

Eugene Shabelyanau and Danny Galindo, Castro Valley

Green Home Features

Solar Panels

Our solar panels were installed in 2017 by Solar City (now Tesla) to supply exactly the amount of electricity we needed at that time — 9 panels, with a total power output of 4.2 kilowatts, which generates the electricity we use in our 1,700 sq. ft. home (two people live here). We are in the process of adding more panels, as we will be having a heat pump installed soon, and want to be able to generate the energy needed to run that. [Hint, if you are having solar panels installed, plan ahead and consider that you would have additional electricity needs in the future if you purchase an electric car, clothes dryer, induction range, or a heat pump for heating and cooling air, or for heating water.]

Instead of leasing a solar panel system we decided to purchase it. We received \$3,700 in rebates; with them, our out-of-pocket cost at that time was \$7,500. Since then, we have generated all the electricity we use, and our only cost has been between \$10-15 a month to cover the minimum monthly electricity delivery fees. [The true-up statement is the bill that solar consumers receive after a 12-month billing period with the utility. The True-Up reconciles all the cumulative energy charges and credits and compensation the solar panel owner may be entitled to for an entire 12-month period.]

Laundry to Landscape Graywater system

We also save gray water from the washing machine and use it to hand water the garden.

Our gray water collection is manual. There are two 55 gallon rain barrels in the garage next to the washing machine, where we collect the run off from the laundry. We use special detergent that makes it safe to use the gray water right away on plants. We manually distribute this water using watering cans.

Heat Pump for Heating and Cooling the House

We are in the process of replacing our gas furnace with a heat pump for heating and cooling houses. EcoPerformance Builders will install our heat pump in the summer of 2022. We're looking forward to having the heat pump, as:

- The heat pump will be powered by the clean energy generated by our solar panels
- We will have better indoor air quality; burning natural gas to heat homes or cook with can release carbon monoxide, formaldehyde and other harmful pollutants into the air, which can be toxic to people and pets
- Burning natural gas is one of the key drivers of global warming, the formation of smog and acid rain
- Heat pumps are cheaper to run than gas furnaces, and,
- As heat pumps both heat and cool a home we'll get free air conditioning!

Conserving Energy by Insulating the House

To conserve energy, a few years ago we insulated the attic, walls and floors. For the insulation we hired Greenshield <https://greenshieldinsulation.com> and we worked with Ahmad Baballah. We received \$2,600 in rebates from BayRen, and the total out-of-pocket cost for insulating our split level, 3 bedroom, 1,700 sq. ft. home was \$3,277.

Bidet

We also have a Purrfectzone Bidet Sprayer for Toilet Handheld Sprayer Kit (Amazon), which can be purchased for \$28. This was easy to install, and with it, you don't need toilet paper.

Bidets saves tree, the water needed to produce the toilet paper, the chlorine used to bleach it, and the energy needed to produce, package and transport it. See this [Scientific American article on bidets](#) to learn more.

Our bidet only uses cold water; the Toto Washlet and Brondell make bidet seat attachments (you keep your toilet and just install the new seat) that have warm water, dryers, and a heated toilet seat. You can find bidet reviews on WireCutter, [Consumer Reports](#) and [Bidet King](#).

[SOAPGEEK](#): We Use Natural Bar Soaps Because They Are Fabulous—And Also to Avoid Buying Soap in Plastic Bottles

We handmake artisanal soaps in small batches, using natural ingredients that include herbs and herbal extracts – most of which come from our garden. Not only are these soaps mild and nourishing to the skin—but our bar soaps are not packaged in plastic. We hope if you think about how many plastic bottles you use and throw away each year, you'll consider switching to bar soap.

Our soap bars, which will last approximately one month of daily use, will be available for purchase on the day of the Bringing Back the Natives Garden Tour.