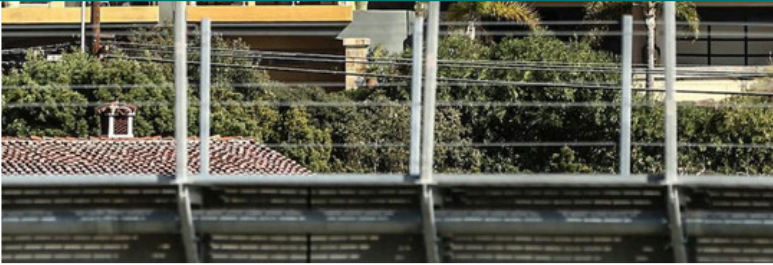




City of Encinitas Home Efficiency Assessment Toolkit User Guide





CITY OF
Encinitas

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Introduction

Thank you for checking out the City of Encinitas' Home Efficiency Assessment Toolkit (HEAT)! While professional home energy assessments are ideal, Do-It-Yourself home assessments and upgrades are a cost-effective and impactful option to help you create an efficient home.

The HEAT contains several tools for performing a home efficiency audit. This guidebook will help you understand how to use each tool, interpret results and take action.

Need Assistance?

If you need assistance with the HEAT, feel free to contact us at [**ClimateAction@EncinitasCA.gov**](mailto:ClimateAction@EncinitasCA.gov)



Tell a Friend!

If you find the HEAT to be helpful, spread the word! The City's Climate Action Plan encourages every citizen, business and visitor to be a part of making our community more sustainable. You can also send us photos or tag us in a social media post using **#BeatTheHEATEncinitas**



@CityofEncinitas



@EncinitasGov



@City of Encinitas



@City of Encinitas

Climate Action Plan

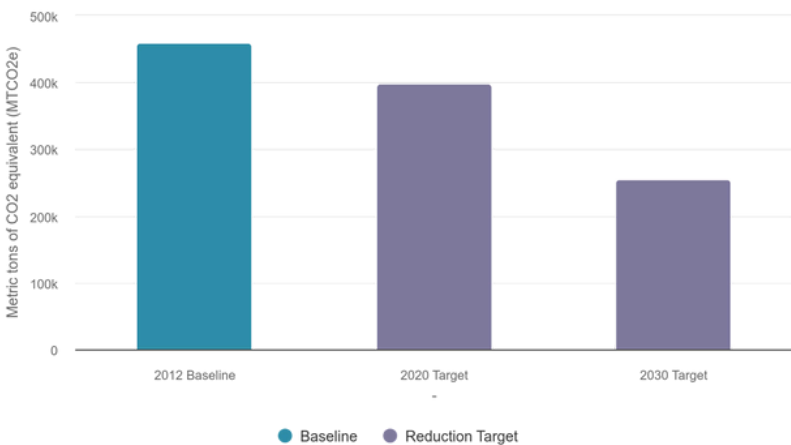
The City of Encinitas prioritizes addressing the effects of climate change. This commitment is demonstrated in many of the City's actions but most notably in the Climate Action Plan (CAP). The City's CAP identifies several measures to reduce community-wide greenhouse gas (GHG) emissions. To learn more about the City's CAP, visit www.EncinitasCA.gov/ClimateAction.

Buildings account for around one-third of all greenhouse gas emissions in Encinitas. The HEAT aims to reduce emissions from natural gas, electricity, and water use in homes in Encinitas.

CAP GOALS:

The HEAT aligns with the following CAP goals:

- Reducing overall emissions to 44 percent below 2012 baseline levels by 2030.
- Improving residential building and water efficiency.



What's in the Toolkit?

Energy



Infrared Thermometer

Check for heat loss in areas such as windows, vents, doors, etc.



Kill-A-Watt Meter

Measure the amount of electricity used by devices when plugged in.



LED Light Bulb

Replace incandescent light bulbs with highly efficient LED light bulbs.



Tape Measure

Identify gaps in your home's insulation to reduce energy waste.

Water



Faucet Aerator

Faucet aerators can help you save water.



