

# SolarEdge Eliminates Demand Tariffs by Optimising Commercial PV

Samin Sheet Metal designs and manufactures a wide range of sheet metal components for a broad cross section of industries. The company was paying a kVA electricity demand charge, which it considered to be expensive, and wanted a solution to reduce both costs, and their overall reliance on the grid. Energy Partners recommended installation of a PV system consisting of SolarEdge inverters and Canadian Solar panels embedded with SolarEdge power optimisers.

Energex, an electric power distribution company in regional Queensland, often places small business customers on a default Small Demand Tariff. While on this tariff, once a business exceeds 100,000 kWh, they are charged a kVA demand charge. With the aim of decreasing the company's reliance on grid energy and removing the kVA charge, the PV system installer, Energy Partners, chose SolarEdge technology.

The SolarEdge solution combines superior power harvesting through panel-level optimisation, and system management through the free SolarEdge monitoring platform. Following installation of the SolarEdge PV system, Samin Sheet Metal now benefits from self-consumption, reduced grid energy import, and revenue from exporting excess energy to the grid.

***"We monitored the system closely, and once the daily average consumption had dropped below 273 kWh/day, we negotiated an Energex Tariff Re-assignment from Small Demand, to Business Flat. This means Samin Sheet Metal no longer pays a kVA demand charge."***

*Wade Samin, Managing Director of Samin Sheet Metal*



Installation Date:  
January 2017

Samin Sheet Metals,  
Queensland, Australia

Panels:  
376 x Canadian Solar  
smart panels with  
embedded SolarEdge  
power optimizers

Inverters:  
4 x 25 kVA SolarEdge

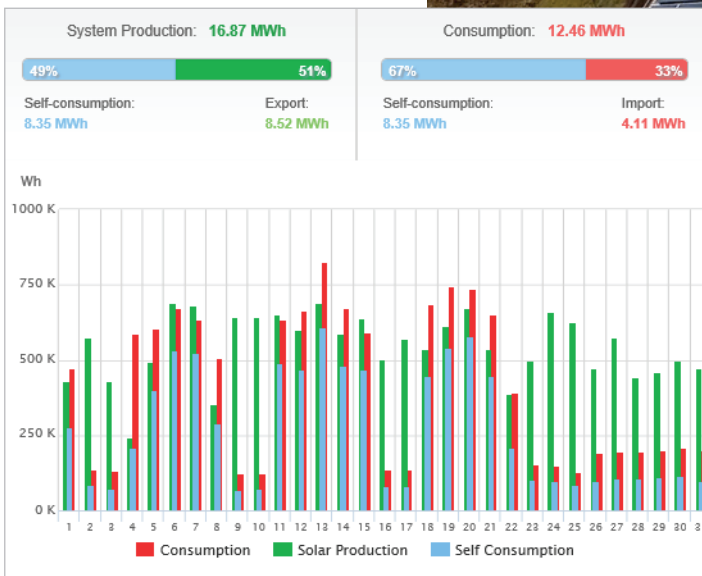
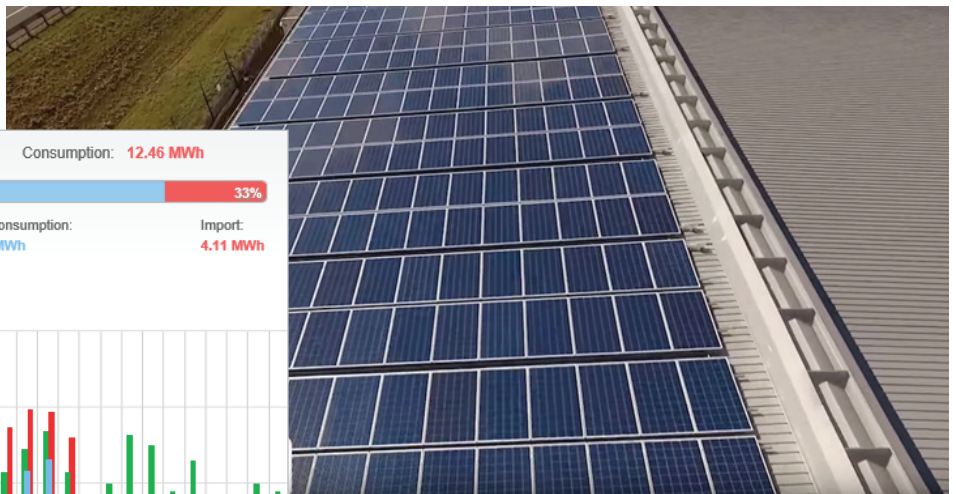


Wade Samin, Managing Director of Samin Sheet Metal said ***“I wanted a solution to get our business away from the kVA demand and simplify my costs. Energy Partners with SolarEdge, were the perfect choice to partner with, and the SolarEdge system has performed much better than I thought possible.”***

For the first six months following the system installation, Energy Partners monitored PV production and consumption using the SolarEdge monitoring platform. Using system performance data, Samin Sheet Metal was able to prove the average daily grid energy consumption had dropped below 273 kWh. As a result, the company successfully re-negotiated their electricity tariff from Small Demand to Business Flat, which eliminated the kVA demand charge tariff, and also reduced their overall electricity bill by approximately 70%.

Not only has Samin Sheet Metal reduced their overall energy bill, but the real-time monitoring provided by the SolarEdge cloud-based monitoring platform helps to overcome any potential performance issues, and ensures the system maintains critical uptime. As a result, the company has saved money, and expects to pay the system off within 3.5 years instead of the 8-year payback they originally anticipated.

Jay Dean, owner and director of Energy Partners, who installed the SolarEdge system said ***“The installation of the PV system was a game changer. By enabling the customer to move from the Energex tariff and remove the kVA demand charge, they have achieved actual cost savings of \$35,000 in just 12 months.”***



*Samin Sheet Metal’s 99.5 kW commercial installation reduced the company’s demand tariff and reduced their bill by up 70%*

*One month’s production and consumption as viewed on the SolarEdge monitoring platform*