

CLIMATE CHANGE

A pair of hands with light-colored nail polish is gently holding a small, green, translucent globe. The globe features a white world map and a grid of latitude and longitude lines. The background is a soft, out-of-focus light brown.

IN YOUR HANDS

Taking action on climate change:

PRESERVING THE QUALITY OF LIFE

{ BY ANNA BARELA }

Climate change is real. And, invariably, if we sit idle and do nothing, it will affect Sacramento and its quality of life. The impacts, though only a prediction may be widespread—affecting our infrastructure, economy, and health.

Picture Sacramento summers with triple-digit heat spanning 100 or more days by the end of the century, with average July temperatures of 104 degrees and even hotter and longer heat waves. Sacramento will probably be more like Phoenix in 2100, if we do nothing.

Then there's the disappearing Sierra Nevada snow pack that provides water for California; rising sea levels that threaten coastal communities and wildlife habitats; and increased energy, food and services costs. More kids will get asthma as heat and increased UV rays devastate air quality.

The solution is in every day action, by everyday people, right here in the community of Sacramento.

That's why acting now, as a community, is critical towards significantly reducing greenhouse gas emissions and minimizing these risks. The good news is that we can reduce our green house gas emissions by taking simple steps in our daily lives and enjoy co-benefits such as cleaner air. The solution is in every day action, by everyday people, right here in the community of Sacramento.

To facilitate cooperative action, the City of Sacramento created a Climate Action Plan detailing steps the city—in coordination with residents, businesses and partners—will use to address the challenges of a changing climate.

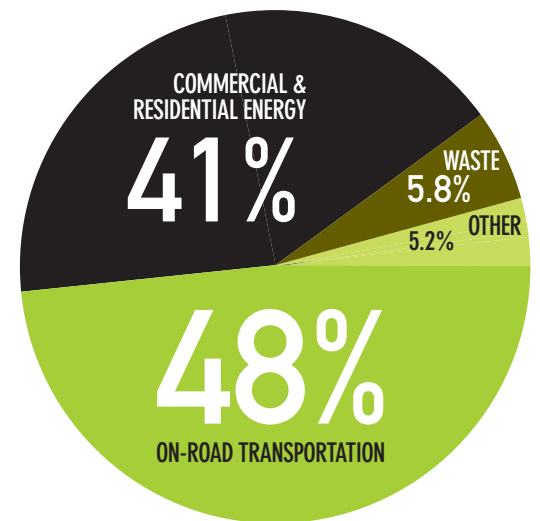
"We are keenly aware of the potential issues associated with climate change," said Erik deKok, senior planner with the city of Sacramento. "Fortunately, many of the actions that help to mitigate climate change also help to preserve our quality of life.

Over the last decade, the city of Sacramento has proven its commitment to addressing climate change by proactively participating in partnerships and agreements with other jurisdictions in California and the rest of the nation. The city's guiding vision is the 2030 General Plan, which includes goals and policies to create a more sustainable future and reduce our community's carbon footprint. The Climate Action Plan will implement this vision.

Scientists agree that recent increases in global average temperature are associated with increases of greenhouse gasses (GHGs) that act like a blanket, holding in more of the sun's heat. As the sun warms the Earth, about half of its heat is absorbed by the Earth's surface while the rest is reflected back toward space. Some of the heat escapes and some is retained by naturally-occurring GHGs in the atmosphere. But the burning of fossil fuels and deforestation increase GHGs, trapping too much heat in the atmosphere. That's why the first goal of the Climate Action Plan is to reduce GHG emissions. In the case of Sacramento, the target is to reduce GHG emission by 15 percent below 2005 levels by 2020.

Scientists also agree that our global climate is already changing —seasons are shifting, temperatures are fluctuating and sea levels are rising. Without efforts to reduce emissions, we can expect these impacts to escalate at an alarming rate. The second goal of the plan is to prepare for and adapt to the impacts of climate change.

