

#### 2018 ANNUAL REPORT Climate Action Plan

# Powered by **Matural Gas**

In San Diego, sustainability is in our DNA. Our aim to forge a cleaner, greener and more prosperous city reflects our way of life: San Diegans innovate new technologies, employ resources responsibly and celebrate our natural environment every day. Our Climate Action Plan is modeled after this spirit. We're on our way to cutting our carbon footprint in half by 2035 and leaving a better San Diego for our children and grandchildren.

This year I established a new department dedicated to bringing improved organization and support to our climate action goals. The Office of Sustainability will further our efforts toward protecting the environment, creating new jobs and increasing opportunity for all San Diegans.

My budget for the upcoming year will allocate more than \$140 million in new funding for sustainability projects throughout San Diego. From building infrastructure that does more with less energy to creating more bike lanes and walkways, we are laying the foundation for San Diego to be a smart, connected and sustainable city of the future.

San Diegans can be proud to call this beautiful city home knowing we are leading the way in tackling global challenges and advancing our quality of life. It's in our DNA.

Sincerely,

SAN DIEGO)

: 5-340

Kevin L. Faulconer Mayor, City of San Diego

# so) sustainability

# SAN DIEGO LEADS THE WAY

#### — Laying the foundation for our future

San Diego continues to advance toward the ambitious climate action goals adopted in 2015, receiving recognition for pursuing projects that reduce carbon emissions while simultaneously benefiting the economy and ensuring climate policies positively impact all San Diegans.

San Diego is dedicated to a healthier and greener future for our communities. We demonstrate accountability by joining global commitments and partnering with organizations committed to our common goals. From Mayor Faulconer's backing of an alliance dedicated to resilient cities to San Diego's pledge to remain committed to the goals of the Paris climate agreement, the City of San Diego is promising to meet our climate challenges head on.

# Top 10 City for Bicycling

San Diego was named a Top 10 City for Bicycling by PlacesForBikes in 2018. Using feedback from everyday bike riders as well as publicly available data, the rankings took five key factors into account: ridership, safety,



network, acceleration and reach.

In 2017, San Diego was #2 in the nation for total installed solar PV capacity according to Environment America Research & Policy Center's Shining Cities report. In addition to helping residents and businesses save money on their energy bills, solar power helps reduce carbon emissions and air pollution.

# Top 10

San Diego was ranked a top 10 futureproofed city in JLL's 2018 City Momentum

**Index.** This index ranks cities by their potential for future, continued growth considering factors such as capability for innovation, quality of the urban environment and public transportation infrastructure.

#### AWARDS, RANKINGS & COMMITMENTS

# Smart Cities

Sustainable Infrastructure Award

San Diego was recognized for sustainable infrastructure by IDC's inaugural Smart City North America Awards for deploying the largest citybased "Internet of Things" platform in the world. San Diego is deploying 3,200 intelligent nodes on city streetlights to provide real-time data that can be used to optimize parking, track carbon emissions and inform planning improvements for pedestrians and cyclists.

#### **2017** Tree City USA Designation

The Arbor Day Foundation named San Diego a 2017 "Tree City USA" recognizing excellent citywide urban forest management. This designation acknowledged San Diego's dedication to the planting and care of trees based on the city's urban forestry program, tree care ordinance, community forestry budget and Arbor Day observance.



#### We are Still In

In 2018 the City of San Diego signed the "We are Still In" declaration to demonstrate our continued commitment to reducing greenhouse gas emissions while creating jobs and strengthening our economy. San Diego is part of the ambitious global

San Diego is part of the amoltious global pact to proactively address shared climate challenges and lessen the human impact on the environment.

#### Mayors for 100% II' Clean Energy

Mayor Faulconer co-chairs the Sierra Club's Mayors for 100% Clean Energy initiative, which calls on leadership across the United States to support a vision of 100% clean and renewable energy. To date, 201 mayors have pledged their support to 100% renewable energy emphasizing positive, bipartisan, community-driven solutions to reaching this goal.

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# TRACKING PROGRESS<sup>1</sup> – Advancing toward our goals

#### **GREENHOUSE GAS (GHG) INVENTORY**

In 2017, total GHG emissions have remained at similar levels compared to the updated 2016 inventory, 21% below the 2010 baseline<sup>1</sup>. In 2017, GHG emissions from water use decreased due to less reliance on imports. Since 2010, emissions from the use of natural gas remain the only category with an overall increase.





+27%

Transportation

#### DRIVING ECONOMIC GROWTH

Overall in 2017 the clean technology sector remained stable, with year-over-year growth occurring primarily in the transportation sector. San Diego continues to have a concentration of clean technology jobs that is twice the national job level.



