

City of
ENCINITAS



CLIMATE ACTION PLAN ANNUAL REPORT 2019

Prepared by the City of Encinitas
FEBRUARY 2021



Letter from the City Manager

Dear Encinitas Residents,

It is my pleasure to present the annual report for the City's 2018 Climate Action Plan. This report covers work completed in 2019.

When Encinitas City Council adopted the Climate Action Plan (CAP) in January of 2018, we committed to the ambitious goal of cutting emissions by 41 percent below 2012 levels in just twelve years. Since the CAP adoption, the City has been hard at work making these goals a reality. Of the nineteen City actions laid out in the CAP, five have been completed and thirteen are in progress.

Since the launch of the CAP, the City has prioritized clean, renewable energy as a core solution to reducing greenhouse gas emissions. Notably, in 2019, the City became a founding member of San Diego Community Power (SDCP), a community choice aggregation (energy) program. The formation of SDCP plays an essential role in meeting our City's overall climate goals. The program will launch in phases in 2021, deliver a minimum of 50 percent renewable energy to Encinitas residents and businesses, as well as allow customers to choose to opt up to 100 percent renewable energy at any time. By 2030, this new electricity provider is slated to serve all Encinitas customers with 100 percent renewable electricity.

Another success story lies in the development and management of the City's tree canopy. Since 2012, the City has planted over 800 trees, far surpassing our goal of planting 650 net new trees by 2030. Trees sequester carbon and provide many other benefits to our community like improved water quality, reduced stormwater runoff, enhanced property values, human health benefits, and habitat for wildlife. Planting these trees ahead of schedule will enable greater carbon sequestration as the trees grow and mature over time.

These sustainability achievements are only the beginning! As you'll discover in reading the latest CAP annual report, Encinitans have many reasons to celebrate and take pride in the City's accomplishments. Community support, thus far, has made the City an environmental leader in the region. I encourage you to follow the City's journey on the Encinitas [Climate Dashboard](#). Staying engaged with YOUR CITY is essential for our momentum to continue.

Sincerely,

Pamela Antil
City Manager, City of Encinitas

Table of Contents

- Letter from the City Manager.....2
- Executive Summary.....4
- Chapter 1: Greenhouse Gas Inventory.....6
- Chapter 2: CAP Implementation Progress Summary.....9
- Chapter 3: CAP Implementation Progress by CAP Strategy
 - Building Efficiency.....17
 - Renewable Energy.....20
 - Water Efficiency.....25
 - Clean and Efficient Transportation.....28
 - Off-Road Equipment.....35
 - Zero Waste.....37
 - Carbon Sequestration.....41
- Chapter 4: Social Equity and Green Jobs.....44
- 2020: Looking Ahead.....48
- Conclusion.....49

Executive Summary

The City of Encinitas is actively engaged in addressing climate change and reducing greenhouse gas (GHG) emissions, evident through the adoption of a comprehensive updated [Climate Action Plan](#) (CAP) on January 17, 2018 and the City's commitment to continued implementation of the CAP. Most recently, on November 18, 2020, City Council approved an interim update to the City's CAP to align with the City's Housing Element. Although this was a significant update, this annual report evaluates progress made based on the 2018 CAP, the document version in place in 2019.

Through the 2018 CAP the City aims to achieve citywide GHG emissions reductions of 13 percent below 2012 levels by 2020 and 41 percent below 2012 levels by 2030. This equates to reducing emissions by 53,232 MTCO₂e by 2020 and 197,724 MTCO₂e by 2030 (See Figure 1). The City's 2018 CAP established nineteen (19) specific City actions that each have numeric performance metrics and associated GHG emission reduction estimates that when added together, will enable the City to achieve its overall 2020 and 2030 targets.

Figure 1. Greenhouse Gas Emissions Reduction Targets



To track and share implementation progress with the public, the 2018 CAP calls for annual monitoring and reporting, summarizing progress toward overall GHG reduction targets and evaluating progress made on implementing each of the 19 City actions. The second annual report includes data tracked through 2019 and notable City actions that occurred in 2019.



In 2019, City staff completed four (4) City actions. To date, of the 19 City actions, a total of five (5) have been completed, thirteen (13) are in progress, and one (1) is awaiting resources.

2019 ACCOMPLISHMENTS

- 1** **Provided** 186 rebates to residents as part of the Electric Leaf Blower Rebate Program, reducing emissions from off-road equipment.
- 2** **Planted** 181 trees throughout Encinitas' parks and streets as part of the Urban Forest Management program in 2019.
- 3** **Launched** the interactive Climate Dashboard website in October 2019 for residents to track the City's climate action progress
- 4** **Adopted** local building codes requiring the installation of electric vehicle charging stations at certain residential and commercial developments in November 2019.
- 5** **Submitted** a community choice energy Implementation Plan to the California Public Utilities Commission in December of 2019 as part of San Diego Community Power JPA with a goal of serving renewable electricity to customers in 2021.

One of the most notable actions in which the City made significant progress was the launch of a Community Choice Energy (CCE) Program. In August of 2019, Encinitas City Council opted to join a regional CCE program led by the City of San Diego, along with the cities of Chula Vista, La Mesa and Imperial Beach. The City also passed ordinances to prohibit the use of gas-powered leaf blowers and to require electric vehicle charging stations as part of certain development projects. Additionally, in 2019, the City planted 181 trees, exceeding the 2030 target established by the 2018 CAP.

Included in the 2019 Annual Report is the most recently available GHG emissions inventory for the City, completed with support from the [San Diego Association of Governments \(SANDAG\)](#). Using the best and most currently available data and modeling technology, this inventory estimated citywide GHG emissions in the City of Encinitas to be 390,600 MTCO_{2e} in 2016 which is 19% lower than emissions estimated in 2012, the baseline year. The next GHG inventory to be completed by SANDAG will include data through 2018 and is expected to be completed in 2020. More information regarding the City's latest GHG emissions inventory can be found in Chapter 1: Greenhouse Gas Inventory.

The 2019 Annual Report evaluates whether the City is on track to meet the 2020 GHG emissions reduction target and provides an early look at the City's trend toward the 2030 emissions target. The 2019 Annual Report highlights the progress made on individual City actions and, where possible, data and graphs are presented to demonstrate progress. It is important to note that, while the data presented may be used as an early indicator of progress, multiple years of monitoring data are needed to develop long-term trends in GHG emissions and provide an accurate understanding of the overall impact that City efforts have achieved.



Chapter 1: Greenhouse Gas Inventory

The community's contribution to global climate change can be accounted for by measuring the greenhouse gas emissions generated within the City. Greenhouse gas inventories are conducted to determine the amount and sources of emissions produced in a community. Inventories play an essential role in the climate action planning process and allow the City to track progress on its ambitious climate goals.

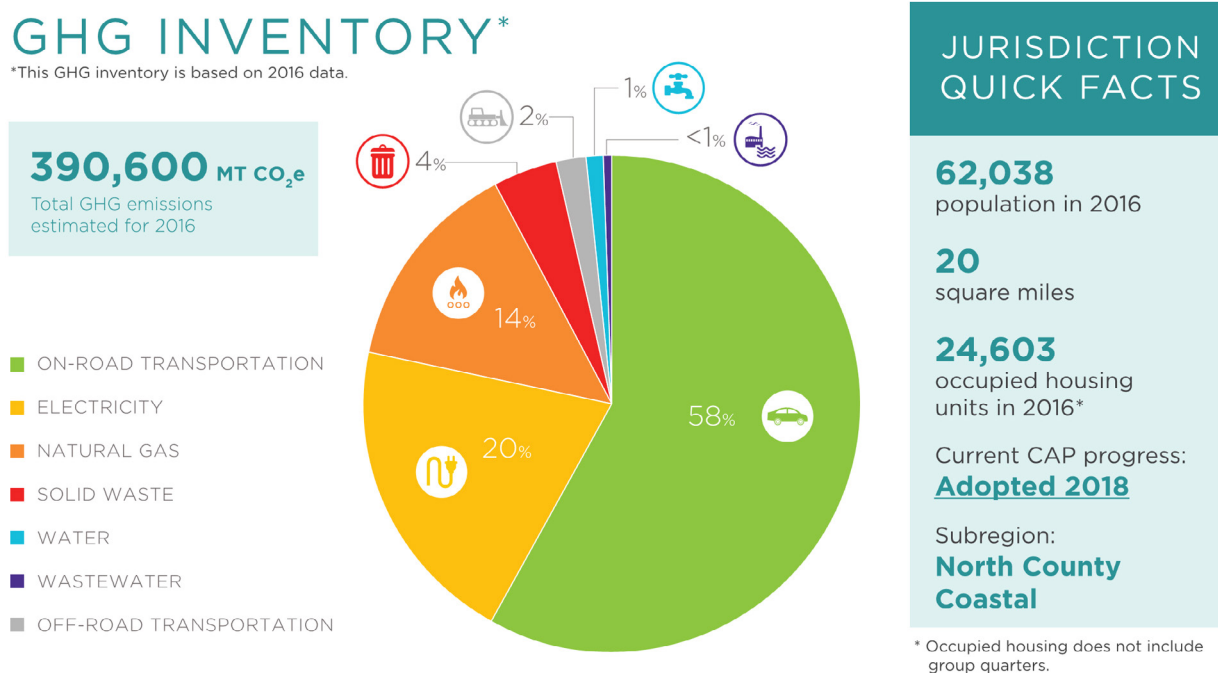
Greenhouse Gas Inventory

The primary greenhouse gases (GHGs) emitted in the City of Encinitas include carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). Each GHG has varying levels of potency in the atmosphere, therefore, to simplify the discussion and comparison of emissions, the CAP uses a measurement referred to as carbon dioxide equivalent (CO₂e), measured in metric tons (MT).

Completing greenhouse gas inventories is essential to achieving the main objective of the City's CAP, which is to meet targeted reductions in emissions by 2020 and 2030. GHG inventories are conducted periodically to provide a snapshot of emissions in a given year and help to develop emissions trends over time. The City's baseline inventory completed for the 2018 CAP estimated GHG emissions from sources in Encinitas to be 483,773 MTCO₂e in 2012.

With support from the Energy Policy Initiatives Center (EPIC), SANDAG completed a 2016 GHG emissions inventories for several cities in the San Diego region in 2018, including the City of Encinitas. Using the best and most currently available data and modeling methods, citywide GHG emissions in the City of Encinitas were determined to be 390,600 MTCO₂e in 2016 which is 19% lower than emissions calculated in 2012, the City's baseline year. The SANDAG greenhouse gas inventory for the City of Encinitas is provided below and is the most current available data (See Figure 2). The City expects SANDAG to complete the next GHG inventory in 2020, which will report on 2018 data.

