



2019

Climate Action Plan ANNUAL REPORT



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Letter from the Mayor



Our vision is to be a sustainable and resilient city with opportunity in every community.

City of San Diego Sustainability
Department Vision Statement

In San Diego, “climate action” isn’t just a phrase — it’s a way of life. We’re taking bold action to accomplish our goals and protect the environment for the next generation.

This year, San Diego took the lead in establishing a path to 100% renewable energy with the creation of a new regional entity to purchase clean energy on the open market. With the support of our partner cities, San Diego is now the largest city in the nation to pursue a community choice energy program. Our landmark Climate Action Plan was also the first to set a citywide goal of delivering clean, renewable energy to our residents and businesses.

We removed outdated parking requirements in neighborhoods near mass transit, spurring new development while helping us meet our climate action goals. The Downtown Mobility Plan came to life as we installed bike lanes and scooter corrals so bicyclists, pedestrians and other travelers can navigate city streets safely. We installed solar panels on city buildings to reduce our energy consumption and save millions in taxpayer dollars.

Giving San Diegans and our visitors more choices to move around the city is key to creating thriving, connected communities.

Sustainability is not just the right thing to do, it is the smart thing to do. That’s why we are taking action and making informed decisions today to create a better tomorrow.

Sincerely,

Kevin L. Faulconer
Mayor, City of San Diego

City on Track with Action

Local partnerships and regional collaboration are moving climate action forward in San Diego. Since the adoption of the Climate Action Plan (CAP) in 2015, communities and organizations have worked alongside the City on a wide range of initiatives including the development of a groundbreaking climate equity index and educating sustainability ambassadors in Communities of Concern, and providing input on the decision to establish a community choice energy program. **To date, all 17 actions identified in the CAP are in progress or completed.**

These collective efforts are the pathway to a more sustainable future for San Diego.



U.N. SUSTAINABLE DEVELOPMENT GOALS

Cities are key contributors to both national and global climate action. San Diego is working to align our efforts with the broader perspective on sustainability. By linking our local efforts with the globally-adopted United Nations Sustainable Development Goals (SDGs), we localize the universal call to achieve a better and more sustainable future for all. This means making the aspirations of the SDGs a reality for our communities, businesses, households and individuals. To understand how San Diego's actions fit within a global context, the SDGs will be referenced throughout this report by name and icon.



AMERICAN CITIES CLIMATE CHALLENGE

In 2018, San Diego was selected as a **Leadership City for the American Cities Climate Challenge** funded by Bloomberg Philanthropies. This challenge was specifically designed for cities with a demonstrated commitment to achieving the Paris Climate Agreement goals. The Climate Challenge is a two-year acceleration program to advance climate action at the local level by providing 25 cities with resources and technical expertise to deliver high-impact policies and initiatives.

- Municipal energy efficiency
- Increase benchmarking compliance
- Municipal on-site solar power generation
- Improve biking and walking network
- Fleet electrification
- Improve mobility choices and reduce driving



San Diego is focused on achieving these commitments by December 2020 as part of its participation in the American Cities Climate Challenge.



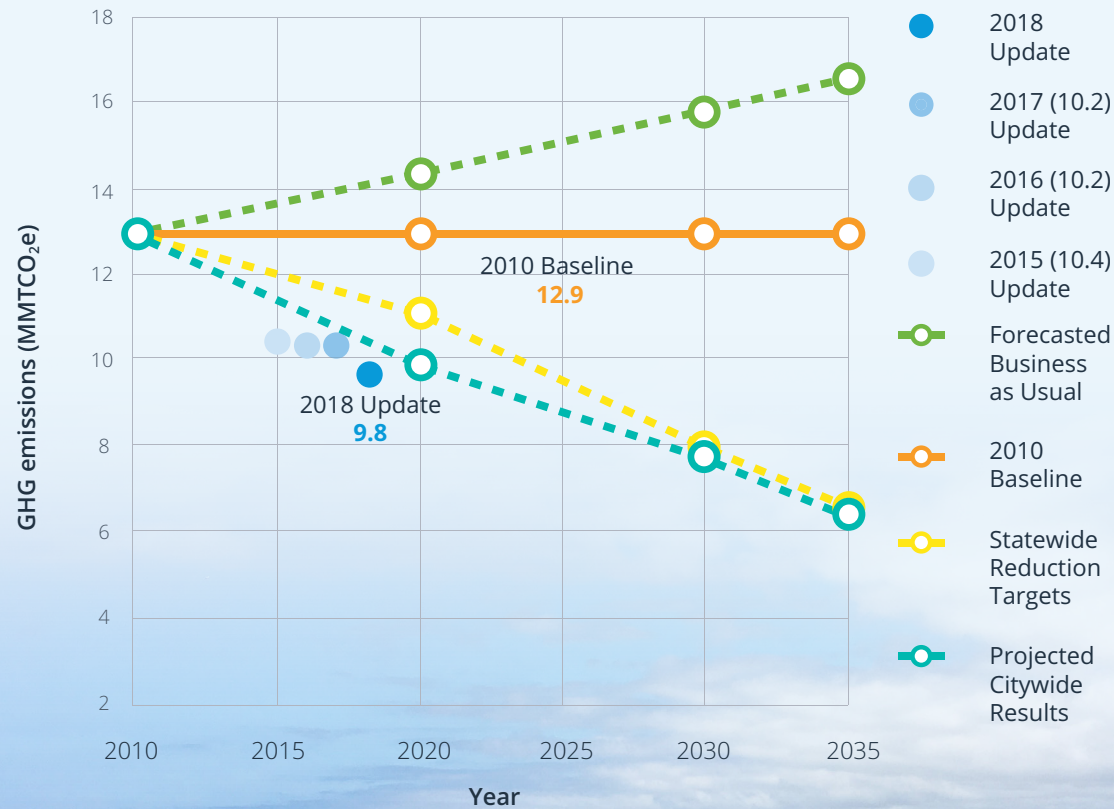
Tracking Greenhouse Gas (GHG) Reductions

The total GHG emissions from San Diego in 2018 were approximately 9.8 million metric tons CO₂e (MMT CO₂e).