To meet these goals, the Climate Action Plan identifies seven strategies of action: sustainable land



SACRAMENTO'S GREENHOUSE GAS EMISSIONS INVENTORY

use, mobility and connectivity, energy efficiency and renewable energy, waste reduction and recycling, water conservation and water efficiency, climate change adaptation, and community involvement and empowerment.

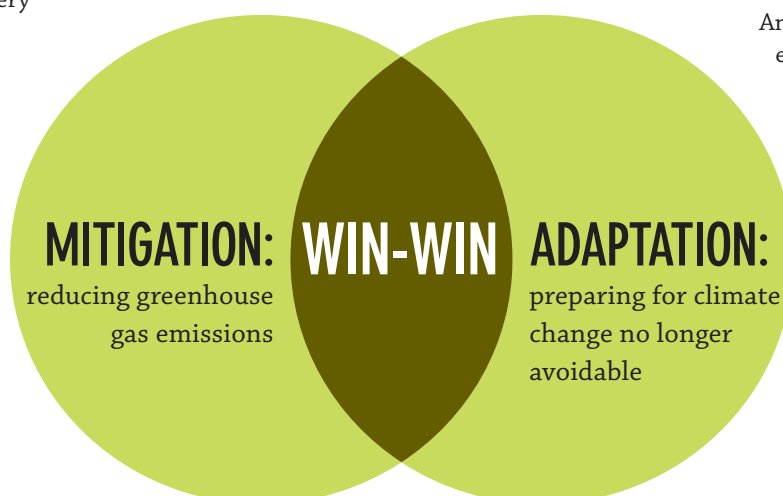
But the city needs your help today in implementing this plan. These seven strategies outline specific and tangible actions you can take at a household level. And while the actions of one person may not seem like much, they can collectively make a big difference. Plus, taking action brings many "co-benefits."

For example, a major co-benefit of implementing the plan will be fewer toxic air pollutants, leading to better air quality and improved health for everyone. Another example is the money saved by energy and water efficiency—that's money in your pocket, and money that will boost the economy and help create jobs.

"It takes an entire community working together—not just government agencies—to make change happen," deKok said. "If everyone takes action, that gradual accumulation will be beneficial in the long-term."

By working together to reduce Sacramento's GHG emissions and prepare for climate change, we improve today and tomorrow for ourselves and our community. The following pages describe more benefits, as well as ways you can take action today.

CLIMATE ACTION



Cruising the green lane

{ BY JEFF CHINN }



John “Bucky” Perez imagines a slower and safer Sacramento. He imagines a Sacramento with smarter land use and better connectivity.

His Sacramento of the future has fewer and less congested roadways with casualties from automobile collisions near zero. More recreation space takes the place of these roads, and people enjoy better health with more opportunities for exercise and cleaner air. Bike paths and walkways thread through the landscape, connecting urban infill homes with mixed-use buildings housing coffee shops, restaurants and varied stores.

It's not only good for the environment, it's good for your health and your pocket book, too.

John lives about five miles from his workplace and began commuting via bike rather than his Chevy Avalanche two years ago. Actions like this help prevent unnecessary vehicle miles traveled (VMT) in the Sacramento area, which in turn reduces the amount of greenhouse gases leaked into the atmosphere.

The City of Sacramento Climate Action Plan's goal is to reduce VMT per capita 7% by 2012 and 16% by 2035. City efforts toward this goal include facilitating compact development patterns, reusing underutilized properties, promoting development near transit and expanding infrastructure for bikes, pedestrians and transit users.

Sacramentans like John can help by utilizing the smart land use that might already exist. If you live a couple of blocks away from a grocery store, walk or bike instead of driving. John found that biking to work only takes 10 minutes longer than driving. And biking allows him to feel energized upon arrival.