Figure 2. 2016 Greenhouse Gas Inventory Prepared by SANDAG



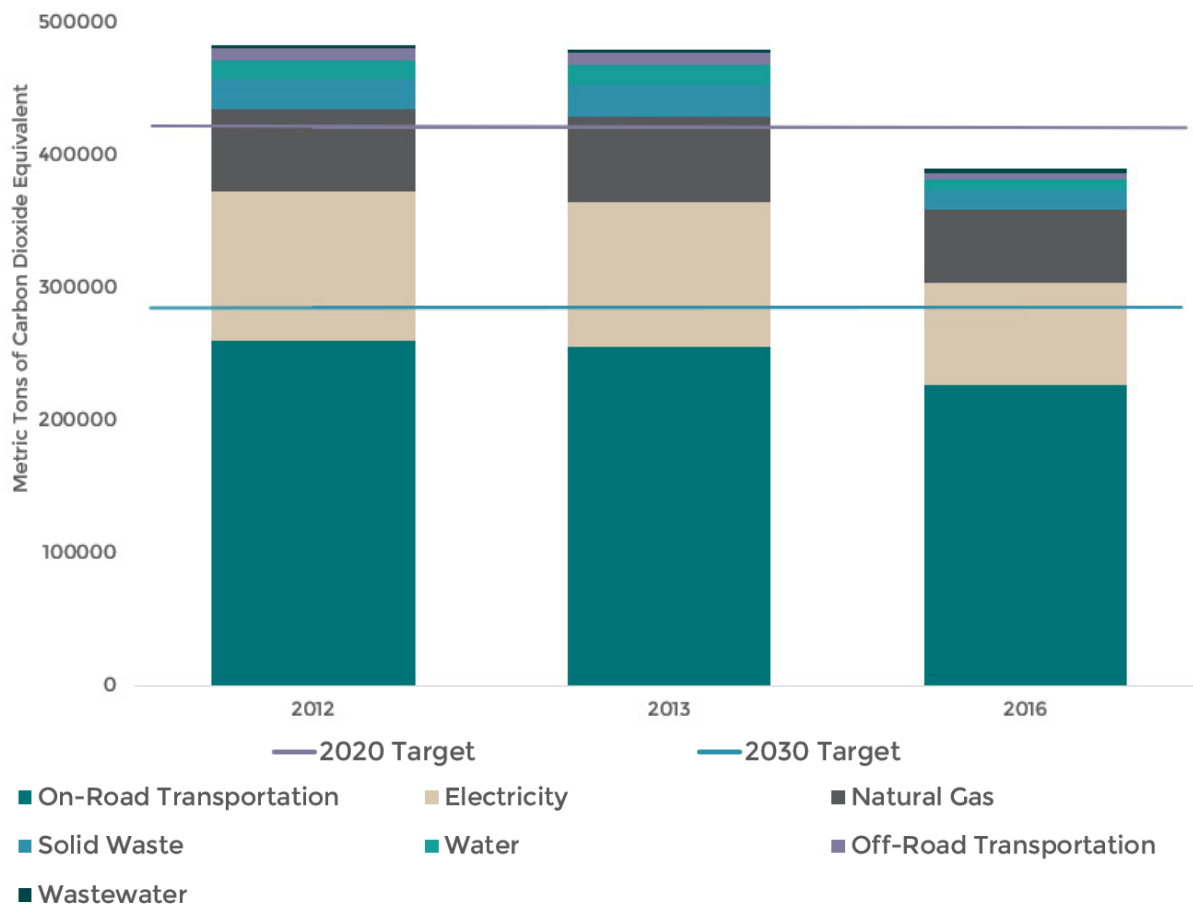
GHG emissions are calculated by multiplying activity data (e.g., kilowatt-hours of electricity, tons of solid waste) by an emission factor (e.g., pounds of carbon dioxide per unit of electricity). Running these calculations involves, among other things, a sophisticated regional transportation model using citywide and regional data. Measuring emissions from transportation is one of the most challenging sectors to evaluate. As climate science

Chapter 1: Greenhouse Gas Inventory

continues to advance and improve in this area, emissions calculation methodologies will vary from year to year, making direct comparisons difficult. Annual GHG inventories are best compared by evaluating the general trends in data over time.

As seen in Figure 3, GHG emissions in the City have decreased since 2012. Emissions went down by 1% in 2013 and 19% in 2016 from the 2012 baseline level. The next GHG inventory is planned to be completed by SANDAG in 2020 and will provide additional data for continued trend analysis. In the meantime, the City will continue to implement CAP actions and supporting measures according to the timeline laid out by the CAP Implementation Plan.

Figure 3. Greenhouse Gas Emissions Inventories by Year





Chapter 2: CAP Implementation Progress

When the CAP was updated in 2018, the City also developed a comprehensive CAP Implementation Plan which outlines how the city will implement CAP actions and monitor progress. Implementation of certain actions requires the City to develop and implement new ordinances, programs, and projects, or modify existing ones. This involved careful consideration of the operational and capital resources needed, as well as timing, phasing, and monitoring of implementation.

CAP Implementation Progress Summary

In this section, the City's progress on each action is summarized with a brief description, the implementation timeline, the current status of implementation, and the co-benefits that will be realized when the action is implemented. Tables 1 and 2 (see page 11), provide a definition of the status icon and co-benefits that are found in the progress summary tables. The information found in the progress summary tables and subsequent overview of each of the 2018 CAP strategy sections represents progress tracked through 2019. Notably in 2019, the City made significant progress implementing the following City Actions:

- **RE-1 Establish a Community Choice Energy Program:** In August of 2019, Encinitas City Council voted to join a regional CCE program, [San Diego Community Power](#) (SDCP). SDCP submitted an [Implementation Plan](#) to the California Public Utilities Commission in December 2019 officially stating its intention to begin serving power to customers in 2021.
- **CET-4 Require Residential Electric Vehicle Charging Stations:** In November 2019, City Council adopted an ordinance requiring new single-family homes to install electrical equipment capable of handling an EV charger, making the home "EV Ready," and new multi-family homes to install EV charging stations (EVCS) at 15% of the parking spaces in the complex.
- **CET-5 Require Commercial Electric Vehicle Charging Stations:** In November 2019, City Council adopted an ordinance requiring the installation of EV charging stations at a minimum of 8% of the total number of parking spaces at new commercial developments and commercial building modifications of a certain size.
- **OR-1 Adopt a Leaf Blower Ordinance to Limit Use of 2-stroke Leaf Blowers:** In August 2019, City Council adopted an ordinance prohibiting the use or operation of any leaf blower powered by a gasoline combustion engine (two-stroke or four-stroke) within City limits. The City provided 186 rebates to residents as part of the Electric Leaf Blower Rebate Program, exhausting the City's \$10,000 allocated subsidy.
- **CS-1 Develop and Implement an Urban Tree Planting Program:** Since 2012, the City planted 843 net new trees in the public right of way and City parks, exceeding the 2030 target of 650 net new trees established by the 2018 CAP.

Table 1. Definitions of Status Icons





















Status Icon	Definition
	<p>Awaiting Resources – The “Awaiting Resources” symbol indicates that the proposed action in the CAP has not yet been allocated a necessary resource, such as funding, to implement the project or program. Although the City has not started the project, the project is still expected to be completed given the timeline.</p>
	<p>In-Progress – The “In-Progress” symbol indicates that the City is in the process of implementing the action. The stages of implementation vary amongst actions, depending on the significance and amount of resources required to complete the project. Find a detailed explanation of the City’s progress on specific actions in the second component of the CAP Implementation Progress section.</p>
	<p>Completed – The “completed” symbol indicates that the City has fully implemented and completed the action it set out to achieve. This does not mean that the emissions reductions are complete for the action, rather the City has taken the necessary action to begin reducing emissions throughout the community.</p>

Table 2. Co-Benefits Legend



Co-Benefits					
					
Air Quality	Cost Savings	Resilience	Water Quality	Public Health	Green Jobs

BUILDING EFFICIENCY

Goal 1.1 Reduce Building Energy Consumption

Action	Description	Timeline	Status	Co Benefits
BE-1	Require Energy Audits of Existing Residential Units Require all existing residential units that seek building permits for modifications, alterations, and additions to perform energy audits. ¹	Within 5 Years	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #00728f 70%, #ccc 70%);"></div>	 
BE-2	Require New Single-Family Homes to Install Solar Water Heaters Require all new single-family homes to install solar water heaters or other efficiency technology. ¹	Within 5 Years	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #00728f 70%, #ccc 70%);"></div>	   
BE-3	Adopt Higher Energy Efficiency Standards for Commercial Buildings Require 1) all new commercial buildings, including commercial portion of mixed-use projects, and 2) commercial building modifications, alterations, and additions with an area larger than 10,000 square feet to meet the California Green Building Standards Code Nonresidential Tier 1 Voluntary Measures.	Within 5 Years	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #00728f 70%, #ccc 70%);"></div>	 
BE-4	Require Commercial Buildings to Energy Efficient Solar Water Heaters Require 1) all new commercial buildings, including the commercial portion of mixed-use projects, 2) commercial building modifications, alterations, and additions with an area larger than 10,000 sq. ft, to install solar water heaters or other efficiency technology. ¹	Within 5 Years	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #00728f 70%, #ccc 70%);"></div>	  

Goal 1.2 Reduce Municipal Operation Energy Consumption

Action	Description	Timeline	Status	Co Benefits
MBE-1	Continue Implementation of Energy Efficient Projects in Municipal Facilities Reduce municipal energy use below 2012 baseline energy use	Within 10 Years	<div style="width: 100%; height: 10px; background: linear-gradient(to right, #00728f 70%, #ccc 70%);"></div>	 

¹ This action was revised as part of the November 2020 interim update to the City's Climate Action Plan
 City of Encinitas CAP Annual Report 2019



RENEWABLE ENERGY

Goal 2.1

Achieve 100% Renewable Electricity Supply in Homes and Businesses

Action	Description	Timeline	Status	Co Benefits
RE-1	Establish a Community Choice Energy Program Present to City Council for consideration a Community Choice Energy program that increases renewable electricity supply.	Within 10 Years	<input type="checkbox"/>	
RE-2	Require New Homes to install Solar Photovoltaic (PV) Systems Require: 1) New single-family homes to install at least 1.5 W solar per square feet or minimum 2 kW per home, and 2) New multi-family homes to install at least 1 W solar per square feet or minimum 1 kW per unit.	Within 5 Years	<input type="checkbox"/>	
RE-3	Require Commercial Buildings to install Solar Photovoltaic Systems Require installation of at least 2 W per sq. ft. of building area on 1) all new commercial buildings, including the commercial portion of mixed-use projects, and 2) commercial building modifications, alterations, and additions with square footage larger than 10,000 sq. ft. ¹	Within 5 Years	<input type="checkbox"/>	

Goal 2.2

Increase Renewable Electricity Supply in Municipal Operations

Action	Description	Timeline	Status	Co Benefits
MRE-1	Supply Municipal Facilities with Onsite Renewable Energy Supply municipal facilities with onsite renewable energy to achieve “Net Zero Electricity” municipal operations.	Within 5 Years	<input type="checkbox"/>	

¹ This action was revised as part of the November 2020 interim update to the City’s Climate Action Plan
City of Encinitas CAP Annual Report 2019

WATER EFFICIENCY

Goal 3.1 Reduce Citywide Potable Water Consumption

Action	Description	Timeline	Status	Co Benefits
WE-1	<p>Regularly Conduct Water Rate Studies and Implement Approved Water Rates Implement approved water rates based on studies for San Dieguito Water District and Olivenhain Municipal Water District to promote water conservation.</p>	Completed/ On-Going		

CLEAN AND EFFICIENT TRANSPORTATION










Goal 4.1 Reduce Vehicle Miles Traveled

Action	Description	Timeline	Status	Co Benefits
CET-1	<p>Complete and Implement the Citywide Active Transportation Plan Complete Citywide Active Transportation Plan and implement projects outlined in plan.</p>	10 years		
CET-2	<p>Implement a Local Shuttle System Implement local shuttle system to serve local schools, transit stations and first-last mile connection.</p>	Within 10 Years		

Goal 4.2 Reduce On-road Fuel Use




Action	Description	Timeline	Status	Co Benefits
CET-3	<p>Improve Traffic Flow Improve traffic flow by retiming traffic signals and installing roundabouts at intersections in the City.</p>	Within 10 Years		

