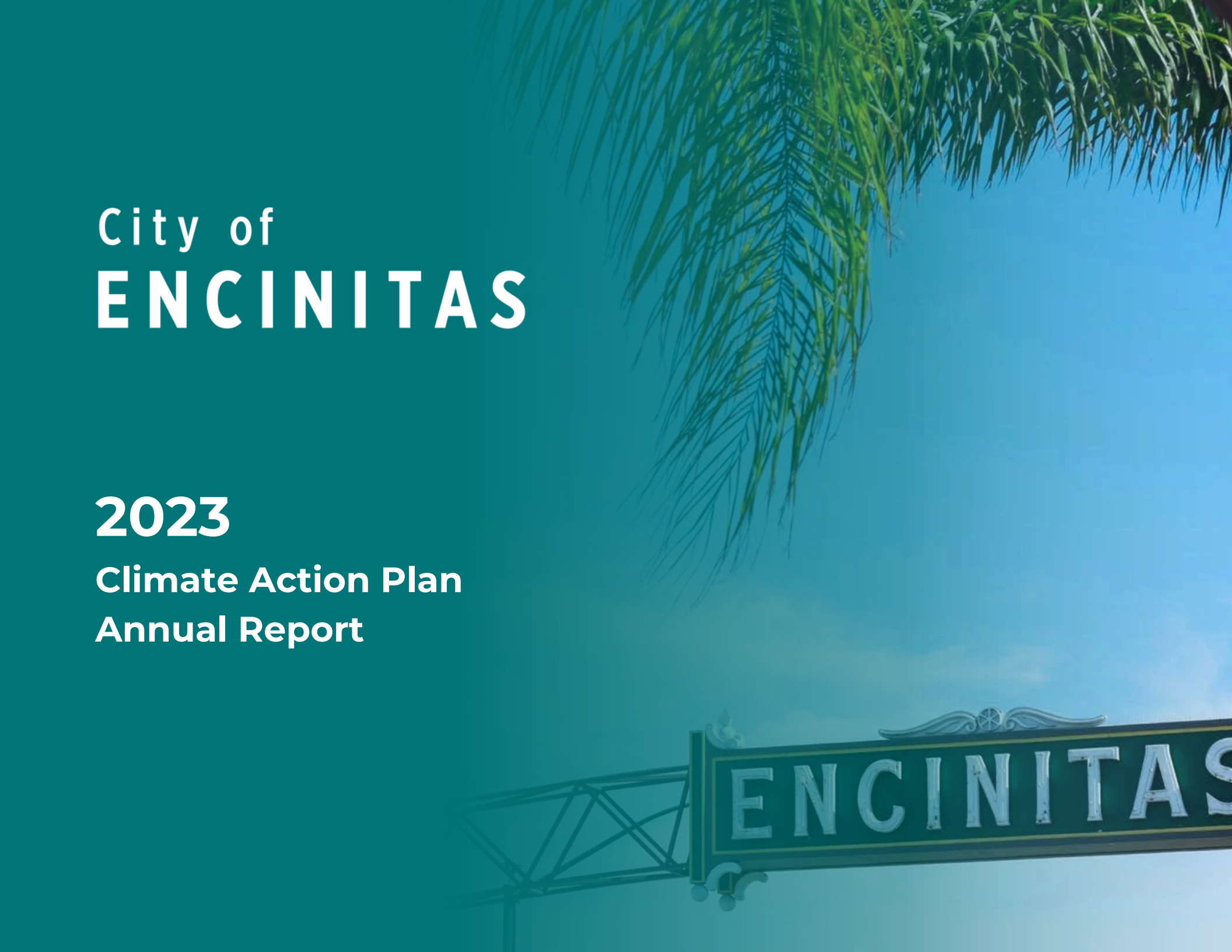
City of
ENCINITAS

2023
Climate Action Plan Annual Report



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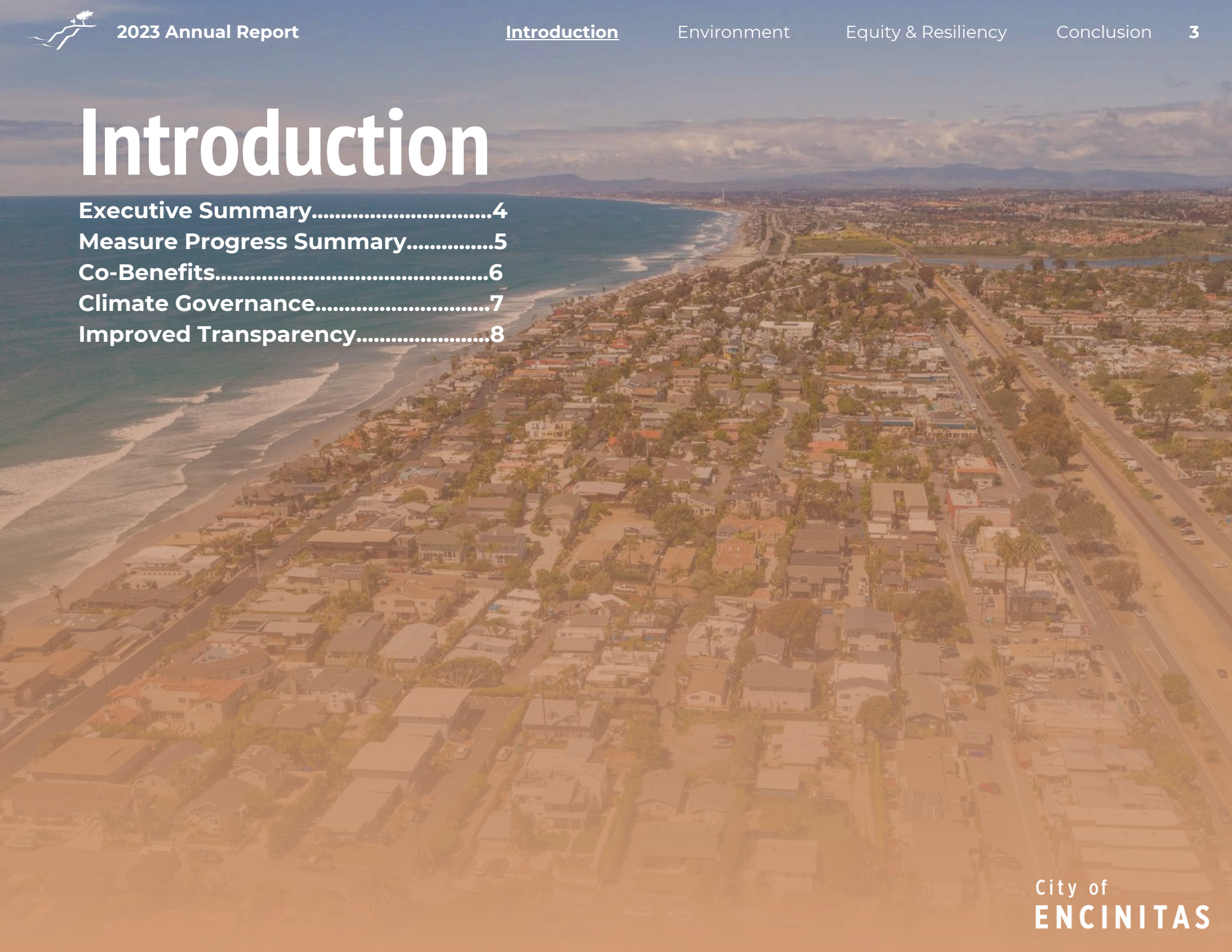


City of ENCINITAS

Executive Summary

City of ENCINITAS

The City of Encinitas is actively engaged in addressing climate change and reducing greenhouse gas (GHG) emissions. Since the adoption of a comprehensive Climate Action Plan (CAP) in 2018, the City has made significant strides in implementing the CAP's strategies, goals, and measures. The City recognizes the importance of continually adapting to our changing climate, which requires placing an emphasis on projects that will serve Encinitans now and in the future. Beyond the CAP, the City continues to support practices that benefit environmental, social, and economic well-being with the goal of fostering equitable access to natural resources, in addition to enhancing public health and well-being.

This is the City's fifth CAP Annual Report and covers calendar year 2023, featuring notable City accomplishments and annual progress towards completion of each CAP Measure. In 2023, twelve measures were complete, two were on track, four were behind schedule, and two were on hold.

The 2023 Annual Report features several new data sources which capture progress the City has been making since 2018 but has not previously reported. These new data sources include identification of affordable housing sites in relation to ATP facilities, leaf blower code enforcement, and an enhanced Green Jobs section, including solar installer data and municipal green jobs data.

While the City experienced a setback in its ability to enforce the recently adopted all-electric building code requirement in 2023, Encinitas worked diligently to develop a new ordinance the requires enhanced energy efficiency measures and incentivizes all-electric residential construction. This new ordinance went into effect during the drafting of this report.

More details on the ordinance can be found in the Building Efficiency section of the report.

The most recent GHG emissions inventory for the City, which is included in the 2023 Annual Report, demonstrates that the City exceeded the 2020 greenhouse gas emissions reduction target which aimed reduce emissions 13 percent below 2012 baseline emissions by 2020.

Overall 2023, was a year in which Encinitas made considerable progress on implementing the CAP as described in the 2023 CAP Annual Report.

Measure Progress Summary

City of ENCINITAS

Throughout 2023, City staff made substantial progress implementing the CAP measures. Of the 20 CAP measures, 12 have been completed and six are at varying levels of progress toward the 2030 goal, and two are temporarily on hold. BE-2 and BE-4, as will be explained later in the report, were required to be temporarily suspended as a result of an active legal case in 2023. However, City staff are seeking alternatives decarbonize new buildings. Notably, in 2023, progress was made on CET-2 with the identification of a grant funding source that will fund a microtransit study.

Utilize the key to the right to identify the implementation status of each measure, with 'on track' denoting in progress measures that are expected to meet their 2030 goals, and 'behind' denoting in progress measures that may be delayed in meeting their 2030 target.

Building Efficiency

Goal 1.1: Reduce Building Energy Consumption		
BE-1	Adopt a Residential Energy Efficiency Ordinance	✓
BE-2	Require Decarbonization of New Residential Buildings	✗
BE-3	Adopt Higher Energy Efficiency Standards for Commercial Buildings	✓
BE-4	Require Decarbonization of New Commercial Buildings	✗
Goal 1.2: Reduce Municipal Operation Energy Consumption		
MBE-1	Continue Implementation of Energy Efficient Projects in Municipal Facilities	⚙

Renewable Energy

Goal 2.1: Achieve 100% Renewable Electricity Supply in Homes and Businesses		
RE-1	Establish a Community Choice Energy Program	✓
RE-2	Require New Homes to Install Solar Systems	✓
RE-3	Require Commercial Buildings to Install Solar Systems	✓
Goal 2.2: Increase Renewable Electricity Supply in Municipal Operations		
MRE-1	Supply Municipal Facilities with Renewable Energy	⏸

Water Efficiency

Goal 3.1: Reduce Citywide Potable Water Consumption		
WE-1	Conduct Water Rate Studies and Implement Approved Water Rates	✓

Clean & Efficient Transportation

Goal 4.1: Reduce Vehicle Miles Traveled		
CET-1	Complete and Implement the Citywide Active Transportation Plan	⏸
CET-2	Implement a Local Shuttle System	⏸
Goal 4.2: Reduce On-Road Fuel Use		
CET-3	Improve Traffic Flow	⏸
Goal 4.3: Increase Use of Alternative Fuels		
CET-4	Require Residential Electric Vehicle Charging Stations (EVCS)	✓
CET-5	Require Commercial Electric Vehicle Charging Stations	✓
MCET-1	Transition to a Zero Emission Vehicle (ZEV) Municipal Fleet	⚙
MCET-2	Adopt a Municipal Employee Telecommute Policy	✓

Off-Road Equipment

Goal 5.1: Reduce Off-Road Fuel Use		
OR-1	Adopt a Leaf Blower Ordinance to Limit Use of 2-Stroke Leaf Blowers	✓

Zero Waste

Goal 6.1: Divert Solid Waste		
ZW-1	Implement a Zero Waste Program	✓

Carbon Sequestration

Goal 7.1: Increase Urban Tree Cover		
CS-1	Develop and Implement an Urban Tree Planting Program	✓

Progress Key:

- ✓ Complete
- ⚙ On track
- ⏸ Behind
- ✗ On hold

Co-Benefits

City of ENCINITAS

- Improved air quality
- Energy savings
- Public health
- Reduced traffic
- Reduced fossil fuel dependence
- Cost savings
- Habitat Perseveration
- Natural Resource Conservation
- Green jobs
- Enhanced Community Character

The 2023 Annual Monitoring Report includes co-benefits for each of the CAP strategies. Each of the CAP strategy has additional benefits that go beyond greenhouse gas reductions. Throughout the 2023 Annual Report, co-benefits will be listed on each CAP strategy. Refer to this page to better understand each of the identified co-benefits.

Oil and gas not only emit climate pollutants, they also release harmful air pollutants. Reducing the use of oil and gas improves local and regional air quality. Improved air quality inevitably leads to better public health outcomes. Furthermore, by reducing the consumption of oil and gas, we are able to reduce our dependency on the finite resource.

The CAP not only considers the planet, but also people. Thus, several CAP measures will create local green jobs, reduce energy consumption for households, and pass cost savings onto the consumer.

Additionally, many of the CAP measures will lead to enhanced community character with quieter streets, more trees, and an overall more pleasant Encinitas. Likewise, the CAP measures will result in reduced traffic throughout Encinitas as they enable more individuals to shift their transportation mode.

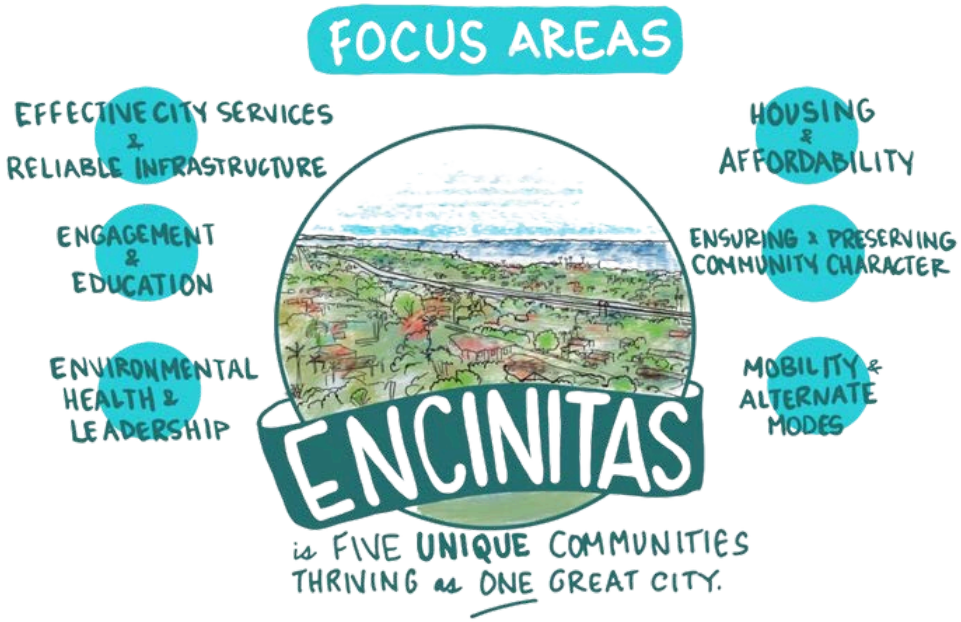
The positive impacts on the natural environment associated with implementing the CAP cannot be understated. Tree planting and other goals will lead to habitat preservation throughout Encinitas. Lastly, the CAP will preserve our precious natural resources such as water.

Local Climate Governance

Each year, the City Council reviews and redefines City priorities and focus areas. A Council priority is defined as a topic that will receive significant attention and budget consideration during the next year. Typically, priorities have a one to three-year time limit, although some may continue beyond that time.

In 2023, the City Council selected the six elements to include as the categories for its highest priorities. 'Environmental Health & Leadership' is one of the City Council's top identified concerns for the community which is defined as continuing the CAP's commitment to good stewardship of the City's natural resources, and meeting CAP goals such as decarbonization, mobility mode shift, clean air and water, responsible solid waste disposal, storm and wastewater reuse, and shoreline and open space perseveration. The City Council's commitment and direction to staff to preserve the natural environment demonstrates the City's devotion to the Climate Action Plan. Strong governance and will to move toward a low carbon future requires buy-in from leaders of organizations throughout the world which the Encinitas City Council demonstrates.

At the direction of the City Council, City employees have made great progress on 'Environmental Health & Leadership' by implementing the CAP throughout 2023.



City of ENCINITAS

Mayor
Tony Kranz

Deputy Mayor
District 1
Allison Blackwell

Council Member
District 4
Bruce Ehlers

Council Member
District 2
Kellie Hinze

Council Member
District 3
Joy Lyndes

Improved Transparency

City of ENCINITAS

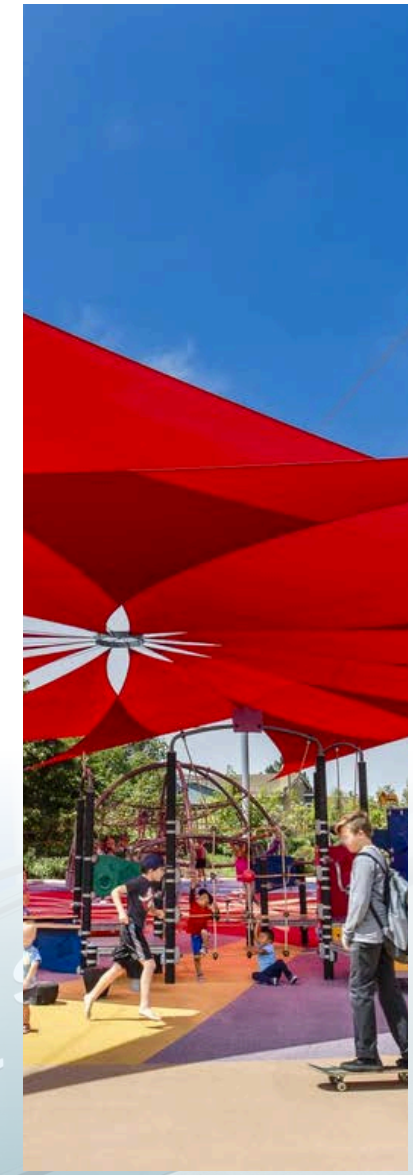
In an effort to improve transparent and open reporting that engages stakeholders, supports international progress, and could establish Encinitas as a global champion for sustainability, the City is publishing this report in tandem with the Carbon Disclosure Project (CDP) - Local Governments for Sustainability (ICLEI) city disclosure tool.