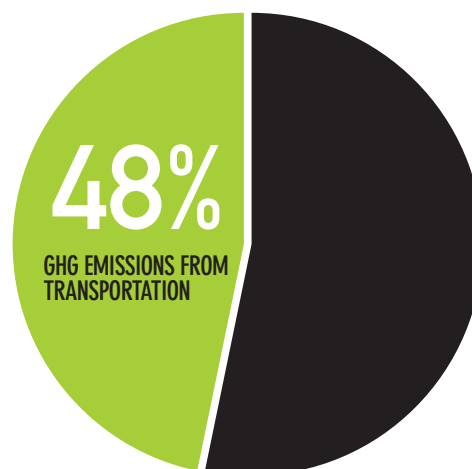
“It's kind of like how you warm up a car in the morning,” John said. “By the time I get to work, I'm ready to go.”

Since John added daily pedaling to his routine, his overall health has improved dramatically. Plus, he has been saving about \$100 a month by swapping out his SUV for his bike, and he actually enjoys getting to and from work now – especially the ride home.

“After getting off work, riding my bike is a great way to unwind,” John said. “It's a good time to think, too. When I get home, it's a completely different feeling than when I drove.”

There are clear advantages to smart land use. It's not only good for the environment, it's good for your health and your pocket book, too.

And the best way to support smart land use and improved mobility and connectivity is to get out of your car and expand your options.



**SACRAMENTO'S
GREENHOUSE GAS (GHG)
EMISSIONS**

WHAT CAN I DO?

- » **Support City sustainable land use initiatives.** Sustainable practices such as neighborhood infill, mixed-use constructs and higher-density efforts are some of the best ways to build a complete neighborhood!
- » **Think about moving** into housing in a higher-density, mixed-use or transit-oriented development. The pros of living in a more accessible area may out weigh the pros of living in your current home.
- » **Check your home's "Walk Score"** at walkscore.com to find out how your home and neighborhood compare with other parts of Sacramento. The results share the nearest amenities and activities within walking distance. If one you've never visited appears to be nearby, try walking there and check it out!
- » **Try finding a job closer to home** or a home closer to work. This may seem like a big change, but so is shaving 40 miles round-trip from a daily commute!
- » **Telecommute** or work from home more often in place of driving. This slows the collection of VMT and allows you the creature comforts of working from home.
- » **Shift daily trips to walking, bicycling, transit, and carpooling** to reduce driving.
- » **Drive more efficiently:** avoid rapid acceleration or braking, observe the speed limit, remove excess weight, avoid excessive idling and use cruise control or overdrive.

Reducing waste for good

{ BY JEFF CHINN }

Sacramento resident Amanda Bohl envisions a self-sustained Sacramento. A Sacramento where the weekly rumble of garbage trucks becomes a rarity and where backyard composting becomes the norm. This low-waste future would benefit Sacramentans far beyond the aesthetic appeal of less clutter.

The decisions we make about the goods we consume and how we dispose of them greatly affect the amount of greenhouse gas (GHG) emissions we produce. The processing and transportation of packaged goods across the country causes the release of many GHGs, as does the decomposition of garbage in landfills.

"We can't afford to live in a disposable city any more," Amanda said.

"It's not difficult. In time, it becomes part of a daily or weekly routine."

That's why the City is working toward becoming a "zero waste" community—meaning no discarded material is sent to landfills—by 2040. To accomplish this goal, the City needs everyone's help.

Steve Harriman, Integrated Waste General Manager for the City of Sacramento, suggests becoming more familiar with what we are throwing out as a first step.

"Get to know your waste!" Harriman said. "As a family, look in your garbage can and identify what could be reduced, reused or recycled, and then identify alternatives and

commit to make a change. For example, pledge to stop using plastic carryout bags and take your own reusable shopping bags with you when you shop."

Amanda's family committed to reducing waste by making as many meals from scratch as possible. These meals feature ingredients Amanda buys in bulk and produces in her backyard garden. Passing on prepackaged food prevents her from throwing away a lot of plastic wrappers and cardboard boxes.

Another way Amanda cuts down on waste is by eliminating paper towels and napkins from her household. Other easily thrown away items like sealable plastic bags are rinsed, hung to dry and reused.

Food scraps in the Bohl home go into compost. Amanda said they bought the bin from a city program, and it's easy to use.

"It's not difficult," she said. "In time, it becomes part of a daily or weekly routine."

