



# **Do-It-Yourself Home Energy Savings Kit**



# Table of Contents

Welcome .....	4
What's In Your Toolkit?.....	5
Why Is Energy Use Important? .....	6
Let's Get Started! .....	7
Home Appliances.....	8
Heating and Cooling .....	10
Home Lighting .....	12
Let's Start Saving Water .....	14
How Much Water Are You Using? .....	15
Faucets and Showerheads.....	16
Toilets.....	17
Water Heaters.....	18
Outdoor .....	19
Kitchen.....	20
Next Steps.....	21
Toolkit Partners and Resources .....	22

# You're on Your Way to Home Energy Savings!

## Welcome to 3C-REN's Do-It-Yourself Home Energy Savings Kit

The fact that you brought this toolkit home from the library tells us that you're already curious about home energy. Congratulations! That's the first step toward energy savings.

Maybe you want to find out how much energy your home currently uses. Or maybe you want to install some quick fixes to help save energy and lower your utility bills. Or maybe you want to learn more about new ways to make your home truly energy smart. This kit does it all!

### **The toolkit helps you take charge of your home's energy and water use.**

It includes tools and equipment you can use to find out where where your home is wasting energy—and install some easy fixes to start saving right away.

We walk you through each step in exploring your home's energy use, and help you understand your home as an **energy system**, where every piece works together to increase your savings.

We also offer additional tips for “going green” in your daily life. Whether your goal is to save money, improve your health and comfort, or protect your local environment, we invite you to explore this guide and start learning more!

Sign up for more home energy upgrades. Learn more and get started at [3c-ren.org/home](https://3c-ren.org/home).



This symbol indicates steps where you will use the toolkit tools and equipment

Original content provided by Sonoma Clean Power.

# What's in Your Toolkit?



## Stuff to Keep: Energy-Saving Equipment



### 4 Light-Emitting Diodes (LEDs) bulbs

Replace the standard bulbs in your high-use light fixtures with these energy-saving LEDs.



### Rubber bands

Wraps around the pliers to help prevent scratching the aerators or showerhead during installation.



### Weatherstripping

Apply weatherstripping around your doors and windows to help seal air gaps. Please return what you don't use.



### 2 Low-Flow Faucet Aerators

Install one (1.0gpm) in your bathroom and one (1.5gpm) in your kitchen to help save water. Will fit most faucets (might not fit some specialty ones).



### Outlet Gaskets

Outlets are a hidden source of heat loss—install these gaskets to seal the gaps!



### Water Leak Detection Dye Tablets

Drop in your toilet tank to identify leaks. (Keep out of reach of children—Do not eat!)



### Low-Flow Showerhead

Save water and stay comfortable with this new showerhead.



### Water Flow Rate Bag

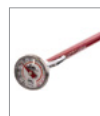
Find your true flow with this great rate bag!

## Stuff to Bring Back: Cool Tools



### Kill-A-Watt® Meter

This tool measures how much energy your appliances and equipment use.



### Thermometer

Checks the temperature of your hot water supply.



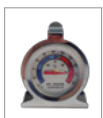
### Infrared Laser Thermometer

This tool finds heat loss in trouble spots like windows, vents, and door jambs.



### Pliers

Use these pliers to replace old showerheads and faucet aerators.



### Refrigerator Thermometer

This tool lets you check the temperature of your refrigerator and freezer.



### Pipe Thread Seal Tape (plumber's tape)

This tape prevents leaks in your faucets and showerheads. Use what you need and return the rest.

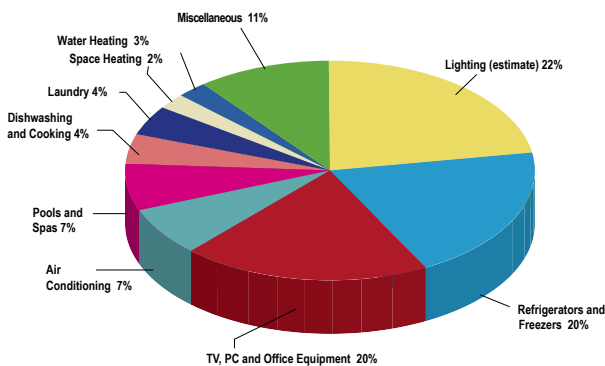
# Why Is Energy Use Important?