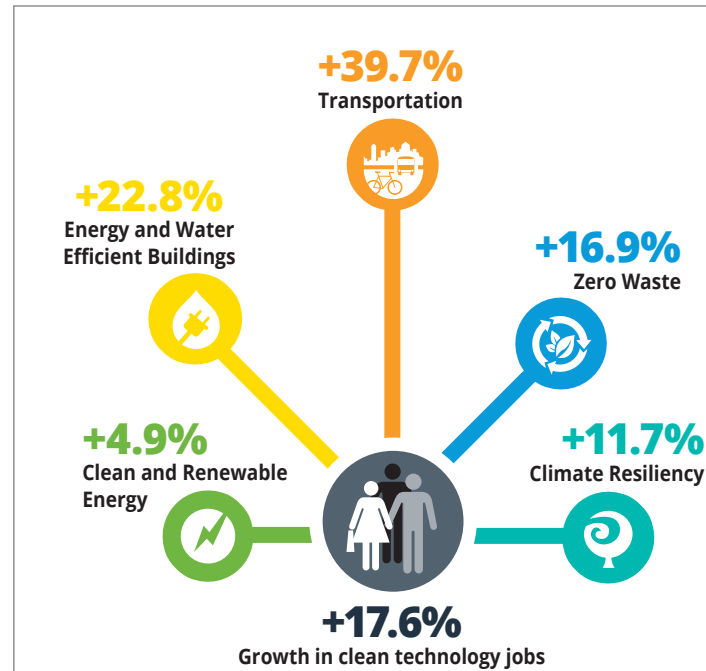
Overall changes in emissions were primarily driven by two sectors: natural gas and water use. In 2018, natural gas emissions decreased by 12%. Less rain in 2017 and 2018 meant the City imported more water, which led to a 19% increase in emissions in the water category.

24%
GHG emissions since 2010

Citywide Greenhouse Gas Emissions Inventory



Promoting Job Growth



In 2018, job growth in the five CAP-related industry groups continued to rise. Nearly four out of five new jobs are in the Energy and Water Efficient Buildings industry. San Diego's jobs in these industry groups grew 17.6% from 2010 to 2018.

San Diego maintains concentration of clean technology jobs that is twice the national job concentration.

Estimated total San Diego jobs by CAP sector between 2010 and 2018.

Advancing Climate Equity



U.N. SUSTAINABLE DEVELOPMENT GOALS



64 homes renovated with energy efficiency upgrades in low-income communities



\$2.2 million
Community Development Block Grant (CDBG) funds allocated to sustainability programs in 2018



In September 2019, community members celebrated the re-opening of Memorial Park in Logan Heights.



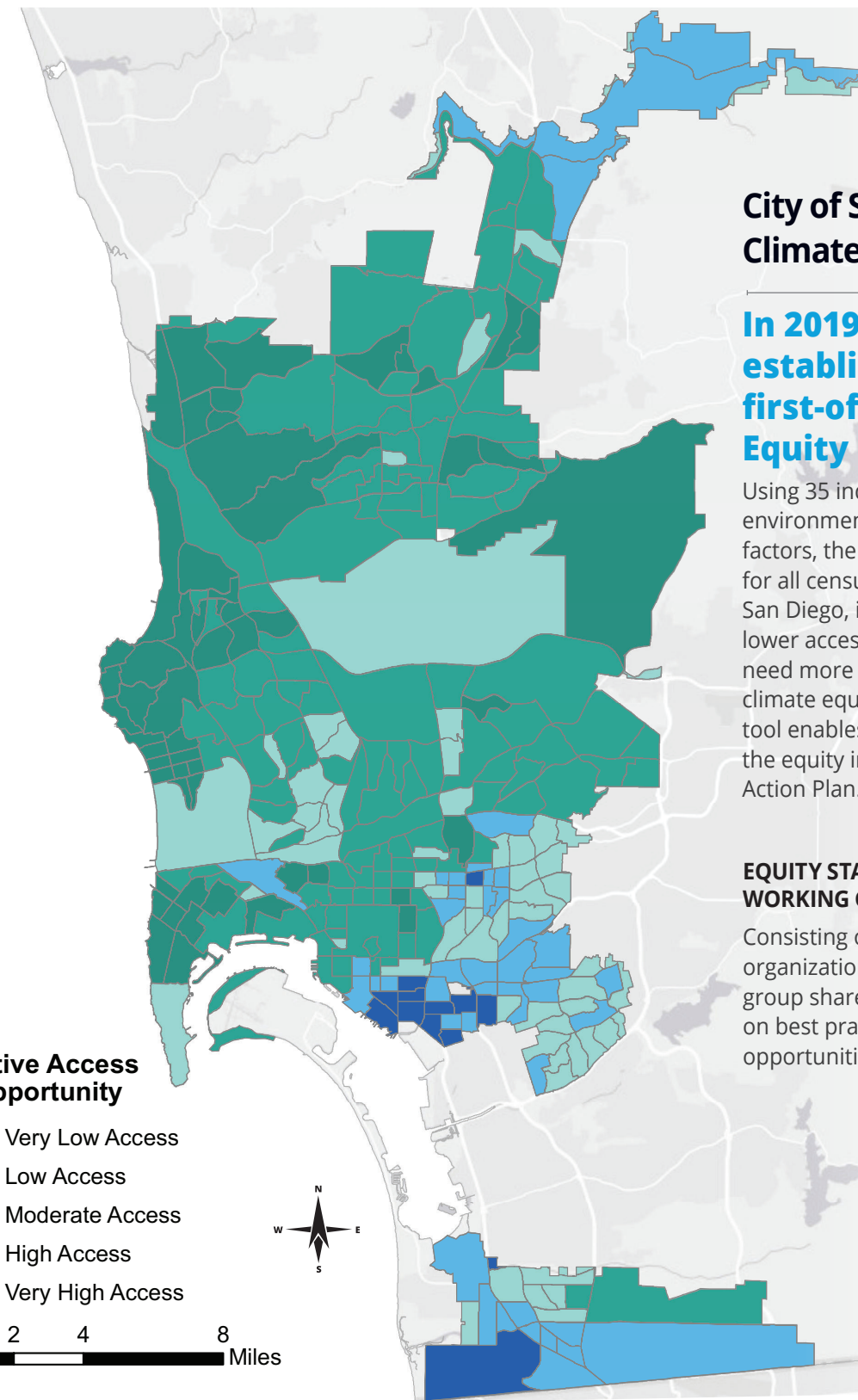
17 people trained in urban agriculture, solar installation or other green jobs