The City's Harriman said these waste reducing habits aren't just good for nature but come with perks for the users.

"Reducing waste has both economic and environmental benefits," Harriman said. "We not only save money by consuming less and avoiding costly disposal fees, but we conserve natural resources."

**CITY WASTE
REDUCTION
AND RECYCLING
GOAL BY 2040:**



WHAT CAN I DO?

- » **Reduce the amount of new products you buy**, or if you do need to buy new products, look for items with less packaging, that are long-lasting, and made from recycled materials.
- » **Reuse things** you already have instead of buying new products.
- » **Donate items** you no longer need instead of throwing them away.
- » **Buy locally:** support Sacramento businesses and local farmers' markets: www.california-grown.com.
- » **Recycle** glass, metal, plastic, and paper products, as well as electronic devices.
- » **Use reusable bags** every time you go shopping, reusable water bottles on the go and reusable mugs when you go to coffee shops.
- » **Try to borrow or rent** things you will only need to use for a short time, like costumes or landscaping tools.
- » **Compost organic materials** to use as garden fertilizer. Learn how at www.cityofsacramento.org/utilities/solid-waste-recycling/residential/residential_education_backyard_composting.cfm
- » **Plant a vegetable garden** or participate in a community garden to access fresh produce close to home: www.cityofsacramento.org/parksandrecreation/parks/community_garden.htm
- » **Donate business waste** that could be reused for art and educational purposes. Learn how at www.raftsac.org and www.recreate.org.
- » **Do your own waste audit** at home or work to see what can be reduced, reused, recycled or composted, and then commit to making the change.

The beauty of saving water

{ BY SHAWN BARNUM }

PHOTO BY RON NABITY



WHAT CAN I DO?

- » **Show your blue thumb!**
Take the Spare the Water Sacramento pledge at www.bewatersmart.info
- » **Fix leaks right way.** Leaks may waste water one drop at a time, but over the course of days and weeks, that adds up!
- » **Schedule a Water Wise House Call** to check for leaks and learn about potential water savings: www.sparesacwater.org
- » **Greenscape your yard** using drought-tolerant plants.
- » **Install low-flow or high-efficiency fixtures** and appliances like showerheads, toilets, dishwashers, and washing machines. You may be eligible for rebates from the City of Sacramento Department of Utilities, SMUD, or PG&E.
- » **Use water conservatively:** avoid taking baths and limit showers to 10 minutes or less, scrape dishes rather than rinsing them before putting them in the dishwasher, wash only full loads of laundry and dishes, and turn off the faucet when brushing your teeth or shaving.
- » **Reduce outdoor water use:** water your yard 1-3 minutes less and only during off-peak hours, use drip irrigation or hand watering, use a broom to clean driveways and patios, adjust sprinklers to avoid overspray and repair leaks, and get an auto shut-off hose nozzle.
- » **Increase the amount of permeable surfaces** and pavement allowing stormwater absorption.
- » **Install a plumbing system** that reuses rainwater or graywater for irrigation.

Joe Zaniker, a local business owner, imagines a future in which every Sacramento yard conserves water and looks gorgeous.

"I think that yards that are landscaped to save water are so much more interesting to look at," he said. "It doesn't take a lot of money to make a yard beautiful and water conservative. A little repetition, pattern, texture, and color all work together to make a huge difference."

Joe realizes that with the recent climate changes in our region, water conservation throughout our community is more important now than ever before.

Sacramento produces greenhouse gas (GHG) emissions through the energy used to pump, transport and treat pure water and wastewater throughout the city.

Reducing water is critical. California's water supply is already impacted and will be further constrained by the impacts of climate change.

While GHG emissions from water and wastewater are a relatively small portion of our community's carbon footprint, expected climate change effects like frequent and intense heat waves, hotter summers, continual and persistent droughts, and unpredictable flooding will likely put additional strains on our water supply. Water shortages also place increased stress on local utilities and infrastructure, threaten public health and jeopardize the city's economy.

