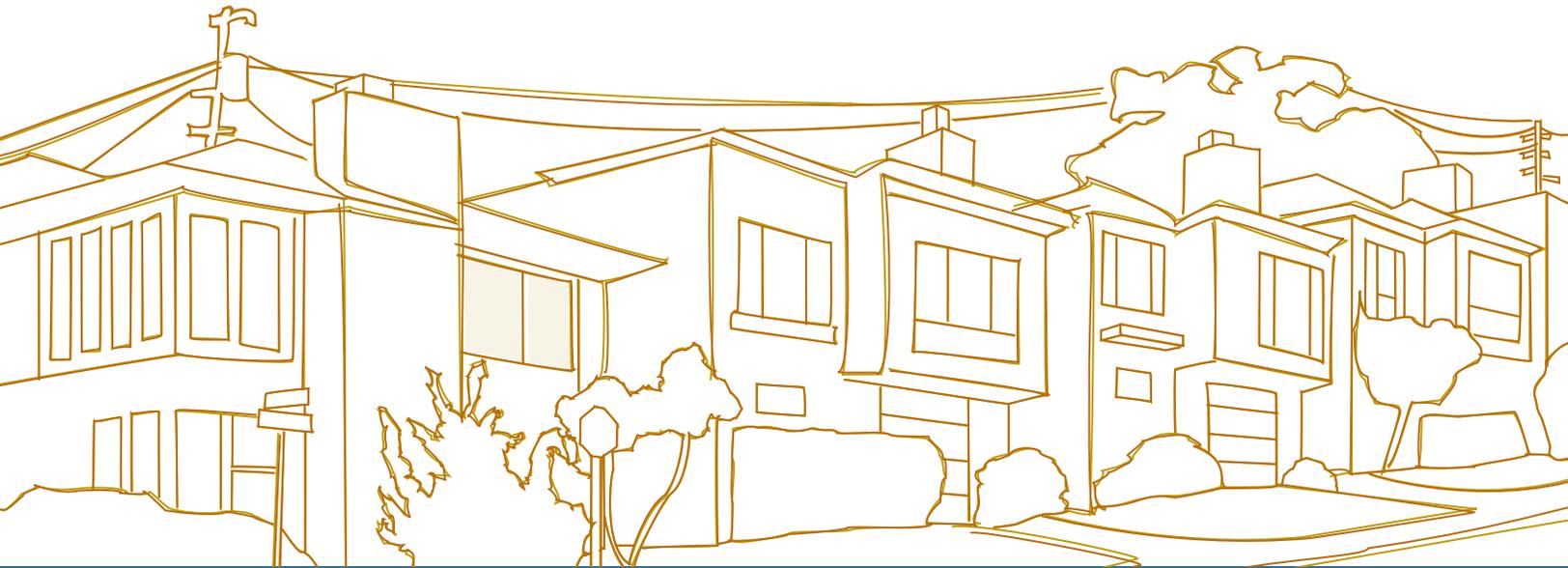


Welcome to your Home!

Marin County Homeowner Resources Kit



All your home sustainability questions answered.

Brought to you by the
Marin County Sustainability Team

3501 Civic Center Drive, Suite 308
San Rafael, CA 94903



Marin Climate & Energy Partnership



Individually, we are all responsible for caring about what happens to our earth and how we leave it for future generations. While climate change is a global issue, it all starts with our

individual choices. We all have to do our part and this guide can help you do yours.

Marin's local governments came together in 2007 to form the Marin Climate and Energy Partnership to foster cooperation and collaboration around our greenhouse gas reduction efforts.

At www.marinclimate.org, you can:

- View each jurisdiction's Climate Action Plan and latest inventories
- Track our progress using the Sustainability Tracker which shows progress in our efforts to reduce energy and water use, waste and vehicle miles traveled
- Learn more about what you can do to reduce your own footprint



