stores and services in my neighborhood
- More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

# Question 19

• 35-54

#### **Question 20**

Other - NextDoor.com

# Question 21

No response

#### **Question 22**

No response

# Name not available

June 7, 2019, 4:24 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 1 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 3 Waste Reduction and Recycling: 5 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 5

# **Question 2**

Increased temperatures and heat waves: Not so serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Somewhat serious Poor air quality: Not so serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Not so concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

#### **Question 4**

Slightly

#### **Question 5**

No response

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested

Seal air leaks in walls, windows, ducts, etc.: Completed Plant shade trees: Completed

Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do

Upgrade your home's insulation: Not interested

Install solar panels: Not interested

Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

## Question 8

Do not own the property: Least important Cost: More important Time and effort: Most important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Most important Safety issues: Most important

#### **Question 9**

Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested

## **Question 10**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Most of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

# **Question 12**

- Exercise
- Dislike driving/finding parking
- Less stressful
- Feels safer

# **Question 13**

Convenience

# **Question 14**

• I am unemployed/retired/working from home

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 15**

Nothing

# **Question 16**

| <ul> <li>More sidewalk lighting and safety</li> <li>More stores and services in my neighborhood</li> <li>More shaded sidewalks</li> </ul> Question 17 94568 | <b>Question 2</b><br>Increased temperatures and heat waves: Very serious<br>Increased wildfire: Very serious<br>Flooding and more severe rainstorms: Very serious<br>Mudslide/landslide: Very serious<br>Drought: Very serious<br>Poor air quality: Extremely serious |
|---|---|
| Question 18   | Question 3  |
| • Own   | Public health: Very concerned<br>Homes and property values: Very concerned  |
| Question 19<br>No response  | Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Somewhat concerned<br>Public infrastructure: Somewhat concerned   |
| Question 20   | Question 4  |

Friend/Neighbor

#### **Question 21**

No response

# **Question 22**

No response

# Name not available

June 7, 2019, 4:34 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 3

Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 2

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 4

# Question 5

Very

Lower my environmental impact: 3 Make my home more comfortable: 2 Save money on utility bills: 3 Improve indoor air quality: 2

Waste Reduction and Recycling: 4 Landscapes and Open Space: 3

Flood Prevention: 4

Stormwater pollution prevention/creek protection: 4

# **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Completed Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

# **Question 8**

Do not own the property: Somewhat important

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Cost: More important   |
|--|
| Time and effort: More important                                  |
| Minimal financial or energy savings: Most important              |
| Concern upgraded technologies will not perform as well: Somewhat |
| important  |
| Safety issues: Least important                                   |

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Some of the time BART: Never

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

• I don't walk or bike for non-commute travel

# **Question 13**

• Quickest travel time

## **Question 14**

• Other - Retired don't work

# **Question 15**

More bicycle lanes and trails

Other - I am in my 70's do not ride bikes anymore

#### **Question 16**

- More sidewalk lighting and safety
- More shaded sidewalks

## **Question 17**

94568

#### Question 18

• Own

#### Question 19

• 65+

#### **Question 20**

Friend/Neighbor

## **Question 21**

No response

# **Question 22**

No response

# William Fontes

June 7, 2019, 5:23 PM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 1 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1 Solar panel installation on residential and commercial buildings: 1 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 1 Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 1 Water Conservation: 1 Waste Reduction and Recycling: 2 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 1 Flood Prevention: 2

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Not at all serious Flooding and more severe rainstorms: Not at all serious Mudslide/landslide: Not at all serious Drought: Not at all serious Poor air quality: Not at all serious

# **Question 3**

Public health: Not at all concerned Homes and property values: Not at all concerned Well-being of future generations: Not at all concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not at all concerned

# **Question 4**

Not at all

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 1 Save money on utility bills: 4 Improve indoor air quality: 1

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Not interested Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Not interested Replace appliances with energy-efficient models: Not interested Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