As part of an overall plan to reduce GHG emissions and adapt to the current climate changes, the City of

Sacramento has recognized the importance of conserving water and reducing water-related GHG emissions. Joe decided to help by completely re-landscaping his yard to become more water efficient.

His plan included installing a drip irrigation system, replacing the current plants with more water-friendly ones and also removing a majority portion of the lawn and concrete.

"By removing the hardscape in our yard, we were able to ensure that the water was actually going into the ground and not just running off of it," Joe explained.

By using a drip irrigation system rather than sprinklers, Joe is able to water individual plants and not the ground next to them. He also tries not to water as often during the peak rain seasons since it isn't really needed.

With his beautiful and water-friendly new yard in place, Joe went a step further and installed a tankless water heater inside his home. He encourages more residents to take steps in their personal lives to conserve water.

"There are so many ways to conserve water throughout the home," he said. "Simple ways include installing water saving appliances, flushing only when necessary and turning the water off while brushing your teeth."

As a community, we can all learn from Joe Zaniker. Making small changes to save water will make a huge difference in the effort to conserve this valuable resource, not to mention.

CITY WATER CONSUMPTION REDUCTION GOAL BY 2020:

20% PER CAPITA



Building a brighter tomorrow, today

{ BY SHAWN BARNUM }

Rooftop gardens and solar panels adorn homes and offices in the Sacramento of tomorrow. Inside, these buildings are models of energy-efficient comfort. And it's not just new construction—even existing structures can be transformed, like the historic Fair Oaks home recently purchased by Nate and Christy Dunn.

It was the young couple's first home. Even though it was old—built in 1956—it was in pristine condition and the perfect foundation to mold their dream house. And with the sudden death of their water heater just weeks after moving in, they realized this home could become energy-efficient as well as beautiful.

Nate and Christy knew that the more energy they used, the more greenhouse gases were emitted into the air. By replacing the dead storage water heater with an energy-efficient tankless model, the Dunn's made the first in a series of upgrades to make their home part of the solution to climate change.

“These changes have transformed our living experience in this house.”

Inspired, Nate and Christy contacted SMUD's Home Performance Program and underwent a “home energy audit.” Not only did the audit give them ideas for more improvements, the program offered rebate incentives. They could actually get money back from SMUD for upgrading the energy efficiency of their home!

Jim Parks, SMUD's Program Manager, said incentive programs like the one the Dunn's participated in are examples of how agencies like SMUD and PG&E are working to curb greenhouse gas emissions.

“SMUD's focus is to partner with the community to conserve energy in order to reach our goal of a 90 percent greenhouse gas reduction by 2050,” said Parks.

As Nate and Christy began upgrading their home, they envisioned creating a house that would be able to withstand long-term energy use as well as provide them with affordable comfort.

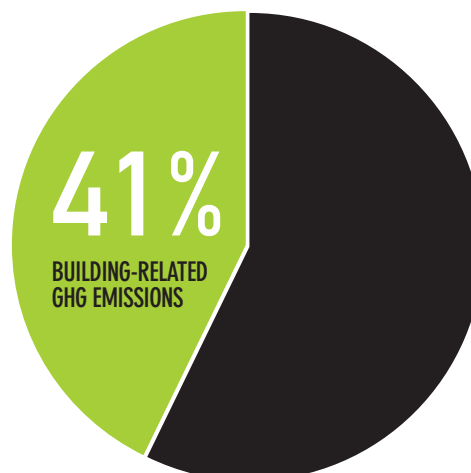
“We wanted to live somewhere we could utilize the heater and AC as much or as little as we pleased, but not worry about our energy bill increasing dramatically,” Nate said.

To this end, they installed a whole house fan, replaced all the windows throughout their home with dual pane windows and added a ceiling furnace.

“Although the process was slow, these changes have transformed our living experience in this house,” Nate said. “We were able to increase our home's efficiency by 56 percent which qualified us for the maximum rebate amount. This allowed us to see half of our project costs returned.”

As an added bonus, the two noticed a staggering decrease in their overall natural gas consumption.

Nate and Christy now understand that small changes have a significant impact on the amount of energy they consume or save. By making smarter energy decisions like the Dunns, we can all be part of the climate change solution – all the while enjoying smaller energy bills!