INVESTING IN COMMUNITIES OF CONCERN:

To date, the City of San Diego has invested nearly \$757 million on CAP Capital Improvement Program (CIP) projects in Communities of Concern.

This represents 49.6% of all CAP CIP expenses.



Relative Access to Opportunity

- Very Low Access
- Low Access
- Moderate Access
- High Access
- Very High Access

0 2 4 8 Miles



City of San Diego Climate Equity Index



In 2019, San Diego established the nation's first-of-its-kind Climate Equity Index (CEI).

Using 35 indicators, including environmental and socioeconomic factors, the CEI developed a score for all census tracts within the City of San Diego, identifying areas that have lower access to opportunity and will need more attention when addressing climate equity. This community-based tool enables the City to measure the equity impacts of the Climate Action Plan.

EQUITY STAKEHOLDER WORKING GROUP:

Consisting of 34 community organizations, this informal working group shares input with City staff on best practices and discusses opportunities for addressing equity.

Data: Multiple data sources used for 35 indicators. Climate Equity Index scores are averaged across all indicators for each census tract. Energy Policy Initiatives Center, USD 12/09/2019



Strategy 1: Energy and Water Efficiency



PROGRESS

2.5%
reduction in
municipal energy use
since 2010

15%
reduction in
residential energy use
since 2010

Per capita water use
has decreased
14
gallons per day since 2010

ZERO NET ENERGY DEMONSTRATION PROJECT

Zero net energy (ZNE) is used to describe homes, buildings and communities that generate as much renewable energy as they use. Through a grant from the California Energy Commission, the City of San Diego is working on a multi-year project to upgrade three libraries to ZNE. This project will demonstrate how all buildings can generate more power on site and reduce overall energy consumption.

Keep an eye out for upgrades in early 2020 at Point Loma/Hervey Branch Library, Valencia Park/Malcolm X Branch Library and Serra Mesa-Kearny Mesa Branch Library.



CALL TO ACTION

There are many ways to conserve energy in your own home, but an easy one is turning down the thermostat on your water heater to midrange (120° F). Just do it once and it will save you money on your monthly bill!



PURE WATER PROJECT

Pure Water San Diego has achieved a significant milestone in using proven water purification technology that cleans recycled water in order to produce safe, high-quality drinking water. In July 2019, the San Diego Regional Water Quality Control Board gave Pure Water conditional acceptance to release highly purified water to surface water reservoirs. This acceptance represents a first under new state regulations and paves the way for other agencies in California and elsewhere in the country to permit similar projects.



WATER CONSERVATION PROGRAMS

A great way to conserve water and reduce runoff is by installing rain barrels at your home. In 2018, **360 residents** took advantage of the City's water-saving rebate programs. Check out the guidelines and find out how you can get a rebate at www.WasteNoWater.org.

1/3
Sustainable Supply

By 2035, Pure Water will provide one-third of San Diego's water supply locally, reducing our reliance on imported water sources.

LIBRARY
Mission Valley Branch

Strategy 2: Clean and Renewable Energy



U.N. SUSTAINABLE DEVELOPMENT GOALS



PROGRESS



San Diego Community Power launch is key to getting City of San Diego to 100% renewable energy by 2035.