The CDP was established in 2000, and was created for companies to disclose their climate impacts. In 2019, CDP partnered with ICLEI to unify local government's sustainability reporting through one framework which increases comparability and transparency.

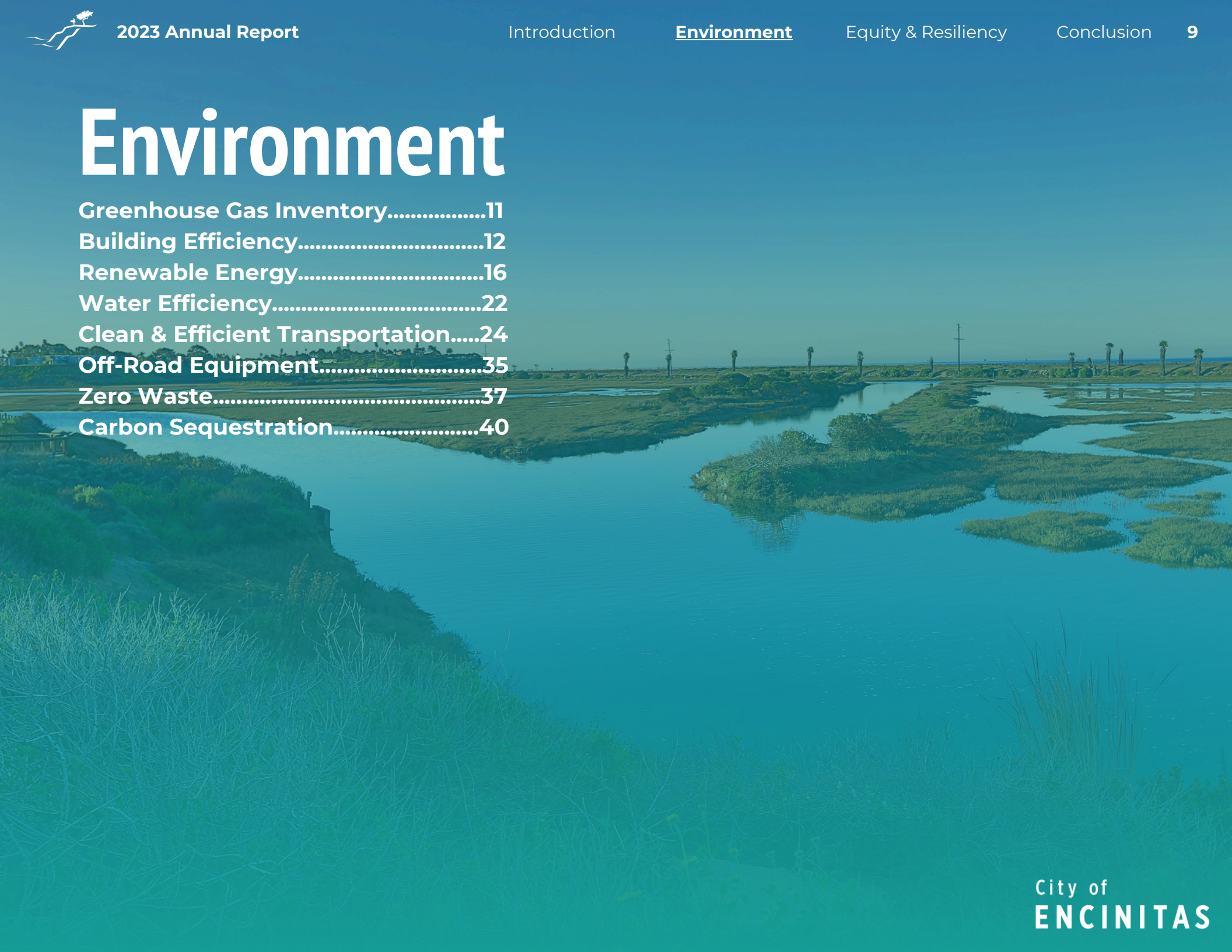
The City of Encinitas participates in this elective reporting process to support the partnership for global climate goals. ICLEI utilizes data reported by cities to inform research and analysis for various sustainability areas such as waste energy, water, transportation, air quality, and more.

Encinitas' climate metrics were disclosed to CDP following the completion of the 2023 Annual Report. In late 2024, Encinitas will receive a score for this report. Several California cities were designated as 'A list' cities meaning they displayed exceptional efforts in addressing climate change. By reporting to CDP, Encinitas is positioning itself to receive global recognition for our bold climate action.

CDP
DISCLOSURE INSIGHT ACTION



Environment



City of ENCINITAS

Sustainability Highlights

City of ENCINITAS

67,000 MTCO2e
Reduced from 2012 to 2020

13
ZEV Fleet Vehicles

91%
Participation in San Diego Community Power Power100 electricity offering

Smoke-free ordinance passed

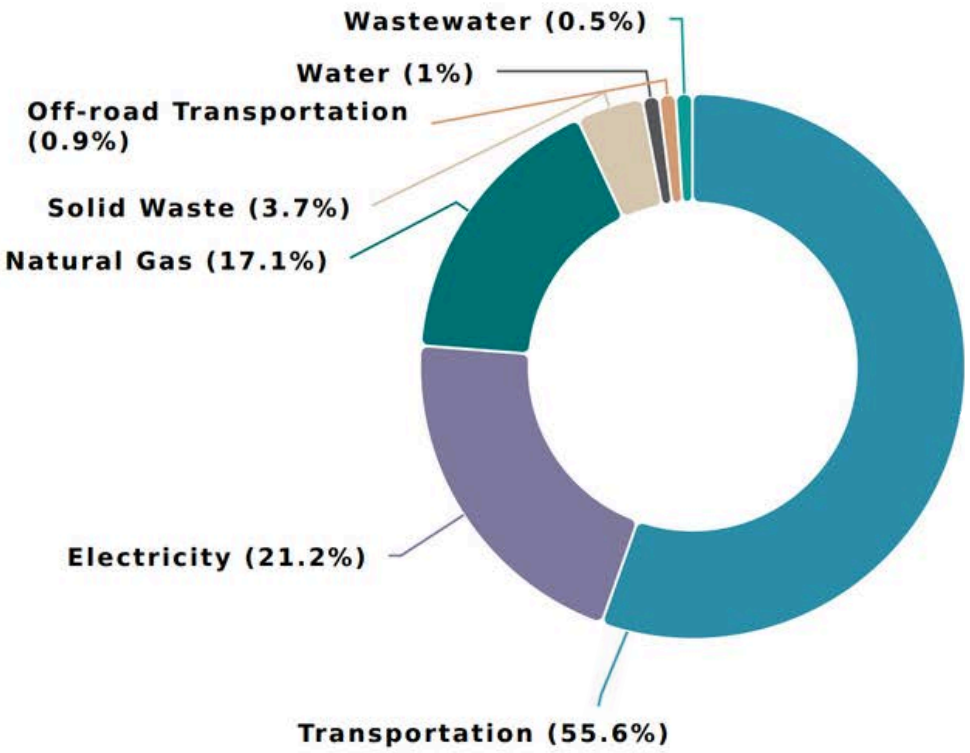
12 CAP Measures Complete

3
New plans initiated or finalized

1,200+
Net new City trees planted since 2012

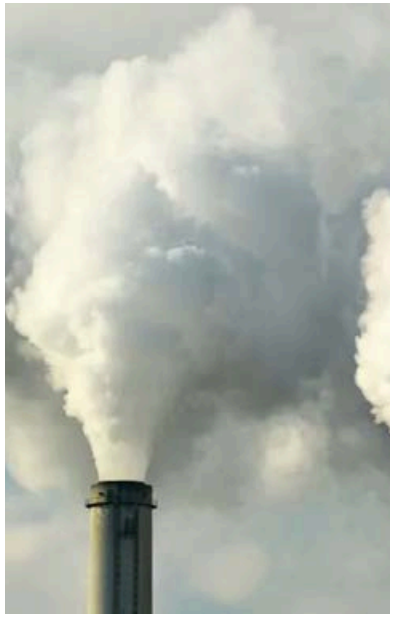
Greenhouse Gas Inventory

City of ENCINITAS



Using the best and most currently available data and modeling methods, citywide greenhouse gas (GHG) emissions in the City of Encinitas were determined to be 391,800 MTCO2e in 2020. Since transportation emissions data was not included in SANDAG's 2020 GHG Inventory due to unreliable vehicle miles traveled (VMT) modeling for that year, the City used 2018 transportation emission data as a proxy for 2020. Annual VMT data generated by SANDAG are forecasted estimates from their regional activity-based model (ABM).

The most recent activity-based GHG emissions model, ABM2+, was last calibrated with observed data from 2016. Any forecasted VMT data for 2020 would not take into account the impacts of the COVID-19 pandemic and therefore would not be an accurate estimate for that year. Historically, on- road transportation makes up the largest share of the City's GHG emissions. The City's CAP set a GHG emissions reduction target of 13 percent below 2012 levels by 2020. In 2020, emissions went down by 14.6 percent from the 2012 baseline level. While some sectors showed greater emissions reductions than others, overall, this demonstrates that the City achieved its 2020 target, exceeding it by 1.6 percent! It is also important to note that the 2020 inventory does not include reductions realized from actions the City has taken within the last three years.



Building Efficiency

City of ENCINITAS

Building Efficiency		
Goal 1.1: Reduce Building Energy Consumption		
BE-1	**Adopt a Residential Energy Efficiency Ordinance** Adopt an ordinance requiring all existing residential property owners conducting major renovations to implement energy efficiency retrofits.	✓
BE-2	**Require Decarbonization of New Residential Buildings** Adopt an ordinance requiring electrification of new residential buildings, including single family homes and low- rise multi-family homes.	✗
BE-3	**Adopt Higher Energy Efficiency Standards for Commercial Buildings** Adopt an ordinance requiring 1) all new commercial buildings, including the commercial portion of mixed-use projects, and 2) commercial building additions of 1,000 square feet or greater or alterations with a permit value of at least $200,000 to meet the 2019 California Green Building Standards Code Nonresidential Tier 1 Voluntary Measures.	
BE-4	**Require Decarbonization of New Commercial Buildings** Adopt an ordinance requiring 1) all new commercial buildings, including the commercial portion of mixed-use projects, and 2) commercial building additions of 1,000 square feet or greater or alterations with a permit value of at least $200,000 to meet the 2019 California Green Building Standards Code Nonresidential Tier 1 Voluntary Measures.	✗
Goal 1.2: Reduce Municipal Operation Energy Consumption		
MBE-1	**Continue Implementation of Energy Efficient Projects in Municipal Facilities** Reduce municipal energy use below 2012 baseline energy use.	⚙

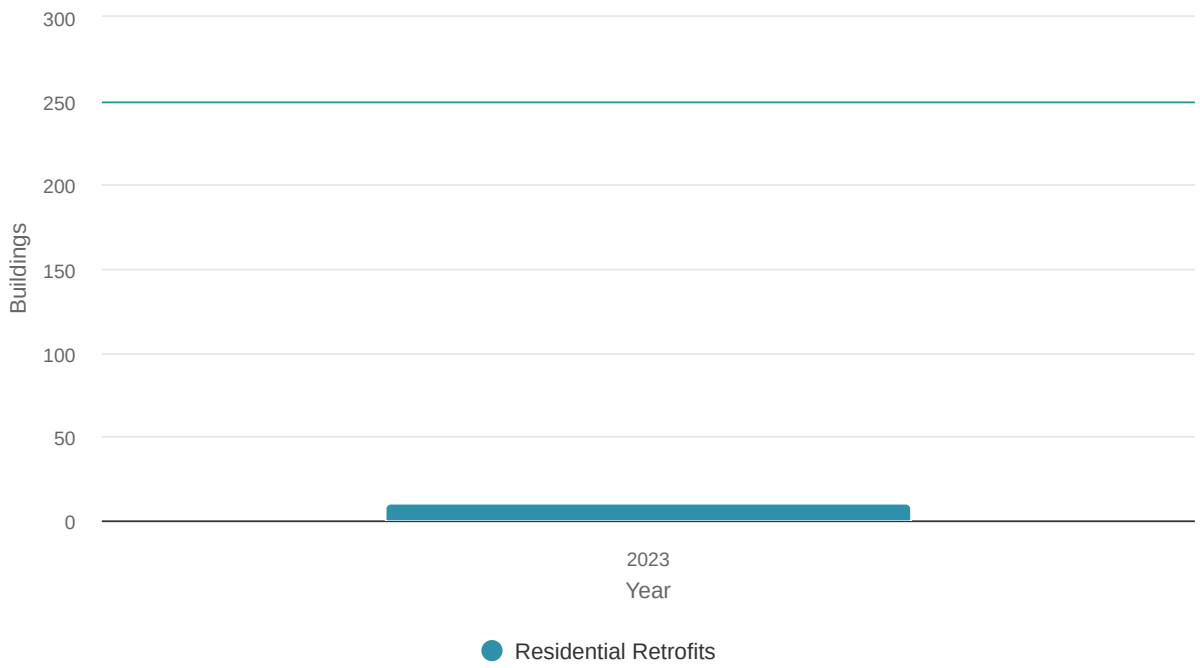
Co-Benefits, see page 7

In 2012, buildings accounted for 36 percent of the City's total emissions due to electricity and natural gas consumption. The City's Climate Action Plan (CAP) aims to reduce energy use and increase energy efficiency in residential, commercial, and municipal buildings. On October 26, 2022, the City readopted its green building regulations, which include higher energy efficiency standards, installation of solar photovoltaic systems on commercial buildings, and a decarbonization requirement specifying that newly constructed buildings be all-electric. However, the decarbonization requirement was later affected by a legal challenge in Berkeley. The original green building ordinance went into effect on August 2, 2022, after approval from the California Energy Commission (CEC) and the California Building Standards Commission (CBSC). The readopted regulations went into effect concurrent with the readopted local building code on January 1, 2023, as municipalities must readopt local building codes following each state triannual building code update.

The following sections describe the requirements in more detail as they relate to each CAP measure. Homes and businesses play a crucial role in this initiative, with the City continuing to improve building efficiency through energy retrofits and new building standards. While there continues to be limited implementation data available due to the lag between ordinance adoption and completion of building construction, these numbers will increase as more buildings are finaled over the next few years.

Homes and Businesses

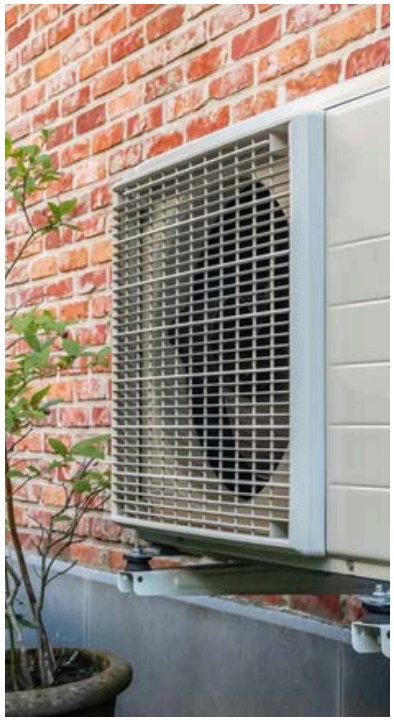
City of ENCINITAS



The City of Encinitas continues to make strides in improving building efficiency for homes and businesses as part of its Climate Action Plan (CAP). This includes efforts to increase energy efficiency in existing buildings and the adoption of new building standards to reduce greenhouse gas (GHG) emissions. Key measures include energy efficiency retrofits for homes and amendments to the local building codes to require or encourage building decarbonization.

In the past few years, the City has adopted green building and energy efficiency regulations as a part of the local building code which enacted CAP Measures BE-1 through BE-4. These measures were further supported by Ordinance Nos. 2022-13 and 2022-14, which were adopted by City Council on October 26, 2022, concurrent with the adoption and incorporation of the 2022 California Building Code into the City's local municipal code.

Ordinance No. 2022-13 supports CAP Measure BE-1 by requiring residential remodels, including single- and multifamily, with a permit value of $50,000 or greater to install energy efficiency upgrades based on the building's age. The GHG reduction target for this measure will be achieved if approximately 250 homes undergo energy efficiency retrofits by 2030. As of 2023, 11 homes received building permits triggering this requirement and completed the necessary energy efficiency retrofits.



City of ENCINITAS

Ordinance No. 2022-14 partially enacted CAP Measure BE-3, requiring higher energy efficiency standards for commercial buildings. All commercial buildings with additions greater than 1,000 square feet, or with a permit value greater than $200,000 that include steel framing, are required to design the steel framing for maximum energy efficiency to avoid heat loss. To date, ten projects that triggered this requirement have been finaled. The GHG reduction target for this measure will be achieved if a total reduction of 1.4 million kilowatt hours (kWh) of electricity use and 5,000 therms of natural gas use is accomplished by 2030.

Ordinance No. 2022-14 enacted a building code that requires the decarbonization of new residential and commercial buildings (CAP Measures BE-2 and BE-4). A similar regulation in the City of Berkeley faced legal challenge under the federal Energy and Policy Conservation Act (EPCA). On April 17, 2023, the Ninth Circuit court ruled that Berkeley's all-electric regulation was preempted by EPCA. In response, on June 14, 2023, Encinitas City Council temporarily suspended its all-electric requirement for new buildings. As of the drafting of this report in early 2024, the Ninth Circuit's ruling was finalized, and on June 12, 2024, the City Council approved an alternative approach to decarbonization (Ordinance 2024-04). This new ordinance incentivizes, rather than mandates, all-electric buildings by setting higher energy efficiency standards for new residential construction. More details about Ordinance 2024-04 will be reported in the 2024 CAP Annual Report. In the meantime, staff will continue to monitor voluntary adoption of all-electric construction and will include this data in future Annual Reports.