SACRAMENTO'S GHG EMISSIONS

WHAT CAN I DO?

- » **Replace incandescent lightbulbs** with more efficient compact fluorescent lightbulbs (CFL).
- » **Turn down water heater** temperature and turn off your water heater during extended periods of non-use.
- » **Use only cold water** to wash laundry.
- » **Air dry clothes** whenever possible and avoid overusing the dryer (clean the lint trap, check on clothes regularly).
- » **Unplug appliances**, televisions and computers when not in use.
- » **In the winter set your thermostat down** to 68 degrees during the day and 55 degrees during the night. During the summer, set your thermostat to 78 or higher.
- » **Increase heating and cooling efficiency:** Change the air filter regularly, tune up HVAC equipment, seal ducts, add more insulation, replace windows with dual pane models, plug door leaks, and install a programmable thermostat that allows you to adjust temperatures when you are away from home.
- » **Purchase Energy Star electronics** and appliances to save energy. You may be eligible for SMUD, CEC, or EPA rebates: www.smud.org or www.energy.ca.gov or www.epa.gov.
- » **Generate your own renewable energy:** install solar panels, or a solar water heater.
- » **Use SMUD energy saving tips**, schedule a home energy audit through SMUD and participate in a SMUD energy program: www.smud.org.

Taking action together { BY ANNA BARELA }

There's no time left to waste on inaction—the climate change clock has run out and is now a ticking time bomb. Taking action to reduce GHGs and adapt will take everyone's help. Even small changes make a big difference.

Change requires new behaviors and new ways of thinking that start today. Don't wait until you can afford to move to start driving less; drive less today by taking public transportation, biking or telecommuting a couple days a week. Even if you can't replace your appliances right now, you can switch to a reusable water bottle and adjust your thermostat.

Climate action is about more than just adaptation and reducing GHG emissions – it's also about better quality of life for everyone.

These new ways of thinking must extend beyond the walls of our own homes so we can connect with the rest of the community toward the common goal of climate action. We can encourage and challenge friends, neighbors and co-workers to both measure and take pledges to reduce their carbon footprint (measure and pledge at www.coolcalifornia.org). We can join the City of Sacramento in raising awareness of climate change and bringing people together with outreach and education programs.

Education programs include water conservation workshops at the City Department of Utilities Water Conservation Office. Become a Water Conservation Ambassador at www.sparesacwater.org. SMUD also offers electricity efficiency classes at the Energy and Technology Center (usage.smud.org/etcstudent).

Community organizations already working to reduce GHG emissions and planning for climate change can always use new volunteers, too.

The City encourages community involvement in policy development, program planning, implementation and assessment. One way to participate is to attend a city or local homeowner's association meeting to lobby for infill and mixed-use development, complete streets and neighborhoods, and coordinated transit, bicycle and pedestrian systems. Through community involvement, new climate action and sustainability leaders will emerge and, by taking action together, we will influence and inspire each other.

But climate action is about more than just adaptation and reducing GHG emissions—it's also about better quality of life for everyone. We not only share a future at risk of the damaging effects of climate change if we don't act, we will all reap the benefits of effective action. Together we can create a healthier, safer and more sustainable Sacramento, while increasing the number of jobs and business opportunities.



TAKE THE COOL CALIFORNIA CHALLENGE!

{ BY ANNA BARELA }

The City of Sacramento has accepted the Cool California Challenge and urges households to join the largest team eco-challenge in the history of our Golden State! Starting April 1st, cities across the State will face off in two rounds to win prizes and a chance for the title of the "Coolest California City." Sacramento households can earn points for Team Sacramento by going green—and by just being green already.

In round one, current transportation and home energy use demonstrate low-carbon lifestyles that earn major points. Measure your carbon footprint at www.coolcalifornia.org to see how your household stacks up against similar households in your area.

Earn double points by reducing your carbon footprint during the competition. You can even earn points for the green things you already do for your community, like recycling and

volunteering. After three months, three finalist cities will move on to round two.