64

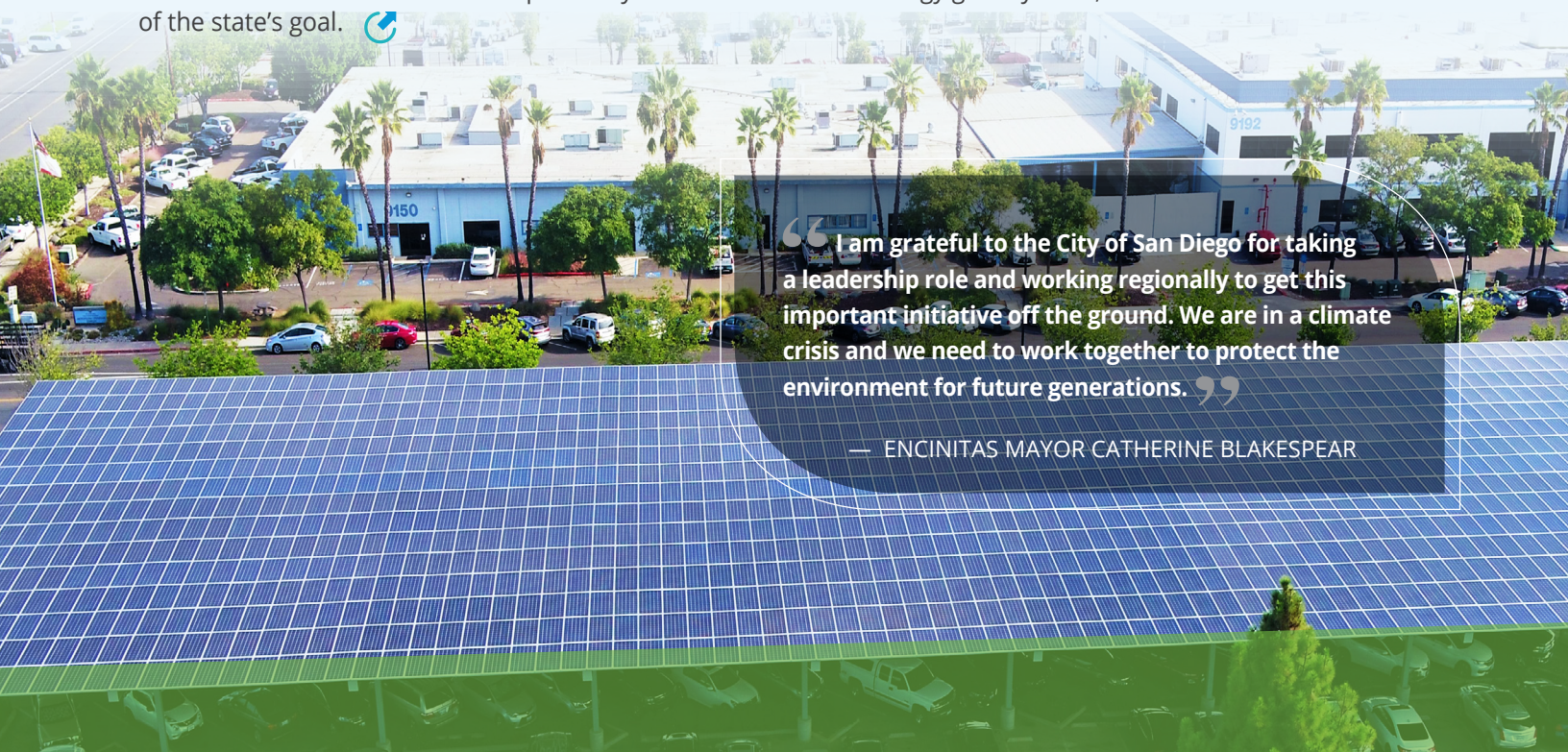
electric vehicle charging stations are energized and ready to use. More electric vehicles and 100 hybrid vehicles will be added to the City's public safety fleet in early 2020.

65

CNG waste trucks in operation in 2019

San Diego is the largest city in the United States to pursue a community choice energy program, setting a new standard for the rest of the country.

In partnership with the cities of Chula Vista, La Mesa, Encinitas and Imperial Beach, San Diego will create the second-largest community choice program in California. San Diego Community Power will purchase clean energy on the open market at more competitive rates for residents and businesses. This move will help the City reach its renewable energy goal by 2035, a decade ahead of the state's goal.



“I am grateful to the City of San Diego for taking a leadership role and working regionally to get this important initiative off the ground. We are in a climate crisis and we need to work together to protect the environment for future generations.”

— ENCINITAS MAYOR CATHERINE BLAKESPEAR

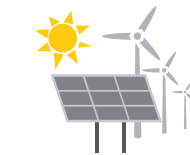


Newly appointed board members took the oath of office at the inaugural meeting of San Diego Community Power at La Mesa City Hall on Oct. 31, 2019.

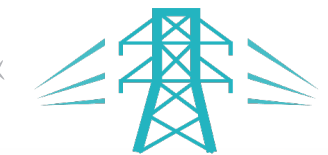


CALL TO ACTION

Have you considered investing in home improvements like solar energy, insulated windows or desert-friendly landscaping? It's more affordable than you might think, thanks to the Property Assessed Clean Energy (PACE) program. Unlike personal home equity loans, PACE loans are attached to the property, paid back through your tax bill and are passed along to the next owner when your property is sold.



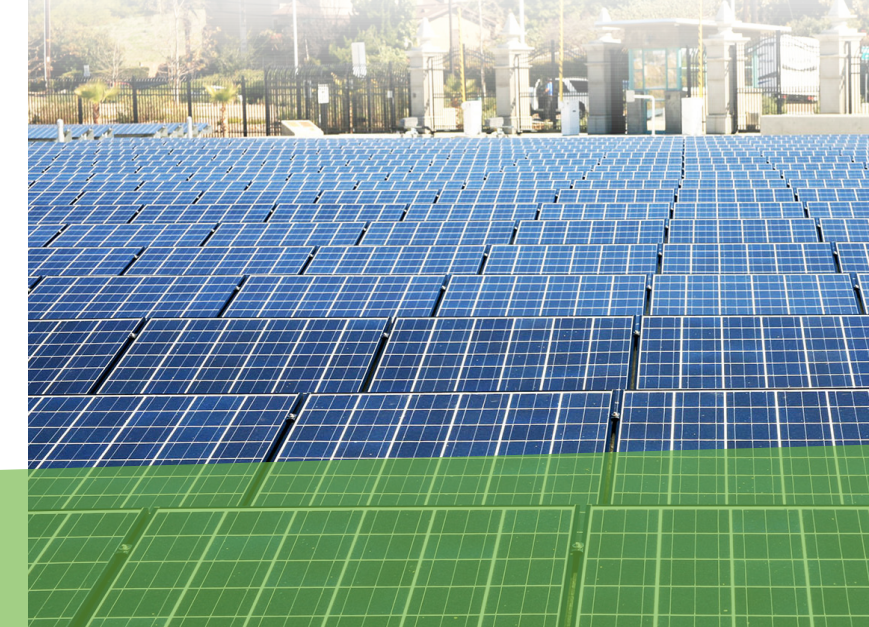
ENERGY PURCHASE
SAN DIEGO COMMUNITY POWER



SERVICE DELIVERY



SAN DIEGANS



Strategy 3: Bicycling, Walking, Transit and Land Use



PROGRESS

The City eliminated parking requirements for new multifamily developments within a half-mile of a public transit stop.