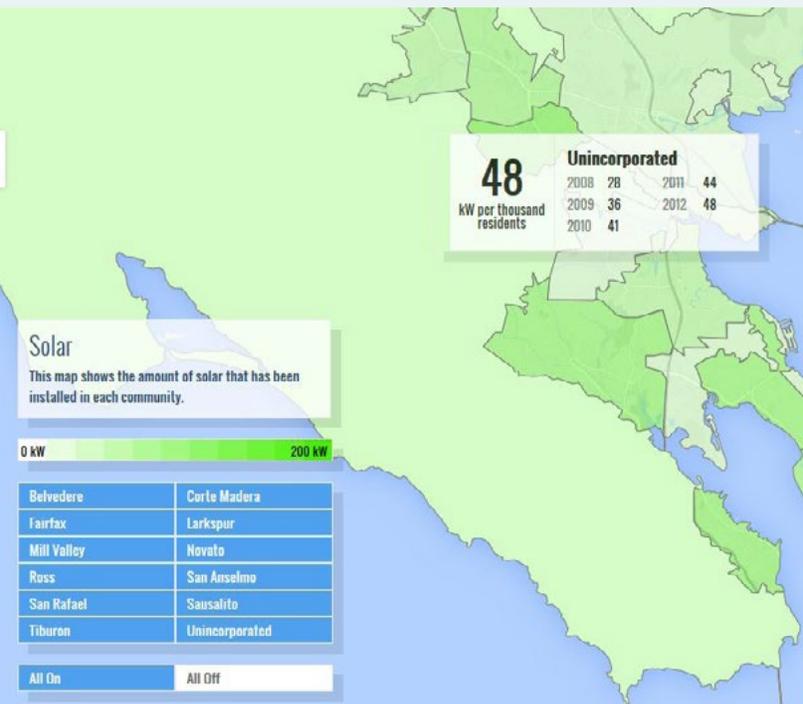
Marin Sea-Level Rise

Even with aggressive efforts to minimize the amount of greenhouse gases entering the atmosphere, climate change is already under way and cannot be completely avoided. Current research efforts have shown that Marin County and the North Bay region have already experienced some changes in climate, including increases in temperature and precipitation.

Marin County ranks second of the nine Bay Area Counties for projected risk of impacts from sea level rise (SLR) flooding and storms, with potential losses of \$8.5 billion worth of buildings and contents on the bay shoreline. Flooding associated with high tides and storms already impacts infrastructure and disrupts people's lives on a recurring basis. These impacts are expected to increase in frequency and severity as sea level rise accelerates. Low income communities are particularly vulnerable to these impacts.

The Federal Emergency Management Agency (FEMA) offers guidance on floodproofing homes: www.fema.gov/floodproofing

Join the conversation about planning for sea level rise: www.marinSLR.org



The interactive Sustainability Tracker illustrates progress made by local jurisdictions, residents, and businesses in Marin County towards reducing emissions and increasing sustainable practices.

www.marintracker.org

Fact:

Even if you live inland or on a hill, sea-level rise can affect your daily life by flooding transit corridors and cutting off critical services.

Commute Options

Our roads can only handle so much traffic, no matter how many improvements we make. If we can modify our traveling habits, even just once a week, we can help make the commute better for everyone. Finding alternatives to driving solo to work helps improve our community by decreasing both traffic congestion and greenhouse gas and other toxic emissions.

Take Transit

Golden Gate bus and ferry services offer discounts for youth, disabled riders, and those aged 65+. The bus service includes commuter routes to Downtown San Francisco. The ferry operates services from Larkspur and Sausalito to/from San Francisco. The ferry is one of the most unique and beautiful commutes in the Bay Area; it also has a full bar!

www.goldengatetransit.org

www.marintransit.org

SMART Train

Sonoma Marin Area Rail Transit (SMART) will operate commuter train service along the 101 corridor. The initial segment will run from Northern Santa Rosa to Downtown San Rafael.

www.sonomamarintrain.org

Ride Sharing

- Carpooling: www.511.org provides options for ridematching throughout the Bay Area.
- Vanpools: New vanpools may be eligible for TAM's \$3,600 cash incentive. Visit www.511.org to find vanpools and apply for the incentive.
- Uber and Lyft are also expanding their services to include carpool options.

Emergency Ride Home Program

Want to get out of your car but worried about getting trapped at work in an emergency? Transportation Authority of Marin's (TAM) Emergency Ride Home Program is available to all Marin employees whose employers register with the program. This program provides rides home for employees who use commute alternatives and need to get home quickly in the event of an emergency.

www.marinerh.org

Walk Bike Marin

Walk Bike Marin's site has useful information for someone getting started as a bike commuter. It also includes links to Marin bike maps so you can plan your route.

www.walkbikemarin.org



Plan a Trip

Use Marin Transit's trip planner to map your commute route using transit. It is powered by Google Transit so it works for trips throughout the Bay Area – not just those within the County.

www.marintransit.org



Safe Routes to Schools (SR2S)

The Safe Routes to Schools (SR2S) program is an opportunity for parents to work closely with their children's school, the community and the local Marin government to create a healthy lifestyle for children and a safer and cleaner environment for everyone and to promote traffic relief. The program is offered to all schools in Marin County.

www.saferoutestoschools.org





Clean Energy and MCE

MCE is a not-for-profit, public agency that works with PG&E to provide electricity generated

from more renewable, non-polluting sources. MCE provides electric generation, which is the source of your power, while PG&E continues to provide electric delivery just as they always have. PG&E still owns and reads your electric meter, sends your monthly bill, and provides the same maintenance and other repair services they always have.