1 Calculation methodologies and source information including revised 2016 calculation results can be found in the Appendix to the 2018 CAP Annual Report at www.SanDiego.gov/sustainability.

#### SUSTAINABILITY FOR ALL





**34** solar energy systems installed for low-income homeowners

### \$1,140,091

**Community Development** Block Grant (CDBG) funds allocated to sustainability programs in 2017



Water and energy efficiency improvements for **20** low-income homeowners

**2** solar trees for the Ocean Discovery Institute Living Lab



93 low-income youth participants in the Youth Garden Workforce Training Program



These projects were supported by the City of San Diego's CDBG fund.





The Arc of San Diego

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# ROOTS FOR SUCCESS

#### Sustainability Dashboard



Reduce residential energy use

Reduce municipal energy use

San Diegans saved **117,112 MWh** through energy efficiency measures. This diverted more than **220 million pounds of carbon dioxide** from being produced, the equivalent of removing **21,400 cars** from the road.

The City of San Diego municipal operations generated

**167,000 MWh** of renewable energy equivalent to **18,628 homes'** electricity use for one year. **72%** of diesel used in the City fleet is renewable diesel, avoiding **16,000 tons** of CO<sub>2</sub>e emissions.

**31 miles** of bike lanes added or improved

**6,800 linear feet** of sidewalk constructed

**307 trees** planted and **17,212 trees** maintained/trimmed

"San Diegans can be proud to call this beautiful city home knowing we are leading the way in tackling global challenges and advancing our quality of life. It's in our DNA."

MAYOR KEVIN L. FAULCONER

STRATEGY

Reduce per capita water use

Achieve 100% renewable energy citywide

Increase municipal zero-emission vehicles (ZEV)

Convert to compressed natural gas (CNG) waste trucks

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STRATEGY

Increase use of mass transit

Increase commuter walking opportunities

Increase commuter bicycling opportunities

> Retime traffic signals and install roundabouts

> > Reduce vehicle miles traveled

Divert solid waste

Methane capture from the landfill

Methane capture from wastewater treatment

Increase urban tree canopy cover

	2010 Baseline	2017	2020 Goal	2035 Goal
•	5000 kW, 300 therms	<b>11%</b> energy use reduction from baseline	15% energy use reduction from baseline in 20% of units	15% energy use reduction from baseline in 50% of units
la ba	205 million kW, 3 million therms	<b>3%</b> reduction from baseline	15% reduction from baseline	25% reduction from 2020 goal
Ļ,	128 gallons per capita per day (GPCD)	<b>112</b> GPCD	117 GPCD	105 GPCD
11	11% renewable energy content	<b>45%</b> renewable energy content	N/A	100% renewable energy content
	0% ZEVs in municipal fleet	90 ZEVs/42 hybrids	50% ZEVs in municipal fleet	90% ZEVs in municipal fleet
	0% CNG waste trucks in operation	<b>25 (18%)</b> CNG waste trucks in operation	N/A	100% CNG waste trucks in operation
	4% commuter transit modeshare	<b>8%</b> commuter transit modeshare <sup>1</sup>	12% commuter transit modeshare	25% commuter transit modeshare
<u>. Å.</u>	3.5% pedestrian commuter modeshare	<b>3%</b> pedestrian commuter modeshare <sup>1</sup>	4% pedestrian commuter modeshare	7% pedestrian commuter modeshare
50	2% bicyclist commuter modeshare	<b>2%</b> bicyclist commuter modeshare <sup>1</sup>	6 <mark>%</mark> bicyclist commuter modeshare	18% bicyclist commuter modeshare
<b>₽</b> �₽	40 traffic signals per year, 0 roundabouts	<b>70</b> signals retimed, 0 roundabouts in 2017 (2 installed since 2015)	200 traffic signals retimed, 15 roundabouts installed	35 roundabouts installed
e	25 miles per day commute distance	<b>20</b> miles per day commute distance <sup>1</sup>	N/A	23 miles per day commute distance
•	52% diversion rate	<b>66%</b> diversion rate	75% diversion rate	90% diversion rate
L.L.L	75% of gas captured from the landfill	<b>74%</b> of gas captured from the landfill	80% of gas captured from the landfill	90% of gas captured from the landfill
Ļ	71% of gas captured from the wastewater treatment facility	<b>98-99%</b> of gas captured from the wastewater treatment facility	N/A	98% of gas captures from the wastewater treatment facility
-	7% tree canopy cover citywide	<b>13%</b> tree canopy cover citywide	15% tree canopy cover citywide	35% tree canopy cover citywide

1 Modeshares for transit, bicycling and walking as well as average commute distance have been modeled using best available data and the most up to date methodologies. CY2017 data was developed using the current SANDAG Series 13 activity-based model; baseline data CY2010 was developed utilizing the SANDAG Series 12 four-step model. The City of San Diego gathered additional modeshare data through a commuter survey which is described in more detail on Page 6 of this report. Numbers have been rounded. More information can be found in the Appendix to the 2018 CAP Annual Report can be found at www.SanDiego.gov/sustainability.