8,800

linear feet of sidewalk constructed or improved

52

signals retimed

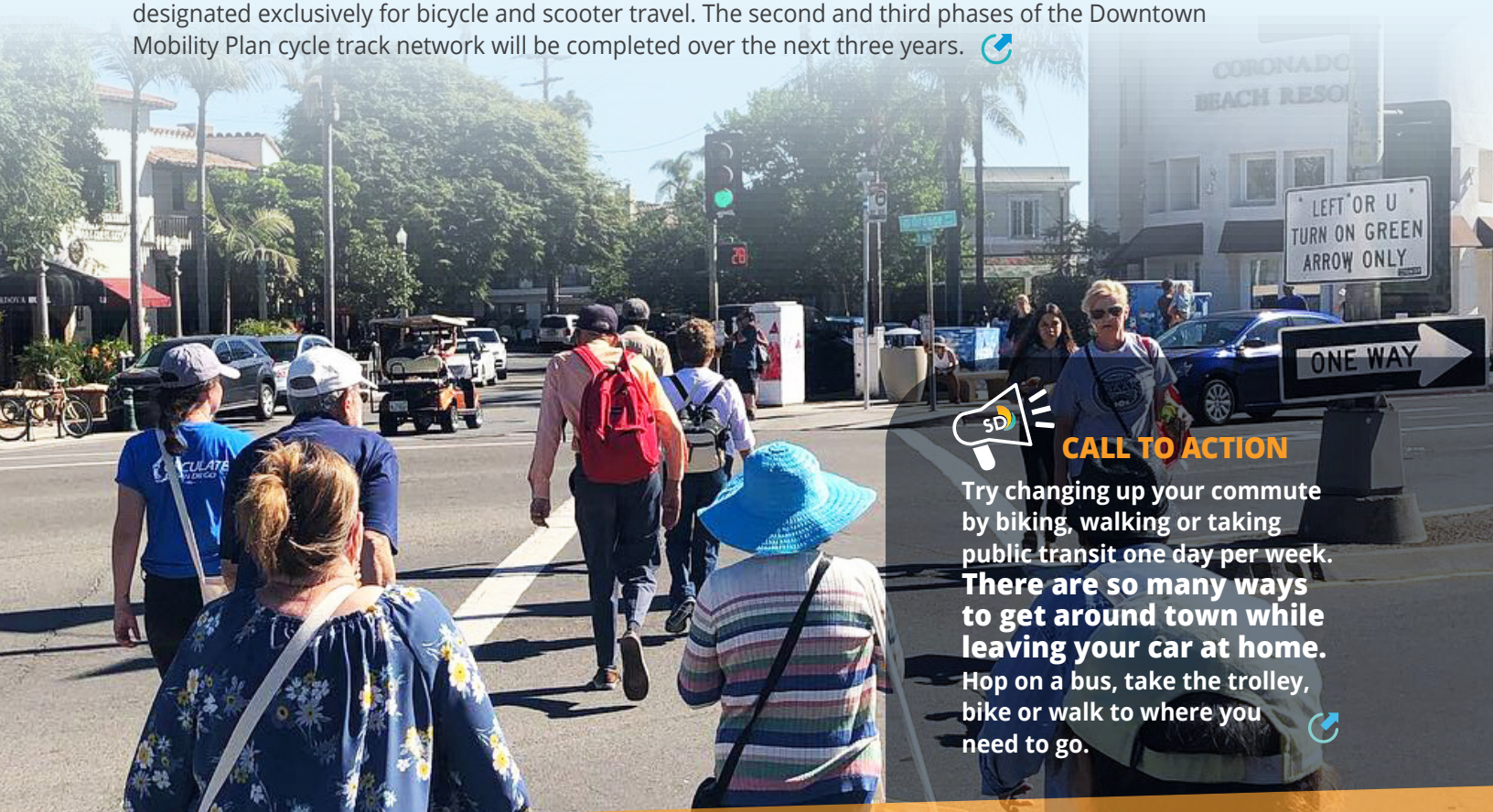
42

miles of bike lanes added or improved

BIKE LANE INSTALLATIONS

Construction on the first phase of the Downtown Mobility Plan is complete.

The first phase redesigned three streets with protected bike lanes. These new lanes provide a right-of-way designated exclusively for bicycle and scooter travel. The second and third phases of the Downtown Mobility Plan cycle track network will be completed over the next three years.



CALL TO ACTION
 Try changing up your commute by biking, walking or taking public transit one day per week. **There are so many ways to get around town while leaving your car at home.** Hop on a bus, take the trolley, bike or walk to where you need to go.



Photo by: Oliver L. Asis

Thousands of people rode bicycles and scooters on Adams Avenue during the CicloSDias open street event on Oct. 27, 2019.

MOBILITY ACTION PLAN

In October 2019, the City released a draft Mobility Action Plan to address changing mobility needs and improve access to opportunities for all San Diegans. The plan builds upon existing policies and programs and outlines priorities, actions and goals for a safe and low greenhouse gas emission transportation future.

The establishment of a Mobility Division is also being considered to work across all departments in the City as a champion for mobility innovation and implementation. The Mobility Division would monitor and report on identified goals, actions and policies.

SAFE STREETS AND SIDEWALKS

In April 2019, the City Council approved regulations for shared mobility devices (SMDs). These regulations are intended to increase safety and provide the City with data to inform future mobility planning and investment. In order to prevent SMDs from being staged on sidewalks, more than 510 parking corrals were added to City streets in neighborhoods with high SMD usage.