Deep Green

Switching to MCE's Deep Green 100% renewable energy program ensures that all of the electricity you pay for on your utility bill is being sourced from 100% renewable

energy. It is one of the easiest ways to lower your carbon footprint.

www.mceCleanEnergy.org

Dig Safe!



Together, Building a Better California

Safety First—Call before you dig. If you're going to put a shovel in the ground to install an irrigation system, plant a tree, or do anything else that requires digging, be sure to call 811 at least 2 business days in advance before starting your project. It's free!



Visit www.usanorth811.org to submit a request. Visit www.pge.com/safety for more information about staying safe with help from PG&E.

To help residents save energy and money, PG&E's website has useful tips and information on rebates for energy-saving products. Visit:

www.pge.com/homeenergycheckup

Consider Going Solar for Your Home

The average residential system size in Marin is about 4 kW to 5 kW; however, the system size will ultimately depend on how much electricity you use annually and the available room on your roof. Most contractors can come out and perform a site assessment for free, while some can do the assessment remotely using mapping programs. The site assessment and bid will include an estimate of the potential system size that fits your roof and meets your energy usage needs. Their bids will include the estimated cost savings and financial analyses. We recommend that you get at least 2-3 bids as you are considering a solar system. Some points to consider as you investigate a potential system:

Costs

System costs can vary based on the scope of the installation, but a very general approximation of cost (as of 2016) is about \$4,000 to \$5,000 per installed kilowatt. So for a 5 kW system the total installed cost could be about \$16,000 to \$25,000.

Tax Credits

Residents are eligible for a 30% Federal tax credit on the net system cost (the cost after state and local rebates) with no cap. If you don't have enough federal tax obligations in the first year to use the full credit you are allowed to roll it over to a second year, but not beyond that. The tax credit declines over time through 2021.

Paying for Your System

There are several ways to pay for a solar electric system including straight purchase, financing (including home equity loans and Property Assessed Clean Energy financing), solar leases or Power Purchase Agreements (PPA). Most solar contractors will include example financing alternatives in their bids, and we are available to go over the proposals with you.



Power Purchase Agreement (PPA) / Lease

If you are considering a PPA or a solar lease, make sure you read the contract clauses closely regarding removal of the systems for reroofing and what happens if/when you sell your home – how is the lease contract transferred. For more information on the various financing mechanisms, please visit: www.gosolarcalifornia.ca.gov/solar_basics/pricing_financing.php

Property Assessed Clean Energy (PACE) Financing

The County and all Marin cities authorized Property Assessed Clean Energy (PACE) financing programs which is another financing option. PACE assessments allow property owners to secure upfront funding for home efficiency projects, which they repay through a 20 year special line item on their property taxes – instead of traditional consumer credit. However, keep in mind that this is not free money – as with all financing products, PACE programs include interest rates on financed funds. These can range from about 6% to 8% depending on the term. Make sure you check offers carefully to ensure that you are comfortable with the rates and fees.



