Breakdown of California's SGIP Battery Rebate

California's Self-Generation Incentive Program (SGIP) is one of the largest battery storage incentive programs in the United States. Originally created as a response to the state's 2001 energy crisis, it has since evolved into the innovative battery storage rebate program it is today.

The goal of SGIP is to reduce greenhouse gas emissions and increase the amount of available clean energy in California.

What is SGIP?

SGIP is an incentive program run by the California Public Utilities Commission (CPUC). You can apply for the incentive for various "behind the meter" distributed generation technologies, such as wind turbines, waste-to-heat power, and pressure-reduction turbines.

However, the incentive is mostly used for energy storage systems. In fact, 80% of the program's budget is allocated for storage.

How does the SGIP battery rebate work?

SB 700, a bill passed by California's legislature in 2018, revamped the SGIP program to make it what it is today. The bill also extended the program's budget by \$800 million.

SGIP's budget is divided between 4 program administrators:

- Pacific Gas and Electric Company (PG&E)
- Southern California Edison (SCE)
- Center for Sustainable Energy (CSE)
- Southern California Gas Company (SoCalGas)

Each of the program administrators receives a different allocation of the total SGIP budget. From there, 80% of each of their budgets is reserved for energy storage, and the remaining 20% is designated for other distributed generation technologies.

Each program administrator's SGIP battery rebate budget is broken down into 5 steps

Each step has a different budget allocation and incentive rate. As the budget allocations are reached, the program moves into the next incentive step.

Once a program administrator's SGIP battery program enters the third incentive step, 25% of their energy storage budget is used to create an Equity Budget that will be used to fund low-income projects. The Equity Budget opens when a program reaches incentive Step 3 and is available until the equity program reaches incentive Step 5.

SGIP's incentive also includes a developer cap in order to prevent any one battery storage developer from establishing a monopoly on California's energy storage market.

First, battery storage developers register with CPUC. From there, the CPUC makes a budget cap for the developer. A developer cannot have an allocation of more than 20% of the funding for any given budget category in each incentive step.

Who can take advantage of the SGIP rebate?

In order to qualify for SGIP, applicants must either be a commercial, industrial, agricultural or residential customer of PG&E, SCE, SoCalGas, or San Diego Gas and Electric (SDG&E).

The SGIP rebate for battery storage is separated into 4 categories:

- Large-scale storage systems;
- Residential storage systems;
- Residential equity systems; and
- Non-residential equity systems.

Large-scale storage systems

Large-scale storage systems are bigger than 10 kilowatts (kW) in size. If you are installing a large-scale battery system and taking advantage of the federal investment tax credit (ITC), you will receive a lower incentive rate.

Residential storage systems

If you are considering installing a home battery storage system, you can apply for the residential SGIP incentive. The system installed must be on a residential property and must be 10 kW or less in size. Using the federal tax credit does not impact the residential incentive rate.

Residential equity systems

If you live in a multi-family or single-family low income home and are considering home battery storage, you may qualify for the residential equity incentive. You can check the SGIP handbook to see if you qualify as a low-income home or if you are in a disadvantaged area. You will receive a lower incentive rate if you use the federal tax credit.

A recent ruling opened up the residential equity rebate to those located in Tier 3 or Tier 4 fire hazard districts. Higher incentive rates will be given to projects located within Tier 3 and Tier 4 fire districts that are also considered low-income or disadvantaged communities.

Non-residential equity systems

Non-residential equity projects must be installed at local or state government agencies, educational institutions, non-profits, or small businesses. Additionally, the site must be in a disadvantaged or low income community. Non-residential equity projects that use the federal tax credit will receive a lower incentive.

All large-scale systems must discharge a minimum of 130 full discharges per year in order to qualify for the rebate. Residential systems are required to discharge a minimum of 52 times per year.

Because of the minimum discharge requirements, battery systems that are installed exclusively for the purpose of backup energy storage, like for use during a power outage, are not eligible for SGIP.

SGIP Energy Storage Incentive Rates

System Type	Step :	1 Step 2	Step 3	Step 4	Step 5
Large-Scale Storage (>10 kW)	\$0.50 / Wh	\$0.40 / Wh	\$0.35 / Wh	\$0.30 / Wh	\$0.25 / Wh
Large Scale Storage (>10 kW) with ITC	\$0.36 / Wh	\$0.29 / Wh	\$0.25 / Wh	\$0.22 / Wh	\$0.18 / Wh
Residential Storage (≤ 10 kW) *Residential Storage is not affected by the ITC	\$0.50 / Wh	\$0.40 / Wh	\$0.35 / Wh	\$0.30 / Wh	\$0.25 / Wh
Non-Residential Equity	N/A	N/A	\$0.35 / Wh	\$0.30 / Wh	\$0.25 / Wh
Non-Residential Equity with ITC	N/A	N/A	\$0.25 / Wh	\$0.22 / Wh	\$0.18 / Wh
Residential Equity	N/A	N/A	\$0.35 / Wh	\$0.30 / Wh	\$0.25 / Wh
Residential Equity with ITC	N/A	N/A	\$0.25 / Wh	\$0.22 / Wh	\$0.18 / Wh

What is the current status of SGIP?

SGIP is a popular incentive program - especially the residential storage portion. For all four program administrators, the residential storage program is in Step 5, with CSE and PG&E currently offering a waitlist. SoCalGas closed Step 4 for residential storage in August, and the opening date for Step 5 is October 1, 2019.

Large-scale storage programs are in Step 3 across the board, except for PG&E, which is still in Step 2. Both residential and non-residential equity programs are in Step 3 under all program administrators.

You can keep track of each step the incentive is in on the SGIP Program Metrics Dashboard.

How much can you save on a battery storage system with SGIP?

Making the decision to install a battery storage system on your home can be an expensive investment. SGIP can soften the blow of the upfront installation costs and make installing battery storage a more affordable option.

In fact, the SGIP rebate amount will cover about one-third of the costs!

<u>Tesla's Powerwall</u> battery system is one of the most popular energy storage systems on the market. Powerwall is a battery that can be used to store the energy produced by a solar panel system.

Homeowners who install Powerwall can apply to receive a rebate from SGIP.

The residential storage SGIP programs are currently in Step 5, so applicants will receive \$0.25 per watthour of energy their battery system holds. One Tesla Powerwall battery has a capacity of 13.5 kWh. So, using the Step 5 incentive rate, a Powerwall system would be eligible for a rebate of \$3,375.

A Tesla Powerwall system, including installation and supporting hardware costs, will cost around \$10,100. Because the SGIP rebate covers about one-third of the costs, the total cost to install Powerwall would drop to \$6,725, after the rebate.

The cost could be even lower if you take advantage of the federal tax credit.

What is the future of SGIP?

Thanks to SGIP, California has gained an additional 85 megawatts of energy storage projects. The large-scale and each of the equity programs still have plenty of funds remaining.

As programs begin to reach the end of Step 5, a waitlist will be established. If funds become available, the waitlisted projects will be reviewed by program administrators.

The popularity of the residential storage program has brought all of the programs into their final step with two of the program administrators, PG&E and CSE, starting waitlists.

Program administrators will accept applications until all incentive funds have been paid or until December 31, 2020 - whichever comes first.