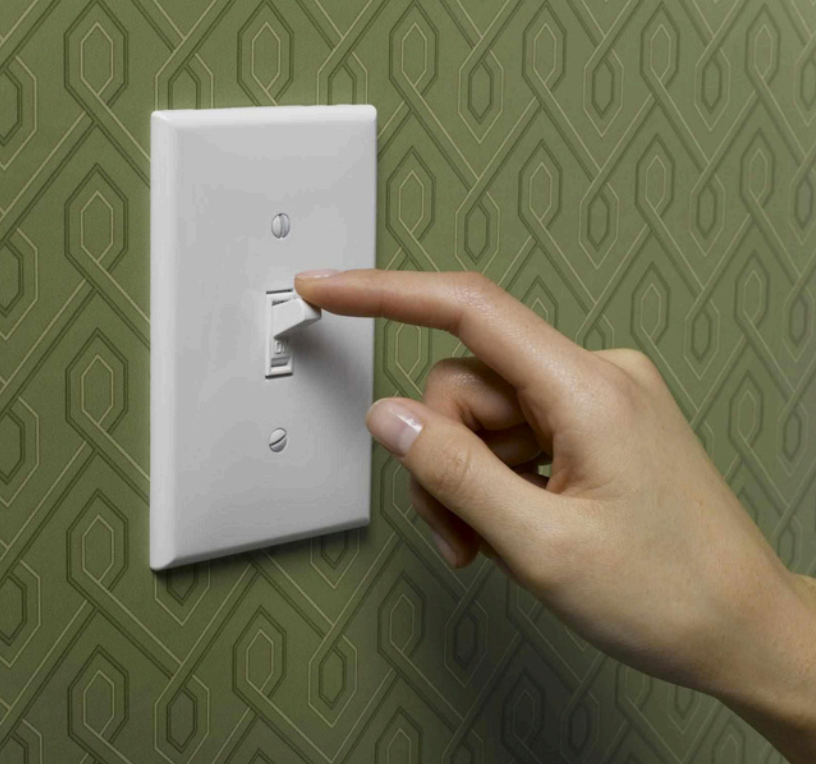
Shower Timer

Be water conscious.



Detect-A-Leak Toilet Tablets

Test your toilet for leaks by dropping this tablet in your toilet tank.



Understanding Your Energy Bill

Before you begin using the tools in the HEAT, it's important to establish a baseline for your energy and water consumption. This means looking at your most recent energy and water bills to calculate your average usage.

San Diego Gas and Electric (SDG&E) and San Diego Community Power (SDCP) customers receive a single bill from SDG&E. To understand your energy bill, utilize the following pages for an in-depth breakdown of charges.

You can also **learn more** about your energy bill and watch an **informational video** by scanning this QR code.



This chart demonstrates your **electric usage** month over month for the past year. If you are on a Time-of-Use (TOU) rate, this will outline the TOU peak in which you used the most energy each month.

SDGE™ ACCOUNT NUMBER 0012 3456 7890 1 DATE MAILED May 3, 2023 Page 1 of 6
 SERVICE FOR SAN DIEGO COMMUNITY POWER sdge.com
 815 E ST SUITE 12716 SAN DIEGO, CA 92112

Account Summary

Previous Balance		\$125.64
Payment Received	4/20/23	THANK YOU - 125.64
Current Charges		+ 211.05
Total Amount Due		\$211.05

Summary of Current Charges (See page 2 for details)

	Billing Period	Usage	Amount(\$)
Electric Delivery	Mar 29, 2023 - Apr 27, 2023	426 kWh	168.55
CCA Electric Generation			42.50
Total Charges this Month			\$211.05

⚡ Your electric energy is provided by SAN DIEGO COMMUNITY POWER. If you have any questions about the Community Choice Aggregation (CCA) charges on your bill, please contact your CCA at 1-888-382-0169.

Regulatory Notices

- All customers are required to pay a Competition Transition Charge as part of the charges above, including those who choose an electric service provider other than SDG&E.


Electric Usage History (Total kWh used)

426 kWh used

- 14.2 Daily avg kWh
- 13.4 Daily avg kWh last month
- 35.2% ⬆ Change in daily avg kWh from last year
- 5.6% ⬆ Change in daily avg kWh from last month
- 4.7 Max monthly demand
- 5.1 Max annual demand
- 30 Days in billing cycle

The **CCA Electric Generation** line reflects the total amount charged by SDCP for the energy that you used during the current billing period.

These charges are associated with **SDG&E's Electric Delivery**. SDG&E charge customers for the transmission and delivery of electricity, along with a variety of other regulatory and program charges, including Baseline Adjustments, Wildfire Fund Charges, Franchise Fees and State Regulatory Fees at the same rates they always have.