Call to Action

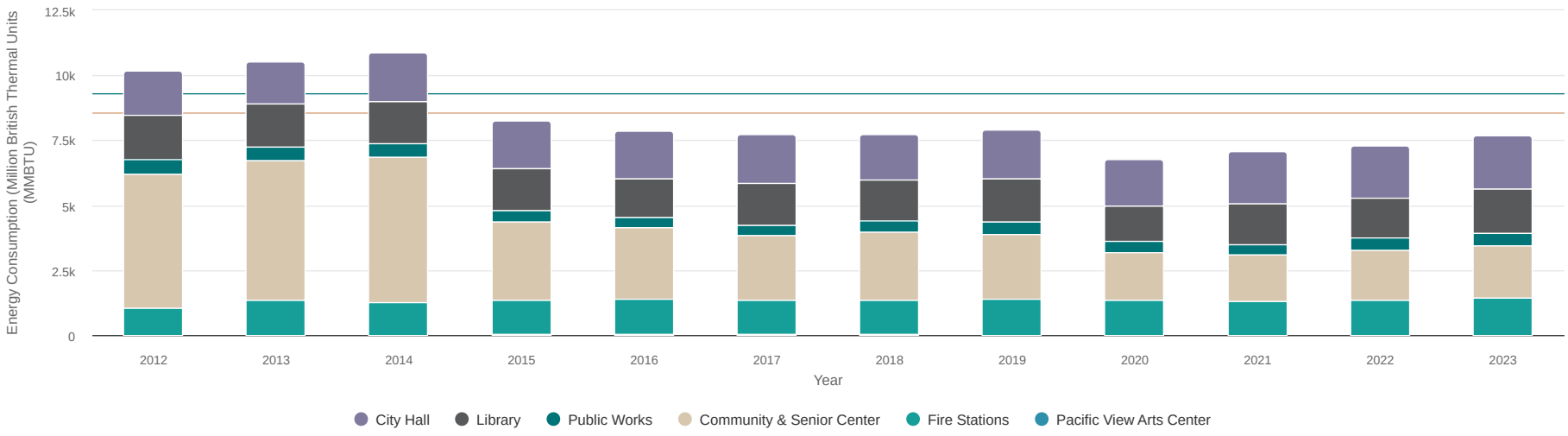
There are many federal, state, and local rebates that help save money when purchasing energy efficient equipment. Access this site to find current rebates you can take advantage of!

Municipal Facilities

City of ENCINITAS

CAP Measure MBE-1 established a goal of reducing municipal energy consumption below 2012 baseline energy use by 7.5 percent by 2020 and 15 percent by 2030. Municipal building facilities include City Hall, Public Works, Encinitas library, the Community and Senior Center, and five fire stations. Since 2012, the City has seen a 24 percent reduction in overall building energy use as a result of various energy efficiency upgrades, including more efficient lighting, upgrades to heating and air conditioning systems, and other projects.

It is important to note that energy consumption at municipal facilities has steadily risen since 2020 for a multitude of factors. As City employees returned to work after the COVID-19 pandemic, energy consumption gradually rose. Additionally, the City staff count has been increasing which increases energy consumption. Furthermore, the heavy rainfall in 2023 led to decreased solar generation at City Hall. While municipal energy use has marginally increased over the last few years, as of 2021, all municipal facilities are powered by 100 percent renewable energy from San Diego Community Power.



Renewable Energy

City of ENCINITAS

The City's Renewable Energy strategy, as detailed in the CAP, seeks to increase supply and access to renewable energy for residences, and commerical and municipal operations within the City. The strategy also aims to increase the amount of onsite renewable energy generation at existing and new developments.

Generating electricity with renewable energy sources, such as solar and wind, rather than fossil fuels, will reduce air pollutants and greenhouse gas emissions.

Thus, the City set goals of 1) achieving 100 percent renewable electricity supply in homes and businesses and 2) increasing renewable electricity supply in municipal operations.

Implementation of the strategy is estimated to reduce the City's greenhouse gas emissions by 434 MTCO2e by 2020 and 20,935 MTCO2e by 2030.

Renewable Energy		
Goal 2.1: Achieve 100% Renewable Electricity Supply in Homes and Businesses		
RE-1	**Establish a Community Choice Energy Program** Present to City Council for the consideration of a Community Choice Energy program that increases renewable electricity supply	✓
RE-2	**Require New Homes to Install Solar 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 multifamily homes to install at least 1 W solar per square feet or minimum 1 kW per unit.	✓
	Require Commercial Buildings to Install Solar Systems Adopt an ordinance requiring installation of solar PV systems on 1) All new commercial buildings,	
RE-3	including the commercial portion of mixed-use projects, and 2) Commercial building additions that increase total roof area by at least 2,000 square feet or alterations with a permit value of at least $1,000,000 that affect at least 75% of gross floor area, unless the installation is impracticable due to poor solar resources or other physical constraints, as approved by the Director of Development Services.	✓
Goal 2.2: Increase Renewable Electricity Supply in Municipal Operations		
MRE-1	**Supply Municipal Facilities with Renewable Energy** Supply municipal facilities with onsite renewable energy to achieve "Net Zero Electricity" municipal operations.	⏸

Co-Benefits, see page 7

Call to Action

Installing solar on your home or business protects the environment, and your wallet! Solar panels can save upwards of $20,000 over a 25-year period. Check out these resources to see if solar is right for you.

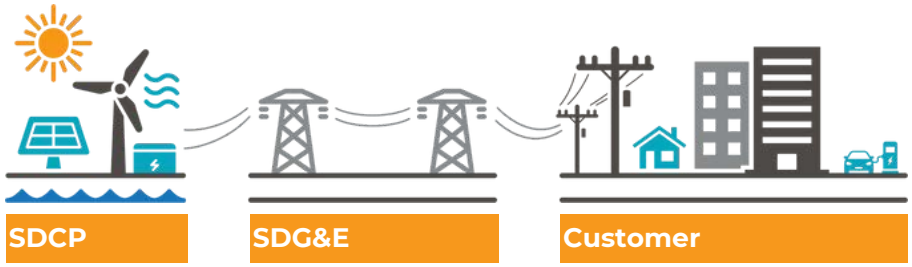
Community Choice Energy

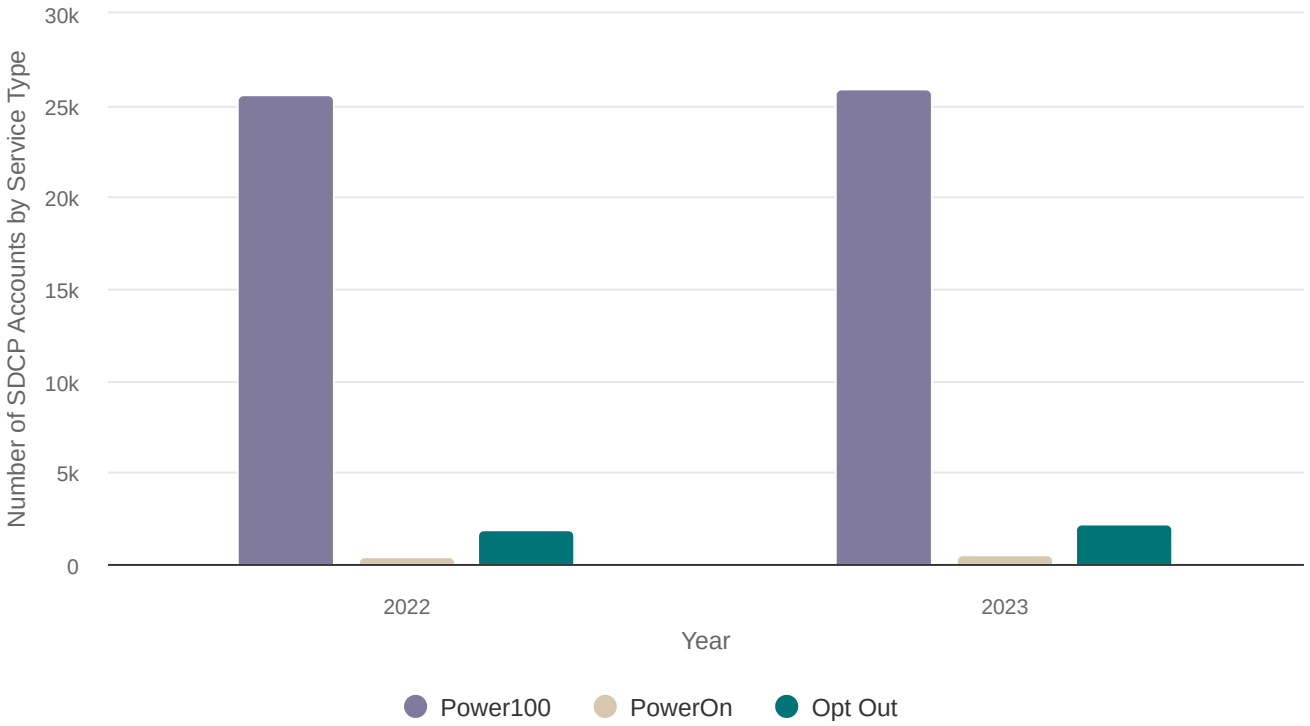
City of ENCINITAS

One of the key goals of the City's Climate Action Plan (CAP) was to launch a Community Choice Energy (CCE) program. CCE programs are not-for-profit, locally controlled energy agencies that purchase clean electrical power on behalf of residents and businesses. In 2019, the city formed a CCE Joint Powers Authority along with the cities of San Diego, Chula Vista, La Mesa, and Imperial Beach known as San Diego Community Power (SDCP.)

As part of this roll-out, Encinitas City Council voted to establish SDCP's premium product, Power 100, as the default electricity choice for all customers within the City of Encinitas which provides 100 percent renewable electricity to customers at a cost that is marginally greater than San Diego Gas and Electric's (SDGE) current rates (one to three percent greater depending on the rate class.) This action enabled the City to achieve its 100 percent renewable electricity goal well in advance of the 2030 target date.

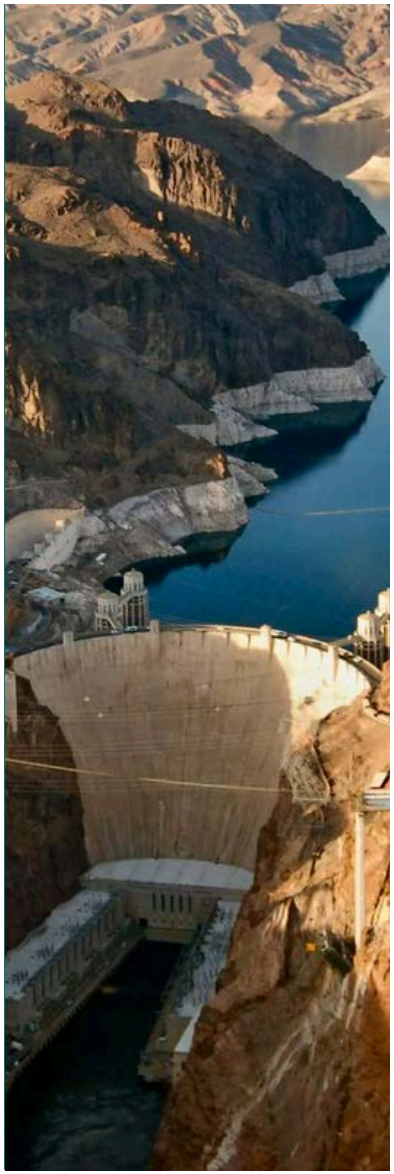
In 2023, 98.2 percent of customers were subscribed to Power100 (100 percent renewable) and 1.8 percent customers were subscribed to PowerOn (50 percent renewable).





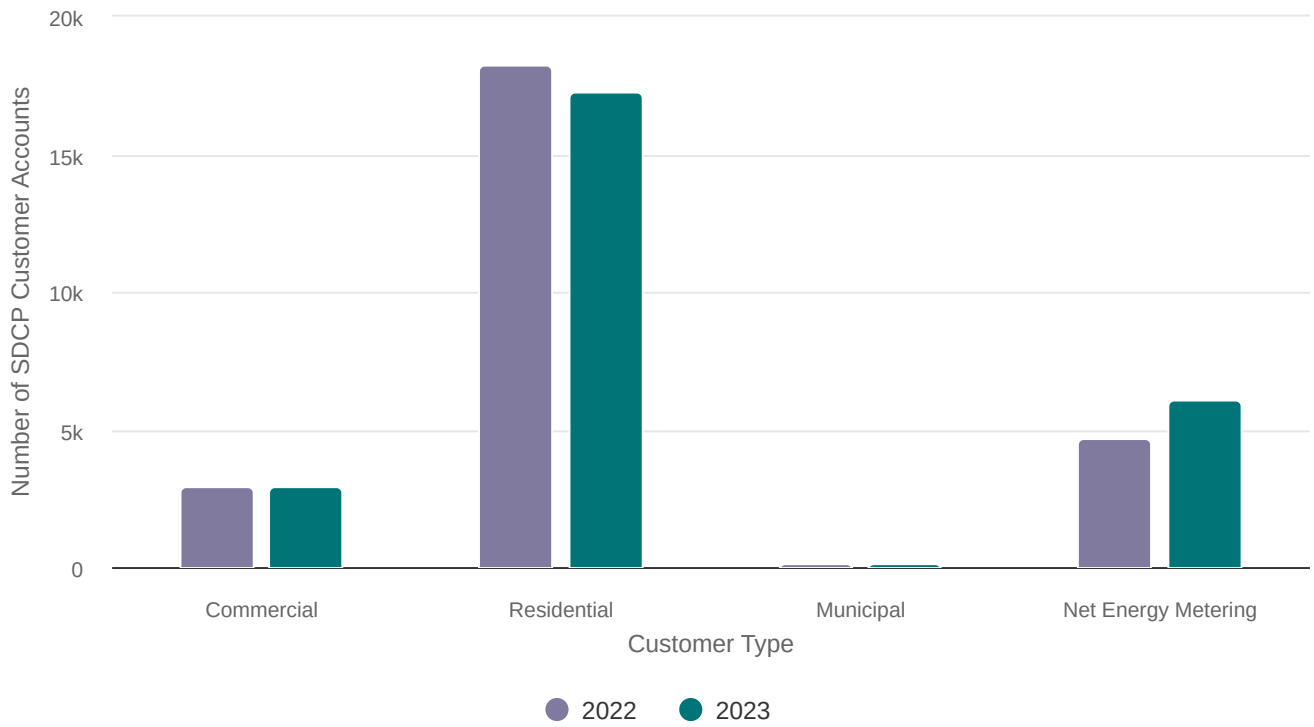
Community Choice Energy

City of ENCINITAS



Of the total active accounts, only 476 customers chose to opt down from Power100 to PowerOn. A total of 2,178 customers opted out of SDCP altogether. The City has 26,428 SDCP customers with a participation rate of 91.8 percent.

SAN DIEGO COMMUNITY POWER



Homes and Businesses

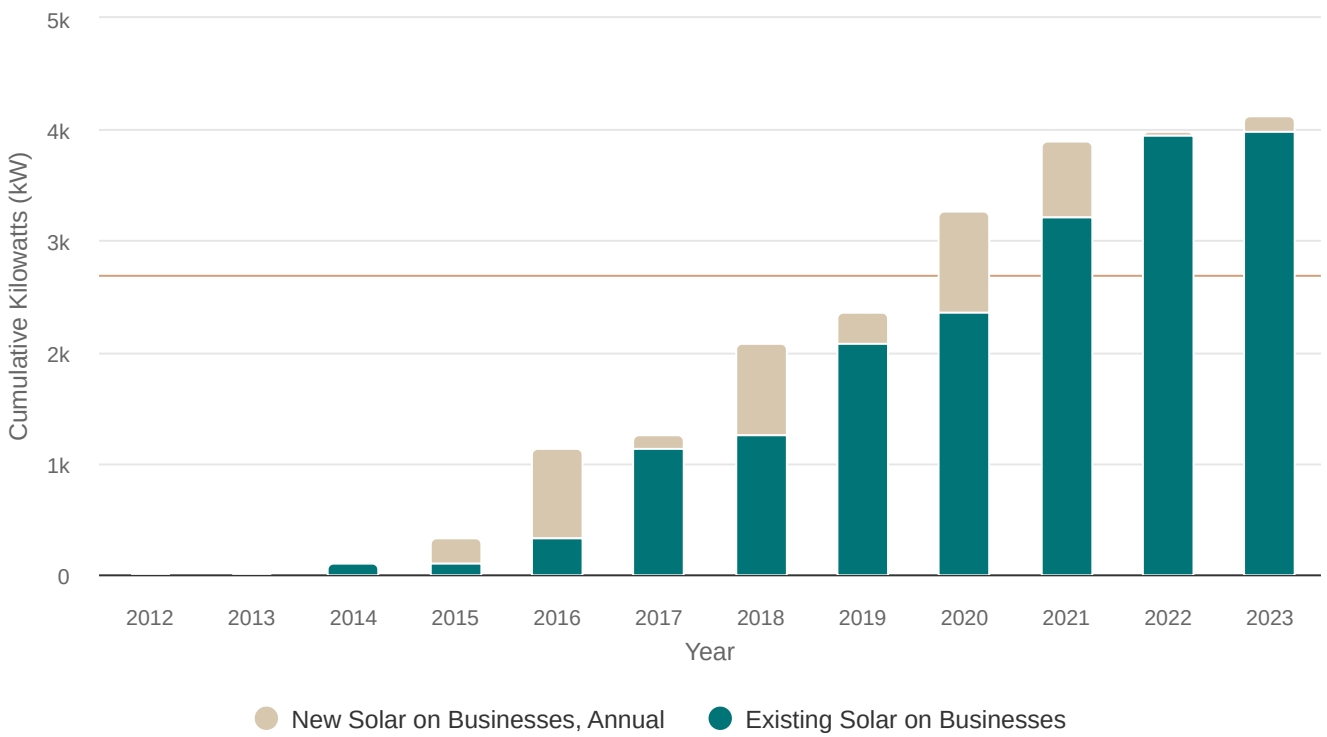
City of ENCINITAS

In 2015, the City adopted Ordinance No. 2015-13 which incorporated new statewide residential solar requirements into its local building code. In 2022, the City updated its local building code. All new single-family and multi-family homes up to three stories in California are now required to install a solar photovoltaic (PV) system large enough to meet the average annual electricity usage of the building. This supports the City's Climate Action Plan (CAP) goal to install 400 kilowatts (kW) and 1,000 kW of additional residential solar by 2020 and 2030 on newly constructed buildings, respectively. Over the past several years, many residents have also voluntarily installed solar panels on their homes. Residential solar PV systems typically range in size from five to 20 kW per home. In 2023, 9,297 kW of solar were installed on residential properties. Together with the statewide residential solar mandate, between 2012 and 2023, a cumulative total of 44,165 kW of solar was installed on 6,464 homes in Encinitas.