Goal 4.3 Increase Use of Alternative Fuels

CAP Measure	Description	Timeline	Status	Co Benefits
CET-4	Require Residential Electric Vehicle Charging Stations Require new residential units to install EVCS equipment. Single family units, install complete 40-Amp electrical circuit (EV Ready). Multi-Family units, install EVCS equipment at 15% of the total number of parking spaces.	Completed/ On-Going		 
CET-5	Require Commercial Electric Vehicle Charging Stations Require installation of EVCS at 8% of the total number of parking spaces at all new commercial buildings, including the commercial portion of mixed-use projects, and commercial building modifications, alterations, and additions with square footage larger than 10,000 sq. ft.	Completed/ On-Going		 
MCET-1	Transition to Zero Emission Vehicle (ZEV) Municipal Fleet Develop a municipal fleet replacement plan to 1) convert gasoline-fueled cars and light-duty trucks to Zero Emission Vehicles, including all-electric vehicles or other ZEV technology by 2030, and 2) convert to renewable diesel for all diesel-fueled heavy-duty trucks by 2020.	Within 5 Years		 




 **REDUCE OFF-ROAD EQUIPMENT**

Goal 5.1 Reduce Off-Road Fuel Use

Action	Description	Timeline	Status	Co Benefits
OR-1	Adopt a Leaf Blower Ordinance to Limit Use of 2-stroke Leaf Blowers Prohibit 2-stroke leaf blowers and implement the phase-out of leaf blower emissions.	Completed/ On-Going		 

 **ZERO WASTE**

Goal 6.1 Divert Solid Waste

Action	Description	Timeline	Status	Co Benefits
ZW-1	Implement a Zero Waste Program Implement a Zero Waste Program to reduce waste disposal from residents and businesses in the community.	Within 10 Years		 



CARBON SEQUESTRATION

Goal
7.1

Increase Urban Tree Cover

Action	Description	Timeline	Status	Co Benefits
CS-1	<p>Develop and Implement an Urban Tree Planting Program Develop and implement an Urban Tree Planting Program, including standards to right-size trees and minimize pruning and irrigation needs, to promote increased carbon sequestration by trees within the community.</p>	Completed/ On-Going		



Building Efficiency

The Building Efficiency strategy of the City's CAP aims to cut back on emissions by increasing the energy efficiency of residential and commercial buildings and reducing energy use in municipal facilities.

Implementation of the Building Efficiency strategy is estimated to reduce the City's GHG emissions by 940 metric tons of carbon dioxide equivalent (MTCO₂e) by 2020 and 4,400 MTCO₂e by 2030.

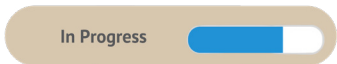
Building Efficiency

How You Can Help



Install energy efficient appliances

Action BE-1 Require Energy Audits of Existing Residential Units



This action proposes that City Council adopt an ordinance requiring residential remodels to consider installing certain energy efficiency upgrades as part of their project. In 2019, after initial implementation, it was determined that this measure would be infeasible to implement. Therefore, this measure was revised in the 2020 interim update to the CAP.

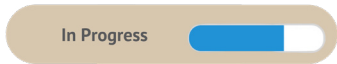
Action BE-2 Require New Single-Family Homes to Install Solar Water Heaters



This action proposes that City Council adopt an ordinance requiring new single-family homes undergoing renovations to install solar water heaters or other efficiency technology. In

2019, after initial implementation, it was determined that this measure would not be cost effective, and therefore was revised in the 2020 interim update to the CAP.

Action BE-3 Adopt Higher Energy Efficiency Standards for Commercial Buildings



This action proposes that City Council adopt an ordinance requiring energy efficiency standards for commercial buildings. In 2019, the City initiated development of a draft ordinance to implement these standards.

Action BE-4 Require Commercial Buildings to Install Solar Water Heaters



This action proposes that City Council adopt an ordinance requiring certain commercial spaces undergoing renovations to install solar water heaters or other efficiency technology. In 2019, after initial implementation, it was determined that this measure would not be cost effective, and therefore was revised in the 2020 interim update to the CAP.

Action MBE-1 Continue Implementation of Energy Efficient Projects in Municipal Facilities



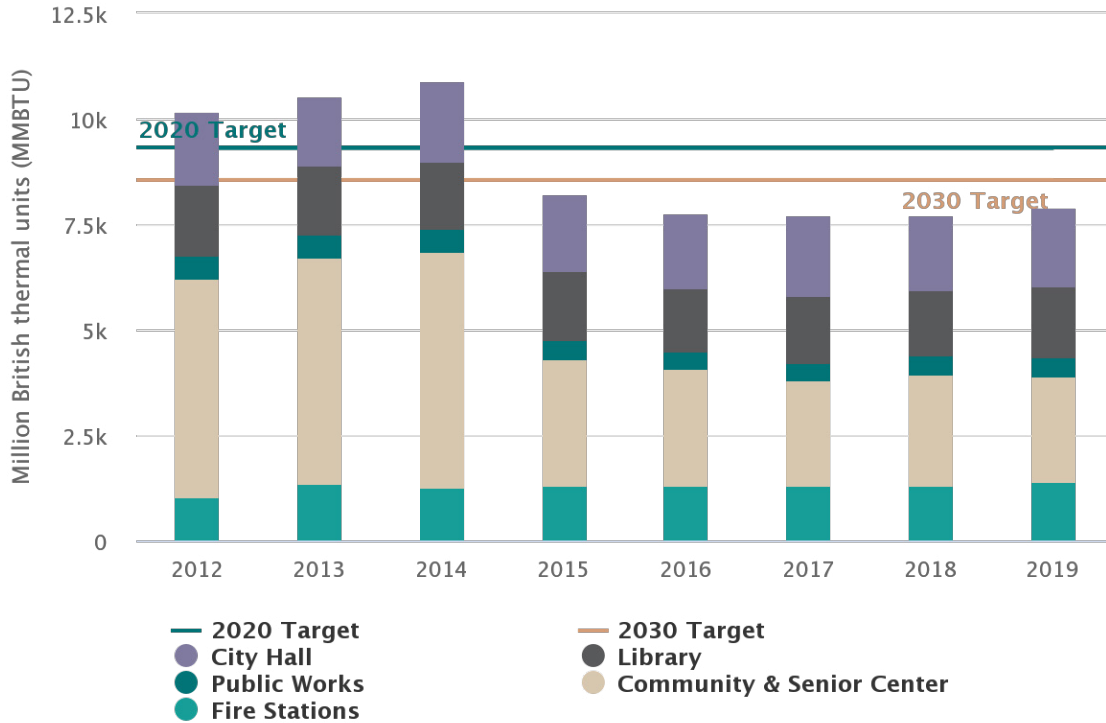
The City’s 2018 CAP established a goal of reducing municipal energy consumption below 2012 baseline energy use by 7.5% by 2020 and 15% by 2030. Municipal facilities include City Hall, libraries, Community & Senior Center, fire stations, parks and more.

Since 2012, the City has seen a 22% reduction in energy use as a result of various energy efficiency upgrades, including more efficient lighting, upgrades to heating and air conditioning systems and others.

Major energy efficiency projects include the replacement of the Community & Senior Center building cooling system in 2015, which reduced energy consumption at that facility by 43%. In 2016, the Public Works facility was retrofitted with LED lights.

In 2019, the City initiated an evaluation of all major municipal facilities and identified additional cost-effective upgrades that could be implemented to further reduce energy use. The proposed options are costly to install and must be added to a future City budget or financed. Once a prudent financing plan is established, the proposal will be presented to City Council for review and approval. Once approved, the project is anticipated to be completed in twelve to eighteen months.

Figure 4. Municipal Facilities Energy Consumption





Renewable Energy

The Renewable Energy strategy in the City's CAP aims to increase supply and access to renewable energy for existing and new residences, commercial properties, and municipal facilities. Transitioning from fossil fuels to renewable energy sources like solar and wind will improve air quality and reduce pollution, including greenhouse gas (GHG) emissions.

Implementation of these measures is estimated to reduce the City's GHG emissions by 430 metric tons of carbon dioxide equivalent (MTCO₂e) by 2020 and 45,000 MTCO₂e by 2030.

Renewable Energy

Action RE-1 Establish a Community Choice Energy Program



One of the key goals of the City’s Climate Action Plan is to launch a Community Choice Energy (CCE) program that serves 100% renewable electricity to customers by 2030. CCE programs are not-for-profit, locally controlled energy agencies that purchase electrical power on behalf of residents and businesses.

After completing a [Technical Feasibility Study](#) and [Governance Analysis Report](#) to assess the feasibility of establishing a CCE program and determine the optimal government partnership, in August of 2019, Encinitas City Council opted to join a regional CCE program led by the City of San Diego, along with the cities of Chula Vista, La Mesa and Imperial Beach. The regional CCE partners, now operating as [San Diego Community Power](#) (SDCP), submitted an [Implementation Plan](#) to the California Public Utilities Commission in December 2019 and is on track to begin serving power in 2021.



San Diego Community Power Board of Directors

How You Can Help

Go solar at your home or business

In 2019 [SDG&E](#) delivered about [45% of its power from renewable sources](#). SDCP is anticipated to provide least 50% of its electricity from renewable resources when the program launches in 2021. SDCP will allow customers to opt up to 100% renewable energy at any time and will increase overall renewable content as the CCE program matures.

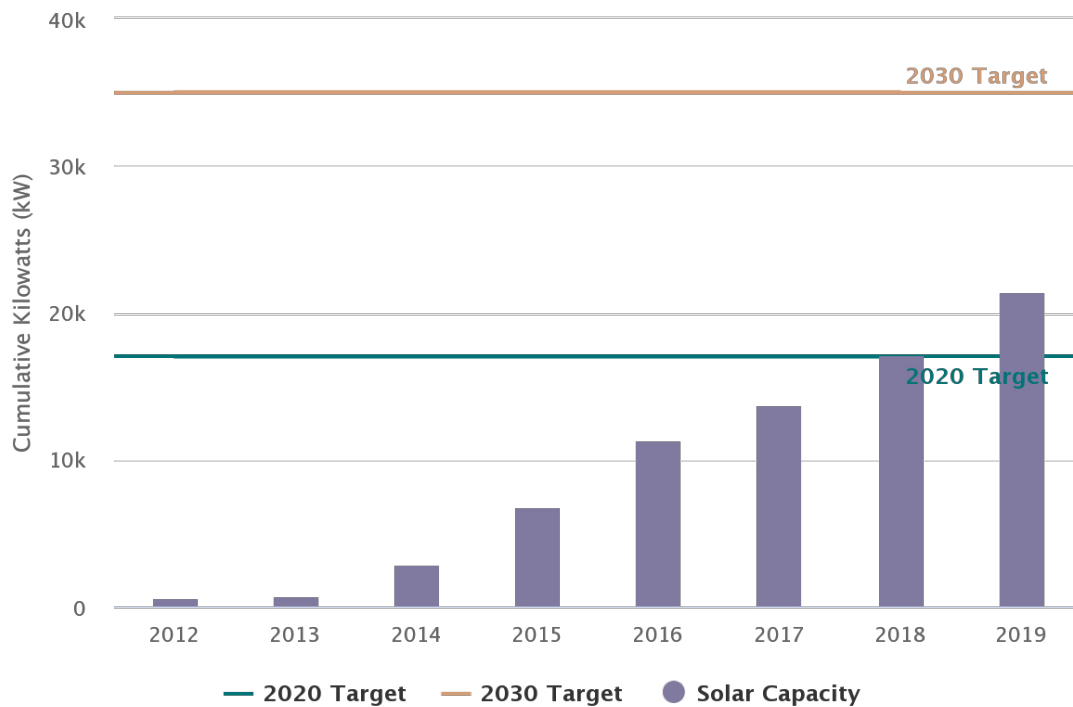
Action RE-2 Require New Homes to Install Solar Photovoltaic Systems



To reduce greenhouse gas emissions from residential electricity use, in October 2019, the City adopted an ordinance to require solar photovoltaic (PV) installations as part of new single-family and multi-family home construction. The new requirements took effect on January 1, 2020 and support the City’s 2018 Climate Action Plan (CAP) goal to install 400 kilowatts (kW) and 1,000 kW of additional residential solar by 2020 and 2030 on new construction, respectively. In 2020, staff will begin tracking progress towards these targets.