ACCOUNT NUMBER 0012 3456 7890 1
AMOUNT DUE \$211.08

Detail of Current Charges

Electric Service

Rate: Time of Use - TOU-DR1-Residential Climate Zone: Coastal
 Baseline Allowance: 264 kWh
 Billing Period: 3/29/23 - 4/27/23 Total Days: 30
 Meter Number: 01234567 (Next scheduled read date May 26, 2023) Cycle: 18
 Meter Constant: 1.000 Billing Voltage Level: Secondary
 Circuit: 0000 Your circuit is currently not subjected to rotating outage. However, this is subject to change without notice.
 Total Usage: 426 (Usage based on interval data)

ELECTRIC CHARGES

				Amount(\$)
Electricity Delivery (Details below)		426 kWh		
WINTER USAGE	On-Peak	Off-Peak	Super Off-Peak	
kWh used	109	164	153	
Rate/kWh	\$.43809	\$.43809	\$.43809	
Charge	\$47.75	+ \$71.85	+ \$67.03	= 186.63
Wildfire Fund Charge	426 kWh x \$.00530			2.26
Electricity Generation (Details below)		426 kWh		
WINTER USAGE	On-Peak	Off-Peak	Super Off-Peak	
kWh used	109	164	153	
Rate/kWh	\$.19307	\$.10855	\$.08402	
Charge	\$21.04	+ \$17.80	+ \$12.88	= 51.70
Electricity Generation Credit				-51.70
Baseline Adjustment Credit	343 kWh x -\$.11724			-40.21
PCIA				7.19
			Total Electric Charges	\$155.87

(Continued on next page)

As an SDCP customer, you will see an **Electric Generation Credit** under SDG&E's Electric Generation portion of the bill to demonstrate what they would have charged you if you had continued to receive your generation services from them.



Energy Efficiency

Audit

Conserving energy is essential for lowering utility costs, reducing greenhouse gas emissions, and supporting a more resilient power grid. Even small changes in how you use energy at home can add up to significant savings over time.

There are four tools in this kit to help make your home more energy efficient and reduce unnecessary energy consumption.

Visit the **Encinitas Climate Dashboard** to learn more about **how you can conserve** and **find available rebates and programs** to further increase energy efficiency.



Kill-A-Watt Meter



A phantom load is electricity that devices use while they are turned off but still plugged in. According to the U.S. Department of Energy, it's estimated **10 percent** of household electricity is consumed by phantom loads.

Unplugging devices when they are not in use is the only way to **reduce phantom load consumption** .

The Kill-A-Watt meter, included in the HEAT, is a tool that helps you identify the amount of phantom electricity consumed by household devices.

Using the Kill-A-Watt is simple:

1. Plug the meter into an outlet, then plug your appliance of choice into the meter.
2. Push the middle button until "Watt" appears as the unit on the screen.
3. Visit the link below to calculate the cost of the phantom energy each year.



Efficiency Fact:

One of the easier energy efficiency hurdles to overcome is phantom energy. Simply unplug devices when they aren't being used and begin to save!

Infrared Thermometer



Return

Heat loss is the amount of thermal transfer from an object to the ambient environment. Heat loss is inevitable, but an inefficient home will have higher levels of heat loss, requiring more energy to stay at a comfortable temperature.

Using the infrared thermometer, you can **measure the heat loss** in your home. To use the infrared thermometer, follow these steps:

1. When you press the trigger button, the thermometer will turn on and begin to take a reading. Please use caution when aiming the laser and avoid pointing it at your eyes or anyone else's.
2. Take the temperature of an interior wall in your home. Record this number as it will be utilized as the baseline for the internal home temperature.
3. Throughout the home there can be several trouble points where heat loss is typically greater than others. We recommend you take the temperature at doors, windows, outlets and vents.

Tape Measure



Return

The tape measure also helps to measure heat loss in your home. You can use this tape measure to **identify holes or gaps** in doorways, windows, walls, etc. A well-insulated home will keep warm/cool air in more effectively.

LED Light Bulb



According to the U.S. Energy Information Administration, lighting accounts for approximately **6 percent** of the electricity consumption in homes.

In the kit, you will find three LED light bulbs that are yours to keep. LED bulbs **last up to 30 times longer** and use at least **75% less energy** than incandescent bulbs! We recommend replacing the bulbs in the fixtures that you use the most by following these steps:

1. Check the wattage of the fixture. The bulbs included in this kit are 9W LED and 60W equivalent.
2. Turn off the light and wait approximately five minutes for the bulb to cool.
3. Incandescent bulbs are safe to dispose of in the trash, as they are not composed of hazardous waste.
4. Install the LED and begin to save!

Efficiency Fact:

Switching to LED can save as much as \$187 over the life of the bulb!

Three bulbs are included in this kit for you to get started. Buy more LED bulbs to continue your energy efficiency journey.