The CAP calls for increasing solar photovoltaic (PV) systems on commercial buildings to reduce greenhouse gas emissions (GHG) from commercial electricity use. The City adopted local green building regulations — first adopted in 2021 and then amended in 2022 — which requires solar PV systems to be installed on commercial

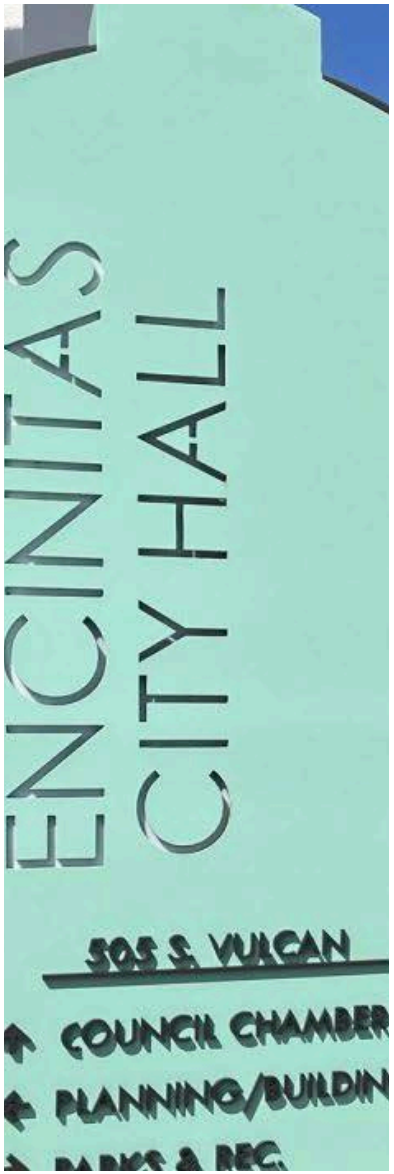
City of ENCINITAS

building additions and alterations of a certain size or permit value. Additionally, all new commercial buildings must install PV systems in accordance with California Energy Code. These requirements support the City's CAP goal to install 2.7 megawatts (MW) of solar by 2030 on new and retrofit nonresidential projects. As of the end of 2023, no remodels triggering the requirement completed construction. More data is expected in the future as projects currently under review are permitted and constructed. Between 2012 and 2023, a cumulative total of 4,133 kilowatts (kW) of solar were voluntarily installed at 109 commercial properties in Encinitas. In 2023, a total of 151 kW of solar were installed on nonresidential properties.



Municipal Operations

City of ENCINITAS



CAP measure MRE-1 set an ambitious goal of supplying all municipal facilities with enough onsite renewable energy to achieve "Net Zero Electricity." This means that municipal buildings would generate as much electricity as they consume. The CAP goal is to supply 50 percent of its municipal energy needs from renewable sources by 2020 and 100 percent by 2030.

In 2008, the City installed a 96-kilowatt (kW) solar PV system at City Hall. The system generates approximately 150 megawatt hours (MWh) of electricity each year, which is equivalent to about 7 percent of the City's total municipal building electricity use, annually.

In 2019, the City acquired an energy consultant to design and install solar PV systems for the Community and Senior Center, the Public Works building on Calle Magdalena, the Encinitas Public Library, and add more solar panels on City Hall as part of a "paid-through-savings" program.

In 2020, this project was put on hold due to COVID-19 and other competing financing needs. This project will be revisited as part of a future City budget cycle. In the meantime, as of 2021, all City facilities are served with 100 percent renewable electricity provided by San Diego Community Power.

Water Efficiency

City of ENCINITAS

Water Efficiency		
Goal 3.1: Reduce Citywide Potable Water Consumption		
WE-1	**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.	✓

In 2023, the entire State of California was declared to be drought free as a result of last winter's particularly heavy rainfall and tropical storm Hilary. Nonetheless, conserving water is just as important as ever as the effects of climate change are beginning to be experienced throughout the state and current drought-free conditions are temporary.

Greenhouse gas emissions are produced as a result of the energy used to pump, transport, and treat water.

Water conservation is also necessary to address the severity of drought throughout the State of California. Therefore, the Water Efficiency strategy aims to reduce greenhouse gas emissions by encouraging water conservation in homes and businesses while enhancing community climate resiliency.

Implementation of water conservation measures is estimated to reduce greenhouse gas emissions by 712 MTCO2e by 2020 and 795 MTCO2e by 2030.

Call to Action

Ready to rip out your grass lawn? Get $2 per square foot of grass lawn that is replaced with more sustainable and native landscaping. Visit SoCal Water Smart to learn more!

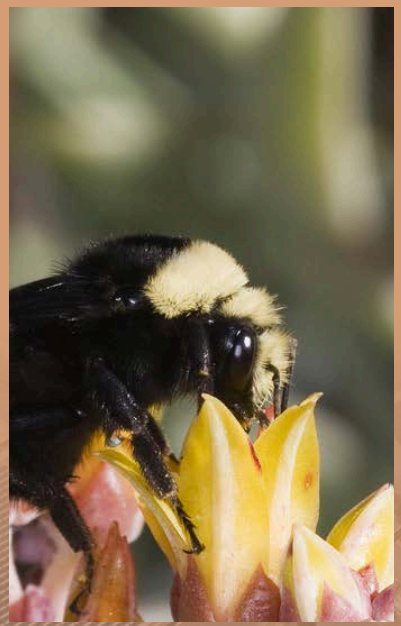
Co-Benefits, see page 7

BEE CITY USA®
AN INITIATIVE OF THE XERCES SOCIETY

Encinitas is proud to be recognized as a Bee City USA Affiliate. On January 25, 2023, a resolution was unanimously approved by City Council to become a Bee City USA Affiliate. This affiliation supports local pollinators, protecting their habitat and promoting the use of native plants and trees throughout the City.

Bees and other pollinators are essential for our ecosystem. About ninety percent of the world's wild plant species rely on pollinators such as bees, butterflies, hummingbirds, moths, and others. Bee City, USA is a nonprofit national organization that encourages everyone to support pollinators by providing them with a healthy habitat that is rich in a variety of native plants and free of pesticides, to the extent possible.

The use of climate-appropriate and native plants that support pollinator species will aid the City in reducing municipal water consumption.



Conserve Water

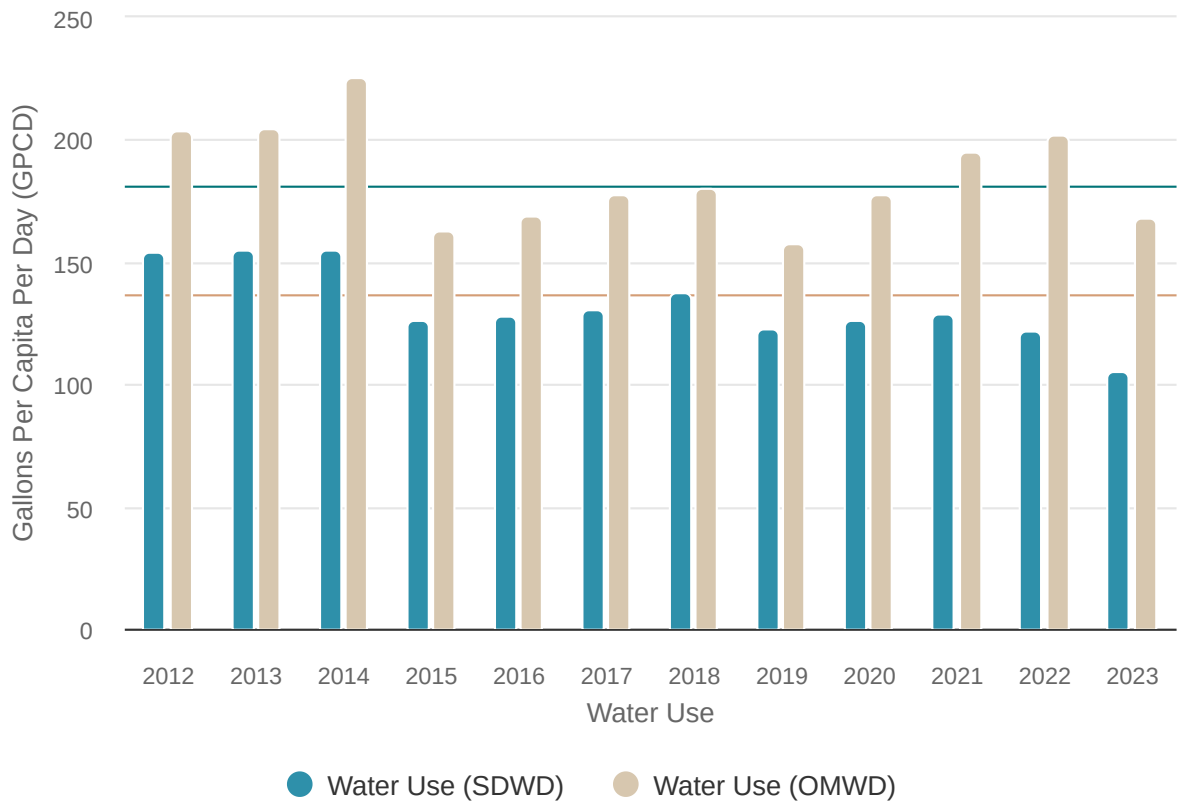
City of ENCINITAS

CAP Measure WE-1 aims to encourage water consumption through periodic water rate adjustments by the City's local water agencies, San Dieguito Water District (SDWD) and Olivenhain Municipal Water District (OMWD). By periodically adjusting water rates, the Climate Action Plan (CAP) estimated that 258 million gallons of water would be saved by 2020 and 672 million gallons would be saved by 2030 from the 2012 baseline.

Encinitans will need to cut water use by an average of five gallons per day to meet the 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 six gallons per flush. To reduce water use, residents can invest in WaterSense products, like low-flow shower heads and toilets.

To achieve the water reduction goals outlined in the Climate Action Plan (CAP), SDWD and OMWD regularly conduct water rate studies and adjust rates based on the cost to supply water and the cost of operations which, in turn, conserves water. To meet the CAP target, the average water consumption rate of Encinitans must equal to 181 gallons per capita per day (GPCD) by 2020 and 137 GPCD by 2030. In 2023, average water use by San Dieguito Water District (SDWD) customers was 105 GPCD, which is a reduction of 32 percent from 2012. For Olivenhain Municipal Water District (OMWD) customers, the average use was 168 GPCD in 2023, which is a reduction of 34 percent from 2012.

For the preparation of the 2023 annual report, water consumption in GPCD was retroactively amended for OMWD dating back to the baseline year 2012 to reflect the most accurate population data available to the City.



Clean & Efficient Transportation

City of ENCINITAS

Internal combustion engines from on-road transportation are the largest contributor to the City's greenhouse gas emissions.

The CAP's Clean and Efficient Transportation strategy leverages smart land use, planning, and other initiatives to encourage individuals to take transit, carpool, walk, bike, or commute alternatively, as opposed to driving alone.

In 2022, California regulators passed a rule restricting the sale of new gasoline powered vehicles within the state. This policy, along with other state and federal policies, will drastically reduce greenhouse gas emissions in the future. Complimentary to these statewide regulations, Encinitas' local policies work toward reducing the frequency and distance vehicles travel in addition to preparing for a large increase in alternative fuel use within Encinitas.

To implement the Clean and Efficient Transportation strategy the CAP outlined the following goals: reduce vehicle miles traveled, reduce on-road fuel use, and increase the use of alternative fuels.

Implementation of this strategy is estimated to reduce the City's greenhouse gas emissions 4,481 MTCO2e by 2020 and 5,900 MTCO2e by 2030.

Clean & Efficient Transportation		
Goal 4.1: Reduce Vehicle Miles Traveled		
CET-1	**Complete and Implement the Citywide Active Transportation Plan** Implement the bicycle and pedestrian projects in the Active Transportation Plan (ATP). In concert with the Housing Element housing site build-out, ATP projects are estimated to lead to a 9% shift in bicycle mode share and 8% shift in walk mode share within the vicinity of ATP projects.	⏸
CET-2	**Implement a Local Shuttle System** Implement service routes recommended in the Encinitas Transit Feasibility Study and use compressed natural gas (CNG) buses for these routes, or implement an alternate shuttle system approved by City Council.	⏸
Goal 4.2: Reduce On-Road Fuel Use		
CET-3	**Improve Traffic Flow** Improve traffic flow by retiming traffic signals and installing roundabouts at intersections in the City .	⏸
Goal 4.3: Increase Use of Alternative Fuels		
CET-4	**Require Residential Electric Vehicle Charging Stations (EVCS)** Require new residential units to install EVCS equipment. Single family units are to install complete 40-Amp electrical circuit (EV Ready). Multi- Family units are to install EVCS equipment at 15% of the total number of parking spaces.	✓
CET-5	**Require Commercial Electric Vehicle Charging Stations** Require installation of EVCS at 8% of the total number of par king spaces at all new commercial buildings, and commercial building modifications, alterations, and additions with square footage larger than 10,000 square feet.	✓
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.	⚙
MCET-2	**Adopt a Municipal Employee Telecommute Policy** Develop a policy for City Council consideration to facilitate telecommuting by City employees, based on job function, with approval from super- visors and human resources.	✓

Co-Benefits, see page 7

Reduce Vehicle Miles Traveled

City of ENCINITAS

Vehicle miles traveled (VMT) data shows how much people are driving in a given timeframe. We can reduce our community's VMT by choosing transportation options like walking, biking, taking public transit, and carpooling to reduce the number of miles we drive alone. In 2012, the total VMT in Encinitas was approximately 1.4 million miles per day, which equates to 538 million miles traveled in that year.

CAP Measure CET-1 aims to implement the City's Active Transportation Plan (ATP.) An ATP addresses local and regional bike and pedestrian travel by establishing proposed biking and walking facilities and improvements to multimodal connections to public transit. Completion of

the proposed bicycle and pedestrian projects established in the ATP would reduce emissions by an estimated 254 MTCO2e.

In 2023, the City completed the Modal Alternatives Plan (MAP), an implementation planning document for the ATP. The MAP prioritized all of the projects identified in the ATP and selected the top 35 bicycle and pedestrian projects that the City should implement first for maximum multimodal benefits. Citywide projects reflect the top 10 prioritized projects while the remaining 25 represent the top five bicycle or pedestrian projects within Encinitas' five communities. City staff continue to make progress installing active transportation projects.

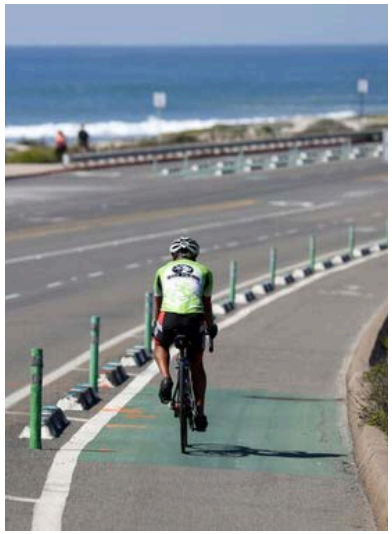
In 2023, the City continued progress on updating the Mobility Element of the City's General Plan. The Mobility Element will consist of goals and policies, street typologies, a street classification map, and other high-level planning for multimodal facilities. The Mobility Element will also develop a framework to implement SB 743, a new state law updating the evaluation of transportation impacts for California Environmental Quality Act analysis from Level of Service to Vehicle Miles Travelled. The last Mobility Element update occurred in 1989. The current update will support the City's effort to expand transportation options to meet population growth while mitigating climate impacts. City Council approval of the final Mobility Element is expected in 2024.

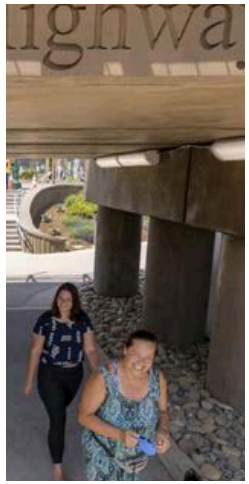
The City understands that data tracking commuter mode shift to biking and walking must be gathered to determine the success of CAP measures. In 2023, City staff began exploring the procurement of monitoring devices to track bicycling and walking throughout the community.

mobility ELEMENT

Bike and Pedestrian Facilities

City of ENCINITAS





Since 2012, the City has installed a total of 19.11 miles of bike lanes. In 2023, the City installed 1.14 miles of new bike lanes. A significant portion of these new bike lanes were installed on Manchester Avenue between Interstate 5 and El Camino Real, adjacent to the San Elijo Lagoon and Mira Costa College.

Since 2012, the City has installed a total of 20.48 miles of pedestrian facilities. In 2023, the City installed 0.14 miles of pedestrian facilities, including sidewalks, walkways, and crosswalks, at various locations throughout the City.