California households account for over 18% of the state’s total energy use. Compared to other states, we are pretty good at saving energy, but we can do even better! And it’s not that hard— with just a few small steps we can make big savings.

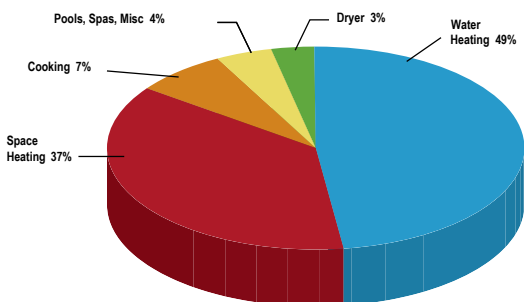
## How much energy does the average California household use?

Knowing how energy is used in your home will help you take steps to reduce your use. These charts show how the average household in California uses electricity and natural gas.

Statewide Average Electricity Use Per Household  
(6,296 kWh per Household)



Statewide Average Natural Gas Use Per Household  
(354 therms per Household)



Source: 2009 California Residential Appliance Saturation Study

## How much energy will this toolkit help me save?

Every home is different, and every household uses energy in different ways. That’s why it’s impossible to tell you exactly how much energy you can save with this toolkit.

However, we are pretty certain that installing some of this free equipment will help you start saving right away.

### Energy Literacy: Understanding Units That Measure Energy

**Watt (W)** - A watt is the basic unit of power used to measure electricity capacity and is equivalent to one joule per second. The higher the watt rating (e.g., 40, 60, 100W), the brighter the light. LED bulbs use far less watts to produce the same amount of light.

**Kilowatt (kW)** - A kilowatt is 1,000 watts.

**Kilowatt hour (kWh)** - A kilowatt hour is 1,000 watts used for one hour (power x time). It is the unit of energy most commonly used on household electricity meters.

**Therm** - A therm is the energy equivalent of burning 100 cubic feet of natural gas.

# Let's Get Started!

## How to measure your home's energy and water use

The following pages give step-by-step instructions to help you discover how much energy and water your home uses.

You'll test your appliances, switch lightbulbs, and check for gaps and cracks in your walls, windows, and doors.

You'll also check for water leaks and install water-saving equipment.

## Ready? Let's start saving!



# Home Appliances

Consumer electronic products account for up to 15 percent of electricity consumption in a typical California household. Many small appliances and electronics use energy even when they are turned off — as much as 75 percent may be consumed in standby or off mode! This is known as “vampire” or “phantom” loads, and eliminating them is a great way to save energy.

## Find out how much energy your appliances use



### Use the The Kill-A-Watt® Meter

The meter measures the energy drawn by appliances and electronics in both operating and standby modes. Follow these steps:

1. Plug the Kill-A-Watt Meter into an outlet, then plug the appliance that you want to test into the meter. You might need to wait a few seconds for it to start working.
2. Push the “down” button until “Watt” appears on the meter.
3. Measure the wattage twice—once when the appliance is on, and again when it’s off.
4. Record the energy used by your appliances and devices.
5. The meter can also help you estimate the cost of electricity used by the appliance or device over time. See the video (left) for instructions.



Tool: Kill-A-Watt® EZ Meter



Instructional Video: How to Use a Kill-A-Watt® EZ Meter. Scan the QR code to view the video or visit: <http://goo.gl/3Mv1Ku>

### TIPS FOR SMALL APPLIANCES

- Unplug small appliances (toasters, coffee pots, etc.) when not in use.
- Unplug phone and battery chargers once they are fully charged.
- In your entertainment and computer areas, plug equipment into a Smart Strip, which will shut off equipment when in standby mode. NOTE: Unplugging your cable box may reset the system; be sure to consult the operation manual.
- Always look for the EnergyStar® logo when buying new appliances.

### TIPS FOR WASHER & DRYER

- Wash full loads and use short wash cycles for mildly dirty laundry.
- Use cold water whenever possible.
- Use the washer’s high spin cycle to reduce drying time, and try a clothesline instead of the dryer, which is a big energy user.
- Clean the lint trap after every use to ensure safe, efficient drying.