#### **Question 7**

• No

# **Question 8**

Do not own the property: Least important Cost: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important Safety issues: Least important

#### **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Not interested Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested

Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

#### Question 11

Personal Car: Never Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

# **Question 12**

- Exercise
- · I don't walk or bike for non-commute travel

# **Question 13**

- · Quickest travel time
- Convenience
- Feeling of greater safety
- · Public transit is not close enough to my home
- Public transit is not close enough to my work
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)
- Other This is not the 1800's

#### **Question 14**

• I am unemployed/retired/working from home

#### **Question 15**

Nothing

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| Question 16                        | Question 2   |  |  |
|------------------------------------|--|--|--|
| Nothing                            | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Extremely serious  |  |  |
| <b>Question 17</b><br>94568        | Flooding and more severe rainstorms: Very serious<br>Mudslide/landslide: Not so serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious                               |  |  |
| Question 18                        |  |  |  |
| Quin                               | Question 3   |  |  |
| • Own                              | Public health: Extremely concerned   |  |  |
| Question 19                        | Homes and property values: Very concerned  |  |  |
|                                    | Well-being of future generations: Very concerned<br>Economic vitality of Dublin community: Extremely concerned   |  |  |
| • 55-64                            | Public infrastructure: Very concerned  |  |  |
| Question 20                        |  |  |  |
| Other - Nextdoor                   | Question 4<br>• Very   |  |  |
| Question 21                        |  |  |  |
| Man made climate change is a hoax! | Question 5   |  |  |
|                                    | Lower my environmental impact: 2   |  |  |
| Question 22                        | Make my home more comfortable: 3   |  |  |
| No response                        | Save money on utility bills: 4<br>Improve indoor air quality: 1  |  |  |
|                                    | Question 6   |  |  |
| Name not available                 | •  |  |  |
| June 7, 2019, 9:34 PM              | Install a high-efficiency heating and air conditioning system: Completed<br>Seal air leaks in walls, windows, ducts, etc.: Completed<br>Install a high-efficiency water heater: Want to do |  |  |
| Question 1                         | Plant shade trees: Completed   |  |  |

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5

Solar panel installation on residential and commercial buildings: 4 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5

Driverless transportation focused on shared mobility: 3 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5

Waste Reduction and Recycling: 4

Landscapes and Open Space: 5

Stormwater pollution prevention/creek protection: 5 Flood Prevention: 4

# Maybe **Question 8**

**Question 7** 

Do not own the property: Least important Cost: Most important Time and effort: Most important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: More important Safety issues: Most important

Change light bulbs to energy-efficient models (LED): Want to do

Replace appliances with energy-efficient models: Want to do

Install high-efficiency windows (double-paned): Completed

Upgrade your home's insulation: Completed

Install solar panels: Want to learn more

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Most of the time Walk: Most of the time Bike: Some of the time Bus: Never BART: Never

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 12**

- Exercise
- Less stressful

#### **Question 13**

- Quickest travel time
- Convenience
- Feeling of greater safety

#### **Question 14**

- No or limited carpooling services available
- I am unemployed/retired/working from home
- · I need a car to run errands during break periods
- · I need a car to drop off/pick up family members

#### **Question 15**

Other - Money back when buying a bike

**Question 16** 

- Traffic safety improvements at pedestrian crossings
- · Higher visibility crosswalks

#### Question 17

94568

#### **Question 18**

• Own

#### Question 19

• 35-54

#### **Question 20**

City website

# **Question 21**

Decrease building and protect natural environment for our citizens

#### **Question 22**

Composting; protecting open space

# Name not available

June 8, 2019, 7:42 AM

#### **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4 Water Conservation: 2

Waste Reduction and Recycling: 1

#### **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Very serious Poor air quality: Somewhat serious

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Not so concerned

#### **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 4 Make my home more comfortable: 4 Save money on utility bills: 3 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Want to do Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to learn more

