

CASE STUDY

Customer Spotlight SolarEdge Edges out the Competition



OVERVIEW

Customer: Eco Solar

Location: Oahu, Hawaii

Installed: 100+ SolarEdge systems

SolarEdge Edges Out the Competition

In Hawaii, high levels of sunshine and cooler temperatures enable customers to get the most out of their solar modules. The problem with standard PV design practices is that you typically design a PV array to clip at these higher output levels just to save cost. This reduces power output and also puts an increased load on the hardware. Eco Solar, an installer specializing in the Hawaii market, was looking for a solution that would reduce clipping, save costs and increase design flexibility. In 2012, Eco Solar's inverter portfolio consisted of only micro-inverters. However, in 2013, Eco Solar was planning to install higher wattage modules of up to 280 Watts. With the higher sunlight and relatively lower temperatures, installations in Hawaii often see module outputs exceeding the levels that their micro-inverters were designed for. So, Eco Solar needed to find a more compatible system that could handle the higher power.

SolarEdge technology relies on power optimizers combined with low cost fixed voltage inverters. For power optimizers that remain near the PV modules, SolarEdge uses higher reliability components, such as all ceramic capacitors, in able to offer an industry leading 25 year warranty. The power optimizers support nearly all modules manufactured in volume today, up to 400 Watts, with no clipping. Not only does this increase energy output, but it puts less strain on the system increasing the longevity of the hardware further.

"Our business model is to deliver reliable systems that maximize conversion of power from the roof and provide real-time feed back of production. With the variable weather conditions of Hawaii and modules up to 350Watts, SolarEdge is the logical choice." - Ben Parish, President of Eco Solar.



"Since Eco Solar became an authorized SolarEdge distributor in the first quarter of 2013, we have transitioned our business from 100% microinverters to nearly 100% SolarEdge. Having SolarEdge as an option has helped Eco Solar win more deals, be more price competitive and differentiate our offering as an integrator in Hawaii."

- Ben Parish, President of Eco Solar



The fixed voltage inverter does not require additional MPPT and dc/dc hardware meaning that it can be manufactured with nearly half the part count and at a much lower cost than traditional string inverters. This means that with SolarEdge, the inverter does not need high dc/ac ratios to remain cost effective.

Since Eco Solar became an authorized SolarEdge distributor in the first quarter of 2013, they have transitioned from 100% microinverters to nearly 100% SolarEdge. Eco Solar were able to introduce SolarEdge as a new product because it met all of the expectations of Hawaii's residents: compatibility

with higher wattage modules and an economic price point. Eco Solar's installation crews have quickly adjusted to installing SolarEdge. The transition was seamless thanks to the training and support that SolarEdge provided. Eco Solar anticipates SolarEdge will continue to be their number one installed inverter for the remainder of 2013. Currently Eco Solar has over 100 SolarEdge systems operational on Oahu. There has been great feedback from customers regarding both the performance of SolarEdge inverters and the user friendly monitoring system.