Smart Strip



Major appliances may account for a quarter of your household energy costs, and your refrigerator is likely to be the single biggest plug load in your home. Follow the tips below to reduce the energy use of your refrigerator:

## Find out the temperature of your refrigerator



### Use the Refrigerator Thermometer

Use the refrigerator thermometer to help set optimum temperatures for your refrigerator and freezer:

1. Place thermometer in refrigerator between several food items. After 20 minutes, record the temperature.
2. Visually inspect your refrigerator for cracks in the door seal.
3. Repeat these actions with the freezer.
4. Adjust temperatures if they are outside the target range:
  - 36-40°F for refrigerator
  - 0-5°F for freezer

### TIPS FOR REFRIGERATORS

- Regularly clean the coils on your refrigerator.
- Leave your refrigerator plugged into a Kill-a-Watt meter (included in the kit) for 24 hours for an accurate energy reading.
- Keep contents organized so you can quickly get what you need; minimizing the amount of time the doors are open will save energy.
- If you have a second refrigerator, consider donating it or having it properly disposed of by your waste hauler, and you may be eligible for a utility rebate!



### Did you know?

You Can Save With EnergyStar® Appliances!

EnergyStar® appliances typically use up to 50 percent less energy and water than standard models. Look for the EnergyGuide label; it provides an estimated yearly operating cost and the range of operating costs for similar models.



### Rebates! Rebates!

Check with PG&E for rebates on your EnergyStar® appliance purchase. PG&E may also pay to pick up your old refrigerator or

A/C unit. Call 1-800-299-7573 or visit <https://bit.ly/3ni97KM> for eligibility and pickup.

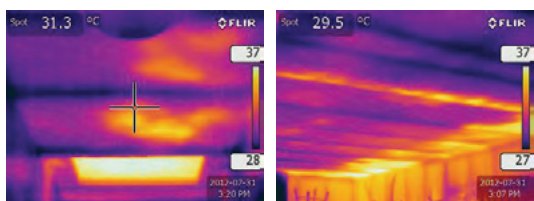
Not a PG&E customer? Check <https://on.sce.com/34uvyXk> for Southern California Edison rebates and <https://bit.ly/3jA6aDG> for SoCalGas rebates.

# Heating and Cooling

Sealing cracks, gaps, and leaks and improving the insulation in your home can save up to 20 percent of your heating and cooling costs. The Infrared Laser Thermometer will help you detect where you may be losing or gaining heat through windows, lighting fixtures, outlets, vents, door jams, and heating and cooling systems.

## Discover where your home is leaking warm or cool air

Heating and cooling can account for half of your home's energy use. A well-insulated home saves money and is more comfortable—cooler in the summer and warmer in the winter. Sealing gaps and leaks around doors, windows, and other parts of your home is an effective way to save on heating and cooling.



These images taken from an infrared camera show examples of a home with poor insulation and air leaks. The yellow spots show areas with little or no insulation. On warm days, heat is conducted through the ceiling and walls, making these areas hot.



### Use the Infrared Laser Thermometer

The thermometer detects heat gain and loss. Turn on and point the thermometer at potential trouble spots in your home, like windows and doors. Note areas with temperature fluctuations that may be caused by air leaks.



Instructional Video: How to Use an Infrared Laser Thermometer. Scan the QR code to view the video or visit: <http://goo.gl/bDJj2>

### INSTALL WEATHERSTRIPPING



Use weatherstripping to seal gaps in your doors and window jams.



1. Use the Infrared Laser Thermometer to check for drafts around exterior doors and window jambs. If you can see light or slide a piece of paper through a gap, then it needs weatherstripping. Focus on sections where you feel air or can see light.
2. Clean and dry the area to ensure a good seal.
3. Cut a piece of weatherstripping to match the length of area where it will be applied.
4. Peel back adhesive strip and apply to the inside of the window jamb or door frame.



Instructional Video: How to Apply Weatherstripping. Scan the QR code to view the video or visit: <https://bit.ly/32ix1hV>

## INSTALL OUTLET GASKETS

Outlet gaskets help prevent air leaks that can result from poor wall insulation.

1. Identify exterior walls with the most exposure to draft.
2. Choose an outlet or switch plate to upgrade, preferably on an external wall.
3. Carefully loosen the face plate screw with a screwdriver (not provided) and remove faceplate.
4. Place gasket over internal area. If necessary, trim the gasket to fit around the outlet.
5. Replace faceplate cover and tighten screw.
6. Repeat for other outlets or switches throughout your house.