Sustainable Development

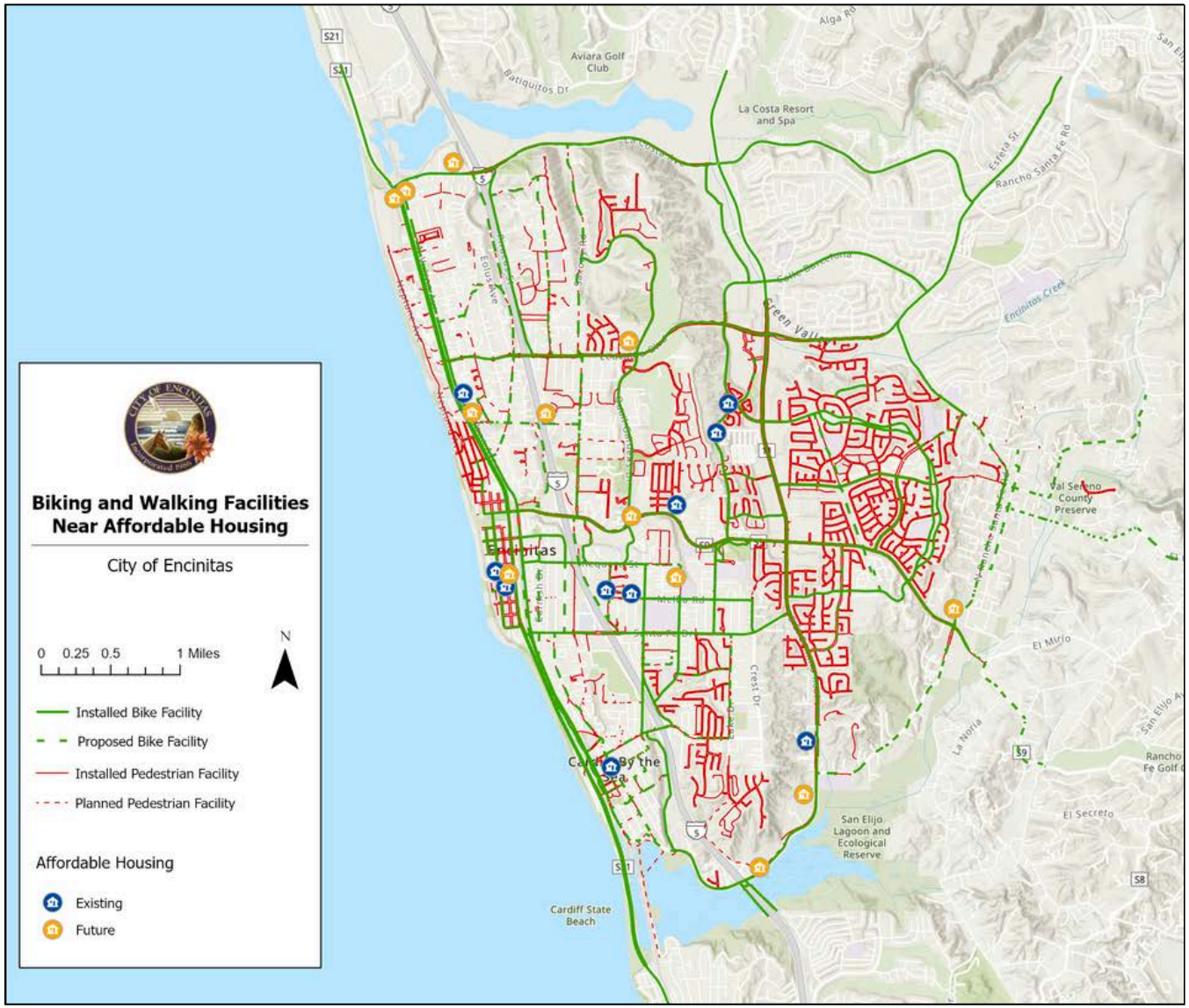
City of ENCINITAS

HOUSING ELEMENT 2021 2029 City of ENCINITAS

Reducing vehicle miles traveled requires smart city planning and growth by working to make future housing developments less car dependent. Additionally, there is a statewide need to build more market-rate, low-income, and very-low income housing to meet current and future housing needs.

The City's adopted Sixth Cycle Housing Element (2021-2029) drives infill development throughout the City, leading to more dense, walkable communities. Many of the identified sites for low- to very low-income housing are placed at existing or future bike, pedestrian, and transit facilities.

As of the end of 2023, there were a total of 371 existing and under development low- to very low-income housing units in Encinitas.



Reduce Fuel Use

City of ENCINITAS

Reducing road congestion and improving traffic flow can lead to decreases in vehicle fuel use and greenhouse gas emissions. CAP Measure CET-3 mandates retiming the City's traffic signals, and installing roundabouts as two methods to achieve this. By 2020, the CAP aimed to retime 60 traffic signals and install three roundabouts. By 2030, the CAP commits to the installation of an additional four roundabouts to improve traffic flow. These actions would reduce GHG emissions by approximately 3,671 MTCO2e in 2020 and 1,241 MTCO2e in 2030.

In 2022, the construction of a roundabout on North Coast Highway 101 and El Portal Street was completed as part of the first phase of the Leucadia Streetscape project. Three other proposed roundabouts have completed the design phase. Construction on two of these roundabouts began in Fall 2023—located along North Coast Highway 101 at the Jupiter Street and Grandview intersections. The third roundabout will be constructed at Leucadia Boulevard and Hygeia Avenue once grant funding is obtained.

Since the goals for on-road fuel use were established in the CAP in 2018, the City has shifted its focus to installing mobility infrastructure to promote the use of active transportation and reduce on-road fuel use, rather than adjusting traffic signal timing. That said, the City's Traffic Division continually monitors all of the City's traffic signals and regularly makes small adjustments to improve traffic flow and pedestrian crossing as warranted.

Call to Action

Gas getting too expensive? Commuting alternatively helps you live a more active lifestyle, save money, and avoid traffic. SANDAG has services for commuting alternatively.

Future Roundabouts

Intersection	Status
Jupiter & Highway 101	Planned, Designed, Funded
Grandview & Highway 101	Planned, Designed, Funded
Moorgate & Highway 101	Planned, Designed, Privately Funded
Leucadia & Hygeia	Planned, Designed
Birmingham & New Castle	Planned, Designed
Quail Gardens & Kristen Ct	Planned, Designed, Privately Funded
Crest & Santa Fe	Planned

Alternative Fuels and Electric Vehicles

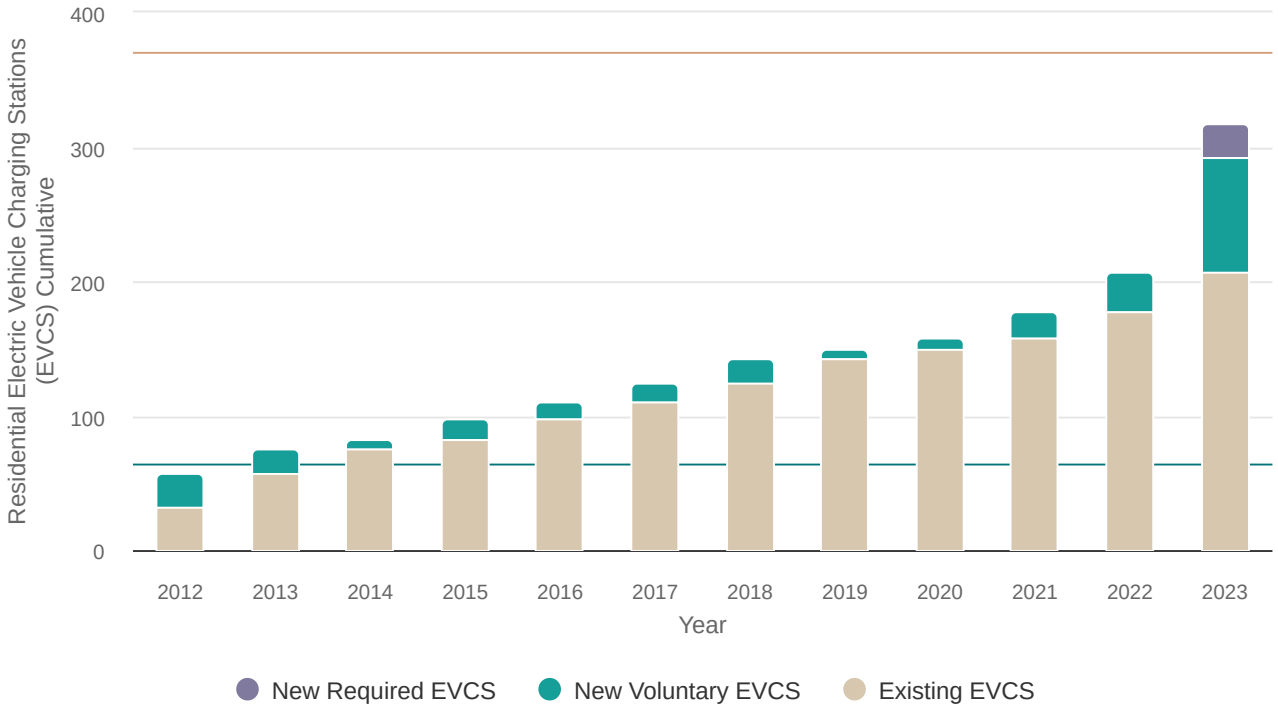
City of ENCINITAS

Vehicles that run on electricity produce fewer emissions than vehicles that run on gasoline or diesel. By supporting a network of electric vehicle charging stations (EVCS), the City can help facilitate the switch to vehicles that run on electricity. Thus, CAP Measure CET-4 and CET-5 require the installation of EVCS at both residential and non-residential developments, respectively.

The CAP anticipates that 65 EVCS will be installed by 2020 and 370 EVCS will be installed by 2030 at new residential developments if Measure CET4 is implemented. Meeting these targets would decrease greenhouse gas emissions by approximately 185 MTCO2e by 2020 and 260 MTCO2e by 2030.

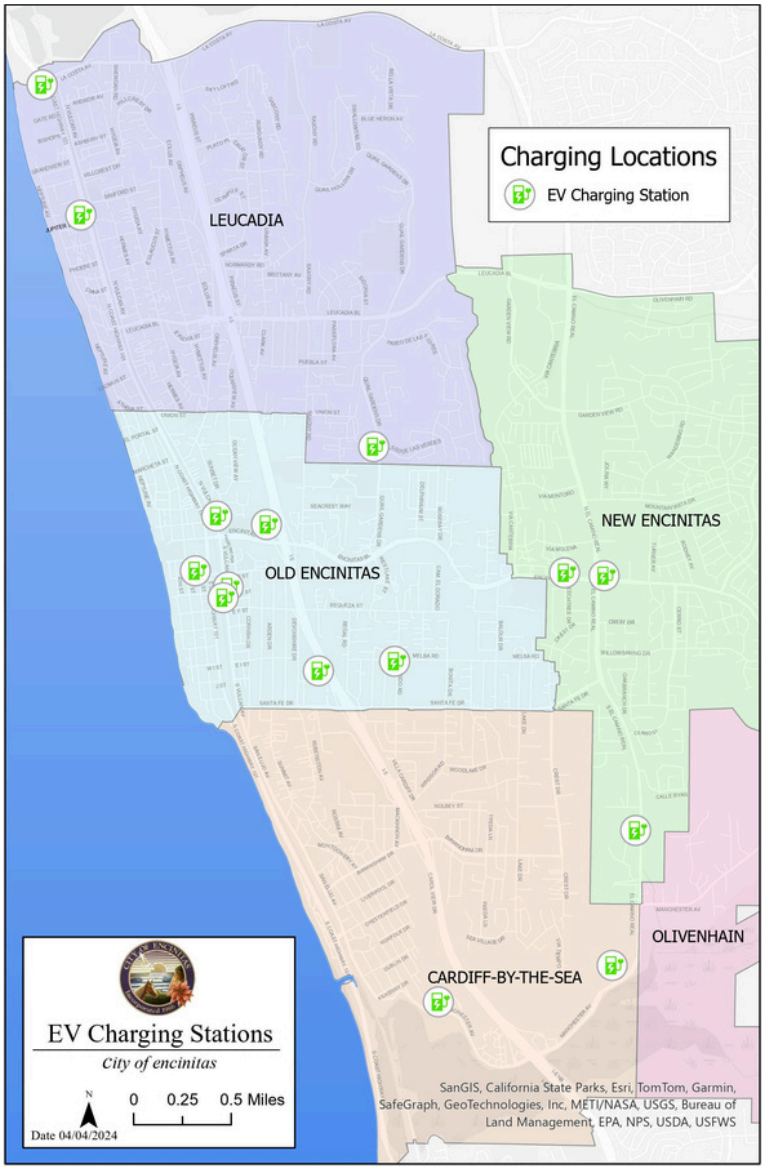
In November 2019, City Council adopted an ordinance requiring new single-family and multifamily homes to have EVCS or be "EV ready," effective January 1, 2020. These requirements were readopted concurrent with the incorporation of the state's triannual code amendment updates, effective January 1, 2023.

In 2023, 111 EVCS were installed at single-family residences, according to building permit records. Of the installed EVCS, 85 were installed voluntarily and 26 were required to be installed due to green building regulations. In total, 298 EVCS were permitted and installed at residential properties between 2012 and 2023.



Alternative Fuels and Electric Vehicles

City of ENCINITAS



Also in November 2019, City Council adopted an ordinance enacting a new regulation requiring new commercial developments to install electric vehicle charging stations (EVCS) at eight percent of the total number of parking spaces, effective January 1, 2020. This requirement was readopted concurrent with the incorporation of the state's triannual code amendment updates, effective January 1, 2023. As a result of this code, the CAP estimated that 150 EVCS will be installed by 2020 and 490 EVCS would be installed by 2030 at new commercial developments. Meeting these goals would decrease greenhouse gas emissions by approximately 440 MTCO2e by 2020 and 3,582 MTCO2e by 2030.

As of 2023, the number of publicly available charging stations in Encinitas was 31. While the ordinance is in place and being enforced, it is evident that commercial development may be occurring at a slower pace than anticipated by the CAP.

A new web app has been created for the publication of this Annual Report that allows residents and visitors in Encinitas to easily locate all publicly available charging stations. Visit the site to see all the chargers in Encinitas!

EV Charging Station Master Plan

City of ENCINITAS

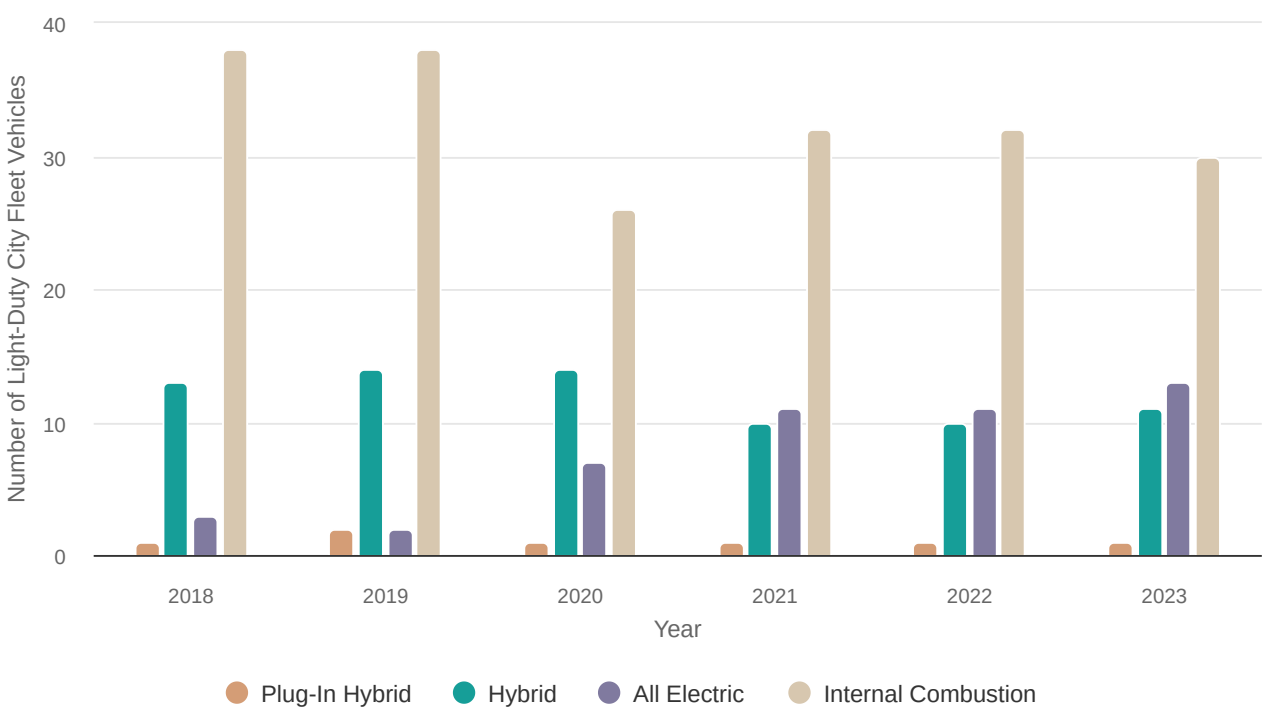
In March 2023, the City adopted the Electric Vehicle Charging Station (EVCS) Master Plan in support of the City's Climate Action Plan Goal 4.3 to Increase the Use of Alternative Fuels. The EVCS Master Plan evaluated and located existing EVCS within a five-mile radius of the City, conducted a needs assessment, defined future charging station location alternatives, and developed a plan to install EV charging stations throughout the community to support residents in transitioning to clean transportation options.

As of 2021, according to the master plan, around 2,900 electric vehicles (EV) were registered in Encinitas, approximately 5.5 percent of all vehicles registered in Encinitas. EV registrations are projected to increase to 3,500 by 2025 and to 15,000 by 2030. The EVCS Master Plan recommends that 120 charging stations be installed by 2025 and 281 charging stations be installed by 2030 in order to meet future demand for EV charging.

Proposed EV charging station sites in the plan include popular public destinations such as parks and beaches, sites along major commuter corridors, and parking lots for retail centers. The EVCS Master Plan recommended that the City utilize local, state, and federal EV charging regulations and incentives to require and encourage employers, multifamily, and commercial property owners to provide EV charging for the community. Check out the plan to learn more!