# **Question 7**

• Yes

#### **Question 8**

Do not own the property: Most important Cost: More important Time and effort: Least important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: Least important Safety issues: Most important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

# Question 10

Personal Car: All of the time

Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

# **Question 11**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

# **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Convenience

#### **Question 14**

· I need a car to drop off/pick up family members

#### **Question 15**

Nothing

# **Question 16**

- · More sidewalk lighting and safety
- More stores and services in my neighborhood

#### **Question 17**

94568

# **Question 18**

Rent

# **Question 19**

• 25-34

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### City website

# **Question 21**

No response

## **Question 22**

No response

# Name not available

June 8, 2019, 4:31 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 1

Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 5 Waste Reduction and Recycling: 3 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 5 Flood Prevention: 4

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Very serious

# **Question 3**

Public health: Somewhat concerned Homes and property values: Not so concerned Well-being of future generations: Somewhat concerned Economic vitality of Dublin community: Not so concerned Public infrastructure: Not so concerned

#### **Question 4**

## Not at all

# **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Completed Install solar panels: Want to do Install high-efficiency windows (double-paned): Completed

# **Question 7**

• No

# **Question 8**

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Not interested

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Some of the time Bike: Some of the time Bus: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

### BART: Some of the time

## **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Some of the time

#### **Question 12**

- Exercise
- Save money

#### **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my home
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)

#### **Question 14**

• I need a car to run errands during break periods

# **Question 15**

- Shorter distance from my home to my destination
- More bicycle parking

# **Question 16**

• More stores and services in my neighborhood

# **Question 17**

No response

#### **Question 18**

• Own

# **Question 19**

• 35-54

**Question 20** 

# Friend/Neighbor

## **Question 21**

No response

### **Question 22**

No response

# Name not available

June 8, 2019, 6:00 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4 Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation

of solar carports, rooftop solar on large commercial business parks, etc.: 2 Driverless transportation focused on shared mobility: 4

Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 5 Waste Reduction and Recycling: 5 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Somewhat serious Increased wildfire: Somewhat serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not at all serious Drought: Somewhat serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Very concerned Homes and property values: Very concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| • | Very |
|---|------|
|---|------|

# **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 2

## **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Yes

#### **Question 8**

Do not own the property: Least important Cost: Most important Time and effort: More important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Most important Safety issues: Most important

#### **Question 9**

Install water-conserving faucets and showerheads: Want to learn more Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to learn more Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

#### **Question 11**

No response

# **Question 12**

No response

# **Question 13**

• Other - I'm elderly and am mobility challenged.

#### **Question 14**

• I am unemployed/retired/working from home

# **Question 15**

No response

# **Question 16**

No response

# **Question 17**

94568

# **Question 18**

• Own

# Question 19

• 65+

#### **Question 20**

City website

# **Question 21**

No response

# Question 22

No response

# Name not available

June 8, 2019, 7:22 PM

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 1 Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 3 Stormwater pollution prevention/creek protection: 4

# **Question 2**

Increased temperatures and heat waves: Extremely serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Extremely serious

#### **Question 3**

Public health: Somewhat concerned Homes and property values: Not so concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Very concerned

#### **Question 4**

Somewhat

#### **Question 5**

Lower my environmental impact: 1 Make my home more comfortable: 2 Save money on utility bills: 4 Improve indoor air quality: 3

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Want to do Plant shade trees: Want to do Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Want to do Upgrade your home's insulation: Want to do Install solar panels: Want to do Install high-efficiency windows (double-paned): Want to do

# **Question 7**

• No

#### **Question 8**

Do not own the property: More important Cost: More important Time and effort: Somewhat important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Least important Safety issues: Least important

# **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Want to do Replace lawns with drought-resistant plants (use xeriscaping): Want to do Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Some of the time Walk: Never Bike: Never Bus: Never BART: Never

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never

# **Question 12**

No response

# **Question 13**

- · Quickest travel time
- Convenience
- Public transit is not close enough to my home
- Public transit is not close enough to my work

#### **Question 14**

- I need a car to drop off/pick up family members
- Other I need my car to transport children

# **Question 15**

Nothing

What should the City of Dublin's priorities be in updating our Climate Action Plan?