Outlet Gaskets



Instructional Video: How to Install Outlet Gaskets. Scan the QR code to view the video or visit:

<http://goo.gl/HQ4YW>

## TIPS FOR HEATING AND COOLING

### Insulation and Sealing

- Caulk windows (video below).
- Consider installing a door sweep to help keep out drafts; you can pick one up at your local hardware store.
- Schedule a professional audit or contact a local contractor to address insulation needs around your light fixtures, vents, or other spots. Visit [www.3c-ren.org/home](http://www.3c-ren.org/home) to determine if you are eligible for a home assessment.
- Insulate ceilings, walls, attics, floors, crawl spaces, and basements to recommended standards for optimum savings.
- Consider insulation made from recycled materials

### Heating and Cooling Systems

- Set your winter heating temperature at 68°F; set your summer cooling temperature at 78°F.
- Replace A/C units more than 10 to 15 years old with EnergyStar® appliances to reduce your costs by as much as 20 to 40 percent!
- Clean and replace filters regularly.
- Use window coverings to prevent heat gains during the summer and heat loss during the winter.
- Do not rely on space heaters, they are very inefficient.
- Circulate air with ceiling or portable fans.



Instructional Video: How to Caulk Windows. Scan the QR code to view the video or visit:

<http://goo.gl/pdRsj>

# Home Lighting

Lighting represents as much as 22 percent of your home’s electrical use. You can reduce your energy bill significantly by switching to energy-efficient lighting. The LEDs provided in this kit use roughly 10 percent of the energy of an incandescent bulb and last 25 times longer. While LEDs are more expensive, they more than pay for themselves over time because of the savings on your energy bill.

## Why should you switch to LEDs?

LEDs screw into place the same as incandescent bulbs. Follow these steps as you set out to switch over to LEDs:

1. When shopping for LEDs, choose an LED with the same amount of lumens as the old bulb. You should be able to find how many lumens on the packaging.
2. Read the packaging to see where the bulb should be used; not all Energy Star qualified LEDs are designed to work in every socket.
3. First replace the incandescent bulbs in fixtures that have the highest use; this will result in the greatest savings for you.



### TIPS FOR LIGHTING

- Pay attention to the color you are getting. LEDs are available in a variety of colors from warmer to cooler as indicated on the package. The higher the temperature (Kelvins) listed on the bulb, the cooler the light.
- If you want a dimmable light, look for the “Dimmable” label on your LED.
- Make sure to dust your bulbs at least every six months; a dirty bulb is an inefficient bulb.

### NEXT STEPS

- As your less efficient lightbulbs burn out, replace them with LEDs. You can find LEDs in many sizes and shapes at any major hardware store.
- Replace your outside lights as well. LED flood lights are available.

## How to dispose of old bulbs



### INCANDESCENT

1. Turn off and unplug the fixture.
2. Put on protective work gloves.
3. Grip metal lip of the bulb with pliers or wrench.
4. Turning counterclockwise, gently unscrew the bulb base.
5. Place bulb and broken glass in a paper bag and place in the trash.

### Handling Broken Bulbs

Broken incandescent bulbs can be removed from the socket using a potato. Simply cut the potato in half, push the flesh into the broken section of the bulb, and twist counterclockwise.

### Non-broken Bulbs

Non-broken incandescent bulbs can be properly disposed of in the trash but LED/CFL bulbs must be recycled at local hazardous waste facilities.



### COMPACT FLUORESCENT LIGHT (CFL)

1. Turn off and unplug the fixture.
2. Open a window or door to the outside environment and leave the room, letting it air out for 10 minutes to let the hazardous chemicals from the bulb dissipate.
3. While continuing to air out room, carefully scoop up glass pieces and powder using stiff paper or cardboard; place into a thick plastic bag.
4. Use sticky tape to pick up remaining fragments (**DO NOT VACUUM**).
5. Wipe area clean with a damp paper towel; dispose of towel in the trash.
6. Place each CFL in a separate, clear, and sealed plastic bag; bring to a hardware or lighting store that recycles CFLs (typically this service is provided free of charge).
7. For CFL and LED recycling locations, visit [earth911.com](http://earth911.com). For general information on light bulb recycling, visit <https://greencitizen.com/light-bulb-recycling/>.