The Average Simple Payback for Solar PV in California is 9 Years

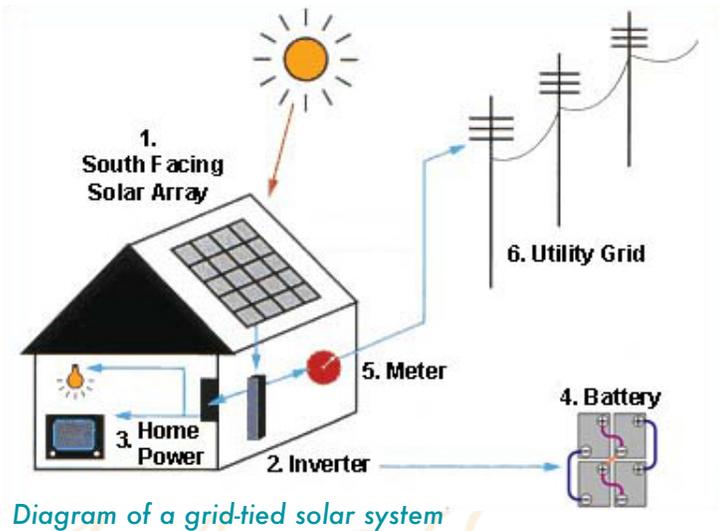


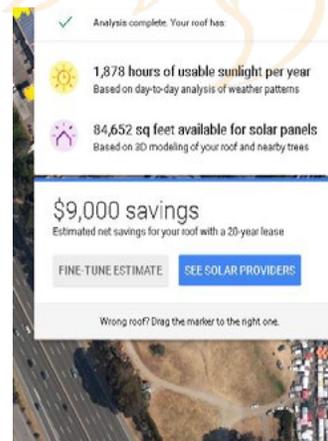
Diagram of a grid-tied solar system

Resources

Marin County Solar Page
www.marinsolar.org

Database of State Incentives for Renewables and Efficiency (DSIRE)
www.dsireusa.org

Google Project Sunroof
www.google.com/get/sunroof



The Marin County Civic Center on Google Project Sunroof

Save Energy in Your Home

Call a Home Upgrade
Advisor for Free Support!
(866) 878-6008

Increase Comfort and Efficiency

Energy Upgrade California™ Home Upgrade enables homeowners to secure rebates for upgrading important energy features in their homes. Almost every big or small remodel project presents an opportunity to increase the energy efficiency and comfort in the home. Taking steps like improving insulation, sealing air leaks, upgrading your heating, ventilation, and air conditioning (HVAC) and domestic hot water systems will lower your utility bills, make your home more comfortable, improve air quality, and increase the value of your home.

You can improve your home's efficiency and secure financial incentives by upgrading the following features:



1 Furnace

When it's time to replace that old furnace, choose a more efficient and properly sized model.

2 3 Insulation and Air Sealing 4 Duct Sealing and Insulation

Insulation and air sealing are the most important and cost-effective measures for building efficiency and comfort.

Most American duct systems have substantial leaks. This means that the air you are paying to heat or cool your home is actually heating or cooling your attic or crawl space. What a waste!

5 Water Heater

You can replace your old water heater with a different type completely based on your needs. Electric and on-demand water heaters are good options as well as efficient tank water heaters.

6 Windows

Modern windows are better equipped to keep out the sun's heat and maintain the temperature inside.

7 Air Conditioning

Poor insulation and air leaks in the building envelope and duct systems should be fixed before replacing an AC unit.



Energy Upgrade California® Home Upgrade provides assistance and incentives for home improvements projects that can reduce energy use and make homes more comfortable. This statewide program is managed locally by utilities and regional energy networks and directed by the California Public Utilities Commission in collaboration with the California Energy Commission. Funding comes from utility customers under the auspices of the California Public Utilities Commission. Incentives are offered on a first-come, first-served basis and are effective until funding is expended or the program is discontinued. Programs may be modified or terminated without prior notice 2016 Energy Upgrade California®. Trademarks are property of their respective owners. All rights reserved.

How it Works

Visit www.bayareaenergyupgrade.org to browse certified Home Upgrade contractors or call 866-878-6008 to speak with a Home Upgrade Advisor. The Home Upgrade Advisors are Building Performance Certified energy professionals that are available to answer all of your questions regarding your home's energy use, the rebate programs in your area, finding the right contractor, financing programs, and more.

The Home Upgrade Advisors are sponsored by the Bay Area Regional Energy Network and are not directly connected to any contractor.

Home Upgrade participating contractors are independent contractors that have gone through extensive energy efficiency training and can work with you on making your home efficient and comfortable.

Tools of the Trade



Home Upgrade takes the guess work out of home energy performance. Contractors use a variety of measurement tools to accurately identify efficiency issues in the home. Pictured here: the thermal imager uses an infrared camera to spot gaps in insulation.

Example Efficiency Improvements

Home Upgrade is designed to take a "whole house" approach to energy efficiency. Contractors examine the energy systems in the home and how they relate to each other. Examples of this include:



Proper Insulation

Making sure your home is well insulated is one of the most cost-effective measures you can do.



Duct Sealing

Sealed ducts ensure that the air from your HVAC unit is being properly distributed through the house and not escaping into the attic or crawlspace.