Beyond the Toolkit

This kit is the first step in your home energy efficiency journey! To keep the momentum going, and the savings up, we recommend you explore the following options:

1. Professional home energy audit

A professional home energy audit provides you with expert advice specific to your home to identify further energy saving opportunities. Check out the U.S. Department of Energy's Residential Energy Services Network for a directory of certified professional energy assessors at [HERSindex.com/Find-A-HERS-Rater/](https://www.HERSindex.com/Find-A-HERS-Rater/)

2. Electrify, electrify, electrify!

There has never been a better time to electrify your home than now! With rebates for numerous highly efficient, electrification technologies, you can offset installation costs and start saving. Switching to a heat pump water heater, for example, saves the average Encinitas home \$200-300 annually! Plus, you're helping the planet by reducing fossil fuel consumption!

3. Take advantage of rebates

Rebates are retroactive payments for energy-efficient appliances that help you save on energy bills! Visit

EncinitasEnvironment.org/Call-To-Action to find local, state and federal rebates.

Beyond the Toolkit



Use cold water in the washer when possible and consider using a clothesline instead of the dryer to save energy.



Turn off the lights when they are not in use and transition to LED lighting throughout your home.



Reduce on-peak energy consumption, between 4:00pm and 9:00pm, to save on your energy bill.



Clean and replace HVAC filters once a month, and replace 10- to 15-year-old AC and furnace units with an ENERGY STAR heat pump.



Set heating temperatures at 68 degrees Fahrenheit and cooling temperature at 78 degrees Fahrenheit.



Unplug devices not in use to reduce phantom energy consumption.



Water Efficiency

Audit

Conserving water is equally, if not more important than conserving energy. Water is a finite resource that is becoming increasingly scarce, especially in Southern California.

You can help reduce water use and protect this vital resource by ensuring that your household water consumption is efficient. The HEAT contains two tools to help you achieve this efficiency.

Visit the **Encinitas Climate Dashboard** to learn more about **how you can conserve** and find **available rebates and programs** to increase water efficiency.



Detect-A-Leak Toilet Tablets



A leaking toilet can waste thousands of gallons of water per month and cost thousands of dollars per year. **You read that right!** A moderate toilet leak can waste approximately 6,000 gallons of water per month, adding more than a thousand dollars to your annual water bill.

To help **diagnose a toilet leak**, we've included several Detect-A-Leak toilet tablets. To use them, simply:

1. Remove the lid of the toilet tank and drop one tablet in.
2. Wait 10-20 minutes for the tablet to dissolve.
3. Check the toilet bowl. If the water turns blue, you have a leaky toilet!

In many cases, adjusting or replacing the flapper or float will resolve the issue. For more serious problems, you should contact a professional plumber.



Efficiency Fact:
Even a small toilet leak can waste over 200 gallons of water per day. That's enough to fill a small bathtub! This kit includes Detect-A-Leak tablets to help you get started. Check your toilets and fix leaks to conserve water and reduce your bill!

Shower Timer

Return



According to the U.S. Environmental Protection Agency, the average shower uses more than 16 gallons of water. To help you **assess and lessen the amount of water you use**, we have included a waterproof shower timer.

How to use it:

1. Place the timer in a visible spot in your shower.
2. Start the timer at the beginning of your shower.
3. Try to keep your shower within the timer's 5-minute countdown to save water and energy.
4. Track your progress and challenge yourself to shorten your showers gradually for even greater savings.

Faucet Aerator



Installing faucet aerators is an easy way to **reduce your water use**. Aerators add air to the water stream, reducing the amount of water that flows from the faucet while maintaining performance and saving you money.

To replace your current faucet aerator:

1. Close or plug your drain.
2. Unscrew the old aerator counterclockwise.
3. Clean and dry the faucet threads.
4. Screw on the new aerator clockwise.
5. Turn on the faucet to test for proper flow and leaks.



Beyond the Toolkit

Similar to energy efficiency, this toolkit was the first step toward a more water-efficient home! To continue saving water and money, we recommend you consider the following options:

1. Native landscaping

Native plants use 60-80% less water than traditional landscaping. By switching to native plants, you save money and water! Visit **SoCalWaterSmart.com** to explore current landscaping rebate programs that can help you get started.

2. Install a graywater system

Graywater systems are a great way to recycle and reduce potable water use. Water from your indoor activities, such as laundry, can be reused to irrigate landscaping, including fruit trees (but not vegetable gardens). Basic graywater systems using wastewater from a single clothes washer in a one- or two-family home may be installed without a permit if certain requirements are met. Visit **www.EncinitasCA.gov** to learn more about graywater systems and how to get started.

