

While many community-based Earth Day volunteer efforts and celebrations are delayed or canceled because of the quarantine, we wanted to share some good news about the results of energy-efficient construction and the use of solar to achieve a carbon-neutral home in Pacifica.

While the current coronavirus crisis is horrific in the number of lost lives, lost income, and lost businesses, we are confident that eventually our scientists will develop a vaccine and we will be able to climb out of this crisis step by step. As we tackle the current issues, the even larger climate crisis still looms as detrimental as ever. While the air is cleaner in many parts of the world right now, the amount of carbon dioxide in the atmosphere is [still rising](#). We all need to do our part to solve global warming, and buildings notoriously exacerbate the problems with inefficiencies in their energy and water use, and with poor design that is not flexible and long lasting.

My husband Bob and I, both architects, completed construction on what we believe to be Pacifica's first Net Zero Energy home. It's now been a year since our solar system has been fully operational, and so we wanted to share our actual data with you. Below is a copy of our PG&E "True Up Statement" for the year. As you can see, some months we use more power than we generate, but overall we are sending more to

the grid than we use, 861 kWh over the course of a year to be precise. The solar system was designed to offset all of our electric use plus an electric car. We have no gas connection to the house, so no fossil fuels are used. Right now we have a plug-in hybrid Ford C-Max we charge that gives us about 15 miles on a charge. We hope to be able to purchase a fully electric car this year to use the rest of those precious kilowatts and be able to completely eliminate fossil fuels from our daily life.



ENERGY STATEMENT

www.pge.com/MyEnergy

Summary of Your NEM True-Up Period Charges

Service For: 478 MONTEREY RD

Service Agreement ID:

Rate Schedule: ETOUA T Residential Time-of-Use Service

Summary of NEM Charges

Bill Period End Date	Net Peak Usage (kWh)	Net Off Peak Usage (kWh)	Net Usage (kWh)	Estimated NEM Charges Before Taxes	Estimated Charges Tax
04/30/2019	-88	-253	-342	-\$41.21	
05/30/2019	-84	33	-52	5.73	
06/30/2019	-128	-199	-327	-45.22	
07/30/2019	-78	227	149	31.99	
08/29/2019	-99	131	32	16.07	
09/30/2019	-69	-194	-264	-26.68	
10/29/2019	-98	-376	-474	-49.13	
12/01/2019	131	109	239	40.88	
12/30/2019	169	430	599	97.75	
01/29/2020	93	109	202	35.89	
03/01/2020	-11	-419	-430	-38.84	
03/30/2020	-89	-104	-193	-12.09	
TOTAL	-351	-506	-861	\$15.14	

Estimated tax amount, if applicable, is displayed in the box below. Differences in net usage occur due to rounding.

Electric Charges

Bill Period End Date	Minimum Delivery Charges
04/30/2019	\$5.26
05/30/2019	9.86
06/30/2019	10.19
07/30/2019	9.86
08/29/2019	9.86
09/30/2019	10.51

How Your True-Up is Calculated

This is your True-Up statement. Your total Charges (NBC) are greater than your total Minimum Delivery Charges, therefore you owe the NBC charges, in addition to the Minimum Delivery Charges. If your Total Charges are less than your Total Minimum Delivery Charges, the difference is credited to your account. Taxes or NBC Charges are greater than the difference, the difference is credited to your account.

Since this is your True-Up statement, all electric charges will be set to zero starting with your next billing cycle.

Based on your **Net Usage (kWh)**, the True-Up amount is calculated as follows:

Total NEM Charges Before Taxes

Below is a page from our solar monitoring system, showing the generation in 2019. As you can see, plenty of solar is generated all year long, even in our foggy months. The day-to-day generation will vary because of the fog and cloud cover, and the months of July and August, when most people would see high numbers, dip a little bit for us here in the coastal Bay Area. The average monthly generation is what is important, though, as our goal is net zero usage at the end of the year, not net zero at each moment in time.