Instructional Video:  
Removing Broken  
Incandescent Bulbs  
<https://bit.ly/3I3TFIB>



Tips: Cleaning Up Broken  
CFLs and Disposing of  
Spent CFLs  
<http://goo.gl/tnFx9>

# Let's Start Saving Water

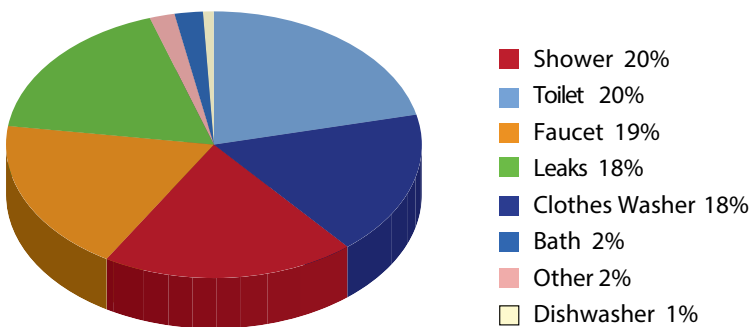
As a necessity for life itself, water is one of our most precious natural resources. On the Central Coast, we get most of our primary water supplies from stormwater capture such as the reservoirs at Lake Casitas, Lake Cachuma, and Lake Nacimiento. Other sources include groundwater, the state water project, and recycled water or desalinated water. But with a changing climate and growing populations, our water resources have been shrinking year by year. While state and local leaders continue to work on long-term solutions to our water challenges, saving water on a daily basis helps stretch supplies and can save you money.



## When you save water, you also save energy.

That's because a good chunk of California's electricity consumption (20%) and natural gas use (30%) is spent to pump, transport, and treat water around the state. Up to 49% of a typical home's gas usage goes to heating water. When you reduce water use, you also help lower your energy bills.

### Indoor Water Use in a Typical Single Family Home



### Fun Fact

On average, U.S. residents use 69 gallons of water a day per person for indoor use. That's 25,000 gallons a year per person—enough to fill an average home swimming pool!

# How Much Water Are You Using?

## HOW TO READ YOUR WATER METER

This kit provides the tools you need to measure and control water flow from individual faucets and fix leaks in your toilets. However, the best way to tell how much water your whole house is using is to read your water meter.

Your water meter is usually located at the front of the house near the curb—sometimes in the sidewalk. Look for a cover labeled “Water.”

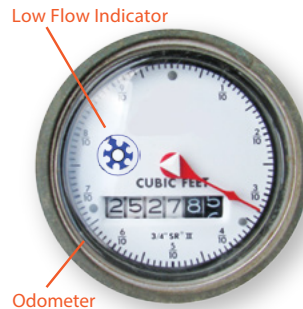
Water meters in the U.S. typically measure volume in gallons or cubic feet. One cubic foot = 7.48 gallons and 100 cubic feet = 748 gallons. Water charges are typically based on 100 cubic feet or on 1000 gallon units.

Read your meter every day or every week and keep a log of the readings. Is your consumption consistent or is it higher on some days? If your sprinkler system has a timer, read the meter the day before and the day after an irrigation cycle. How much water is going into the garden? How does that compare to the days without irrigation?

## CHECKING FOR LEAKS

Your water meter can also help you determine if you have a leak. Here’s how:

1. Turn off all water in your home. Make sure that any dishwashers, automatic irrigation systems, etc. are not running.
2. Lift the cover to expose your water meter. Flip open the hinged lid. You’ll find either a straight-reading or round-reading dial.



On straight-reading meters, the large needle on the dial is used for testing. On round-reading dials, the test dial will either be labeled “one foot” or will have no markings.

3. Mark the test-needle by laying a straight-pin or toothpick exactly on top of it.
4. Wait 30 minutes, then check the dial again. If the test needle has moved (and no one has used any water) you probably have a leak and should do some more investigating.
5. To determine if the leak is inside or outside the house, locate the main shut-off valve (usually at the front of the house underneath an outside faucet) and turn it off. If the dial moves while the main house valve is turned off, you may have an underground house line leak. Inspect along a straight line between the meter and the house valve for surface water or a wet or super-green spot.

# Faucets and Showerheads

## Are you using too much water?



### Use the Flow Rate Bag

Using the water flow rate bag, you will measure the rate that water flows from your faucets and showerheads.

1. Determine if your existing fixture is already low-flow; this should be printed on the side of the device. Low-flow fixtures are marked as follows:



Water Flow Rate Bag

- Bathroom sink: 1.0 gpm
- Kitchen sink: 1.5 gpm
- Showerhead: 2.0 gpm

If the existing fixture is not marked as above, continue with the following steps.