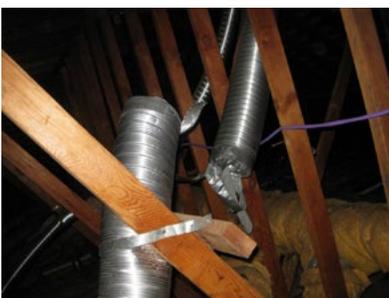


Building Air Sealing

Feel a draft? Sealing cracks and gaps in your building envelope will help keep your home cozy in the winter months. Pictured: the blower door test. Contractors use state-of-the-art testing equipment to identify how leaky your house is and find exactly where those leaks are.

Example of Energy-Wasting Features in Homes

Do any of these pictures look familiar? These are examples of poor performing homes, and they are more common than you might think. Home Upgrade contractors are trained to identify and fix these common building performance issues.



Disconnected Attic Duct



Poorly Insulated Attic



Leaky Duct Seam

ZERØWASTEMARIN

Zero Waste Marin is the formal name for the Marin Hazardous and Solid Waste Joint Powers Authority (JPA) which represents all of Marin County.

Zero Waste Marin offers a wide range of resources and programs to help residents reduce and properly dispose of waste.

Programs Include:

- *Bulb and Battery Take Back*
- *Home Composting Courses*
- *California Paint Care*
- *Motor Oil & Filter Recycling*



Home Composting Courses

Almost every community in Marin provides curbside recycling and food scrap collection services. Learn more at www.zerowastemarin.org/residents/who-is-my-hauler. If you want to compost at home, Zero Waste Marin offers two hour basic composting classes during the spring and fall. Visit Zero Waste Marin's webpage for more composting information:



www.zerowastemarin.org.residents/zero-waste-programs/home-composting-courses



Certified Construction and Demolition Waste Facilities

Redwood Landfill and Recycling Center

8950 Redwood Highway, Novato, CA 94945
(415) 892-2851

Marin Resource Recovery Center

565 Jacoby Street, San Rafael, CA 94901
(415) 485-5646

HOW LONG UNTIL IT'S REALLY GONE?



PAPER 2-4 WEEKS

ORANGE PEEL 5 MONS.

SODA CAN 80YRS

PLASTIC BOTTLE 450YRS

STYROFOAM ∞

The Green House Call

California Youth Energy Services (CYES) employs local high school and college-aged youth to perform no-cost energy and water evaluations dubbed the "Green House Call".

Green House Calls are performed during the summer months, but residents can call to get on the waitlist year-round by calling **(510) 665 - 1501 EXT. 5** or by visiting www.risingsunenergy.org.



The Green House Call Includes:

- An energy and water efficiency assessment 
- Installed energy-efficient light bulbs 
- Installed water-saving devices for showers and faucets, and toilet leak detection
- Leak detection
- Basic solar assessment
- E-waste pickup and disposal

Available to any PG&E or MCE customer, including renters and homeowners of all income levels!

Home Energy Score

The Home Energy Score uses a 10-point scale so anyone can understand how different homes compare in terms of energy use. Similar to the Energy Star® rating on appliances, a Home Energy Score will give potential home buyers an idea as to how much energy a home is likely to use under standard operating conditions.

How it Works

A qualified assessor collects data during a home walk-through, then uses a standard energy modeling tool to estimate how much energy the home will use. This energy estimate is converted into a value on the 10-point scale, where 1 represents a high energy-use home and 10 represents a low energy-use home.

How to Improve Score

You will receive a custom recommendations form that identifies opportunities to improve the energy efficiency of your home. Rebates and financing may be available if you decide to pursue these improvements. A home with a low score can improve its score by making improvements to the heating, cooling, and hot water systems. A home can also improve its score by installing solar panels.

www.homescoreca.org



Water Efficiency

Rebates may be available for water-saving devices and projects for your home. Check with your water district to find current rebate offerings.

Rebates may be available for:

- Pool covers
- Rain barrels
- Hot water recirculating systems
- Laundry-to-landscape system components
- High efficiency toilets

"California is always prone to dry conditions, we must focus on our daily conservation habits and making permanent changes to save water. The future is unpredictable; we do not know what next year will bring." -Saveourwater.org



Marin Municipal Water District
(415) 945-1520
marinwater.org/conservation



North Marin Water District
(415) 761-8933
nmwd.com/conservation.php

Look for the WaterSense Label When Purchasing Appliances



- Bathroom sink faucets
- Showerheads
- Toilets
- Urinals
- Weather-based irrigation controllers
- New homes

For more information visit:
www3.epa.gov/watersense/index.html

Example Water Saving Projects

Check for rebates and incentives with your water provider



Installing Efficient, Watersense-Labeled Shower Heads

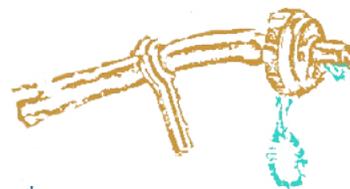
save
10 Gallons
per average 10-minute shower*