## **Question 16**

- More sidewalk lighting and safety
- Higher visibility crosswalks
- More stores and services in my neighborhood

#### **Question 17**

94568

#### **Question 18**

• Rent

# Question 19

• 65+

# **Question 20**

Other - NextdoirDublin

# **Question 21**

No response

# **Question 22**

No response

# Name not available

June 8, 2019, 8:59 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 2 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 4

Driverless transportation focused on shared mobility: 1 Electric vehicle (EV) charging station infrastructure: 1 Bicycle/Pedestrian infrastructure: 2 Water Conservation: 3 Waste Reduction and Recycling: 3 Landscapes and Open Space: 5 Stormwater pollution prevention/creek protection: 4

### Flood Prevention: 2

# **Question 2**

Increased temperatures and heat waves: Not at all serious Increased wildfire: Not so serious Flooding and more severe rainstorms: Not so serious Mudslide/landslide: Not so serious Drought: Somewhat serious Poor air quality: Somewhat serious

# **Question 3**

Public health: Not at all concerned Homes and property values: Not at all concerned Well-being of future generations: Not so concerned Economic vitality of Dublin community: Not at all concerned Public infrastructure: Not so concerned

# Question 4

Slightly

# Question 5

Lower my environmental impact: 1 Make my home more comfortable: 3 Save money on utility bills: 3 Improve indoor air quality: 3

# **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Not interested Install high-efficiency windows (double-paned): Completed

# **Question 7**

• No

# **Question 8**

Cost: More important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: More important

What should the City of Dublin's priorities be in updating our Climate Action Plan?

#### Safety issues: More important

## **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Want to do Adjust timers or install a new water-efficient irrigation system: Not interested Replace lawns with drought-resistant plants (use xeriscaping): Not interested Modify the length of showers to conserve water: Have done

#### **Question 10**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

# **Question 11**

Personal Car: Most of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Never

#### **Question 12**

Exercise

#### **Question 13**

- Quickest travel time
- Feeling of greater safety

#### **Question 14**

• No or limited carpooling services available

#### **Question 15**

Nothing

# **Question 16**

More sidewalk lighting and safety

#### • Higher visibility crosswalks

#### **Question 17**

94568

## Question 18

• Own

#### **Question 19**

• 55-64

# Question 20

City employee

#### **Question 21**

Stop growth.

#### **Question 22**

No response

# Name not available

June 10, 2019, 9:40 AM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 4 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 5 Solar panel installation on residential and commercial buildings: 5 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 5 Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 4 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 4 Waste Reduction and Recycling: 4 Landscapes and Open Space: 4 Stormwater pollution prevention/creek protection: 4 Flood Prevention: 3

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Increased temperatures and heat waves: Very serious Increased wildfire: Extremely serious Flooding and more severe rainstorms: Somewhat serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Extremely serious

# **Question 3**

Public health: Extremely concerned Homes and property values: Extremely concerned Well-being of future generations: Very concerned Economic vitality of Dublin community: Very concerned Public infrastructure: Somewhat concerned

# **Question 4**

Very

#### **Question 5**

Lower my environmental impact: 3 Make my home more comfortable: 3 Save money on utility bills: 4 Improve indoor air quality: 4

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Want to do Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to do Install solar panels: Completed Install high-efficiency windows (double-paned): Completed

#### **Question 7**

Maybe

#### **Question 8**

Do not own the property: Least important Cost: More important Time and effort: More important Minimal financial or energy savings: Somewhat important Concern upgraded technologies will not perform as well: More important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Not interested