Over the past several years, many residents have voluntarily installed solar panels on their homes. Residential solar PV systems typically range in size from 5 to 20 kW per home. Between 2012 and 2019, a cumulative total of 21,473 kW of solar was installed on 3,356 homes in Encinitas (See Figure 5). According to the City’s 2018 CAP, future voluntary solar PV installations plus installations that will be required by the new ordinance are expected to achieve 17,000 kW of community-wide residential solar PV capacity by 2020 and 35,000 kW by 2030.

Figure 5. Residential Solar Photovoltaic Capacity



Action RE-3 Require Commercial Buildings to Install Solar Photovoltaic Systems

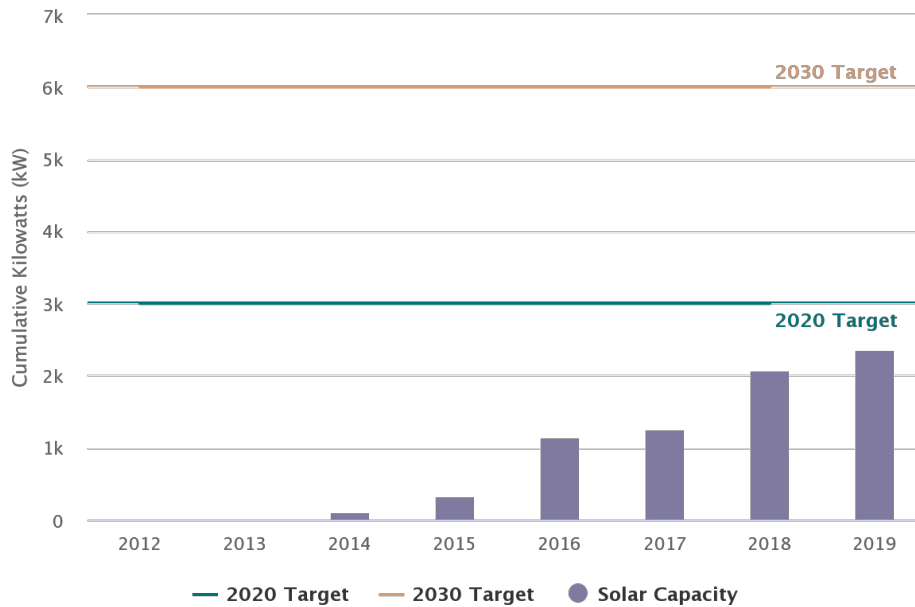
In Progress

To reduce greenhouse gas emissions from commercial electricity use, the City is drafting an ordinance to require solar photovoltaic (PV) systems to be installed as part of all new commercial buildings and remodeled commercial buildings of a significant size. Once in place, these requirements will support the City’s Climate Action Plan goal to install 200 kW and 8000 kW of commercial solar by 2020 and 2030 on new construction, respectively. After City Council adopts the ordinance, staff will begin tracking progress towards these targets.

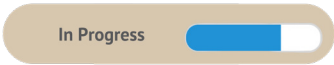
The 2018 CAP calls for increasing solar PV capacity and energy efficiency for commercial buildings. To maintain consistency with the California Energy Code, the draft ordinance defines commercial buildings as non-residential buildings. In addition to commercial buildings like retail, office and warehousing, the ordinance would also apply to hotels, motels and large multi-family housing units.

Some commercial properties have already voluntarily installed solar panels. Between 2012 and 2019, a cumulative total of 2,359 kW of solar was installed at 88 commercial properties in Encinitas (See Figure 6). According to the City’s 2018 CAP, future voluntary solar PV installations plus installations that will be required by the new ordinance are expected to achieve 3,000 kW of community-wide commercial solar PV capacity by 2020 and 6,000 kW by 2030.

Figure 6. Commercial Solar Photovoltaic Capacity



Action MRE-1 Supply Municipal Facilities with On-site Renewable Energy

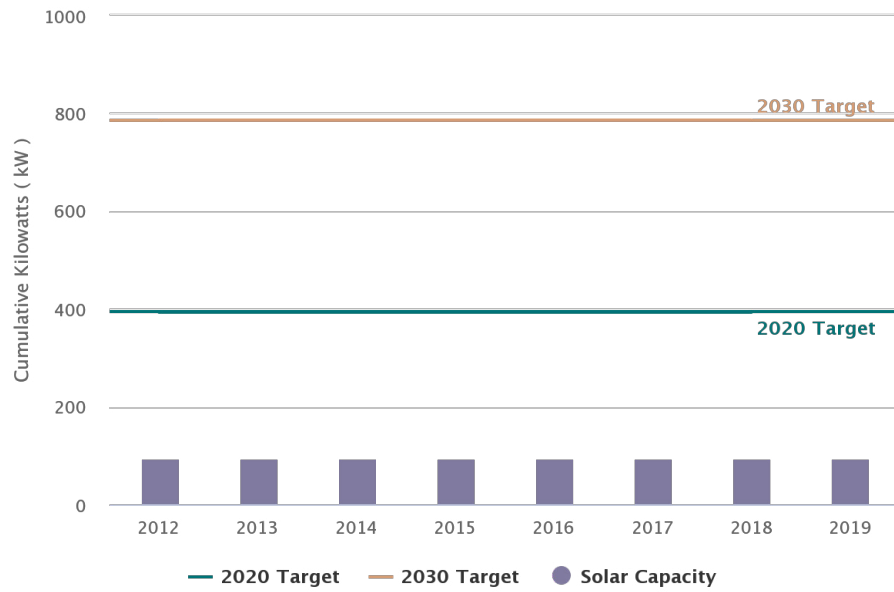


The City’s 2018 Climate Action Plan (CAP) set an ambitious goal of supplying all municipal facilities with enough on-site renewable energy to achieve “Net Zero Electricity.” This means that municipal buildings would generate as much electricity as they consume. The City aims to supply 50% of its municipal energy needs from renewable sources by 2020 and 100% by 2030.

In 2008, the City installed a 96 kW solar PV system at City Hall (See Figure 7). The system generates approximately 150 MWh of electricity annually. This is a good start, but a lot more solar power is needed to achieve the CAP goal.

In 2019, the City hired an energy consultant to design and install solar PV systems for the Encinitas Community & Senior Center, the Public Works building on Calle Magdalena, the Encinitas Public Library, and additional solar panels at City Hall as part of a “paid-through-savings” program. In total, the project will increase to City’s solar capacity to approximately 600 kW.

Figure 7. Municipal Solar Photovoltaic Capacity





Water Efficiency

The Water Efficiency strategy of the City's Climate Action Plan aims to reduce greenhouse gas emissions by encouraging the community to conserve water in their homes and businesses. Clean water is an essential but limited resource that is expected to be strained even further through projected drought conditions in a changing climate. We can reduce GHGs and enhance our resilience by ensuring water is used in the most efficient way possible.

Implementation of water conservation measures is estimated to reduce GHG emissions by 712 metric tons of carbon dioxide equivalent (MT-CO₂e) by 2020 and 735 MTCO₂e by 2030.

Water Efficiency


Action WE-1 Regularly Conduct Water Rate Studies and Implement Approved Water Rates



The City's 2018 Climate Action Plan (CAP) set a goal of reducing water consumption in Encinitas by approximately 5 gallons per capita per day (GPCD) by 2020 and another 5 GPCD by 2030. This equates to a reduction of 258 million gallons by 2020 and 266 million gallons by 2030. The energy used to treat and deliver water creates greenhouse gas (GHG) emissions. Reducing water use thereby reduces energy use.

The City's two water districts, San Dieguito Water District (SDWD) and Olivenhain Municipal Water District (OMWD), regularly conduct water rate studies and adjust rates based on the cost to supply water and the cost of operations. It is anticipated that future water rate structures will incentivize residents to reduce water use. Both water districts also offer various public education and incentive programs to encourage water conservation efforts.

How You Can Help



Install water-efficient appliances

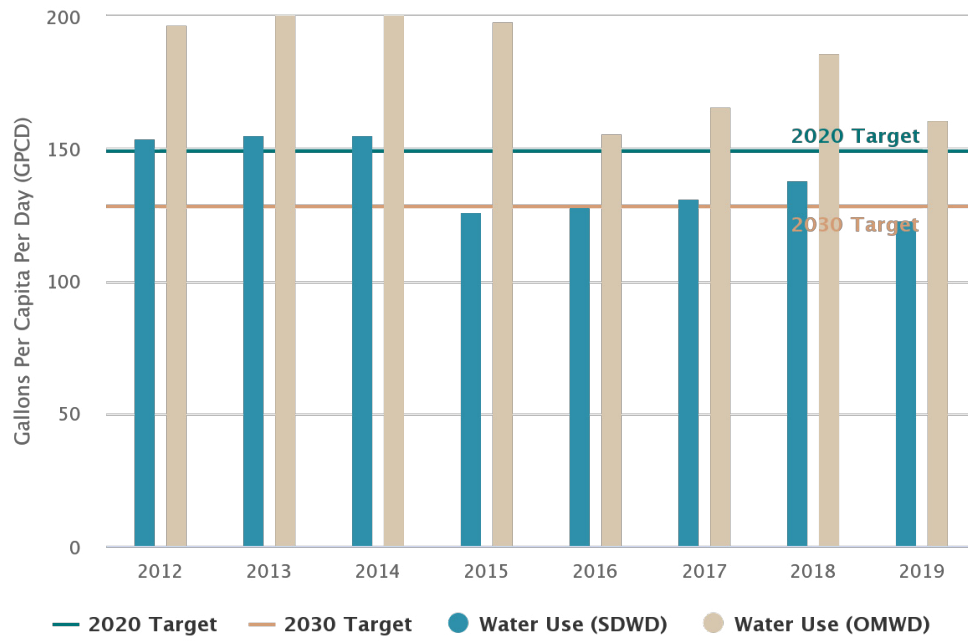
Encinitans will need to cut water use by an average of five gallons per day to meet the 2018 CAP's water reduction goals. For context, standard shower heads use 2.5 gallons of water per minute and older toilets use as much as 6 gallons per flush. To reduce water use, consider decreasing outdoor irrigation, taking shorter showers, or investing in WaterSense products, like low-flow shower heads and toilets.

During the most recent drought, Encinitas was able to reduce water consumption by 20%. When we must cut back on water use, we do a great job! In 2019, average water use by SDWD customers was 123 GPCD, which is a reduction of 31 GPCD from 2012. For OMWD customers, the average use was 161 GPCD, which is a reduction of 36 GPCD compared to 2012 levels. A potential explanation for the higher GPCD for OMWD is the larger property size and higher water use in the Olivenhain area. OMWD's service district also encompasses areas outside of the City of Encinitas. GPCD values include all water rate classes

(residential, commercial, agricultural, etc.).

Our water use has varied over the years, but overall, Encinitas residents tend to use more than the average American. According to the United States Geological Survey USGS, the national average water use was 83 GPCD in 2015. Encinitas' higher water use could be a result of southern California's dry climate and the increased need for landscape irrigation. In southern California, outdoor irrigation accounts for about two-thirds of water usage.

Figure 8. Encinitas Resident Water Consumption





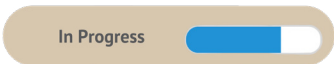
Clean and Efficient Transportation

The Clean and Efficient Transportation strategy of the Climate Action Plan (CAP) leverages smart land use planning and other initiatives to encourage people to take transit, carpool, walk, or bike rather than drive alone. This strategy also includes initiatives meant to boost the use of electric and alternative fueled vehicles when driving is necessary. Achieving greenhouse gas (GHG) emission reductions from this strategy involves coordination with, and participation from, local and regional transportation and planning agencies as well as residents and businesses.