2. Turn on faucet to the extent you normally do and fill water flow rate bag for 5 seconds.
3. If the flow rate is greater than noted in the 1st step, then install one of the toolkit fixtures (see below).
4. Test the flow rate again after the installation and note your findings.
5. Dry the bag with a towel before putting it back in the toolkit.

*\*Think before you dump leftover water; make the most of it by giving it to your indoor or outdoor plants.*

### REPLACE YOUR AERATORS

Check the imprint on the aerator for flow rate, or use the flow rate bag to measure. If the faucet flows at more than 1.0 gpm (bathroom) and 1.5 (kitchen), then you should replace the current aerators with the aerators provided. Note: Some kitchen faucets are custom sizes and cannot be replaced with the toolkit's aerator. You can still measure the flow rate and seek alternatives at a local hardware store or online.

1. Close or plug your drain.
2. Unscrew old aerator counterclockwise; if needed, use the pliers supplied in the toolkit to loosen the aerator. Wrap the teeth of the pliers with a rubber band or a towel to avoid scratches to the existing equipment.
3. Clean and dry water pipe threads (grooves at end of faucet).
4. Wrap provided pipe thread seal tape around pipe thread.
5. Screw on new aerator clockwise by hand.
6. Turn on faucet to test for leaks, and tighten with pliers if necessary.



Faucet Aerator



Pipe Thread Seal Tape



Pliers



Instructional Video: How to install a faucet aerator. Scan the QR code to view the video or visit: <http://goo.gl/ZHDeo>



## REPLACE YOUR SHOWERHEADS

Check the imprint on the showerhead for flow rate, or use the flow rate bag to measure. If the showerhead flows at more than 1.5 gpm, then you should replace with the showerhead provided.

## WATER-SAVING TIPS

- Turn water off when brushing your teeth and shaving.
- Use a shower timer to use less water and save energy at the same time. Try to set it for five minutes or less.
- Check for shower diverter leaks. If you have water coming out of a tub spout when the shower is running, your diverter is no longer working properly and you have a leak.

The average diverter leak, 0.8gpm, can waste 7,200 gallons annually per family of three (taking 8 minute showers)! Check with your local hardware store or your plumber for a replacement (this may require a plumber or handy person).



Instructional Video: How to install a new showerhead. Scan the QR code to view the video or visit: <http://goo.gl/qkcxB>



Low-Flow Showerhead



# Toilets

## Use the Leak Detection Tablets

Leaking toilets can contribute to high water bills. The Leak Detection Dye Tablets are a simple and inexpensive way to test for leaks on a regular basis.

1. Carefully remove toilet tank lid.
2. Drop 1-2 tablets into exposed tank.
3. Wait 20-30 minutes. Do not flush the toilet during this time.
4. If blue color appears in the toilet bowl you have a toilet flapper leak. A leaky flapper is usually the cause for toilet leaks. Replacing a toilet flapper is relatively simple and inexpensive.

## TIPS FOR TOILETS

- A running toilet can waste as much as 200 gallons per day.
- Your city's public works may offer free water audits.
- Upgrade your old toilets to a low-flow efficient model.



# Water Heaters

Heating water typically accounts for up to 49 percent of the natural gas use in your home.

## Check your water heater

### LOOKING FOR LEAKS

Most people visit their water heaters only if the hot water stops. Check yours. If you notice a puddle of water around the bottom of the tank, it probably indicates a leak caused by corrosion – a sure sign of old age, and the most common reason for replacing the tank. If the tank wall is corroding, more problems are coming, and it's time to retire the tank and get a new energy saving model.

Water heaters last about 15 years with proper care. To clear out any sediment, flush a few quarts of water from the drain valve at the bottom of the tank into a bucket about every six months – maybe when you change fire alarm batteries around the house. Also operate the pressure-relief valve at the top of the tank. Don't worry if a little water leaks out; that means it's working. Also close and reopen the cold-water inlet valve at the top, so you're sure it's easy to operate in an emergency.

### ADJUSTING YOUR WATER HEATER

1. Locate your water heater.
2. Locate adjustment dial and mark current setting with a pencil or masking tape.
3. Locate the faucet closest to the water heater.
4. Run water until hot and capture a cupful in a mug. You can catch cold water in a bucket for outdoor use while waiting for the water to get hot.

