Towards ZERO EMISSIONS NOOSA

Businesses take control

Forward thinking Noosa businesses are turning to solar power with great results, and the resounding message is, Solar for Business is a No-Brainer. Many are now looking at how to take their control of energy usage even further, and this is where commercial batteries are leading the charge.

Battery systems make the most of rooftop solar and slash demand charges while providing certainty of supply during power outages. Battery-supported solar installations ensure that any excess energy can then be stored for use when electricity rates are high or for overnight usage.

Batteries allow a business to shift its energy profile. The savings from this are heightened if a business is subject to demand charges. This can account for a significant portion of a company's annual electricity cost. Where a demand charge is in place, this can be up to 45-50 percent of total electricity costs.

The benefits of storing all excess solar output in onsite batteries don't stop at demand charges. All business will have an overnight electricity usage of some form, so capturing the excess solar produced during the day ensures that this power is available for night time usage, ensuring minimal to no grid consumption, and the best bang for your solar buck.

Battery storage combined with solar helps businesses to maximise their use of self-generated and very cheap electricity. But even without solar panels, the use of a battery storage system can enable a company to use cheaper off-peak grid power for charging. You can then use that stored energy at times when mains electricity supply is most expensive.

Picture: CSIRO

Case Study: Battery + Solar = No Electricity Bill

With solar installed at his home, Andrew Chapman already knew its benefits. For his business, he wanted to go a step further, harnessing all of the solar energy while using a battery for storage to ensure energy security.

Andrew has run his well-known Andrew's A-Grade Mechanical business in Pomona for 18 years, operating five days a week and often late into the night. He says: "The financial savings from solar were an obvious benefit, but energy security was the main reason for us installing the solar and battery system in our business. The Enopte Power Station (battery) provides the garage with a constant power supply, even through power black-outs or power surges.

"The battery powers the security cameras, fridges and other electronics, or if the power goes off. For added reassurance, we selected a battery that is manufactured locally at Coolum Beach, on the Sunshine Coast. Our advice is to choose a company that you can trust and local is best."

Andrew Chapman with battery system.
Picture: SUPPLIED

Adam concludes: "Having solar is a consistent thing. We are drawing energy from an outside source - the sun - that we don't have to pay for. Even on cloudy days we are still using power from our solar system. I'm blown away by how well this system works."

Costs and benefits at a glance

Electricity costs before installation: $900 per quarter.

Current electricity costs: $0 per quarter. The new system offsets the entire electricity bill.

Installation cost: Equipment lease repayments of $810 per quarter for 5 years.

Payback period: 4.5 years.

Greenhouse gas emissions reduction per year: 8.5 tonnes of CO_2-e.

Technical details

Installation date: May 2019

System size: 7 kW

Solar system: Zeus Apollo 275W solar panels

Battery storage: Enopte Power Station (battery & inverter)

Battery capacity: 7.7kWh

Check out https://www.zeroemissionsnoosa.com.au/business-solar for ZEN Inc.'s Solar Checklist to help you take the right steps to installing solar in your business.