Implementation of the Clean and Efficient Transportation strategy is estimated to reduce the City's GHG emissions 4,500 metric tons of carbon dioxide equivalent (MTCO₂e) by 2020 and 6,500 MTCO₂e by 2030.

Clean and Efficient Transportation

CET-1 Complete and Implement the Citywide Active Transportation Plan



The City's 2018 Climate Action Plan (CAP) established a goal of completing and implementing a citywide Active Transportation Plan (ATP). An Active Transportation Plan addresses local and regional bike and pedestrian travel by establishing proposed biking and walking facilities and improvements to multi-modal connections to public transit.

The City has completed and adopted its Active Transportation Plan on August 22, 2018. Implementation of the cost-effective projects has been initiated and major projects will be incorporated into the City's Capital Improvement Plan based on project priority.

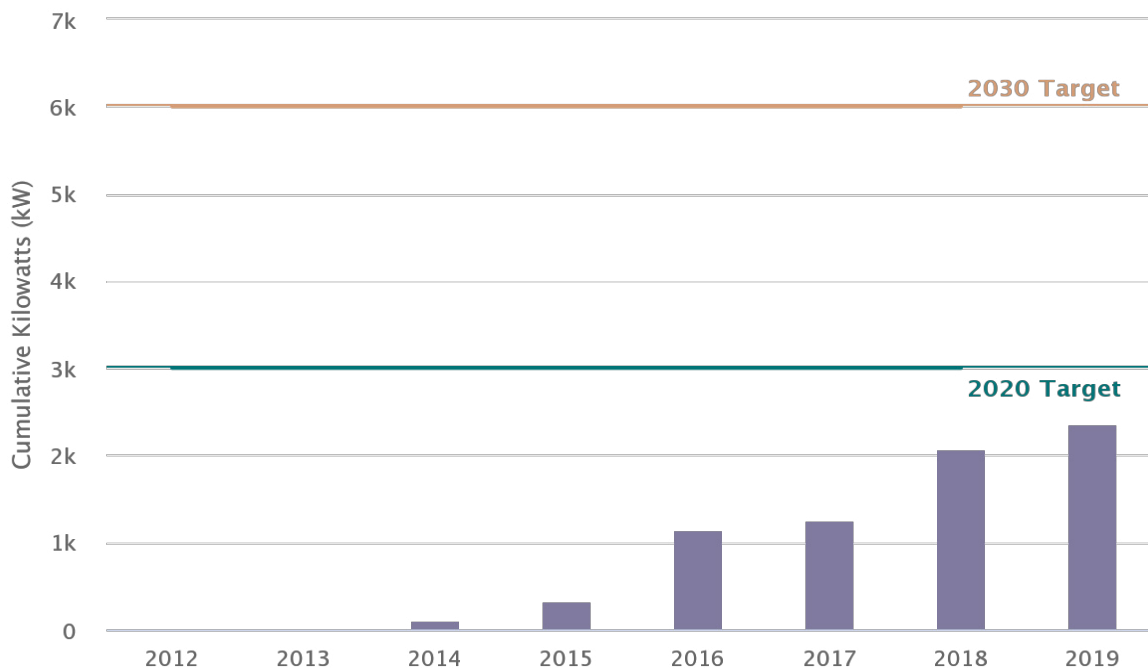
In 2019, the City installed 4 miles of new bike lanes. Since 2012, the City has installed 38 miles of bike lanes. Major bike facility improvement projects include a 1.3-mile segment of the Coastal Rail Trail (Class I) along the railroad between Santa Fe Drive to Chesterfield in 2019, 0.4 miles of buffered bike lanes (Class II) in both directions along Piraeus Street from Skyloft Road to Plato Place in 2019, and 0.3 miles of buffered bike lines along Requeza Street from the I-5 to Westlake Street.

How You Can Help



Commit to biking to work once a week

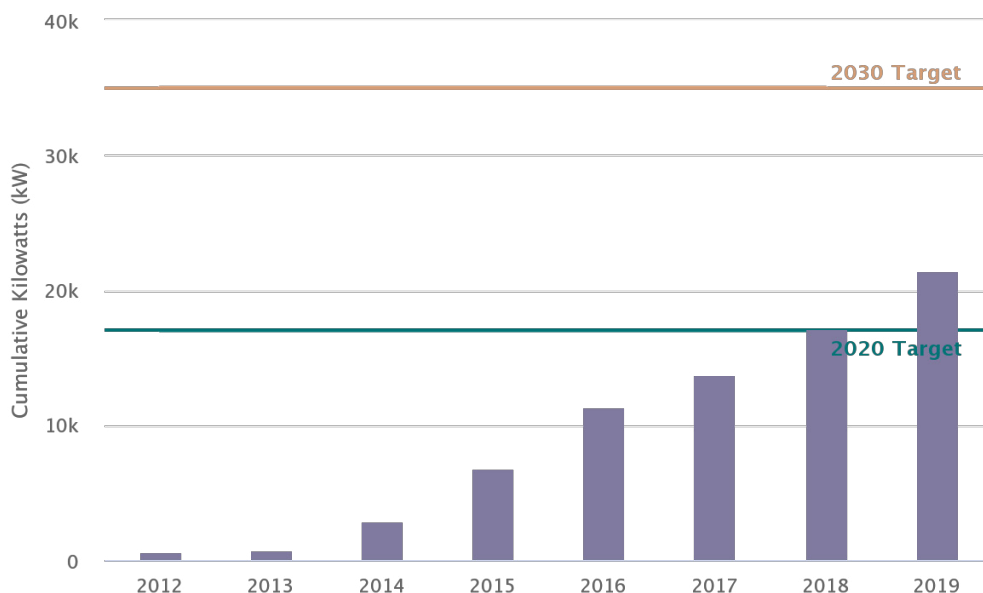
Figure 9. New and Existing Bike Facilities



* In 2012, 2013, 2014, and 2018 (indicated on the chart), the City did not track data on bike facility improvements. Although not represented in this chart, bike facility improvement projects were completed during these years. Moving forward, City staff has established a process to track bike facility installation for CAP reporting purposes.

In 2019, the City installed 2.75 miles of pedestrian facilities including sidewalks, trails, and crosswalks (See Figure 10). Since 2012, the City has installed close to 18 miles of pedestrian facilities. Two notable pedestrian projects completed in 2019 include a half-mile walkway along La Costa Avenue from 101 to I-5 and a 1.3-mile pedestrian walkway on Neptune Avenue. Other notable pedestrian improvements include the addition of four crosswalks, two on San Elijo Avenue at Montgomery Avenue and Liverpool Drive, one at Vulcan Avenue and F Street, and one at Capri Road and Burgundy Drive.

Figure 10. New and Existing Pedestrian Facilities



CET-2 Implement a Local Shuttle System

Awaiting Resources

The City’s 2018 CAP estimated that adding new local transit options could save an estimated 365,000 vehicle miles traveled in 2020 and 875,000 vehicle miles traveled in 2030. This would result in an estimated greenhouse gas emissions reduction of approximately 100 MTCO₂e and 200 MTCO₂e, respectively.

In 2014, the City completed a Transit Feasibility Study that recommended implementing new local transit routes to serve the Highway 101 corridor, education facilities in the city, and the Encinitas COASTER station. The City is currently exploring potentially viable public transit options, including rideshare programs that may be served by neighborhood electric vehicles. Opportunity for outside funding is currently being explored and costs for a local shuttle system will be considered in a future City budget.

CET-3 Improve Traffic Flow

In Progress

Vehicle fuel usage is another way to measure how transportation impacts the climate. Reducing road congestion and improving traffic flow can lead to reductions in vehicle fuel use and greenhouse gas emissions. The City’s 2018 Climate Action Plan (CAP) identified two ways to reduce fuel use: re-timing traffic signals and installing roundabouts. Efficient signal timing and roundabouts reduce vehicle stops and starts, improve vehicle stacking time, and reduce idle time, collectively contributing to reduced fuel use and reduced greenhouse gas emissions.

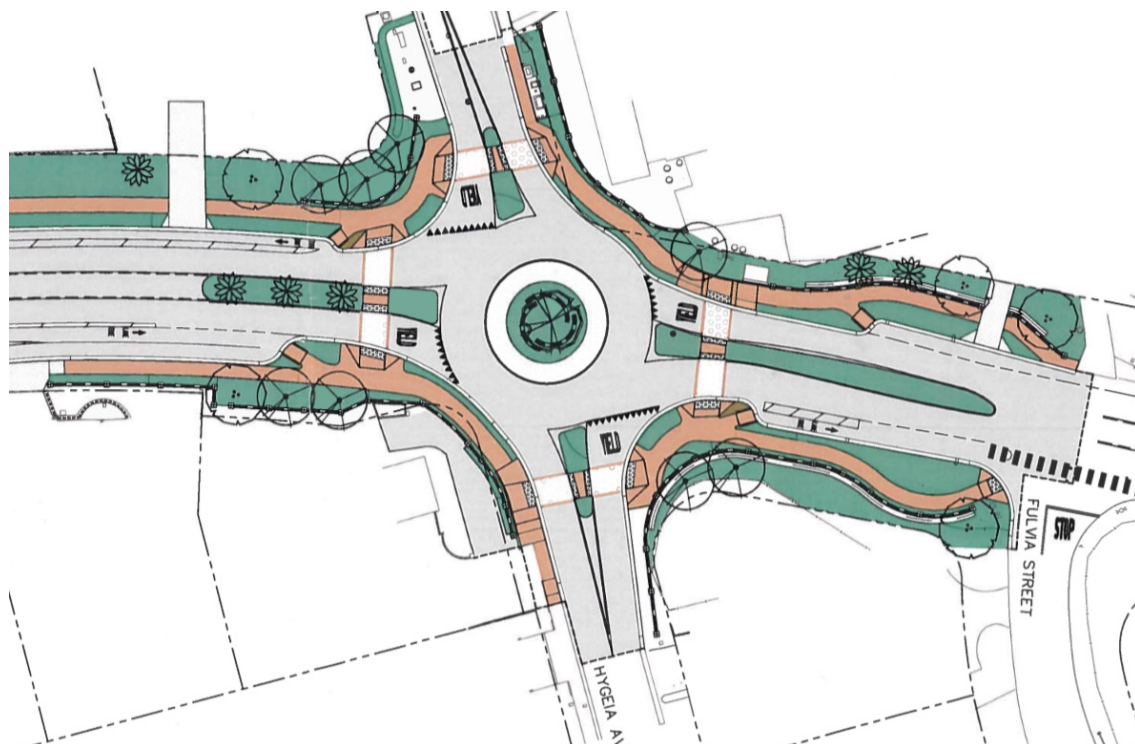


Figure 11. Roundabout planned for Leucadia Blvd and Hygeia Ave Intersection

By 2020, the 2018 CAP aims to re-time 60 traffic signals and install three roundabouts. By 2030, the CAP proposes the installation of an additional four roundabouts to improve traffic flow. This would reduce greenhouse gas emissions by approximately 3,700 MTCO₂e and 2,800 MTCO₂e, respectively.

Designs are currently in development for five new roundabouts, one at Leucadia Blvd and Hygeia Ave (See Figure 11) and four along North Coast Highway 101. A citywide traffic re-timing study is also underway and will focus on improving traffic flow by adjusting traffic light timing on Rancho Santa Fe Road, one of the City's main thoroughfares. In early 2019, the City secured a grant to add a series of signal modifications that will reduce delay times and improve traffic efficiency.