Zero Emission Municipal Fleet

City of ENCINITAS



CAP Measure MCET-1 commits the City to converting to renewable diesel for all diesel-fueled heavy-duty trucks by 2020 and transitioning its municipal fleet to "zero emission" or alternative fuels by 2030. The CAP estimated that this measure would reduce fleet fuel use by 10 percent by 2020 and 30 percent by 2030, which reduces GHG emissions by 55 metric tons of carbon dioxide equivalent (MTCO2e) and 384 MTCO2e, respectively.

In 2018, all City fleet diesel-fueled vehicles—including pickups, dump trucks, fire trucks, and stationary generators—began being fueled by renewable diesel. As a result, since 2012, there has been a 99 percent decrease in the use of conventional diesel fuel, mainly due to an increase in the use of renewable diesel. The switch to renewable diesel enabled the City to exceed both the 2020 and 2030 CAP goals for renewable diesel several years early.

Also in 2018, to support the transition to electric vehicles,

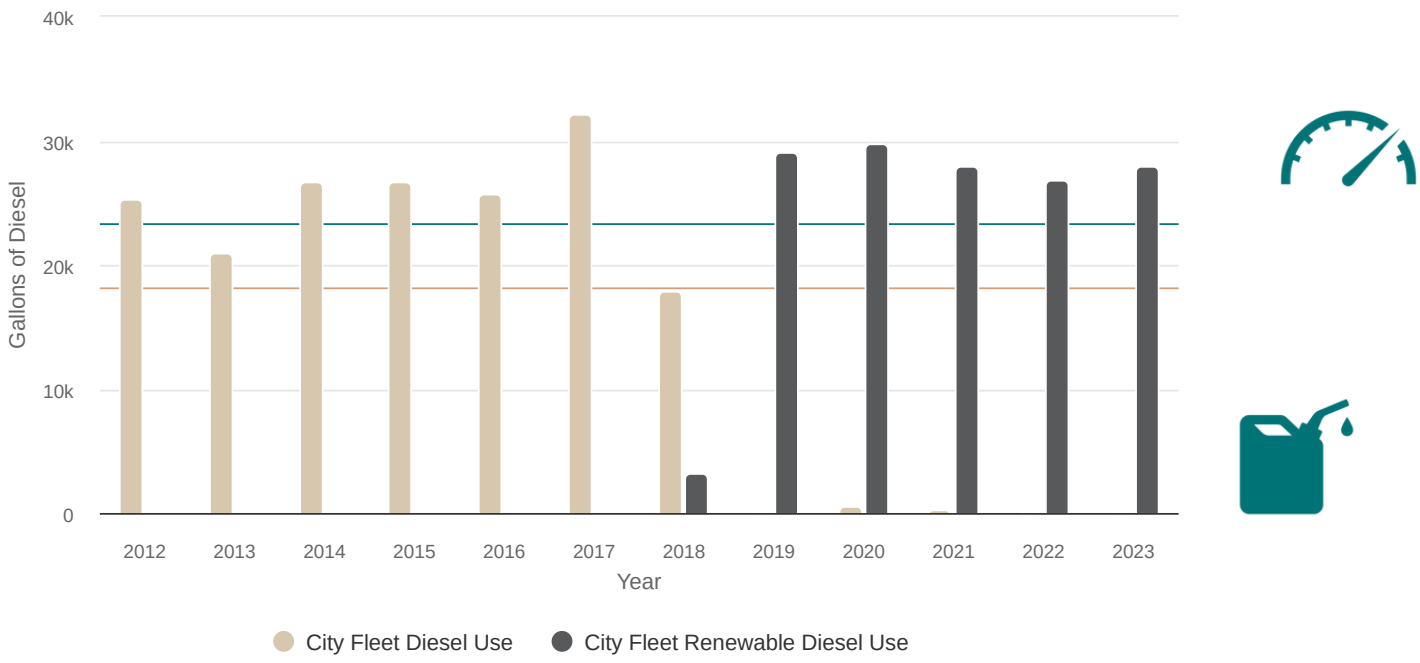
City of ENCINITAS

the City installed 10 EV charging stations at the Public Works Yard through San Diego Gas and Electric's (SDGE) "Power Your Drive" program.

In 2022, 10 fleet vehicle charging stations were installed at City Hall as a part of an exterior renovation project. These chargers are used to charge all-electric fleet vehicles used by staff at City Hall.

In 2023, the City's municipal fleet included 13 battery-electric vehicles, one plug-in hybrid vehicle, and 11 hybrid vehicles, with 25 clean fleet vehicles in total. EVs make up 45 percent of the light-duty fleet—the portion of the fleet that commonly has EV alternatives available in the market. In accordance with the ZEV Fleet Conversion Plan, City vehicles are evaluated annually, and vehicle replacements are budgeted and scheduled as needed. Whenever possible, EVs are selected as replacement vehicles in the light-duty class.

Since 2012, due to the transition to EVs and right-sizing the fleet, total gasoline use by City vehicles has decreased by 38 percent, far exceeding the 2020 goal and making great strides towards a zero-emission light duty fleet by 2030. While there was a marginal increase in fleet gasoline use between 2021-2023 due to the return to work since the COVID-19 pandemic, overall fuel consumption has significantly declined.



Employee Telecommuting

City of ENCINITAS

When the City's CAP was updated in 2020, CAP Measure MCET-2 was added, making it the CAP's 20th measure. With this measure, the City has pledged to develop and implement a telecommuting policy for City employees. It assists in decreasing the City's overall greenhouse gas (GHG) emissions by reducing the number of vehicle miles traveled by City employees. The City's CAP estimated that this measure would avoid 170,000 miles of commuting to and from municipal facilities and reduce GHG emissions by 50 metric tons of carbon dioxide equivalent (MTCO2e) in 2030.

The initial phase of the policy launched in the summer of 2022, giving City employees the option to telecommute one day per week. In 2023, the program was expanded to allow City employees the choice to telecommute one day per week on their four day week and two days per week on their five day week on a 9/80 schedule. The ability to telecommute is contingent on job function and management approval. For example, Public Works crews must be onsite to conduct maintenance in the field and cannot telecommute.

Off Road Equipment

City of ENCINITAS

Off-Road Equipment		
Goal 5.1: Reduce Off-Road Fuel Use		
OR-1	**Adopt a Leaf Blower Ordinance to Limit Use of 2-Stroke Leaf Blowers** Starting in 2018, prohibit 2-stroke leaf blowers and implement the phase-out of leaf blower emissions	✓

Off-road equipment, defined as any non-stationary device typically powered by an internal combustion engine not used for road use, contributes to the City's greenhouse gas emissions. The City's Off-Road Equipment strategy seeks to restrict the use of gas-powered two-stroke leaf blowers. By doing so, the City can not only reduce greenhouse gas emissions, but also other environment pollutants such as noise and criteria pollutants as well.

Implementation of this strategy is estimated to reduce the City's greenhouse gas emissions by 128 MTCO2e by 2020 and 142 MTCO2e by 2030.

In 2019, the City Council passed an ordinance prohibiting the use of gas-powered two-stroke leaf blowers. This ordinance went into effect in January 2020 and has led to reduced CO2 emissions.

To assist residents with the transition away from fuel-powered leaf blowers, a City funded rebate was offered for electric or battery-powered leaf blowers until May 1st, 2020. Additionally, the California Air Resources Board offered the Clean Off-Road Equipment Voucher Incentive Project (California CORE) which assisted professional landscapers and small business who conduct landscape maintenance, with rebates for the purchase of electric landscape equipment through 2023.

While the ordinance has been passed, enforcement of the measure is ongoing. Any violations are encouraged to be reported by submitting a Code Enforcement Complaint using this online form or reporting an issue using the MyEncinitas app, which can be downloaded to your phone here.

Co-Benefits, see page 7

Call to Action

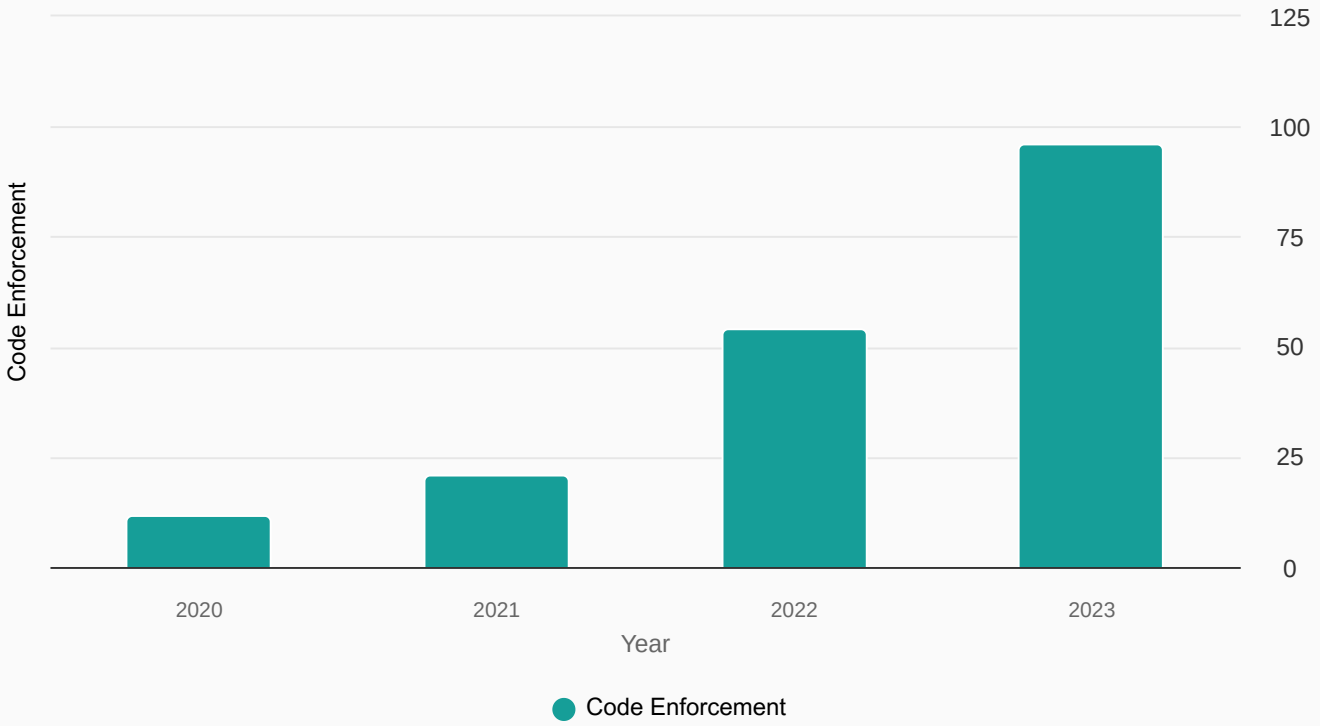
Have a landscaper for your front yard? There are many programs to incentivize purchasing electric landscaping equipment! Visit California CORE or the San Diego County Air Pollution Control District to receive the latest updates.

Leaf Blowers

City of ENCINITAS

CAP Measure OR-1 relies on active enforcement of the leaf blower restriction to ensure the community transitions to electric-powered leaf blowers, achieving the GHG reductions and co-benefits outlined within the CAP. Thus, Encinitas Code Enforcement responds to complaints filed via a Citizen Complaint Form or through the MyEncinitas app.

Since the ordinance went into effect in January 2020, there have been a total of 216 code violations. In 2023, there were the 96 code violations on file with Code Enforcement. Each code violation resulted in a correction, helping to achieve GHG reductions.



Zero Waste

City of ENCINITAS

The Zero Waste Strategy, as outlined in the City's CAP, aims to reduce the amount of waste sent to local landfills. CAP Measure ZW-1 commits the City to implementing a Zero Waste Program in which the goal is to reduce waste disposal from residents and businesses by sorting and diverting recyclable and organic materials. In particular, organic materials, such as food and landscape waste, can generate a significant amount of greenhouse gas emissions. Organic materials decompose in a manner that leads to the emission of methane, a greenhouse that is 25 times more potent than carbon dioxide. When organic waste is diverted from landfills to be processed in an anaerobic digester, proper decomposition can occur through the capture and reuse of the methane and waste material.

Zero Waste		
Goal 6.1: Divert Solid Waste		
ZW-1	**Implement a Zero Waste Program** Implement a Zero Waste Program to reduce waste disposal from residents and businesses in the community.	✓

Encinitas has implemented the Zero Waste Program through several actions including continuous education and outreach, construction of the anaerobic digestion facility in 2021, and adopting zero waste regulations.

Encinitas' Zero Waste Program seeks to divert 65 percent of Encinitas' solid waste from the landfill by 2020, and 80 percent of total solid waste by 2030. This is equivalent to reducing our waste generation rates to 5.3 pounds per person per day by 2020 and three pounds per person per day by 2030.

Call to Action

Sorting waste can be difficult but it is necessary to ensure recyclable or compostable items don't end up in the landfill. Boost your knowledge with EDCO's recycling guide.

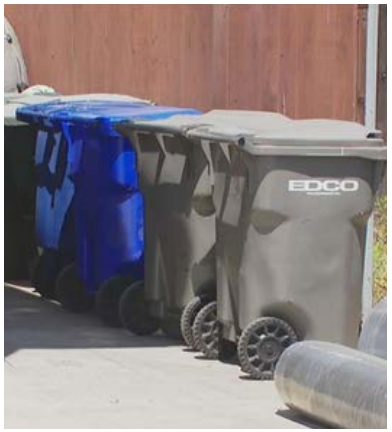
The City works closely with EDCO, our contracted waste hauler, to execute the CAP's waste diversion goals. EDCO leverages green technologies, such as a state-of-the-art Resource Recovery Facility that properly sorts the City's co-mingled recycling waste and their anaerobic digester that processes food waste and landscape material. In 2021, EDCO began collecting and processing food waste for recycling ahead of SB 1383, the state law that went into effect January 1, 2022, requiring all California residents and businesses to recycle organic waste.

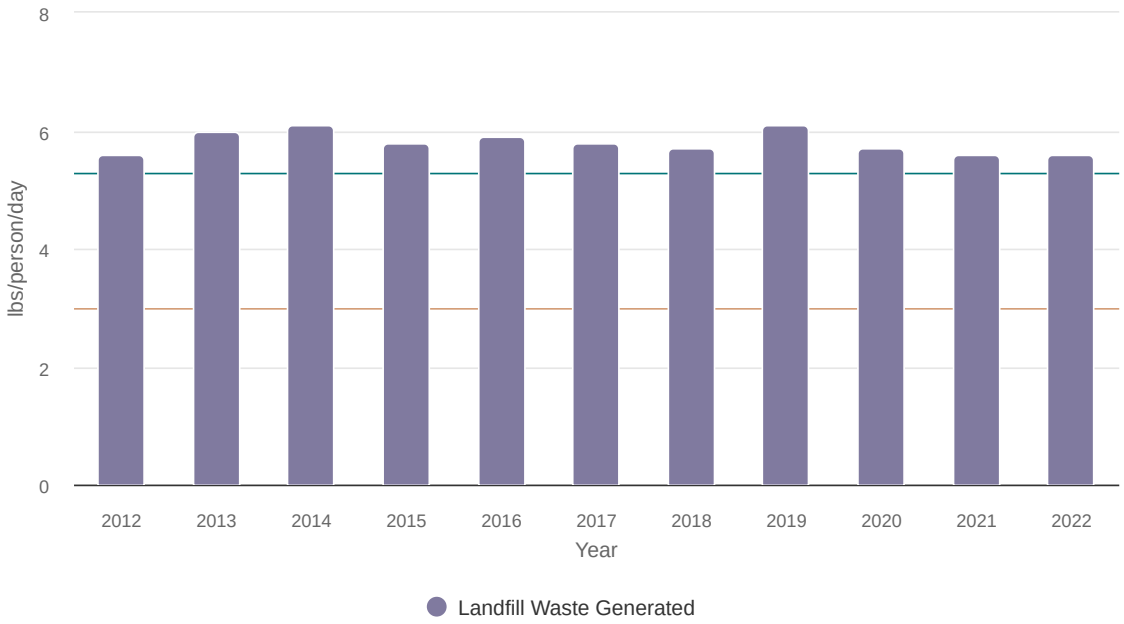
Implementation of the Zero Waste strategy is estimated to reduce the City's GHG emissions by 2,830 MTCO2e by 2020 and 9,216 MTCO2e by 2030.

Co-Benefits, see page 7

Divert Solid Waste

City of ENCINITAS





According to CalRecycle, the amount of waste generated by the City of Encinitas has fluctuated between 5.6 and 6.1 lbs/person/day since 2012. In 2022, the average Encinitan generated 5.6 lbs/person/day. Using the most current waste generation data from 2022, the average Encinitan generates 5.6 lbs/person/day.

To comply with SB 1383, the City updated its Solid Waste Management and Construction and Demolition Debris Recycling ordinances in 2021 (Ordinance Nos. 2022-16 and 2022-17). These include a five percent increase (from 60 percent to 65 percent) in the percentage of construction debris that must be recycled. The ordinances became effective on January 1, 2022. Additionally, the City introduced a new ordinance in 2021, Mandatory Organics Recycling and Edible Food Recovery (Ordinance 2022-15). Effective January 1, 2022, Ordinance No. 2022-15 not only requires all generators to recycle organics, but also mandates that some edible food generators donate any leftover food products to local organizations.

In 2022, City Council unanimously passed the 'Lighter-than-air' Balloon Ordinance, restricting the sale of helium (or any gas lighter than air) filled balloons. The National Oceanic and Atmospheric Administration cited balloons as a top pollutant that poses harmful consequences to marine life. Furthermore, helium-filled balloons are often found littering Encinitas parks and beaches and are the most common form of floating garbage within 200 miles of the region's shoreline.

Smoke-Free Ordinance

New smoking rules took effect in July in Encinitas, restricting smoking and vaping in all public places. This new law follows in the footsteps of similar regulations enacted by many other Southern California communities, including Santa Barbara, Beverly Hills, and Manhattan Beach. The goal of the new rule is to reduce waste, protect the environment, and limit secondhand smoke exposure to the public.

