California home battery rebate: Self-Generation Incentive Program (SGIP)

California's SGIP rebate is one of the best incentives in the country for homeowners who want to install a home battery with their solar panels. The Golden State already leads the country in solar energy – it has more solar capacity than any other state in the U.S., and nearly six times more solar than numbertwo state Arizona. Now, California is becoming a leader in energy storage. Thanks to the Self-Generation Incentive Program (SGIP) you can get a rebate for most or all of your solar battery installation in California, and it's about to become a lot easier for homeowners to access. Here's everything you need to know about the SGIP rebate.

California SGIP rebate program can help you save

The California energy storage rebate program, technically referred to as the Self-Generation Incentive Program (SGIP), was established back in 2001. SGIP supports a variety of "behind the meter" technologies that are installed at your home or business, including energy storage, fuel cells, and combined heat and power generators.

Until recently, the process for applying to get a home battery rebate through SGIP was difficult, particularly for residential customers. All of the program funds became available on a specific day, and the vast majorities were taken very quickly by industrial-sized energy storage projects, leaving nothing left for homeowners interested in small home batteries.

Luckily for homeowners with energy storage in California, the program has made changes to promote major incentives for CA home batteries.

First, and most importantly, homeowners who are customers of either PG&E, SCE, SCG, or SDG&E will be eligible for an incentive as high as \$250 per kilowatt-hour (kWh) when you install a home battery. That's enough to cover the majority of your battery costs. The value of the per-kWh incentive depends on the size of the battery you purchase and will be reduced as more batteries are installed in the Golden State, so it pays to be an "early adopter" of home batteries. You can check the current value of the incentive at the SGIP Program Metrics dashboard.

How much could you save on a Powerwall System with SGIP?

The Meritsun Powerwall ESS System has a 10kWh, 15kWh, 30kWh and larger capacities. Under SGIP step 5, you're eligible for an incentive rate of \$250/kWh incentive.

- 10 kWh, worth a total of \$2,500
- 15 kWh, worth a total of \$3,750
- 30 kWh, worth a total of \$7,500

That's enough to cover a significant portion of the cost of purchasing the Powerwall equipment. (Note that this incentive value changes as more energy storage projects are installed in California. You can check the current value of the incentive at the SGIP Program Metrics dashboard.)

There are additional costs associated with installing a Powerwall, including other hardware, shipping, installation, and taxes. Lowes Electric estimates that supporting hardware and installation. However, estimates do not include electrical upgrades (if necessary), taxes, permit fees, or any retailer/ connection charges that may apply. In most cases, the Powerwall is also eligible for the federal investment tax credit (ITC), which reduces prices by a further 26 percent. In all, when you combine the SGIP incentive and federal ITC, you can expect to reduce your costs by more than half.

Additional benefits of the overhauled SGIP program

75 percent of the program's funds (equal to more than \$62 million annually) will be marked specifically for energy storage. This is a departure from past years when more of the funds were used for fuel cells and other forms of energy production. Fifteen percent of the funds will also be marked specifically for residential applications to ensure that homeowners who want to install batteries with their solar panels can afford to do so.

Finally, instead of being released all at once, funds will be available throughout the entire year. A continuous program is more in line with how most other incentive programs are structured, particularly for solar power. This way, your solar-plus-storage installer can tell you exactly how much of a rebate is available to you before you install your system.

Why get a California home battery rebate?

Home energy storage offers many benefits, particularly if you have a solar panel system on your roof. In essence, installing a home battery allows you to store your excess solar power at home instead of feeding it back into the grid.

Feeding your excess power into the electric grid is an easy way to balance out your daily electricity production and use. Under California's original net metering policy, homeowners receive bill credits equal to the price they pay for electricity for every kWh of extra solar power they send back onto the grid. However, the state is implementing a few changes to net metering that will make a battery more valuable for homeowners.

In early 2016, California approved net metering 2.0, which will eventually require all new solar homeowners to switch to time-of-use (TOU) rates. In summer 2016, San Diego Gas & Electric became the first CA utility to start implementing net metering 2.0. If you have TOU rates for your electricity, the cost of one kWh (and the value of every kWh you send back to the grid) will vary depending on the time of day. By installing a home battery with your solar panel system, you can store your excess solar power at home when utility rates are low and use it when rates are highest.

When you install a home battery, you also have the benefit of some backup power in the event that the electric grid goes down. However, most batteries for home use are designed to store a few hours of electricity, so they won't run your home at full power for multiple days.