CET-4 Require Residential Electric Vehicle Charging Stations

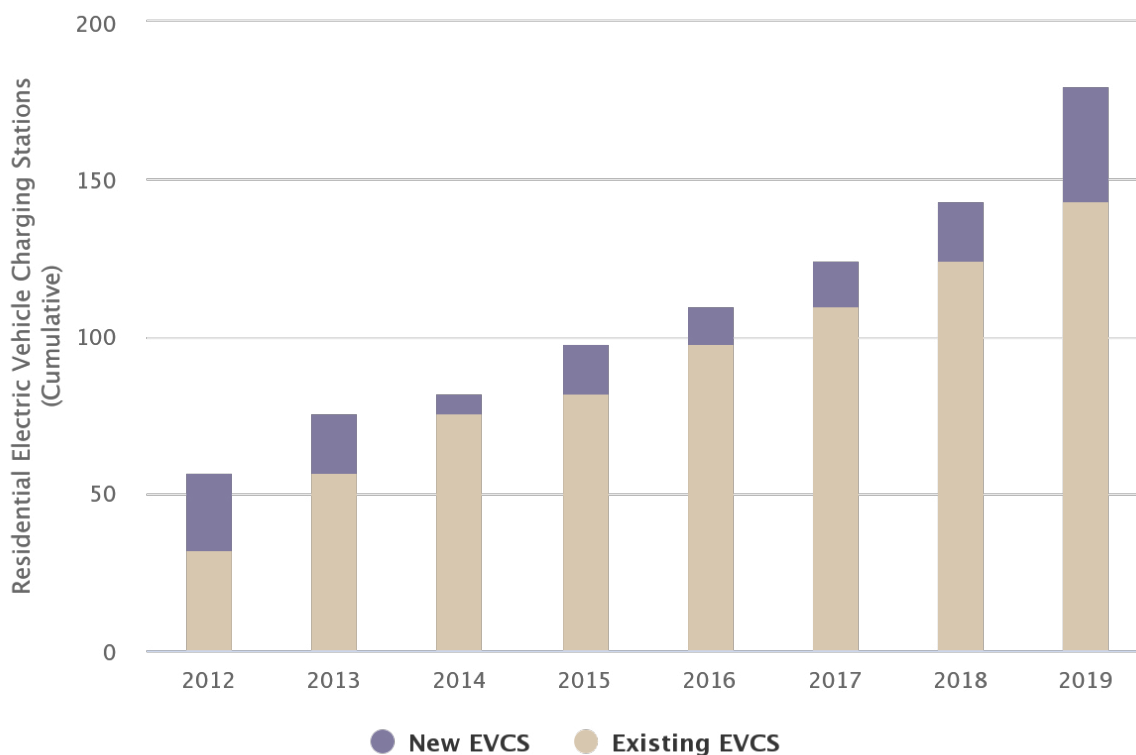
Completed

To increase electric vehicle (EV) adoption by residents, the City's Climate Action Plan (CAP) proposed enacting local building codes to require residential EV charging stations. In 2019, an ordinance was developed to require new single-family homes to install electrical equipment capable of handling an EV charger, making the home "EV Ready," and require new multi-family homes to install EV charging stations (EVCS) at 15% of the parking spaces in the complex. In November 2019, City Council considered and adopted [Ordinance 2019-22](#) enacting these new regulations, which went into effect on January 1, 2020.

As a result of these new codes, the 2018 CAP estimates that 65 EVCS will be installed by 2020 and 370 EVCS will be installed by 2030 at new residential developments. Meeting these goals will decrease greenhouse gas (GHG) emissions by approximately 200 MTCO₂e by 2020 and 1,400 MTCO₂e by 2030. Now that the ordinance is in place, staff will begin tracking the City's progress towards these targets.

Prior to the passing of the ordinance, some homeowners voluntarily installed electric vehicle charging stations at homes throughout Encinitas. According to building permit data, 161 EVCS were installed at residential properties from 2012 to 2019 (See Figure 12).

Figure 12. Residential Electric Vehicle Charging Stations



CET-5 Require Commercial Electric Vehicle Charging Stations

Completed

To increase electric vehicle (EV) adoption by residents, the City’s 2018 Climate Action Plan (CAP) proposed enacting local building codes requiring the installation of EV charging stations at commercial properties. In 2019, an ordinance was drafted to require to all new commercial developments and commercial building modifications, alterations, and additions 10,000 square feet or greater to install EV charging stations at 8% of the total number of parking spaces. In November 2019, City Council considered and adopted [Ordinance 2019-22](#) enacting these new regulations, which went into effect on January 1, 2020.

As a result of these new codes, the 2018 CAP estimates that 150 EVCS will be installed by 2020 and 490 EVCS will be installed by 2030 at new commercial developments. Meeting these goals will decrease greenhouse gas (GHG) emissions by approximately 200 MTCO_{2e} by 2020 and 1,800 MTCO_{2e} by 2030. Now that the ordinance is in place, staff will begin tracking the City’s progress towards these targets.

MCET-1 Transition to a Zero Emission Municipal Fleet



In 2019, the City’s municipal fleet included 2 battery-electric vehicles, one plug-in hybrid, and 12 hybrid vehicles, with 15 clean fleet vehicles in total. EVs make up almost 30 percent of the light duty fleet--the portion of the fleet that may currently have EV alternatives available in the market. In accordance with the ZEV Fleet Conversion Plan, City vehicles are annually evaluated, and vehicle replacements are budgeted and scheduled as needed. Whenever possible, EVs are selected as replacement vehicles in the light-duty class.

Since 2012, there has been a 37% decrease in City fleet gasoline use (See Figure 13), resulting from the use of hybrid and electric vehicles for municipal operations. The City has 10 electric vehicle charging stations at the Public Works Yard installed as part of SDG&E’s Power Your Drive program. In 2019, the City began planning for additional charging stations to be installed at City Hall, the Community & Senior Center, and the library.

In 2019, the City continued to receive deliveries of renewable diesel fuel for municipal fleet use. Renewable diesel is made from products that would otherwise be wasted, such as natural fats, vegetable oils and greases, as opposed to conventional diesel which is derived from extracted petroleum. Renewable diesel is chemically similar to conventional diesel but generates fewer emissions and other harmful substances when burned.

All City fleet diesel-fueled vehicles, including pickups, dump trucks, fire trucks and stationary generators, now fuel up on renewable diesel. The City tracks diesel use and, since 2012, there has been a 99% percent decrease in use of conventional diesel fuel, mainly due to an increase in use of renewable diesel. The City’s overall diesel consumption has increased by 15% since 2012 (See Figure 14).



City’s first all-electric vehicle

Figure 13. Municipal Gasoline Consumption

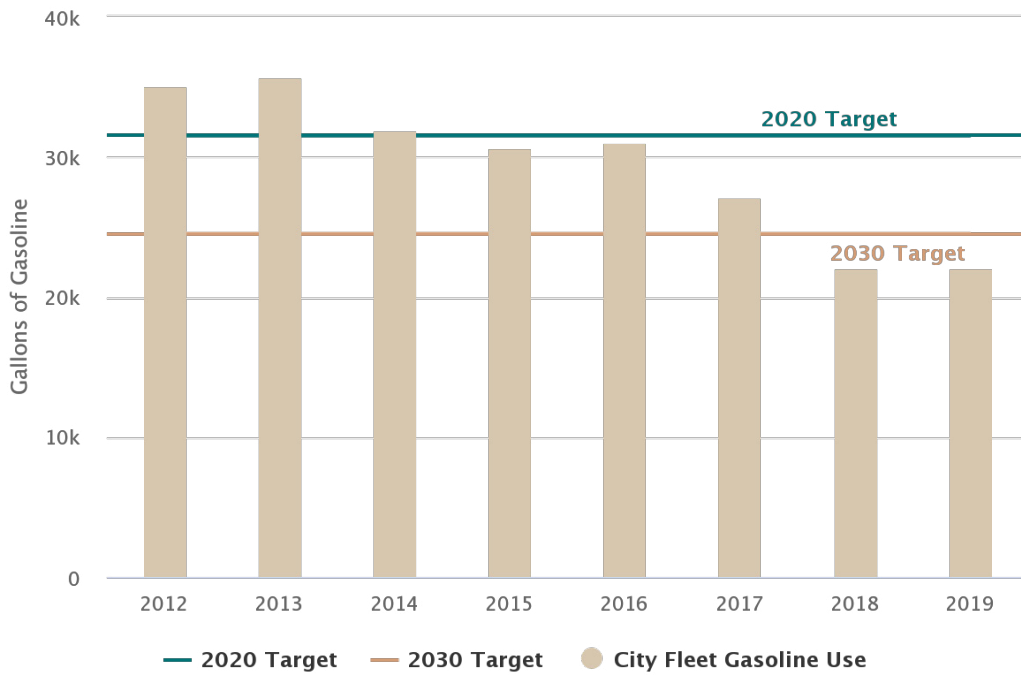
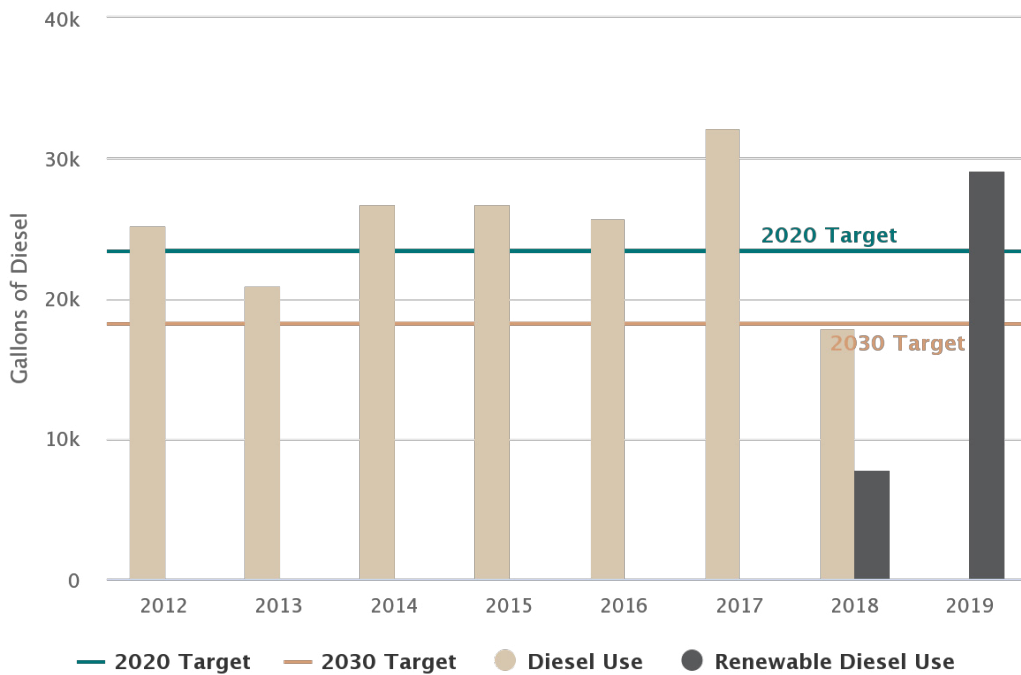


Figure 14. Municipal Diesel Consumption





Off-Road Equipment

The Off-Road Equipment strategy of the City's CAP aims to cut back on emissions by prohibiting the use of gas-powered two-stroke leaf blowers. Transitioning away from fossil fuel powered landscape equipment will decrease greenhouse gas emissions, reduce noise from yard care activities, reduce air particulates and debris, and prevent many other harmful emissions from polluting the air.

Implementation of this strategy is estimated to reduce the City's greenhouse gas emissions by 130 metric tons of carbon dioxide equivalent (MTCO₂e) by 2020 and 140 MTCO₂e by 2030.

Off-Road Equipment

Action OR-1 Adopt a Leaf Blower Ordinance to Limit Use of 2-stroke Leaf Blowers

Completed 

The City's 2018 Climate Action Plan (CAP) set a goal to reduce greenhouse gas emissions by phasing out the use of gas-powered two-stroke engine leaf blowers throughout the City of Encinitas. According to the California Air Resources Board, two-stroke leaf blowers are among the top four most used types of off-road equipment.