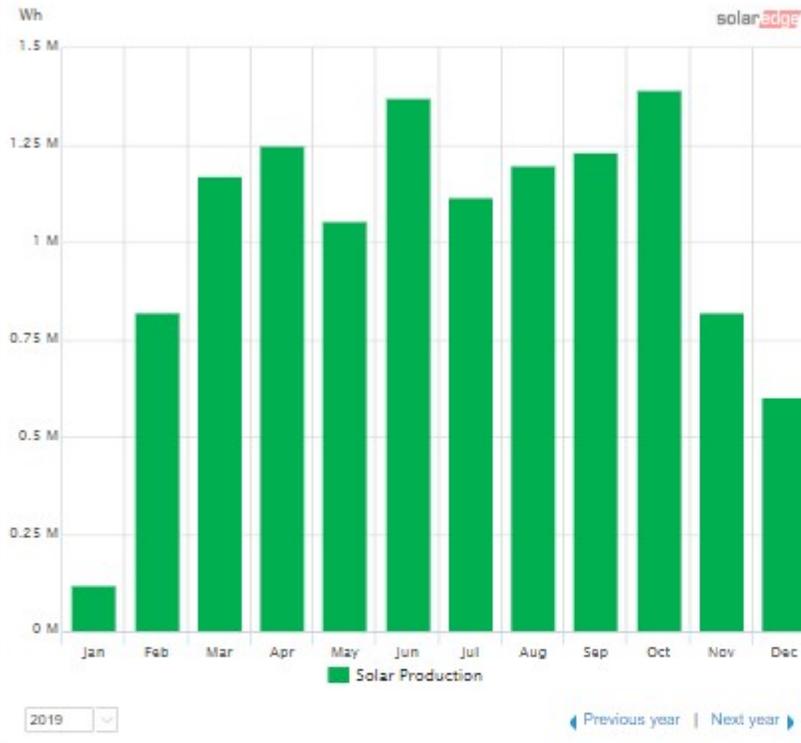
Power and Energy



Day Week Month Billing Cycle Year

01/01/2019 - 12/31/2019

System Production: **12.14 MWh**



Site Status	
ID	910820
Name	Boles_478 Monterey
Address	Monterey Road, 478, Pacifica, California, United States
Installed	11/19/2018
Last Updated	04/16/2020 14:19
Peak Power	7.92 kWp

Mostly Cloudy
52 °F
Feels like 52 °F
Wind SSW, 2 MPH
Humidity 100 %
Sunrise at 06:33
Sunset at 19:47

<p>Thursday</p> 55 - 54 °F Mostly Cloudy	<p>Friday</p> 55 - 54 °F Mostly Cloudy
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Environmental Benefits

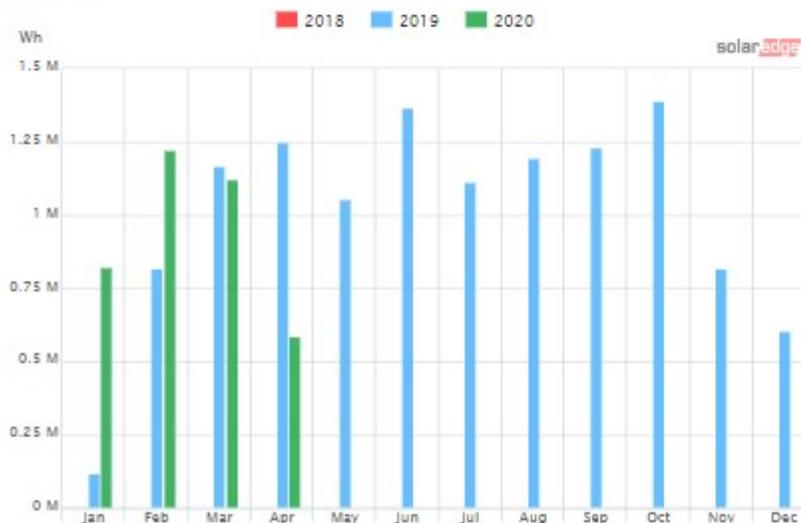
CO2 Emission Saved
24,613.1 lb

Equivalent Trees Planted
619.91

Comparative Energy



Month Quarter Year



My favorite section on this page is at the bottom of the right column that translates solar generation into the number of trees planted. While we have managed to plant about a dozen real trees on our property since we moved in, our solar system has offset the equivalent of planting 619 trees!

If you'd like more detailed and technical information about our project, we wrote about the design and construction process in the form of a blog on our website over the past few years, so you can get more photos and technical information related to the specific topics through the link below.

<http://www.beausoleil-architects.com/portfolio/1765/>

Keep an eye on our website for future tours as well. Hope to see you soon, on a tour, on a beach cleanup day, or at a local restaurant! Please consider getting a quote for solar for your own home or business to reduce your carbon footprint in time for next year's Earth Day, or if you can't do that, plant something near you to soak up that carbon dioxide.

I'll leave you with my favorite quote from Desmond Tutu: *“Do your little bit of good where you are; it's those little bits of good put together that overwhelm the world.”*

There is hope if we all work together and do our part!

Christine Boles