Modify the length of showers to conserve water: Not interested

#### **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

# **Question 12**

• I don't walk or bike for non-commute travel

#### **Question 13**

Other - Public transit is close to my home but requires too many transfers

#### **Question 14**

• No or limited carpooling services available

#### **Question 15**

Nothing

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- · Higher visibility crosswalks
- More frequent crosswalks

What should the City of Dublin's priorities be in updating our Climate Action Plan?

| <ul> <li>Reducing crossing distance</li> <li>Question 17</li> <li>94568</li> </ul> | Increased temperatures and heat waves: Extremely serious<br>Increased wildfire: Very serious<br>Flooding and more severe rainstorms: Very serious<br>Mudslide/landslide: Very serious<br>Drought: Extremely serious<br>Poor air quality: Extremely serious |  |  |
|--|--|--|--|
| Question 18  | Question 2   |  |  |
| • Own  | Question 3 Public health: Extremely concerned  |  |  |
| <b>Question 19</b> • 55-64   | Homes and property values: Somewhat concerned<br>Well-being of future generations: Extremely concerned<br>Economic vitality of Dublin community: Very concerned  |  |  |
|  | Public infrastructure: Very concerned  |  |  |
| Question 20  | Question 4   |  |  |
| City website   | • Very   |  |  |
| Question 21  | Question 5   |  |  |
| No response  | Lower my environmental impact: 4   |  |  |
| Question 22  | Make my home more comfortable: 1<br>Save money on utility bills: 3   |  |  |
| No response  | Improve indoor air quality: 2  |  |  |

# Name not available

June 10, 2019, 5:23 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 3 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 4 Electric vehicle (EV) charging station infrastructure: 2 Bicycle/Pedestrian infrastructure: 5 Water Conservation: 4 Waste Reduction and Recycling: 5 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 1 Flood Prevention: 1

#### **Question 2**

# **Question 6**

Install a high-efficiency heating and air conditioning system: Completed Seal air leaks in walls, windows, ducts, etc.: Want to do Install a high-efficiency water heater: Completed Plant shade trees: Completed Change light bulbs to energy-efficient models (LED): Want to do Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Want to learn more Install solar panels: Want to learn more Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

# **Question 8**

Do not own the property: Least important Cost: More important Time and effort: Least important Minimal financial or energy savings: Most important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Least important

What should the City of Dublin's priorities be in updating our Climate Action Plan?

Install water-conserving faucets and showerheads: Have done Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

## **Question 10**

Personal Car: Most of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

#### **Question 11**

Personal Car: Some of the time Lyft/Uber: Never Carpool: Never Walk: Some of the time Bike: Some of the time Bus: Never BART: Some of the time

# **Question 12**

- Exercise
- · Reduce my impact on the environment
- Dislike driving/finding parking

#### **Question 13**

- Quickest travel time
- Convenience
- · Public transit is not close enough to my home
- Limited infrastructure (i.e., not enough sidewalks, bike lanes, parking for BART/carpool)
- Other Businesses, e.g. Ranch Market and some strip malls, do not have secure bike locking capability. Also, some intersections (Amador Valley Blvd/SR Road, Dublin Blvd/Village Parkway) and streets (e.g. Dublin Blvd) are dangerous for bikes and pedestrians.

#### **Question 14**

• Other - No one nearby to share ride.

# **Question 15**

Shorter distance from my home to my destination

- More bicycle lanes and trails
- More bicycle parking
- Slower traffic speeds
- Other Currently, Dublin is designed to optimize auto-centric travel. Parking lots are throughways for cars. There are too many parking spaces. Streets, signal lights and cross-walks prioritize autos. E.g. Dublin Blvd emphasizes through traffic.

#### **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Higher visibility crosswalks
- More frequent crosswalks
- Reducing crossing distance
- · More stores and services in my neighborhood
- Other Many parking lots could be shortcuts for pedestrians but many have shrubs that limit entry for pedestrians or limit entry to auto entrances and exits. Parking lots on Regional between AVB/Dublin Blvd and on Dublin Blvd between Regional/Amador Plaza.