The 2018 CAP estimated that 20% of the emissions from lawn and garden equipment could be attributed to two-stroke leaf blowers and that phasing out the use of these leaf blowers would reduce the City's greenhouse gas emissions by approximately 130 MTCO₂e by 2020 and 140 MTCO₂e by 2030. In addition to greenhouse gas emissions, two-stroke engine leaf blowers are known to emit a number of other harmful air pollutants because a portion of the fuel does not undergo complete combustion during operation.



An electric leaf blower

Alternatives to gas-powered leaf blowers include electric and battery powered leaf blowers, human-powered equipment, and preventing the need for equipment through smart landscaping and planning. These alternative options generate less noise and emit little to no harmful air pollutants.

How You Can Help



Use a rake, broom, or electric leaf blower

On August 21, 2019, Council adopted a progressive [Leaf Blower Ordinance](#) that prohibits the use of all gas-powered (two-stroke or four stroke) leaf blowers citywide. Additionally, the ordinance regulates the permitted hours of operation of all leaf blowers and prohibits leaf blowers from depositing waste (leaves, debris, etc.) onto a neighboring property, street, sidewalk, gutter, or storm drain. The ordinance went into full effect on January 20, 2020.

In conjunction with the adoption of the leaf blower ordinance, Council created a rebate program for residents and businesses to facilitate a more affordable and equitable transition to electric powered leaf blowers. In 2019, the City processed 108 leaf blower rebate applications.

The City continued to receive rebate applications after using all originally allotted funding, and in January 2020, City Council acted to replenish a second round of rebate funds, bringing

the total number of community leaf blower rebates to 186 (32 businesses and 154 individual citizens). The rebate program ended on May 1, 2020.

The leaf blower ordinance also helps to protect the health of landscapers by protecting them from the adverse health impacts of the pollution and noise of gasoline leaf blowers.



Zero Waste

The Zero Waste strategy in the City's CAP aims to reduce the amount of waste sent to local landfills. Methane, a greenhouse gas (GHG), is emitted when waste, primarily organic materials, improperly decomposes in landfills. Methane is about 40 times more potent than carbon dioxide. Successful implementation of this strategy depends on the expansion of recycling and composting programs and participation from City residents and businesses to reduce waste and increase diversion.

Implementation of the Zero Waste strategy is estimated to reduce the City's GHG emissions by 2,830 metric tons of carbon dioxide equivalent (MTCO₂e) by 2020 and 11,921 MTCO₂e by 2030.

Zero Waste

Action ZW-1 Implement a Zero Waste Program



How You Can Help

Swap single-use plastics for reusables

The City's 2018 Climate Action Plan (CAP) aims to divert 65% of the City's solid waste from entering the landfill by 2020 and divert 80% of waste by 2030. This is equivalent to reducing our waste generation rates to 5.3 pound per person per day (lbs./person/day) by 2020 and 3 lbs./person/day by 2030, respectively. If these goals are achieved, the 2018 CAP estimated this would result in a greenhouse gas reduction of approximately 2,800 MTCO₂e and 12,000 MTCO₂e, respectively.

To achieve these diversion rates, the City is implementing a Zero Waste Program that promotes waste prevention, recycling, and diversion of organic waste. To accomplish this, the City works closely with EDCO, our contracted waste hauler. EDCO leverages green technologies, such as a state-of-the-art Resource Recovery Facility that properly sorts the City's co-mingled recycling waste.

Figure 15. Encinitas Waste Generation²

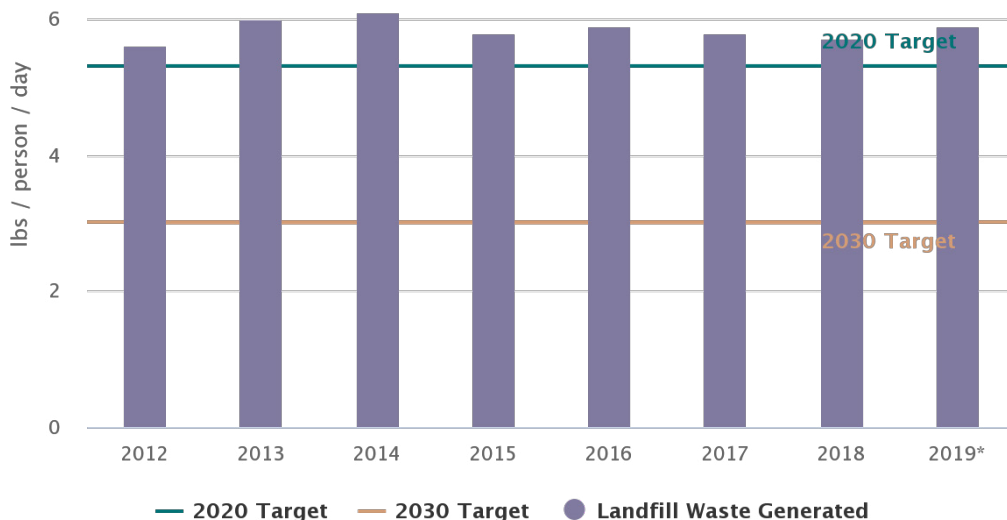


Figure 15 shows that, since 2012, the amount of waste generated by residents has fluctuated between 5.6 and 6.1 lbs./person/day. In 2019, the average Encinitas resident disposed of 5.9 pounds of waste per day.² The City's waste generation rate has remained fairly constant since we began tracking in 2012. We will need to make greater strides in waste diversion in

² The City receives waste generation data from CalRecycle, a state agency. Due to data availability issues, CalRecycle only provided the City data for the first two quarters of 2019. The total waste generation shown for 2019 is an estimate based on waste generated in the first two quarters of the year. The chart will be updated as soon as the data becomes available.

Chapter 3: CAP Implementation Progress Zero Waste

order to meet our 2020 and 2030 CAP targets. City is preparing to meet the state-mandated SB 1383 requirements related to organics waste diversion and it is anticipated that these efforts will help reduce overall waste generation.



2019 Zero Waste Fair

The City also offers workshops, educational programs, and other services to support waste reduction in partnership with local organizations, such as the Solana Center for Environmental Innovation, I Love a Clean San Diego, and BCK Programs. Some of the many City-funded initiatives include a compost bin subsidy program and an annual Zero Waste Fair. [To learn more about the City's Zero Waste programs, visit the City's website.](#)

The City also supports at-home management of organics waste (yard waste and food scraps) through educational workshops and subsidies to purchase compost and worm bins. Yard waste is also collected curbside by EDCO and processed into usable mulch.

In early 2021, curbside collection of food and green waste, also known as organic waste, will be available to Encinitas residents by conveniently using their green roll-out containers. EDCO is building an anaerobic digestion (AD) facility, which will convert food scraps, green waste, and soiled paper products into valuable end-products. Anaerobic digestion uses microorganisms to breakdown organic material into “digestate” and renewable natural gas (RNG). Digestate is rich in nutrients that can be used as fertilizer for crops and RNG can be used to fuel trucks or for energy, displacing the need for fossil fuels.



Photos from May 2020 and June 2020 of EDCO's Anaerobic Digester Facility

[Watch EDCO's video of the state-of-the-art anaerobic digestion facility.](#)

Once the curbside food and green waste collection program is rolled-out, residents can conveniently place all food scraps and soiled paper products in the green roll-out container. For further information about the program, please contact recycling@encinitasca.gov.

What Will Go in the Green Container?

Below are just a few examples of what will be able to be placed in your green organics container.

Food Scraps

Fruit, vegetables, meat, bones, dairy, egg shells, prepared food



Food-Soiled Paper

Napkins, tea bags, paper plates, coffee filters



Landscape Waste

Plants, leaves, branches, grass





Guide on what types of trash will go in the green organics container



Carbon Sequestration

The Carbon Sequestration strategy in the City's Climate Action Plan aims to facilitate the process of removing carbon dioxide (CO₂), a greenhouse gas, from the atmosphere through natural or artificial processes. An important way our community can improve its carbon sequestration potential is by increasing the number of trees planted and by maintaining a healthy urban tree canopy.

Implementation of the Carbon Sequestration strategy is estimated to reduce the City's GHG emissions by 5 metric tons of carbon dioxide equivalent (MTCO₂e) by 2020 and 23 MTCO₂e by 2030.

Carbon Sequestration

Action CS-1 Develop and Implement an Urban Tree Planting Program



The City of Encinitas maintains a thriving urban forest that includes trees along city streets and trees in city parks. New trees are continually being added to the City’s urban forest and established City trees are maintained regularly. In addition to carbon sequestration, trees provide many benefits to our community by improving water quality, reducing stormwater runoff, regulating temperature, reducing energy use in buildings, cleaning the air, enhancing property values, supporting human health, and providing wildlife habitat.



Arbor Day Tree Planting

We recognize the City’s urban forest as one of our greatest natural resources. City leaders and staff have made our trees a priority and they are dedicated to the continued planting, protection and maintenance of Encinitas’ urban forest. The departments of Public Works and Parks and Recreation have an established Urban Forest Management Program (UFMP) which closely follows the City’s UFMP Administrative Manual. In 2018, the City hired a City Arborist to support the implementation of the UFMP and oversee the care of the City’s trees.

City trees include trees in the public right of way, typically along streets and sidewalks, and trees growing in City parks. The City’s 2018 Climate Action Plan set a goal of planting 150 net new City trees by 2020 and 650 net new City trees by 2030, which is an average of 50 net new trees planted per year.

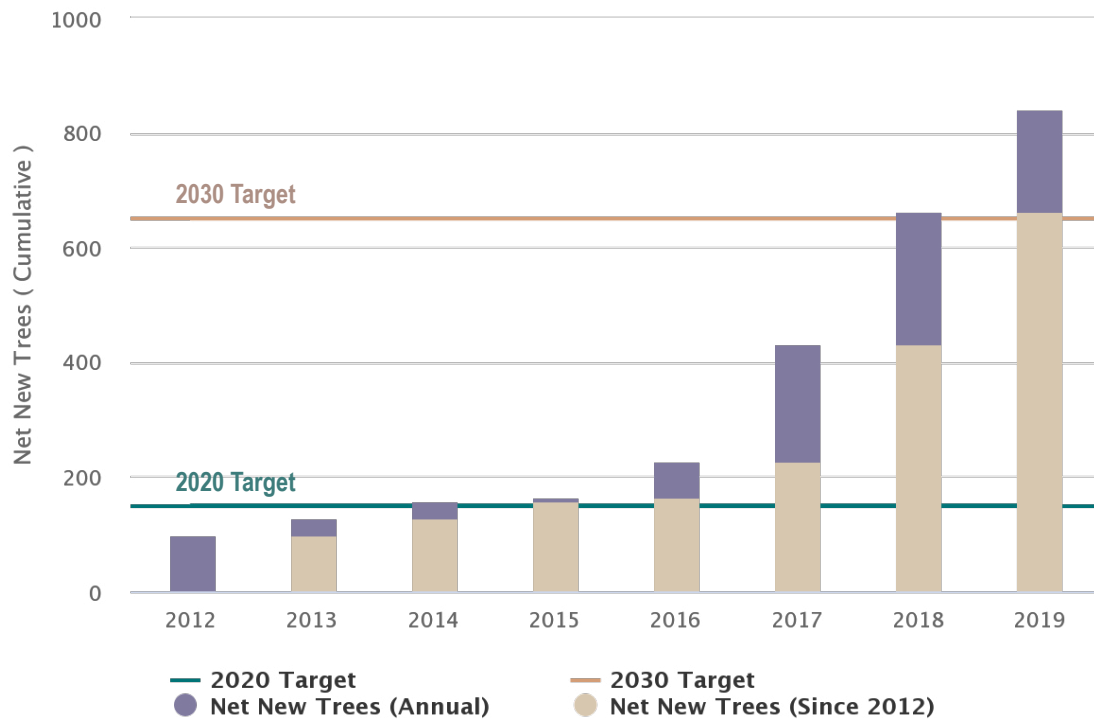
At the end of 2019, the City’s urban forest included 21,459 City trees in the public right of way. Trees in the right of way are proactively cared for and maintained by the City’s Public Works Department. Trees in the City’s numerous parks are maintained by the City’s Parks and Recreation Department. Between 2012 and 2019, the City planted a total of 843 net new trees, averaging about 105 net new trees planted per year (See Figure 16).