# LAUNCHING GREEN INITIATIVES



Respondents reported that the top reasons for not utilizing active

transportation modes

or transit were:

INFRASTRUCTURE

22%

**12%** Lack of

TRAVEL TIME

#### **Mobility Monitoring: Surveys and Models**

In 2018, the City of San Diego used both a survey and modeled calculations to determine modeshare transportation choices. Approximately 4,000 respondents took the survey which explored how participants travel to work or school and what barriers to active transportation and transit are most prohibitive.

Modeling provided representative citywide data based on the best available sources. The results of both the modeling and surveyed data are displayed below.

We will continue to explore the tools available – surveys, modeling or others – and use the best available information to determine how San Diegans are getting around.



#### San Diegans Switch Up their Commutes for #TransitTuesday

15%

Lack of

CONNECTIVITY

1% - COST

In April 2018, the City of San Diego launched a mobility campaign to encourage commuters to try alternative transportation one day per week. **More than 25,000 people viewed the #TransitTuesday videos on social media.** Videos included real San Diegans who bike, walk and take transit to work, as well as a bicycle safety tutorial from local basketball star Bill Walton. The campaign culminated in the City of San Diego's official partnership in Bike to Work Day 2018.



Visit: sandiego.gov/transit-tuesday for more information on how to change up your commute.

#### City of San Diego Models Green Building Best Practices



The City of San Diego is using its own 700 municipal buildings as incubators to demonstrate the benefits and effectiveness of building energy benchmarking and smart building management. Three of the City's libraries will be transformed into zero net energy buildings. These living laboratories serve to encourage local businesses in the community to adopt this comprehensive approach to reducing energy consumption in large buildings.





#### 2030 District a Sustainable Public-Private Partnership



The City of San Diego is the latest city to establish a 2030 District, a high-performance building community that aims to dramatically reduce the environmental impacts of building operations and construction. **Participating buildings aim to reduce energy, water, and transportation emissions by 50 percent by 2030.** The City of San Diego is an official partner of the 2030 District which is managed by Cleantech San Diego, clean technology businesses, real estate organizations and other local business leaders.

#### FRED Electric Microtransit Vehicles Move San Diego



Funded in part by the City of San Diego, Free Ride Everywhere Downtown (FRED) is a convenient transit option for short trips in the Downtown area. Riders can request a free ride in one of FRED's all-electric five-passenger vehicles through the FRED app, available in iPhone and Android app stores. FRED was launched in 2016 to help reduce congestion wed the *City* is archeve for the preduce congestion

and the City's carbon footprint.

INTRODUCING FRED BANDLEG PROVIDING A FREE RIDE EVERYWHERE DOWNTOWN

## NOTE FROM THE CHIEF SUSTAINABILITY OFFICER — Cody Hooven

Climate action is not easy. Ensuring meaningful progress can be complex, intimidating or take longer than any of us would like. As we wrap up our third year implementing the Climate Action Plan, we have learned a lot and kept up momentum toward meeting our ambitious goals. Looking ahead, we have big challenges to tackle.

In the near-term, we will be expanding our climate-equity efforts, which means finding ways for the sustainability movement to be inclusive of - and a benefit to - all San Diegans. We are exploring mobility options and aligning transportation choices with other important initiatives like housing and community planning. We will continue to share with others in the region and the State to help bring more cities along and maximize our impact.

As San Diego's Chief Sustainability Officer it is great to be at the local level where it matters most. We are lucky to have innovative business leaders and smart residents leading the way. I'm proud to be part of a city that is creating a future San Diego that will be even better than it is today.



*"I'm proud to be part of a city that is creating a future San Diego that will be even better than it is today."* 

- CODY HOOVEN



For more information or data, please see the 2018 Climate Action Plan Annual Report Appendix or visit www.sandiego.gov/sustainability.



This information is available in alternative formats upon request. This report was partially funded by California utility ratepayers under the auspices of the California Public Utilities Commission.

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