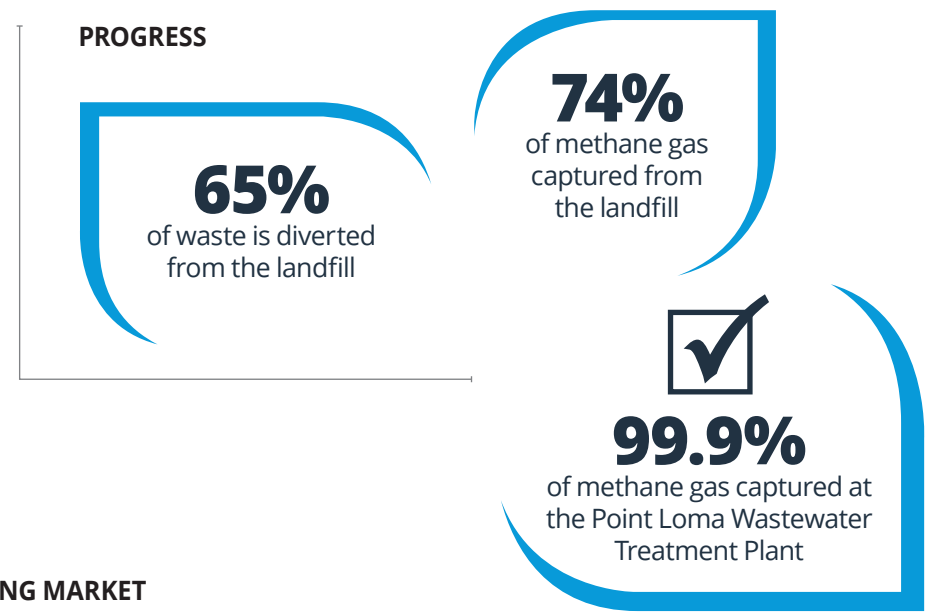
Funded by SANDAG, MoveFreeSD is an educational campaign implemented in partnership with the San Diego County Bicycle Coalition and Circulate San Diego. Through hosting CicloSDias, "transit for fun" events, bike safety classes and walk audits, the **City aims to encourage people to consider walking, bicycling or transit as their preferred form of transportation.**



Students of MoveFreeSD's League Certified Instructor training program learn skills to be bicycle ambassadors in their own communities.



Strategy 4: Zero Waste



EVOLVING WITH A CHANGING MARKET

Until 2019, the City had a revenue generating contract for processing, transporting and marketing recyclable materials collected from residents. As a result of major policy changes in China, San Diego and other municipalities are no longer expecting to generate revenue from these goods. Going forward, the City's curbside processing contract will cost up to \$65 million over the next 10 years. Curbside recycling remains essential to the Climate Action Plan, extending the life of the Miramar Landfill and meeting state requirements for solid waste diversion.

Due to this changing landscape in the solid waste industry, the City is revising the Zero Waste Plan to outline a new path forward, acknowledging the impact of new regulations, recycling infrastructure and fluctuating markets for recyclables.

MIRAMAR GREENERY

San Diego operates one of the largest municipally run composting sites in California. This year, the Greenery installed a covered aerated static pile system. The system can process 20,000 tons of clean organic food waste and 20,000 tons of ground green waste. The addition of an aerated static pile composting system was identified in the city's Zero Waste Plan as one of the key strategies to help increase the City's waste diversion rate to 75%.



CALL TO ACTION

Composting food scraps reduces the amount of trash going to the landfill and helps soil sequester carbon dioxide. Through the Compost Bin Voucher program, residents can receive a discount on a compost bin to get started composting at home. Find out more at www.RecyclingWorks.com.



Strategy 5: Resiliency



U.N. SUSTAINABLE DEVELOPMENT GOALS



PROGRESS



ARBOR DAY

April 26, 2019 marked the inaugural citywide Arbor Day Event. Nearly **100 native** and drought-tolerant trees were planted by volunteers throughout Balboa Park.