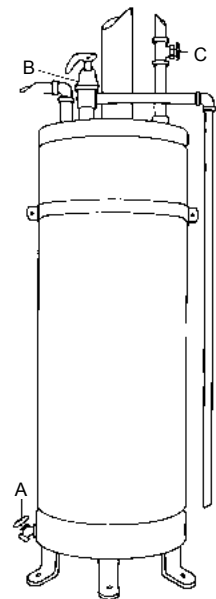
5. Insert thermometer and wait for it to reach its highest point.
6. Adjust setting so that your hot water runs at 120°F. If your water heater does not have specific temperature settings, this step might take a few tries.

### TIPS FOR WATER HEATERS

- Insulate the hot water pipes leading from the water heater. This helps conserve energy.
- Set your water heater to “Vacation Mode” when you are away for long periods of time to conserve energy.
- Check the EnergyGuide sticker when purchasing a new hot water heater. It provides the estimated cost to run the equipment.



Instructional Video:  
How to Adjust  
Your Water Heater  
Temperature. Scan the  
QR code to view the  
video, or visit this link:  
<https://bit.ly/32ef83B>



A: Drain Valve;  
B: Pressure relief valve;  
C: Cold-Water inlet valve

# Outdoor

## Irrigation and Landscaping

### TIPS

- Regularly check for and fix leaks in your irrigation system; leaks can waste thousands of gallons of water annually. Run each station of your automatic irrigation controller and do a visual inspection. Water shouldn't be running into the gutter and should only be spraying the landscaping.
- Consider switching to a drip irrigation system to save water.
- Water between sunset and sunrise when temperatures and wind are the lowest; this reduces evapotranspiration and allows water to soak deeper into your landscaping.
- Pool filters are energy intensive. Consider reducing your filter times in the fall and winter and set timers to avoid peak utility rates. Using a pool cover will save even more energy and water.
- To view water-saving tips and rebates, check with your local water purveyor or city and county water agencies.
- Change your irrigation schedule with the season and with local weather conditions. Better yet, consider upgrading to a weather based irrigation controller.
- Make sure sprinklers are pointed at landscape and are not watering concrete.
- Consider a switch to drought tolerant landscaping.

## Leaks can hide outside

### LOOK FOR BRIGHT GREEN OR "SOFT" AREAS

Manual, sprinkler, and drip systems can all leak. First check for overly green or soggy spots, where broken spray heads or underground pipe cracks will tell on themselves. Leaks occurring in sandy or porous soil may not show up as clearly. Automatic sprinkler and drip systems that generate a hissing sound are likely leaking. Remember to check drip systems for damage from foot traffic or gnawing pets or pests. Got leaky hoses? Repair them with waterproof tape. Dribbling spray nozzle connection? Wrap the hose threads with Teflon tape.

## Washing Your Car

A home car wash uses 80-140 gallons of water whereas most commercial car washes use 30-45 gallons. Washing your car on your driveway or in the street sends dirty water, soap, heavy metals, oil, and grease into the gutter, which flows to local creeks and waterways. If you wash your car at home, park it over the lawn or a gravel area.

### Rebates!

Rebates may be available for water-efficient fixtures through your local water provider. Check with your local water purveyor and City or County water agencies for more information.

# Kitchen

Kitchen activities often require large amounts of energy. Use these tips to reduce energy use:

## Cooking

- Thaw frozen meats and seafood in the fridge to reduce cook times.
- Double your recipe, freezing half for later.
- Heat only as much water as needed.
- Cover pans to reduce cook time and energy.
- Use fewer pots to reduce dish washing needs.
- Use your toaster oven or microwave for small items; unplug appliances when not in use.
- Avoid opening the oven door.

## Dishwasher

- Scrape, don't rinse, dishes.
- Use the short cycle.
- Avoid the "Rinse Hold" setting.
- Air dry dishes by turning off the heat setting and opening the door.
- Upgrade to an EnergyStar® model, saving up to \$40 per year.
- Use during non-peak utility rate times.



## Composting and Recycling

Composting not only provides healthier soil and plants but can save you money by not having to buy soil conditioners, mulch, and fertilizer. Home composting also reduces yard trimming collection and processing; keeps kitchen waste out of the landfill; and turns organic material into a valuable product for gardens and house plants.

For more information about recycling and compost programs, contact your City or County's Waste Management Division. They can provide helpful resources to reduce, reuse, and recycle your waste and dispose of items properly.