How You Can Help



Plant a tree in your yard or grow indoor plants

Figure 16. Cumulative City Trees Planted Since 2012



A photograph of four children standing on a beach at sunset, each holding a surfboard. The sky is filled with soft, golden light from the setting sun, and the ocean waves are visible in the background. The children are silhouetted against the bright horizon. A teal banner with white text is overlaid on the bottom part of the image.

Chapter 4: Social Equity and Green Jobs

To successfully implement the CAP, economic and equity factors must be taken into consideration. The City's CAP focuses on social equity and green jobs to address these in relation to CAP implementation.

The City continues to manage existing programs and pursue new programs to promote social equity and green jobs. The following section provides information related to the City's recently adopted Housing Element and Accessory Dwelling Unit Program and covers the on-going Section 8 Housing and Community Development Block Grant programs. The section also highlights the equitable roll out of the recently adopted Leaf Blower Ordinance, the opportunity for green jobs with the establishment of a community choice energy program, and discusses other ways that the implementation of the City's CAP will increase green jobs and contribute to a more socially equitable community.

Social Equity

The impacts of climate change will affect different members of the community in different ways and to varying degrees. Addressing equity in the implementation of greenhouse gas reducing actions ensures the just distribution of the benefits of climate protection efforts. Social equity is a broad subject that reaches beyond the capacity of the Climate Action Plan (CAP); therefore, the City continues to address equity in a holistic manner through the City's General Plan and across multiple departments. The following section summarizes the City's progress on addressing social equity through various well established and new programs and initiatives.

On March 13, 2019, City Council approved the 2013-2021 Housing Element, which addresses local affordable housing needs. The new Housing Element includes policies for new housing construction, rehabilitation, and conservation of the existing affordable housing stock. The Housing Element includes strategies and programs focusing on housing affordability, substandard housing rehabilitation, existing demand for new housing, eliminating housing development constraints, and maintaining an adequate supply of rental housing. The new plan also identified sites in the City that are suitable for lower income housing that will be up-zoned to 30 units per acre, such as providing seniors with housing options to downsize and move into areas with easy access to services, transportation, amenities, and pedestrian and bike-friendly communities.

Upon completing the Housing Element update in 2019, in accordance with the Environmental Assessment, the City initiated an update to the CAP to incorporate the new residential zoning, recalculate citywide vehicle miles traveled, and add any necessary GHG reduction measures. This CAP update was completed on November 18, 2020, concurrent with mitigation requirements.

The City also recently made changes to the accessory dwelling unit (ADU) policy, which promotes the development of more affordable housing in the community. An ADU, also known as a "mother-in-law suite" or "granny flat," is an attached or detached residential dwelling units on the same lot as an existing single-family dwelling unit which is zoned for single-family or multifamily use, that provides complete independent living facilities. ADUs provide housing opportunities within existing neighborhoods, creating housing that is already connected to the local character and infrastructure. The additional units help diversify the market for renters while providing supplemental income for homeowners, and thus increasing housing affordability throughout Encinitas.

In January 2019, the city launched a Permit-Ready Accessory Dwelling Unit (PRADU) Program which encourages the construction of ADUs by offering property owners a selection of pre-approved ADU building plans that can be downloaded from the City's web-page. The program assists property owners in creating ADUs by providing customizable plans, expediting the process, and reducing preconstruction fees. The program also helps the city meet strategic plan goals by providing diverse housing options throughout the city.

On August 21, 2019, Council adopted a progressive Leaf Blower Ordinance that prohibits the use of all gas-powered leaf blowers citywide. During consideration and adoption of the ordinance, the City conducted public outreach in both English and Spanish, knowing that many landscapers that operate in the City are predominantly Spanish speaking. In conjunction with the adoption of the leaf blower ordinance, Council created a rebate program for residents and businesses to facilitate a more affordable and equitable transition to electric powered leaf blowers. The rebate program ended on May 1st, 2020 and distributed rebates to 32 businesses and 154 residents.

The City continues to address equity in community planning through existing housing programs including the Section 8 Housing Program and the Community Development Block Grant Program. Since 1995 the City of Encinitas Housing Authority (EHA) has operated a Section 8 Rental Assistance Program. The Section 8 program offers financial rental assistance to very low-income Encinitas households through a voucher-based program. The program is very popular with an ongoing wait list. Since 2011, the City has managed a Community Development Block Grant (CDBG) Program. The program facilitates the administration of federal funding for housing related projects to create a suitable living environment, to provide decent housing, or to create economic opportunities for low-to-moderate-income households and communities.

In support of the CAP, the City is an active member of the North Coast Energy Action Collaborative, which promotes energy savings for local businesses, including small businesses, and seeks to work together on other equity-related programs. Over the past three years, the group has come together quarterly to share ideas and knowledge. Together the Collaborative has disseminated information on regionally available energy efficiency programs and brought these programs into our local North County coastal communities, including electric vehicle charging programs, climate adaptation programs, mobility and alternative transportation programs.

Green Jobs

The City fosters a need for green jobs in our local community and around the region through the implementation of the City's CAP and through the implementation of other various programs and partnerships. As the City continues to complete CAP actions and track progress, the creation of green jobs will be more closely analyzed. The following section provides some examples of the City's work that supports and promotes green jobs.

Development and completion of many of the CAP actions will create a need for more green jobs in Encinitas. For example, once the new building ordinances are in place, workers in the development and construction industry with technical knowledge and skills in solar photovoltaic systems, electric vehicles and energy efficiency will be required. Similarly, the City's Water Efficient Landscape Regulations (EMC 23.26) and the water districts' on-going water conservation programs foster a need of businesses specialized in green landscape design and installation.

The City's Economic Development program directly supports the growth of green jobs through targeted workshops and trainings. In December 2019, the City hosted a Green Business Solutions Workshop with assistance from local industry experts at I Love a Clean San Diego. At the workshop, participants from diverse business types received information on the best practices to improve office sustainability and collaborated on ways to overcome challenges to implementing green initiatives in the workplace.

The City also provides support to its four economic development organizations, Cardiff 101, Encinitas 101, Leucadia 101, and the Encinitas Chamber of Commerce. These organizations are the heart of the City's business community and are encouraged to participate in implementation of the CAP. In 2018 and 2019, through the City Cultural Tourism Committee, members of the economic development organizations supported the City's development of a north county bikeshare program. The bikeshare program is expected to launch in 2020 and add several green jobs to the region while promoting alternative transportation.

Chapter 4: Social Equity and Green Jobs

On September 18, 2019, City Council voted unanimously to form a Community Choice Energy program (CCE) called San Diego Community Power (SDCP). SDCP will be the second largest CCE program of the 19 CCE programs currently serving power in California. To begin serving power, the agency must hire staff and consultants to accomplish many clean energy related tasks. SDCP expects to spend \$5 million over the next year staffing its agency and hiring consultants. SDCP is expected to begin delivering electricity in 2021 at a cost 2-4% lower than San Diego Gas and Electric rates and with a renewable energy proportion of at least 50%. The cost savings is expected to be a significant economic investment for the region, that could promote consumer spending and jobs growth. The increase in renewable electricity proportion over SDG&E's current proportion is expected to increase the regional demand for renewable energy supplies and drive further development of the resource which will require expansion of jobs in the renewable energy field. Once SDCP is established, the agency will begin to develop programs that promote renewable energy and greenhouse gas reduction, both locally and regionally. Progress of the SDCP in green jobs development will be reported in more detail in future CAP Annual Reports.

The City is also a member of several sustainability organizations around the region including CleanTech, the Climate Collaborative, and the San Diego Green Business Network. The City is on the board of the San Elijo JPA and Encina Wastewater Authority, both creating green jobs through their wastewater and water recycling services. Additionally, the City is on the board of the San Diego County Water Authority and the Santa Fe Irrigation District, both involved in the sustainable management of water resources, bringing green, environmental service jobs to Encinitas residents and residents of surrounding cities.

Many of the City's Council members serve on influential regional boards and commissions and actively seek to pursue the development of CAP-related initiatives and local green jobs. For example, in 2019 Mayor Catherine Blakespear served as the Vice Chair on the SANDAG Board of Directors and as a board member on the Regional Solid Waste Association. In 2019, Council Member Tony Kranz was the Board Chair for the North County Transit District and Council Member Joe Mosca was selected to serve as Board Chair for San Diego Community Power. The City will continue to leverage these partnerships and leadership roles to promote and encourage green jobs development.

Looking Ahead

With thirteen (13) City actions in progress and one (1) awaiting resources, City staff will continue working diligently to achieve 2020 and 2030 targets. The CAP Implementation Plan calls for City actions to be completed within varying timelines depending on complexity and cost. City staff will prioritize City actions to be completed within the Implementation Plan's estimated timeline, with special attention given to those projects with a longer schedule. In addition to overseeing existing CAP programs, looking ahead to 2020, City staff will focus on executing the following activities:

Update the CAP to include new housing projections and establish performance metrics and GHG reduction potentials for ATP implementation.

Support San Diego Community Power in its effort to begin serving power to customers by 2021.

Adopt building code amendments related to energy efficiency and renewable energy.

Continue to install bike and pedestrian facilities to enhance mobility throughout the community.

Increase solar PV capacity at municipal facilities.

Develop a curbside organics recycling program for the community.

Launch a community bike share program.

Continue to maintain a healthy urban tree canopy and plant new trees in the City's Urban Forest.

Support City projects relevant to the CAP including the construction of the Hygeia roundabout, the El Portal undercrossing, and Leucadia Streetscape.

Conclusion

The 2019 Climate Action Plan (CAP) Annual Monitoring Report (Annual Report) summarizes the City's progress toward overall greenhouse gas (GHG) reduction targets and evaluates progress made on implementing each of the 19 City actions established in the 2018 CAP. This Annual Report covers progress made since implementation began in early 2018, upon completion of the 2018 CAP, and includes data tracked through the end of 2019.

Of the 19 City actions, five (5) have been completed, thirteen (13) are in progress, and one (1) is awaiting resources as of the end of 2019. Four (4) City actions were completed in 2019 and one (1) was completed in 2018. Moving forward, staff will produce reports annually, presenting the most recent available data. Staff will continue to work and coordinate with consultants, SANDAG, and other regional and business partners to further CAP implementation and continue to lower GHG emissions. Currently, the City is on-track with CAP implementation and expects to meet its citywide GHG emissions reduction targets of 13 percent below 2012 levels by 2020 and 41 percent below 2012 levels by 2030.

In Encinitas, some of the implications of climate change are already evident and will increasingly become a challenge the community must overcome. The community faces rising sea levels, increased drought risk, and increased vulnerability of bluffs and beaches. Apart from mitigating GHG emissions, the City also strives to strengthen the community's resiliency against climate change. The climate challenge poses a unique opportunity to develop a more sustainable, healthy, and equitable Encinitas community driven by the strategies in the Climate Action Plan. The City, with support from community members, local businesses, and regional partners, will continue to pursue emissions reductions goals and improve the well-being of Encinitas residents now and into the future.