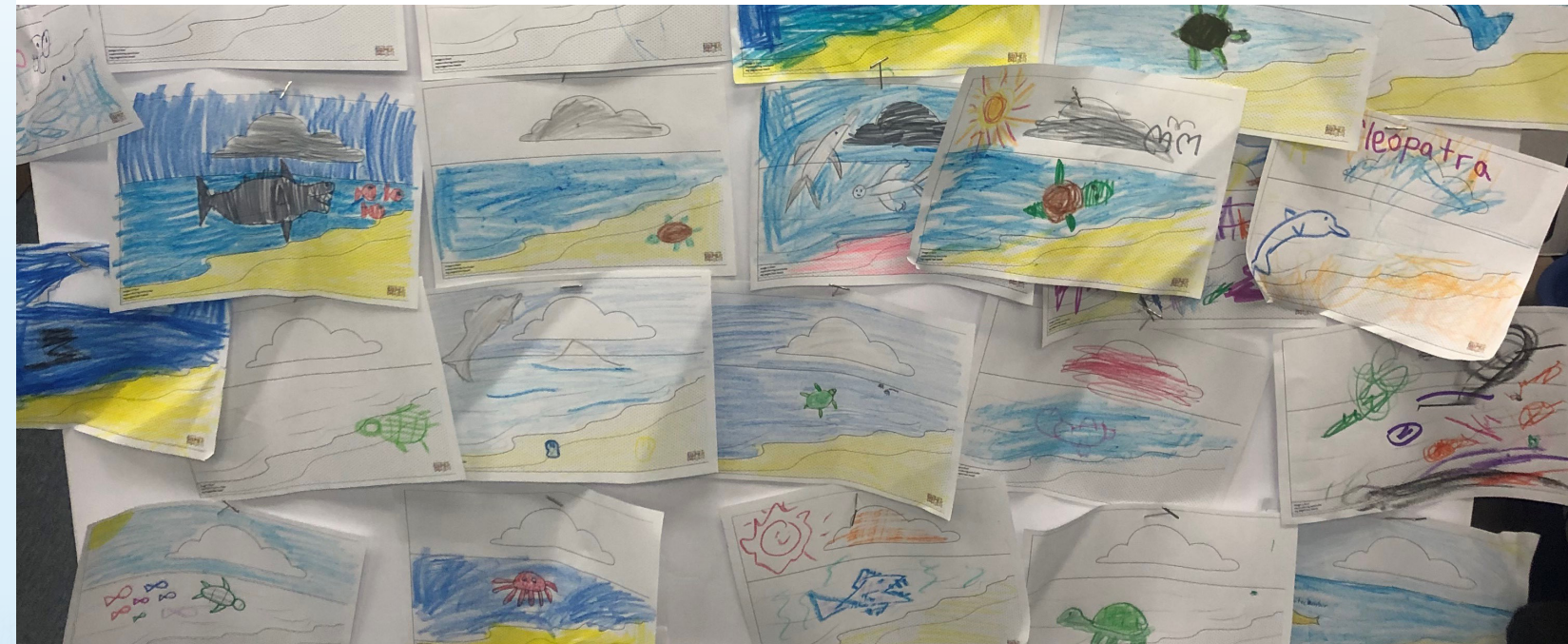


MAINTAINING OUR CANOPY

Pests, diseases and drought are impacting San Diego's urban forest.

To grow our tree canopy, we must maintain and protect existing trees while also focusing on planting new trees.

Tree issues on City property can be reported on the Get It Done app.



When a tree must be removed, staff make sure nothing goes to waste. Trees to Treasures is a program with Friends of Balboa Park that takes downed timber and dead trees and uses the wood to create unique products for sale. Profits are used to plant new trees in Balboa Park.

SEA LEVEL RISE VULNERABILITY ASSESSMENT

Completed in July 2019, this assessment identifies vulnerabilities of City assets and public trust resources to future flooding and erosion. Potential adaptation strategies to address these vulnerabilities are listed in the assessment's report, along with relative costs and timeframes of each measure. This sea level rise vulnerability assessment and future resiliency plans are pivotal steps in planning for climate change impacts in our region.

Looking Forward: Climate Resilient SD

City staff are conducting stakeholder outreach in developing Climate Resilient SD which aims to address the City's vulnerabilities to impacts of climate change and identify potential adaptation measures. Extensive public outreach will be necessary to ensure the plan has input from residents and business owners on potential adaptation strategies.

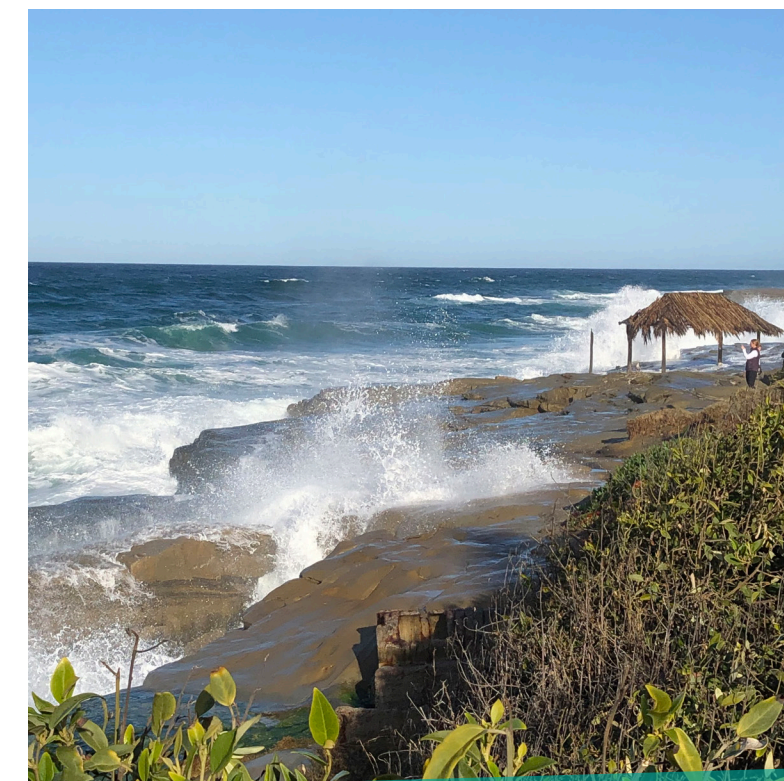
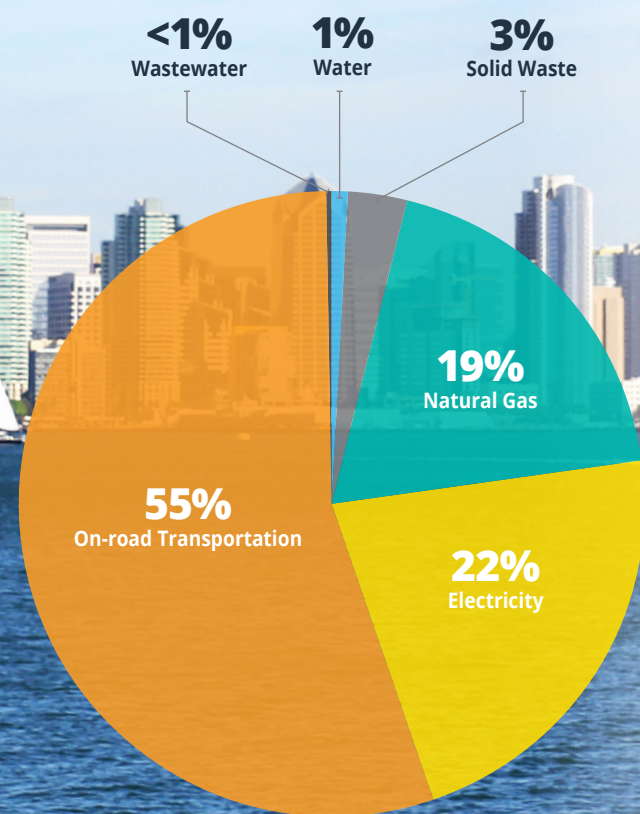


Table of Strategies and Actions

BREAKDOWN OF GHG EMISSIONS IN SAN DIEGO (2018)



Percentages may not add to totals due to rounding.