# Next Steps

## Return the DIY toolkit to the library

Now that you've used the toolkit and accomplished the steps to a more energy-efficient home, you have just a few things left to do:

1. Make sure all the “Stuff to Bring Back” listed on page 5, including the guidebook, are placed in the toolkit. Don't forget the guidebook.
2. Bring the toolkit back to your local library by the return date assigned at check-out.
3. Interested in more energy saving upgrades for your home? Contact 3C-REN's Home Energy Savings at [www.3c-ren.org/home](http://www.3c-ren.org/home) or call (805) 541-3806 to check if you are eligible for more free or reduced-cost upgrades.
4. Want more water savings tips? Contact your local water purveyor and City or County water agencies for more information on programs and rebates.
5. Consider saving more through home energy upgrades—visit [www.3c-ren.org/home](http://www.3c-ren.org/home) to learn more and get started.
6. Spread the word about this DIY toolkit.
7. Enjoy the savings from all of your DIY actions!



### For more information

Visit [www.3c-ren.org/](http://www.3c-ren.org/)

or email [info@3C-REN.org](mailto:info@3C-REN.org)

# A Regional Commitment to Energy Savings

3C-REN is proud to offer the DIY Toolkit program in partnership with the following libraries and organizations:



County of SLO  
Public Libraries



## San Luis Obispo Sustainability Resources & Partners

**The County of San Luis Obispo** partnered in launching the Tri-County Regional Energy Network to help improve regional energy efficiency, as well as the San Luis Obispo County Green Business Program to help local businesses save money and implement sustainability practices.

**The County of San Luis Obispo's Climate Action Plan** (EnergyWise Plan) includes a goal to reduce community-wide greenhouse gas emissions by 15 percent from 2006 baseline levels by the year 2020. Significant efforts and progress have been made through energy efficiency, renewable energy, transportation, water conservation, and solid waste programs and projects.

**Learn More at**

[www.slolibrary.org](http://www.slolibrary.org)

## Santa Barbara Sustainability Resources & Partners

**The City of Santa Barbara** implements innovative strategies in energy, materials management, transportation, land use, and water treatment to decrease its greenhouse gas emissions. Along with reducing its carbon footprint, the City is working to build a resilient community that can survive and thrive in the face of a changing climate.

**The City of Santa Barbara Energy and Climate Division** is committed to a clean energy future. Our Sustainability and Resilience Programs work to bolster reliability of the local electric grid, educate the community, and improve resilience in the face of a changing energy and climate landscape.

**Learn More at**

[www.sustainability.santabarbaraca.gov](http://www.sustainability.santabarbaraca.gov)

## Ventura County Sustainability Resources & Partners

**The Ventura County 2040 General Plan** ([www.vc2040.org](http://www.vc2040.org)) reflects the County's ongoing commitment to collaborate with residents, cities, businesses, and non-profits to meet our social and economic needs in a sustainable manner, protect the environment and address climate change, and encourage safe, healthy, vibrant, and diverse communities to thrive.

**The Ventura County Regional Energy Alliance** ([www.vcenergy.org](http://www.vcenergy.org)) is a Joint Powers Authority composed of public agencies working in collaboration with various entities in the region to collectively preserve and enhance the area in which we live. Learn more at [www.vcenergy.org](http://www.vcenergy.org).

**Clean Power Alliance** ([www.cleanpoweralliance.org](http://www.cleanpoweralliance.org)) is Ventura County's locally-operated electricity provider, offering clean renewable energy at competitive rates. Established in 2017, CPA provides cost-competitive electric services, reduces electric sector greenhouse gas emissions, stimulates renewable energy development, promotes energy efficiency, and sustains long-term rate stability through local control.

**Learn More at**

[www.ventura.org/environment](http://www.ventura.org/environment)



## Tri-County Regional Energy Network

**The Tri-County Regional Energy Network** (3C-REN) is a partnership between the Counties of San Luis Obispo, Santa Barbara and Ventura.

For households, 3C-REN offers direct energy saving opportunities, with an emphasis on hard-to-reach and underserved communities.

For industry, 3C-REN offers capacity-building services including workforce training and technical code support. Serving both public and private sector professionals, 3C-REN responds to the needs of the local building industry.

Together, 3C-REN programs take a holistic approach to delivering energy-efficient, resilient, and healthy buildings within the tri-county region. These efforts reduce energy use, strengthen local job markets and support climate goals.

**Learn More at**

[www.3C-REN.org](http://www.3C-REN.org)