The number one waste item found at beach cleans ups in San Diego County is cigarette butts. Tobacco waste is one of the main sources of marine plastic pollution worldwide. By enacting the ordinance, the City of Encinitas hopes to eliminate as much waste as possible and further contribute to the beautification of the city.

In addition to the positive environmental effects this ordinance can create, it will also help alleviate the negative effects of secondhand smoking. The U.S. Environmental Protection Agency found the effects of secondhand smoke are a health risk to the public and therefore classified it as a "group A carcinogen", the most dangerous class of toxin. The City was concerned about the potential health effects second-hand smoke could have on the community and cited this as one of their main reasons to adopt the regulation.

Carbon Sequestration

City of ENCINITAS

Carbon Sequestration		
Goal 7.1: Increase Urban Tree Cover		
CS-1	**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, and to promote increased carbon sequestration by trees within the community.	✓

The Carbon Sequestration strategy in the City's CAP aims to facilitate the process of removing carbon dioxide (CO_2), a greenhouse gas, from the atmosphere through natural, such as tree planting. This is referred to as carbon sequestration. Trees, algae, and other vegetation are "carbon sinks" because they naturally take in atmospheric CO_2 through their respiration process. 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 $MTCO_2e$ by 2020 and 66 $MTCO_2e$ by 2030.

Call to Action

Own your property and considering planting trees? Not only will they reduce energy consumption, and increase property values, trees also help fight climate change! Check out the City's tree planting guide.

The City's dedicated urban forestry efforts have resulted in Encinitas being recognized as a Tree City USA by the Arbor Day Foundation for more than 12 years. To obtain this designation, municipalities must spend at least $2 per capita on community forestry, establish a tree care ordinance, and observe Arbor Day.

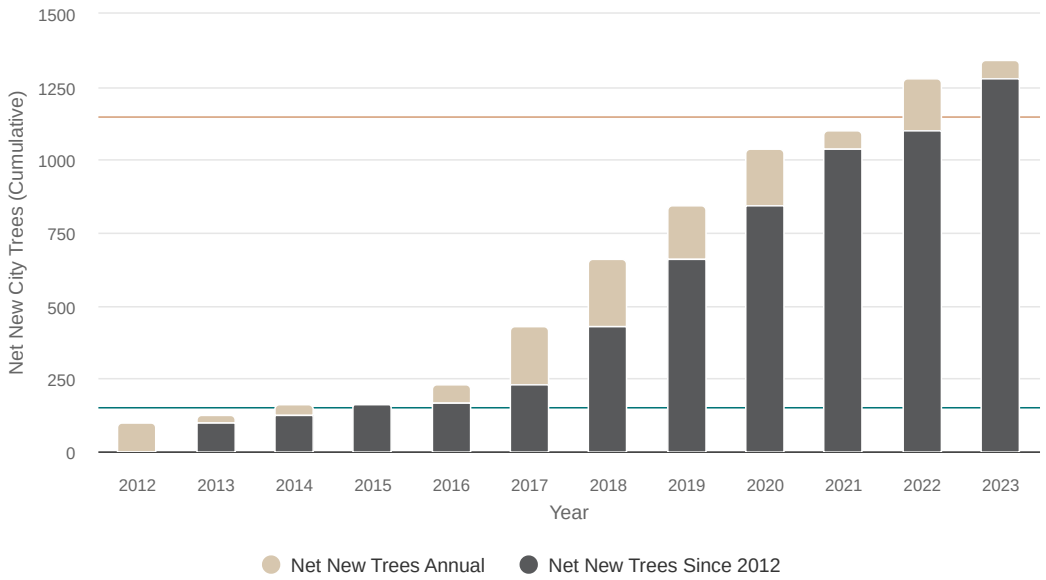
Co-Benefits, see page 7

Urban Forestry

City of ENCINITAS

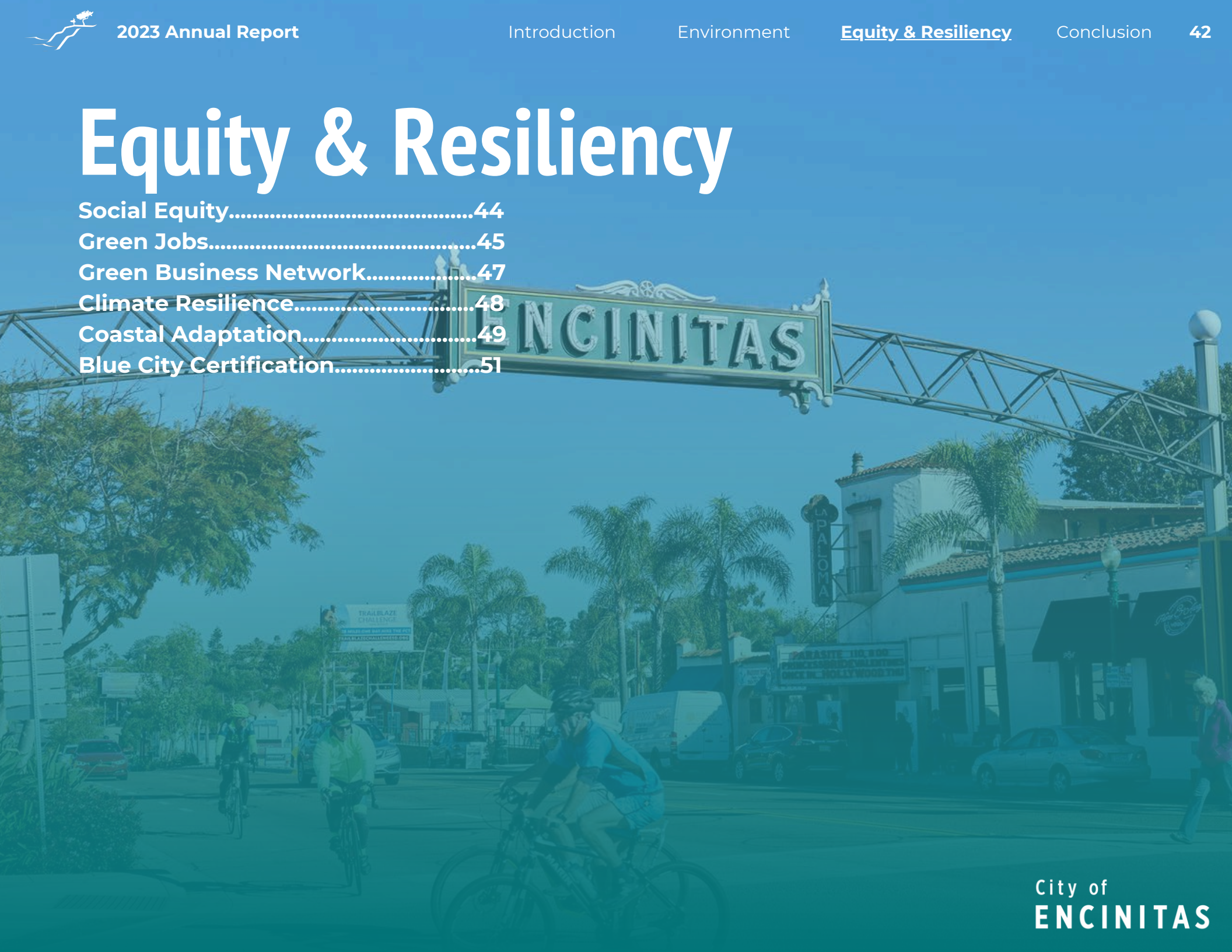
We recognize the City's urban forest as one of our greatest natural resources. City leaders and staff have made our trees a priority and they are dedicated to the continued planting, protection, and maintenance of Encinitas' urban forest. In alignment with CAP Measure CS-1, the departments of Public Works and Parks and Recreation have an established Urban Forest Management Program (UFMP) which closely follows the City's UFMP Administrative Manual and incorporates the City's Urban Tree Planting Program. In 2018, the City hired a City Arborist to support the implementation of the UFMP and oversee the care of the City's trees.

The City's Climate Action Plan (CAP) set a goal of planting 50 net new City trees annually between 2018 and 2020, which is a total of 150 net new trees planted by 2020 and planting 100 net new City trees annually between 2021 and 2030, for a total of 1,150 net new trees planted by 2030. As part of the 2020 CAP update, the City decided to increase the tree planting goal from 50 to 100 net new trees, doubling the City's efforts to grow our urban tree canopy. In 2023, the City planted a total of 59 net new trees.



Between 2012 and 2023, the City has planted a total of 1,282 new trees, averaging about 100 new trees planted per year. At the end of 2023, the City's urban forest included 21,806 City trees in the public right-of-way and in City parks.

Equity & Resiliency



City of ENCINITAS

Equity & Resiliency Highlights

City of ENCINITAS

55 Jobs Created
at San Diego Community Power since 2018

7800
feet of coastline to be restored

A+
Grade for Moonlight and San Elijo State Beach pollution safety levels

751
Solar projects installed in Encinitas by local businesses

Green business network established

Clean Community Power Plan finalized

13
Community events attended

Social Equity

City of ENCINITAS

To successfully implement the CAP, economic and equity factors must be taken into consideration. Low-income, minority, and other communities of concern are expected to be most impacted by future climate changes. Therefore, the City's CAP includes the consideration of socially equitable climate adaptation, equitable implementation of mitigation measures, and a focus on green jobs.

San Diego Community Power (SDCP), which the City formed along with four other member cities, offers many equitable energy programs. These programs seek to increase access to renewable energy and energy efficiency programs for low-income customers or those located in disadvantaged communities. In 2023, SDCP released its final Community Power Plan (CPP). In the plan, possible customer programs include energy education, application assistance, community solar green tariffs, building electrification assistance, energy storage systems, electric vehicle charging stations, transportation electrification, and more. SDCP continues to announce new programs and initiatives to make energy more equitable for Encinitans and their other customers.

The City continues to address equity through existing affordable housing programs and planning for future affordable housing. Ongoing programs include the City's Housing Choice Voucher Program (Section 8 rental assistance) and Community Development Block Grant Program (CDBG). 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 low-income Encinitas households through a voucher-based program. The program is very popular with an ongoing wait list. Additionally, the city has managed a CDBG program since 2011. The CDBG 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.

The City's Housing Element identifies existing and projected housing needs in order to preserve, improve, and develop housing for all economic segments of the community, in addition to demonstrating how the city will accommodate its fair share of regional housing. The City's Housing Element identifies existing and projected housing needs in order to preserve, improve and develop housing for all economic segments of the community, in addition to demonstrating how the city will accommodate its fair share of regional housing.

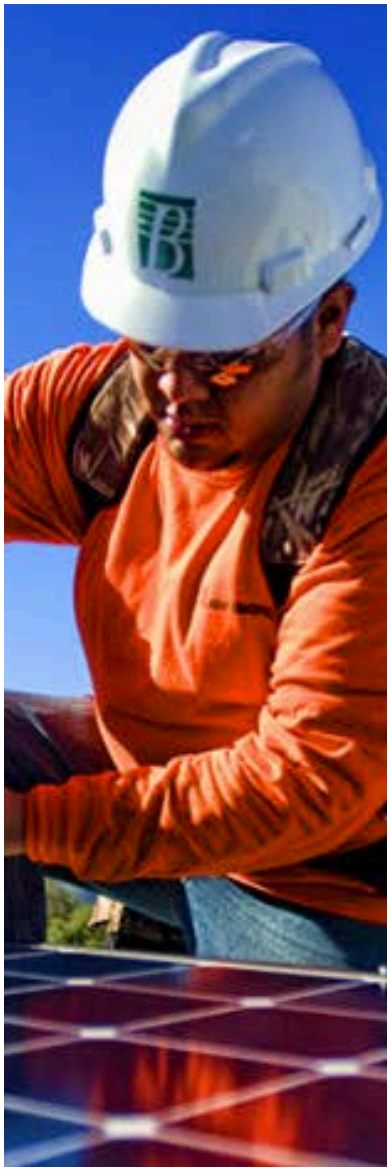
Underserved and underrepresented communities often do not have the same level as participation in planning processes. Thus, the City has worked to engage community members of diverse backgrounds by attending various city-wide events to promote climate action plan related opportunities. In 2023, staff attended 13 community events. Events attended by city sustainability staff included the Spring Egg Hunt, Cyclovia, Spring and Holiday Street Fairs, Dia de los Muertos, Small Business Resource Fair, Zero Waste Fair, and farmers' markets.

Green Jobs

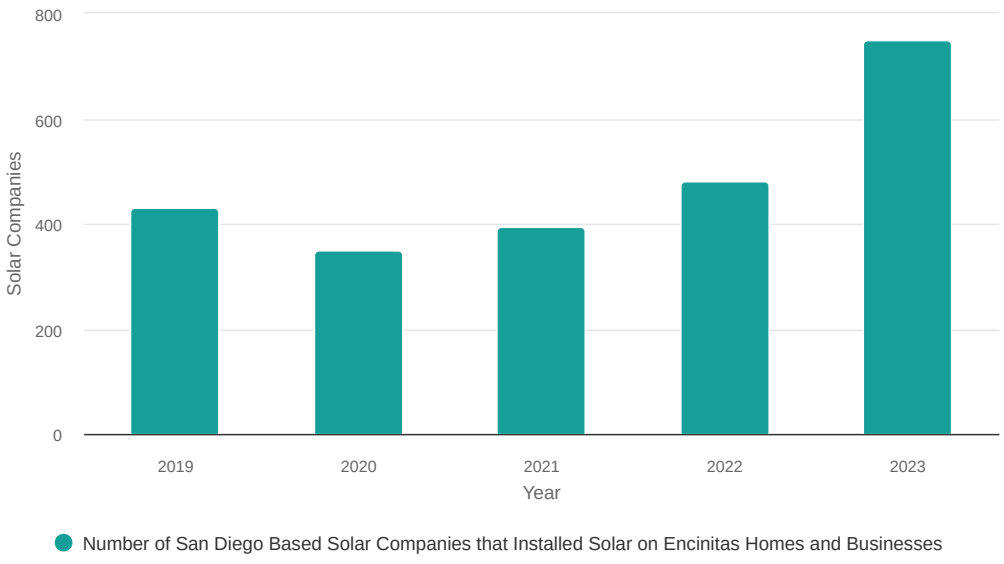
City of ENCINITAS

The City fosters green jobs in our local community and around the region through the implementation of the Climate Action Plan (CAP). Development and completion of the various CAP measures will create a need for more green jobs in Encinitas and the region.

Through its procurement of renewable energy, San Diego Community Power (SDCP) is committed to supporting local green jobs and building San Diego County's green economy. The agency works closely with clean energy generators to provide its member communities with clean energy. The Jacumba Valley Ranch (JVR) Energy Park—located in southeastern San Diego County—is a solar and storage facility commissioned by SDCP in 2021. Construction on the project began in early 2022 and created approximately 350 construction jobs, utilizing a Project Labor Agreement with local unions. As SDCP grows its energy portfolio, new renewable energy projects will create local construction, maintenance, and management jobs in the clean technology sector.



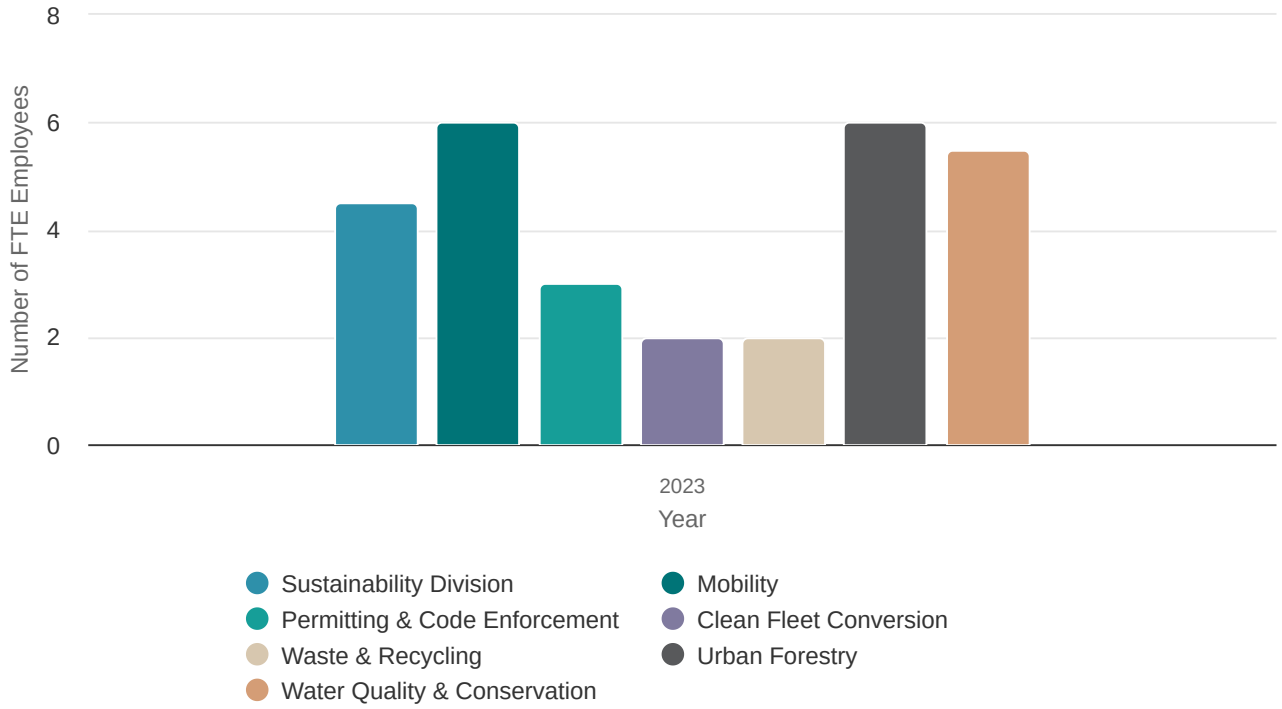
Policies created to advance the deployment of renewable energy generation at residential, and commercial buildings in Encinitas directly support the creation of green jobs. Every year in Encinitas, hundreds of solar PV systems are installed at homes and businesses, both voluntarily or as a result of Encinitas green building regulations. Of the solar installed, a majority of installers are locally based companies. According to California Public Utilities Commission data, of the 1195 solar PV systems installed in Encinitas in 2023, 751 were installed by companies based in San Diego County. Solar PV systems installed by San Diego County based companies directly support our local green economy and create green jobs.