STRATEGY 1



Reduce residential energy use

2010 Baseline



5000 kW, 300 therms

2018

15% energy use reduction from baseline in 50% of units

2020 Target

15% energy use reduction from baseline in 20% of units

2035 Target

15% energy use reduction from baseline in 50% of units

STRATEGY 2



Reduce municipal energy use



205 million kW, 3 million therms

2.5% reduction from baseline

15% reduction from baseline

25% reduction from 2020 goal

Reduce per capita water use



128 gallons per capita per day (GPCD)

114 GPCD

117 GPCD

105 GPCD

Achieve 100% renewable energy citywide



11% renewable energy content

43% renewable energy content

N/A

100% renewable energy content

Increase municipal zero-emission vehicles (ZEV)



0% ZEVs in municipal fleet

87 ZEVs/**69** hybrids municipal fleet (2% ZEV's in municipal fleet)

50% ZEVs in municipal fleet

90% ZEVs in municipal fleet

STRATEGY 3



Convert to compressed natural gas (CNG) waste trucks



0% CNG waste trucks in operation

29% of waste trucks in operation are CNG

N/A

100% CNG waste trucks in operation

Increase use of mass transit



4% commuter transit modeshare

8% commuter transit modeshare¹

12% commuter transit modeshare

25% commuter transit modeshare

Increase commuter walking opportunities



3.5% pedestrian commuter modeshare

3% pedestrian commuter modeshare¹

4% pedestrian commuter modeshare

7% pedestrian commuter modeshare

Increase commuter bicycling opportunities



2% bicyclist commuter modeshare

2% bicyclist commuter modeshare¹

6% bicyclist commuter modeshare

18% bicyclist commuter modeshare

Retime traffic signals and install roundabouts



40 traffic signals per year, 0 roundabouts

52 signals retimed, **0** roundabouts

200 traffic signals retimed, 15 roundabouts installed

35 roundabouts installed

STRATEGY 4



Reduce vehicle miles traveled



25 miles per day commute distance

20 miles per day commute distance¹

N/A

23 miles per day commute distance

Divert solid waste



52% diversion rate

65% diversion rate

75% diversion rate

90% diversion rate

Methane capture from the landfill



75% of gas captured from the landfill

74% of gas captured from the landfill

80% of gas captured from the landfill

90% of gas captured from the landfill

Methane capture from wastewater treatment



71% of gas captured from the wastewater treatment facility

99.9% of gas captured from the wastewater treatment facility

N/A

98% of gas captures from the wastewater treatment facility

STRATEGY 5



Increase urban tree canopy cover



7% tree canopy cover citywide

13% 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 2019 CAP Annual Report (www.SanDiego.gov/sustainability).



Working with Communities



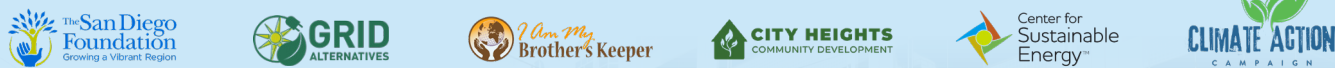
CITY HEIGHTS COMMUNITY DEVELOPMENT PARTNERSHIP

In August 2019, the City partnered with City Heights Community Development Corporation for Transit & Tacos at Fair@44. Attendees shared their thoughts on our region's transportation system.



PARTNERS FOR PLACES

The City of San Diego is working with I Am My Brothers Keeper, GRID Alternatives, the San Diego Foundation, Climate Action Campaign and the Center for Sustainable Energy to ensure that the benefits of work related to the Climate Action Plan are shared with the communities who need it the most. The Partners for Places Project will engage communities in Southeast San Diego through a Climate Ambassadors for Environmental Justice educational program and energy efficiency analysis specific to mobile home parks.



Letter from Chief Sustainability Officer



Our climate is changing. As Chief Sustainability Officer for the City of San Diego, it is my mission to ensure we take bold steps to enhance our quality of life, improve the health of our environment, increase opportunities for all of our communities, build a more resilient economy and ensure we create a city where future generations will prosper.

The cities of San Diego, Chula Vista, La Mesa, Encinitas and Imperial Beach made the choice to put the future of energy into the hands of the communities they represent while setting a path forward to 100% renewable energy through the formation of San Diego Community Power. Together, we will make choices in how to meet the energy needs of our communities and see more localized benefits and opportunities from power generation and conservation efforts.

We are working to be more connected to our citizens than ever before, bringing more opportunity for San Diegans to participate in solutions to this global problem, and benefit from implementation of the Climate Action Plan. I'm especially proud of my team in the Sustainability Department and all of the public servants who are working hard to help the City walk the walk. We are doing exciting things, from bringing more renewable energy and advanced efficiency projects, to establishing a first-of-its-kind climate equity index and establishing measurable indicators of environmental justice.

San Diego is demonstrating to the world that we can be a resilient, thriving city in an uncertain climate. Together, as a community, we will create a city of the future.

Sincerely,

 Cody Hooven





For more information or data, please see the 2019
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.