3. Utilize rainwater barrels

Rainwater barrels collect and store rain from your roof, providing water for your garden and landscaping. Using a barrel can reduce your water bills and help conserve this valuable resource. Visit **SDCWA.org** to learn more about rain barrels and available discounts and rebates.

Beyond the Toolkit



Efficient dishwashers use as little as three gallons of water per load, older models use about 10 gallons per load, and handwashing can use up to 27 gallons.



Upgrade low-efficiency toilets (3.5+ gallons per flush) to high-efficiency toilets (1.2 to 1.6 gallons per flush) to save water.



Commercial car washes recycle water and keep soap, oil and other pollutants out of storm drains and waterways.



Turn off the water when brushing your teeth or shaving to save up to 200 gallons per month per person.



Water plants in the early morning or evening, when temperatures are coolest to reduce water waste. Always check for irrigation leaks!



Installing a water efficient shower head can save up to 5,000 gallons of water per person per year.



Sustainable

Living

Now that you have learned how you can make your home more sustainable and efficient, let's see how you can apply sustainable living to other aspects of life!

Zero Waste

You can help the planet by reducing the amount of waste sent to the landfill by properly sorting your waste! Knowing what item's go in which bin is the key to proper waste disposal. The most important thing you can remember is **"when in doubt, throw it out."** Improper recycling results in numerous issues at mixed recycling facilities. The guide on the next page shows all the acceptable recyclable items determined by Encinitas' waste hauler, EDCO.

Learn more about proper Household Hazardous Waste (HHW) disposal practices

<https://Encinitas.EDCOdisposal.com/Residential-Waste-Services/Curbside-Pickup/Household-Hazardous-Waste/>



ORGANICS ORGÁNICOS



EDCO
edcodisposal.com
"We'll Take Care of It"



NO PLASTIC BAGS
NO BOLSAS DE PLÁSTICO



NO BIODEGRADABLE OR COMPOSTABLE BAGS
NO BOLSAS BIODEGRADABLES O COMPOSTABLES



NO PLASTIC CUPS OR STRAWS
NO VASOS O POPOTES DE PLÁSTICO



NO STYROFOAM
NO ESPUMA DE POLIESTIRENO

RECYCLE RECICLAR



EDCO
edcodisposal.com
"We'll Take Care of It"



NO PLASTIC BAGS
NO BOLSAS DE PLÁSTICO



NO FOOD WASTE
NO DESPERDICIO DE COMIDA

NO FOOD SOILED PAPER
NO PAPEL SUCIO CON COMIDA



NO LANDSCAPE WASTE
NO DESECHOS DE JARDINERÍA

LANDFILL BASURA



EDCO
edcodisposal.com
"We'll Take Care of It"



NO FOOD WASTE
NO DESPERDICIO DE COMIDA



NO LANDSCAPE WASTE
NO DESECHOS DE JARDINERÍA

NO RECYCLABLE MATERIAL
NO MATERIAL RECICLABLE



NO PAPER/CARDBOARD
NO PAPEL O CARTÓN



Clean

Transportation

Encinitans are increasingly embracing efficient modes of transportation such as biking. In fact, a study found a 71% increase in biking in the San Diego region from 2019 to 2022, the second highest in the nation!

Most trips taken are under three miles which is perfect for biking. The rise of electric bikes has made riding uphill easier, and many local bike shops offer test rides so you can decide if purchasing a bike is right for you!

If you already own a bike but want to use it for transportation rather than recreation, the City of Encinitas offers Community Cycling skills classes to learn where to ride, road laws and guided rides. Visit www.EncinitasCA.gov/ebikes to view the class schedule.

The San Diego Association of Governments (SANDAG) offers resources to help you commute cleaner. Visit www.SANDAG.org/STS to learn more about Sustainable Transportation Services (STS) including transit, vanpools, guaranteed ride home, bike lockers and more.

**THANK
YOU!**



The Earth, and all of us at the City of Encinitas, say thank you for your commitment to creating a more sustainable world!

This kit is the first step towards making your home and lifestyle more sustainable. We hope this has inspired you to keep going!

We'd love to hear your feedback on how useful the kit was and any suggestions for improvement. Please email us at ClimateAction@EncinitasCA.gov.

Don't forget to share the HEAT with a neighbor, friend, family member or your favorite local business owner so they can take advantage of the kit too!

Finally, please coordinate with the person you picked up the HEAT from to return the kit so more Encinitans can benefit from this resource.



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