The competition heats up in round two, as the three finalist cities face off for a grueling nine months. Only the greenest will survive as households continue to earn points for transportation and home energy use, with bonus points for one-time actions like pledging to eat vegetarian for a week.

Play as part of an EcoTeam of friends, colleagues, or neighbors and earn points for your household, your team and your city. You can even earn points by referring others! Create a CoolCalifornia.org profile where you can track your progress and see your points. Leading households, EcoTeams and cities will be recognized and awarded throughout the competition as they close in on the title of "Coolest California City."



**COOLCALIFORNIA
CHALLENGE**

- 1. Starting April 1st, sign up at coolcalifornia.org.**
- 2. Measure your carbon footprint.**
- 3. Take action and earn points for Sacramento!**

*Open to residents of the Cities of Sacramento, Citrus Heights, and Davis

SIGN UP TO STAY IN THE LOOP AT WWW.COOLCALIFORNIA.ORG/COMMUNITYCHALLENGE

Take action today

Change can't take place without the proper tools. The following are websites that contains the tools you need to affect climate change little by little, day by day.

- » Take a look at the **Climate Action Plan (CAP)** that will identify how the city and the broader community can reduce Sacramento's greenhouse gas emissions (GHG). www.sacgp.org/cap.html
- » **Green Building Program**
City of Sacramento Community Development Department www.cityofsacramento.org/dsd/building/green-building
- » **CoolCalifornia.org's** goal is to provide resources to all Californians in order to reduce their environmental impact and take action to stop climate change. Visit www.coolcalifornia.org ... and don't forget to take the Cool California challenge starting April 1st!
- » **350 Sacramento** encourages Sacramento-area citizens to help build a global climate movement. www.350sacramento.org
- » **The Sacramento Sustainability Forum** is a monthly venue to support movement toward a more sustainable future. sacramentosustainabilityforum.org
- » **The Sacramento Area Sustainable Business** program promotes businesses that take voluntary actions to prevent pollution and conserve resources. sacberc.org/Web/programs/ssbp/index.php

ENERGY EFFICIENCY

- » **SMUD** www.smud.org
- » **Pacific Gas and Electric** www.pge.com/myhome
- » **Go Solar California** www.gosolarcalifornia.org
- » **Energy Upgrade California** is your one-stop-shop for home improvement projects to make your home healthier and more comfortable. energyupgradeca.org

LAND USE AND MOBILITY

- » **Sacramento Regional Transit District** www.sacrt.com
- » **City of Sacramento 2030 General Plan** www.sacgp.org
- » **Sacramento Area Council of Governments** www.sacog.org
- » **City of Sacramento, Department of Transportation, Bikeway and Pedestrian Program** www.cityofsacramento.org/transportation/bikeped.html
- » **Sacramento Area Bicycle Advocates** sacbike.org
- » **WALKSacramento** is a nonprofit community organization working to create a more walkable Sacramento. www.walksacramento.org
- » **May Is Bike Month** www.mayisbikemonth.com

WASTE REDUCTION

- » **City of Sacramento Solid Waste & Recycling** www.cityofsacramento.org/recycle

WATER CONSERVATION

- » **City of Sacramento, Department of Utilities** www.sparesacwater.org
- » **River-Friendly Landscaping** is a whole systems approach to gardening and landscaping that works to support the Sacramento River watershed. www.msa.saccounty.net/sactostormwater/RFL
- » **Regional Water Authority** www.rwah2o.org/rwa
- » **Regional Water Authority Blue Thumb** www.bewatersmart.info

URBAN FOREST

- » **City of Sacramento Urban Forestry Services** provides care service for trees on sidewalks, in city parks and on city property. www.cityofsacramento.org/transportation/urbanforest/index.html
- » **Sacramento Tree Foundation** www.sactree.com

AIR QUALITY

- » **Sacramento Metropolitan Air Quality Management District** www.airquality.org
- » **Kids Be Green** www.kidsbegreen.org



CITY OF SACRAMENTO
creating a sustainable city