# **Question 17**

94568

# Question 18

• Own

#### Question 19

• 65+

# Question 20

• Other - City announce received via email.

#### **Question 21**

Slow down traffic on all roadways, especially on SR Road and Dublin Blvd, but also on residential streets. Add more cut throughs and shortcuts for pedestrians and bikes, like the one between Shadow and the apartment complex. Remove one traffic lane on Dublin Blvd at the 680 underpass to make room for a bike path.

#### **Question 22**

No response

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# Name not available

June 12, 2019, 2:29 PM

# **Question 1**

Energy efficiency upgrades for residential and commercial buildings to reduce a building's energy use for heating, cooling, lighting, etc.: 5 Advanced energy efficiency requirements for new commercial and residential construction resulting in low energy use for heating, cooling, lighting, etc., once occupied: 4

Solar panel installation on residential and commercial buildings: 3 Develop local community solar energy sources by promoting installation of solar carports, rooftop solar on large commercial business parks, etc.: 3

Driverless transportation focused on shared mobility: 5 Electric vehicle (EV) charging station infrastructure: 5 Bicycle/Pedestrian infrastructure: 4 Water Conservation: 3 Waste Reduction and Recycling: 3 Landscapes and Open Space: 2 Stormwater pollution prevention/creek protection: 3 Flood Prevention: 3

# **Question 2**

Increased temperatures and heat waves: Very serious Increased wildfire: Very serious Flooding and more severe rainstorms: Very serious Mudslide/landslide: Somewhat serious Drought: Very serious Poor air quality: Extremely serious

# **Question 3**

Public health: Very concerned Homes and property values: Somewhat concerned Well-being of future generations: Extremely concerned Economic vitality of Dublin community: Somewhat concerned Public infrastructure: Very concerned

# **Question 4**

Very

# **Question 5**

Lower my environmental impact: 2 Make my home more comfortable: 2 Save money on utility bills: 4 Improve indoor air quality: 2

#### **Question 6**

Install a high-efficiency heating and air conditioning system: Not interested

Seal air leaks in walls, windows, ducts, etc.: Completed Install a high-efficiency water heater: Not interested Plant shade trees: Not interested Change light bulbs to energy-efficient models (LED): Completed Replace appliances with energy-efficient models: Completed Upgrade your home's insulation: Not interested Install solar panels: Not interested

Install high-efficiency windows (double-paned): Completed

# **Question 7**

Maybe

#### **Question 8**

Do not own the property: Most important Cost: More important Time and effort: More important Minimal financial or energy savings: More important Concern upgraded technologies will not perform as well: Somewhat important Safety issues: Somewhat important

#### **Question 9**

Install water-conserving faucets and showerheads: Not interested Replace older toilets with a new low-flow model: Have done Adjust timers or install a new water-efficient irrigation system: Have done Replace lawns with drought-resistant plants (use xeriscaping): Have done Modify the length of showers to conserve water: Have done

# **Question 10**

Personal Car: All of the time Lyft/Uber: Some of the time Carpool: Never Walk: Some of the time Bike: Never Bus: Never BART: Some of the time

# **Question 11**

Personal Car: All of the time Lyft/Uber: Never Carpool: Never Walk: Never Bike: Never Bus: Never BART: Never

What should the City of Dublin's priorities be in updating our Climate Action Plan?

# **Question 12**

• Exercise

## **Question 13**

- Quickest travel time
- Convenience
- Public transit is not close enough to my home
- Other Public transit only operates to pick up and drop off students

# **Question 14**

No response

## **Question 15**

# Nothing

# **Question 16**

- Wider sidewalks
- More sidewalk lighting and safety
- Traffic safety improvements at pedestrian crossings
- Reducing crossing distance
- More shaded sidewalks

#### **Question 17**

94568

#### **Question 18**

• Own

### **Question 19**

• 35-54

#### **Question 20**

City website

# **Question 21**

No response

# **Question 22**

No response