Installing a High-Efficiency Watersense-Labeled Toilet (1.28 Gallon Per Flush)

saves
19 Gallons
per person, per day*



Installing a Drip Irrigation System for Your Landscaping



can save
30-70%
compared to a traditional sprinkler system*

* Find more information at Saveourwater.org

Take Action to Protect Water and Health

In Marin, rain is not cleaned before it enters storm drains that flow to creeks, bays or the ocean. To keep Marin's waters healthy, only clean rain can enter storm drains. Follow water-friendly practices to help keep Marin's waters and wildlife, and your family and pets healthy.

Hiring Contractors, Painters, Surface Cleaners, Landscapers and Pest Control Companies

Make sure the companies you hire use proper waste management, dumping, pesticide, and pollution prevention practices when working on your home. Visit the Marin County Stormwater Pollution Prevention Program's website for more information.



www.mcstopp.org

Join Your Community

Marin Green Business

Help your workplace implement sustainable best practices and become recognized as a certified Marin Green Business.



Browse through the Marin Green Business listing and learn more about certification by visiting:

www.maringreenbusiness.org

Support Clean and Green Businesses

- Less toxic landscaping & pest management products:

www.ourwaterourworld.org

- Bay-friendly landscapers: www.rescapeca.org

- EcoWise certified pest control:

www.ecowisecertified.org

- Water protecting surface cleaners:

www.basmaa.org

Resilient Neighborhoods

The Resilient Neighborhoods is a fun, free program that has helped over 660 Marin residents save money, make families safer, and reduce over 2.8 million pounds of carbon emissions.

Friends, family, and neighbors get together to form an EcoTeam that meets 5 times to learn about actions they can take like simple ways to trim energy use and waste, drive ecologically, conserve water, and prepare their homes and neighborhoods for emergencies.

It's a great way to meet your neighbors and learn about what's going on in Marin about sustainability and community disaster preparedness practices.

Learn more by visiting:
www.resilientneighborhoods.org



Farmers Markets

Farmers Markets take place all over the county and on almost every day of the week. Marin farmers markets are a great place to get your produce and support local agriculture at the same time.



Find Your Local Farmers Market:

www.growninmarin.org

or

www.marincounty.org/depts/ag/farmers-markets

Volunteer Opportunities

Find volunteer opportunities in your community and throughout Marin County.

Center for Volunteer & Nonprofit Leadership

Search for volunteer and nonprofit opportunities in Marin:

www.volunteer.cvnll.org

Marin County Volunteer Page

Visit Marin County's volunteer page for current nonprofits and charity organizations enlisting volunteer support:

www.marincounty.org/residents/community/volunteering



Marin Building Departments

San Rafael

1400 5th Avenue
PO Box 151560
San Rafael, CA 94915
(415) 485-3367
cityofsanrafael.org

Novato

922 Machin Ave
Novato, CA 94945
(415) 899-8989
novato.org

Fairfax

142 Bolinas Rd
Fairfax, CA 94930
(415) 453-1584
town-of-fairfax.org

Ross

31 Sir Francis Drake
Blvd
Ross, CA 94957
(415) 453-1453
townofross.org

Mill Valley

26 Corte Madera Ave
Mill Valley, CA 94941
(415) 388-4033
cityofmillvalley.org

Belvedere

450 San Rafael Ave
Belvedere, CA 94920
(415) 435-3838
cityofbelvedere.org

Sausalito

420 Litho St
Sausalito, CA 94965
(415) 289-4100
ci.sausalito.ca.us

Marin County

3501 Civic Center Drive
Suite 308
San Rafael, CA 94903
(415) 473-6550
marincounty.org

Corte Madera

300 Tamalpais Drive
Corte Madera, CA
94925
(415) 927-5062
townofcortemadera.org

Tiburon

1505 Tiburon Blvd
Tiburon, CA 94920
(415) 435-7380
townoftiburon.org

Larkspur

400 Magnolia Ave
Larkspur, CA 94939
(415) 927-5038
ci.larkspur.ca.us



BAY AREA Regional
Energy Network



MARIN COUNTY
energy
watch

This program is funded by CA ratepayers under the auspices of the California Public Utilities Commission.

This packet was developed by the Marin County Sustainability Team ©2016 (415) 473-2698 www.marinsustainability.org