Municipal Green Jobs

City of ENCINITAS

Various City departments and divisions work to implement the Climate Action Plan (CAP). The City Council has made implementing the CAP a priority, and thus have allocated considerable funding towards positions that directly implement the CAP. Head-count for staff are measured in full-time equivalency (FTE). Interns and other contract employees that work part-time are counted as partial FTE staff. Throughout the City, in 2023 there were 29 staff working on CAP implementation in 2023. The Sustainability Division spearheads climate action for the City by implementing and updating the CAP, reporting on implementation progress, coordinating with other City staff involved in implementation, and educating stakeholders on climate action. The City hired a full-time Sustainability Management Analyst to assist the City with building capacity to successfully implement the CAP in late 2023. Housed within the Public Works Department, the Waste & Recycling Division directly implements the Zero Waste Program through SB 1383 compliance, coordination with EDCO, and community education on waste sorting practices. The City's Storm Drain Management Division and San Dieguito Water District ensure waterways are clean and that water is conserved throughout the City. Mobility encompasses several employees across the Development Services, Engineering, and City Manager departments. Mobility employees work on bicycle and pedestrian planning, infrastructure projects, and safety education. Our Urban Forestry team includes staff in Parks, Recreation & Cultural Arts and Public Works as well as individuals contracted by Dudek and West Coast Arborists. Permitting & Code Enforcement plays a vital role in ensuring community-wide compliance with various CAP-related ordinances. Finally, employees within Public Works are working on the City's transition to a Zero Emission Municipal Fleet by identifying funding sources, and procuring new vehicles. As necessary, City Council will consider the creation of additional green jobs to directly implement the CAP.



Green Business Network

City of ENCINITAS

2,900+
Businesses located in the City of Encinitas

30+ Business types

Up to 18%
Reduction in operational costs for businesses

- Decreased Energy Use
- Clean and Efficient Transportation
- Increased Waste Diversion Rates
- Decreased Water Consumption

At the end of 2023, the City of Encinitas joined the San Diego Regional Green Business Network as a program partner. Implemented by the San Diego Green Building Council, this local delivery partner administers green business certification to local businesses in partnership with the City of Encinitas.

Businesses seeking to become certified must meet environmental requirements in the areas of energy, waste, water and more. The San Diego Regional Green Business Network provides Encinitas businesses with individualized consulting to help meet the certification requirements at no cost.

By becoming a certified green business, businesses in Encinitas can enjoy reduced operational costs. Case studies conducted by the San Diego Regional Green Business Network found that operational savings can be as high as 18 percent.

This partnership between the City and the San Diego Regional Green Business Network, in collaboration with the Encinitas Chamber of Commerce, is expected to provide great value to our local green economy and will contribute to enhanced environmental outcomes for the City.

More data regarding progress of the program is expected in 2024.

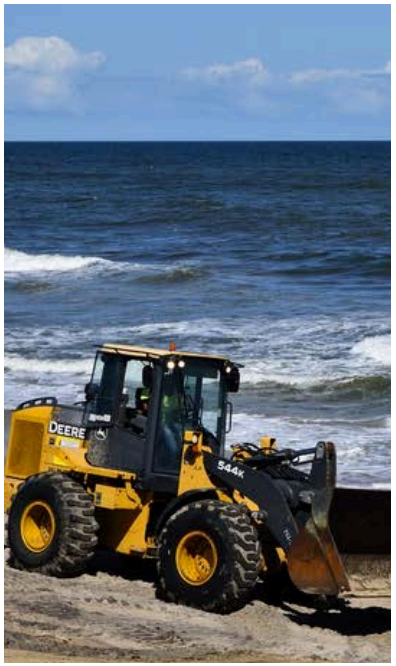
Climate Resilience

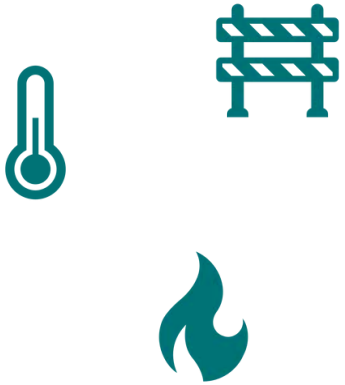
City of ENCINITAS

While the Climate Action Plan (CAP) is largely focused on mitigating and reducing the future impacts of climate change, some effects are already beginning to take shape. The CAP's climate change vulnerability risk and adaptation assessment chapter outlines the current and future impacts of climate change. Furthermore, the CAP outlines strategies for the City to improve community resiliency and adaptation to the current and future impacts of climate change.

The CAP calls for preparations to adapt to an increase in rising temperatures. In tandem with the CAP's Carbon Sequestration strategy, tree planting is an effective way to prepare for a rise in future temperatures. The urban heat island effect is a phenomenon where higher temperatures are experienced by urban areas as a result of more heat-absorbing manmade surfaces such as roads and buildings. Trees help reduce the urban heat island effect by shading heat-absorbing surfaces. Since 2012, the City has planted 1,282 net new trees, advancing community heat resiliency in the process.

A future decrease in the amount of water supply and precipitation are another concern for the Encinitas community. The CAP's Water Efficiency strategy seeks to reduce the amount of water consumed by Encinitans to prepare for future decreases in water availability. Studies have shown that increased water rates can lead to decreased water consumption. Additionally, the City's Bee City USA affiliation and development of a native species policy will both help to promote the planting of native vegetation, which requires less water than traditional ornamental landscaping.





Another future climate impact that is a focus of the City climate action planning is wildfire. Several areas in Encinitas are particularly vulnerable to wildfire risk and climate change is expected to increase the frequency of wildfires. Thus, the CAP seeks to increase preparedness for future potential wildfires. The Encinitas Fire Department, in close partnership with the County of San Diego, conducts outreach and education for residents to be more prepared for procedures in the event of a wildfire. The City also operates a Fire Prevention Bureau which oversees business inspection and weed abatement programs and enforces hazardous materials storage/use and disposal laws. Fire Station No. 6 was added to the Olivenhain community approximately 10 years ago on a temporary, part-time basis. Olivenhain is the most rural, brush-covered portion of the City and is designated as a high fire hazard severity zone. The City now operates Station No. 6 on a full-time basis and is seeking a permanent location for this important fire station.

Coastal Adaptation

City of ENCINITAS

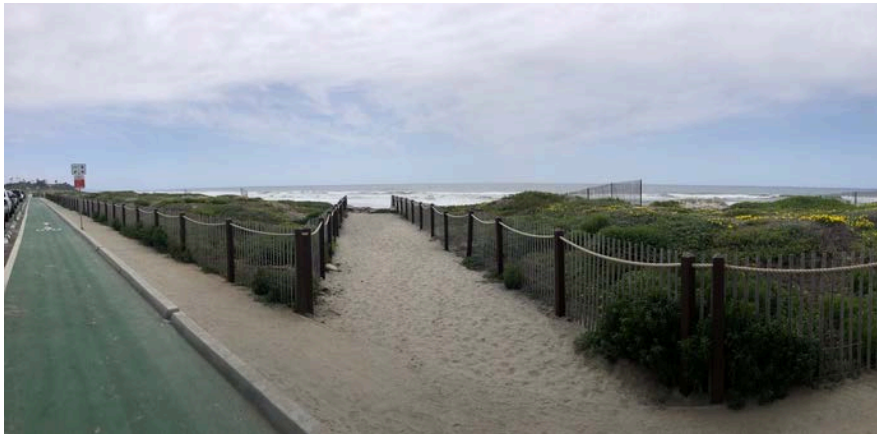
With the Pacific Ocean as our backyard, it is paramount that the City continues to prioritize projects and policies that promote coastal resilience and adaptation. The City recognizes the importance of protecting our six miles of coastline. The City actively manages our coastline in a way that supports the community's active coastal lifestyle and works to preserve and protect the native plants and animals that rely on our coastal resources. The City's climate action plan assessed the City's potential impacts related to future sea level rise and found that the City will need to handle an anticipated sea level rise of between two to four feet over the next century.

One of the most direct ways that the City can mitigate potential future sea level rise is by maintaining sand on our local beaches. The City utilizes the Sand Compatibility and Opportunistic Use Program (SCOUP), to streamline beach nourishment projects. This program facilitates the use of available sand from construction sites and other opportunistic sources, tested through stringent environmental regulations and granule consistency to ensure compatibility with receiver beach locations.

The City is also part of a collaborative coastal storm damage reduction project with the U.S. Army Corps of Engineers (USACE) and the City of Solana Beach (known as the San Diego County, CA Project). The project was approved in 2015 with the Project Partnership Agreement and lease approved and signed in 2023. The goal of this 50-year project is to reduce storm and sea level rise-related coastal damage and erosion by adding sand in five-year cycles to the Encinitas coastline between Swami's and Beacon's Beach. In 2024, 340,000 cubic yards of compatible dredged sand material will be added to our beaches. Additional nourishments in Encinitas will add 220,000 cubic yards of sand every five years. In 2023, the project's pre-construction, engineering, and design phases were completed. Monitoring began in the fall of 2022 to set baseline conditions of the shoreline, including supratidal, intertidal, and shallow habitat. Project funding is comprised of local, state, and federal sources.

Coastal Adaptation

City of ENCINITAS



Another coastal project that aids in the City's adaptation to sea level rise and mitigate coastal storm damage is the Cardiff State Beach Living Shoreline Project. Completed in 2019, this project created an engineered coastal dune along a low-lying area of the City called Cardiff-by-the-Sea. The dune was constructed using repurposed buried rock revetment and cobblestone and 30,000 cubic yards of sand dredged from the San Elijo Lagoon inlet and other acceptable sand sources. Native seeds and potted specimens of dune thriving plants were installed along the new shoreline on the easterly 30-foot width of the dune.

The Cardiff State Beach Living Shoreline Project is the first of its kind in Southern California to test coastal dunes as a nature-based solution to beach erosion and flood protection of a vulnerable coastal asset. This project also created healthy and safe habitats for a variety of species, including the endangered western snowy plover. Additionally, a five-foot wide, decomposed granite footpath was installed with the project, just east of the dune system, supporting pedestrian activity along South Coast Highway 101.

In 2019, a monitoring program was developed to study the Cardiff State Beach Living Shoreline Project and to inform other coastal communities considering such adaptive measures. Monitoring data is also used to inform the project's long-term maintenance and will continue through 2024. This program is a collaborative effort between the City, California State Parks, California State Coastal Conservancy, the Nature Collective, U.S. Fish and Wildlife, Surfrider Foundation, University of California, Los Angeles, and Scripps Institution of Oceanography. In March 2021, the City accepted a national award from the American Shore and Beach Preservation Association (ASBPA) for Best Restored Beach of 2020.

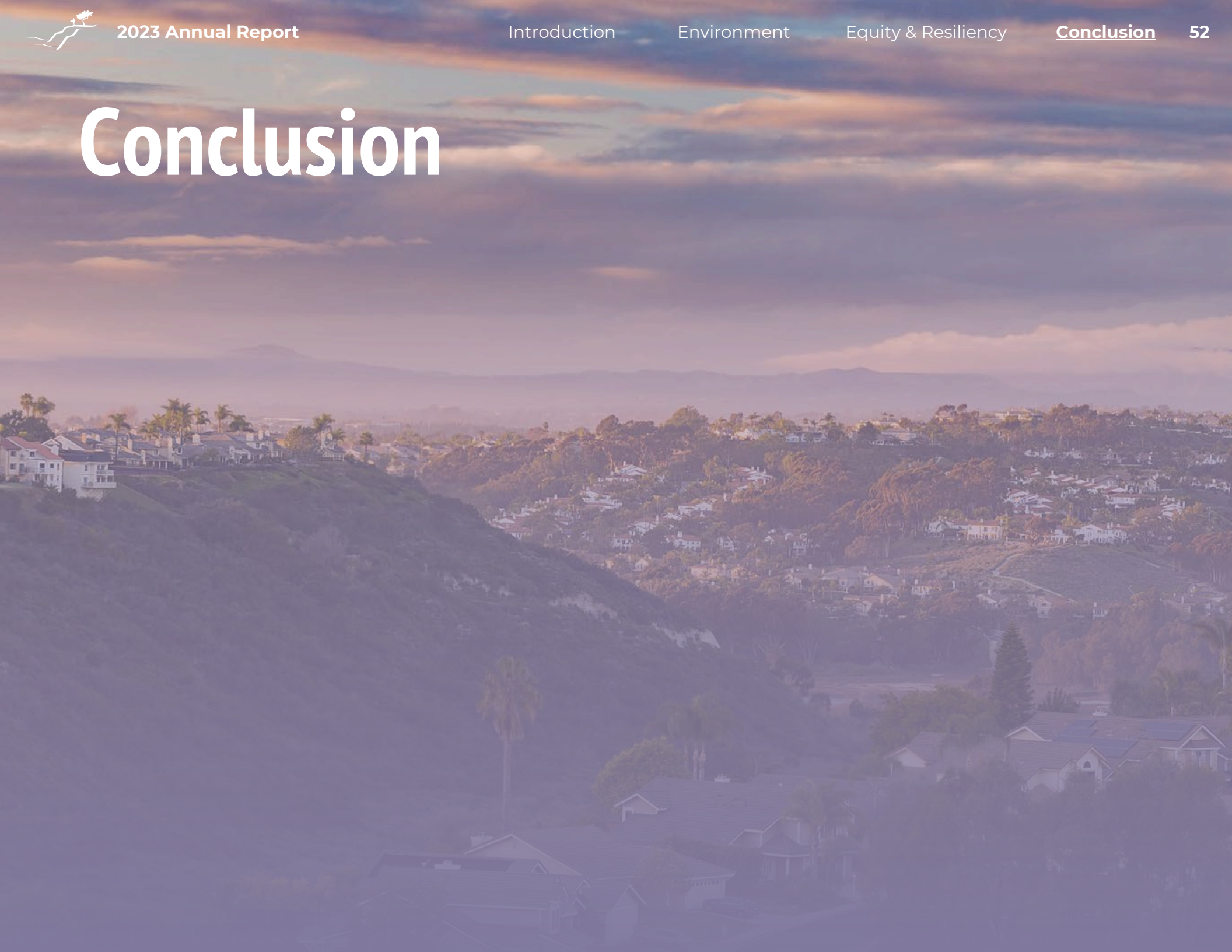
Blue City Certification

The Blue City Network, implemented by the non-profit organization Project O, is a certification program that recognizes cities, towns and counties that continually progress on their commitments to protecting waterways and oceans. This network of coastal communities is continuing to grow and, as of the end of 2023, Encinitas is proud to be the newest member of the network.

As a member of the Blue City Network, Encinitas will collaborate with cities, towns and counties and receive support from non-profit partners in addressing sustainability through four solution areas: Waste Minimization, Climate Protection and Community Resilience, Water Quality and Efficiency, and Healthy Ecosystems.

Upon becoming a member of the Blue City Network, Encinitas was recognize with a status of Ocean Champion, scoring 455 out of a possible 500 points for accomplishments in coastal resilience and protection. Some of the City's efforts cited include the Cardiff State Beach Living Shoreline Project, the 'Smoke-Free' ordinance, and the 50-year partnership with the U.S. Army Corps of Engineers which will protect one-and-a-half miles of shoreline. The Blue City certification further solidifies the City's promise to protect the vital California coastline.

Conclusion



Conclusion

City of ENCINITAS

The 2023 Climate Action Plan (CAP) Annual Monitoring Report (Annual Report) summarizes the City of Encinitas' progress toward overall greenhouse gas (GHG) reduction targets and evaluates the implementation status of each of the twenty measures established in the CAP. This Annual Report covers the City's efforts since implementation began in 2018, and includes data tracked through the end of 2023. Of the twenty CAP Measures, fourteen have been completed, and six are in varying levels of progress.

City staff will continue to work diligently to complete all CAP measures by 2030 in order to meet the CAP's greenhouse gas (GHG) reduction targets. The CAP Implementation Plan calls for measures to be completed within varying timelines depending on complexity and cost. Looking ahead, City staff will focus on executing the following CAP-related activities in 2024, and beyond, to successfully implement the CAP:

2024 CAP Activities

- Continue to support San Diego Community Power in its effort to serve all Encinitans 100% renewable energy.
- Implement the City's Green Building regulations in support of building electrification, decarbonization, and energy efficiency.
- Revamp the City's Green Building Incentive Program to be more accessible to residents with existing homes in the City of Encinitas.
- Certify and promote local businesses through the California Green Business Certification implemented by the San Diego Regional Green Business Network.
- Continue to install bike and pedestrian facilities to enhance mobility throughout the community.
- Continue to maintain a healthy urban tree canopy and plant new trees within the City's urban forest.
- Support City projects relevant to the CAP including Leucadia Streetscape.
- Continue coastal resilience projects like SCOUP, the USACE Coastal Storm Damage Reduction Project, and the San Diego Association of Governments, Regional Beach Sand Project III.
- Seek funding to support installation of on-site renewable energy at municipal sites
- Complete a microtransit study to support the future development of a microtransit program
- Seek funding to install proposed roundabouts to improve traffic flow.

In Encinitas, some of the implications of climate change are already evident and will increasingly become a challenge that the community must address. Encinitas faces rising sea levels, increased drought risk, increased annual temperatures, and increased vulnerability of bluffs and beaches, in addition to other changes that pose a threat to the coast and community we call home. 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 outlined in the CAP. 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.

Addendum - October 4, 2024

City of ENCINITAS

The following changes were made to the 2023 Climate Action Plan Annual Report on October 4, 2024.

On page 19, it was previously reported that 9,287 kW of solar was installed on residential properties in 2023, resulting in a cumulative 44,152 kW of solar installed on 6,463 homes in Encinitas between 2012 and 2023. The text now accurately reports 9,297 kW of solar was installed on residential properties in 2023, resulting in a cumulative 44,165 kW of solar installed on 6,464 homes in Encinitas between 2012 and 2023.