



Battery Storage -

IS IT WORTHWHILE FOR ME?





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Approx 2,500 Solar systems installed across the region - up to 300kW

30-35 grid-connected systems with battery storage (AKA hybrid)

Many dozens of off-grid systems - becoming more viable for new homes

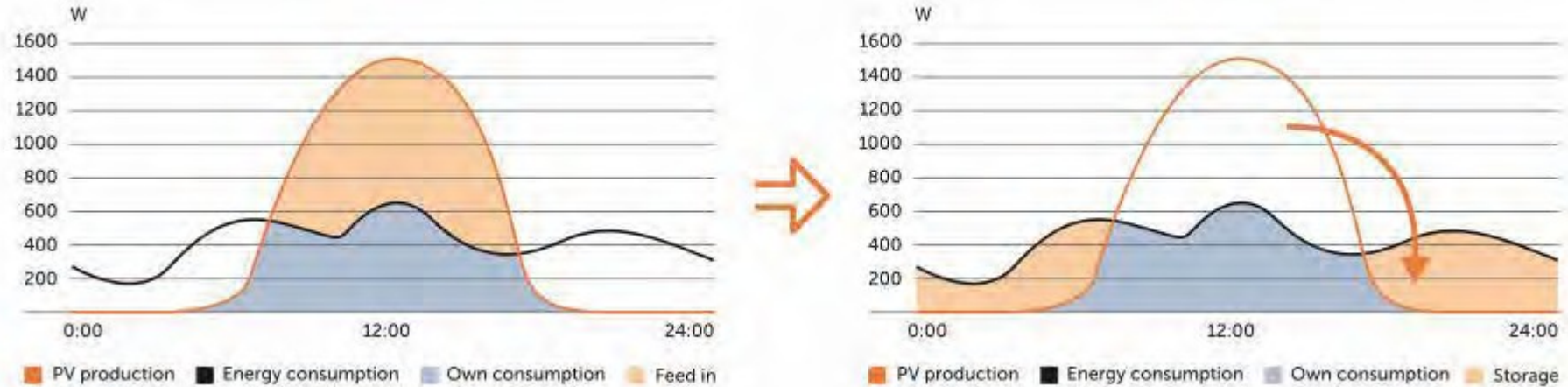
Our Traralgon showroom runs entirely off lithium battery storage and solar

20 full-time staff, including 6 F/T electricians with off-grid experience

Full-time tech support electrician (working for our affiliated business Solar Fix)



What is Battery Storage?



- ▶ Battery Storage enables you to store surplus solar power, and to use it at night
- ▶ Charge your batteries during the day for free, when you are not at home
- ▶ Use that power for free at night, saving you from using peak electricity from the grid
- ▶ Provide power to your home during a brownout or blackout



Pro's and con's of Battery Storage



Benefits of Battery Storage

- ▶ Charge your batteries during the day, instead of exporting to the grid for 5-6c per kiloWatt hour
- ▶ Use the stored solar power at night, saving you 30-40c per kWh (at current rates)
- ▶ Also possible to charge the batteries at off-peak rates (11pm-7am) for 19c per kWh
- ▶ Power when the grid goes down (major advantage in rural areas/end of the line)
- ▶ Ability to increase your battery storage later, disconnect totally from the grid (not all systems will allow this)



Downsides of Battery Storage

- ▶ Batteries are still expensive, haven't reached mass production yet
- ▶ It won't suit every situation (eg people who use power during the day)
- ▶ It still has a long financial payback (between 8-12 years)
- ▶ Some types of batteries won't last 10 years, if they aren't treated well
- ▶ You still need a smart meter, and to stay connected to the grid



What does it cost?



- ▶ Lithium batteries (Tesla Powerwall, LG Chem etc) - \$7,500 - \$11,000 installed
- ▶ This will provide between 5.5kWh and 8kWh of USEABLE battery storage
- ▶ Systems available with 2kWh-30kWh of battery storage
- ▶ Commercial applications - anywhere from 50kWh - 5,000kWh of storage



What will it save me?

- ▶ Different for every consumer
- ▶ Typical situation: Steve and Sally in Leongatha- already have 4.5kW system
- ▶ Dual income - no kids - both work 9 - 5
- ▶ Currently they feed the grid for 6c per kWh during the day
- ▶ Now - Charge their batteries all day while they are at work
- ▶ Use 7kWh each night from batteries - assume they are paying 38c per kWh
- ▶ Savings of \$2.60 per day - \$950 per year
- ▶ They would have received 6c x 7kWh - \$0.42 per day - \$150 per year
- ▶ Actual savings from battery storage - \$800 per year
- ▶ Cost of system \$8,000 - financial payback 10 years



Electricity rates are going up

Assuming electricity price of 45c per kWh

- ▶ Savings of \$3.15 per day (7kWh x \$0.45)
- ▶ Savings of \$1,150 per year (less the \$150 for a 6c Feed-in Tariff)
- ▶ Financial return of around 7 years

Assuming electricity price of 50c per kWh

- ▶ Savings of \$3.50 per day (7kWh x \$0.50)
- ▶ Savings of \$1,270 per year (less the \$150 for a 6c Feed-in Tariff)
- ▶ Financial return of around 6.25 years



Should I wait until battery prices fall?

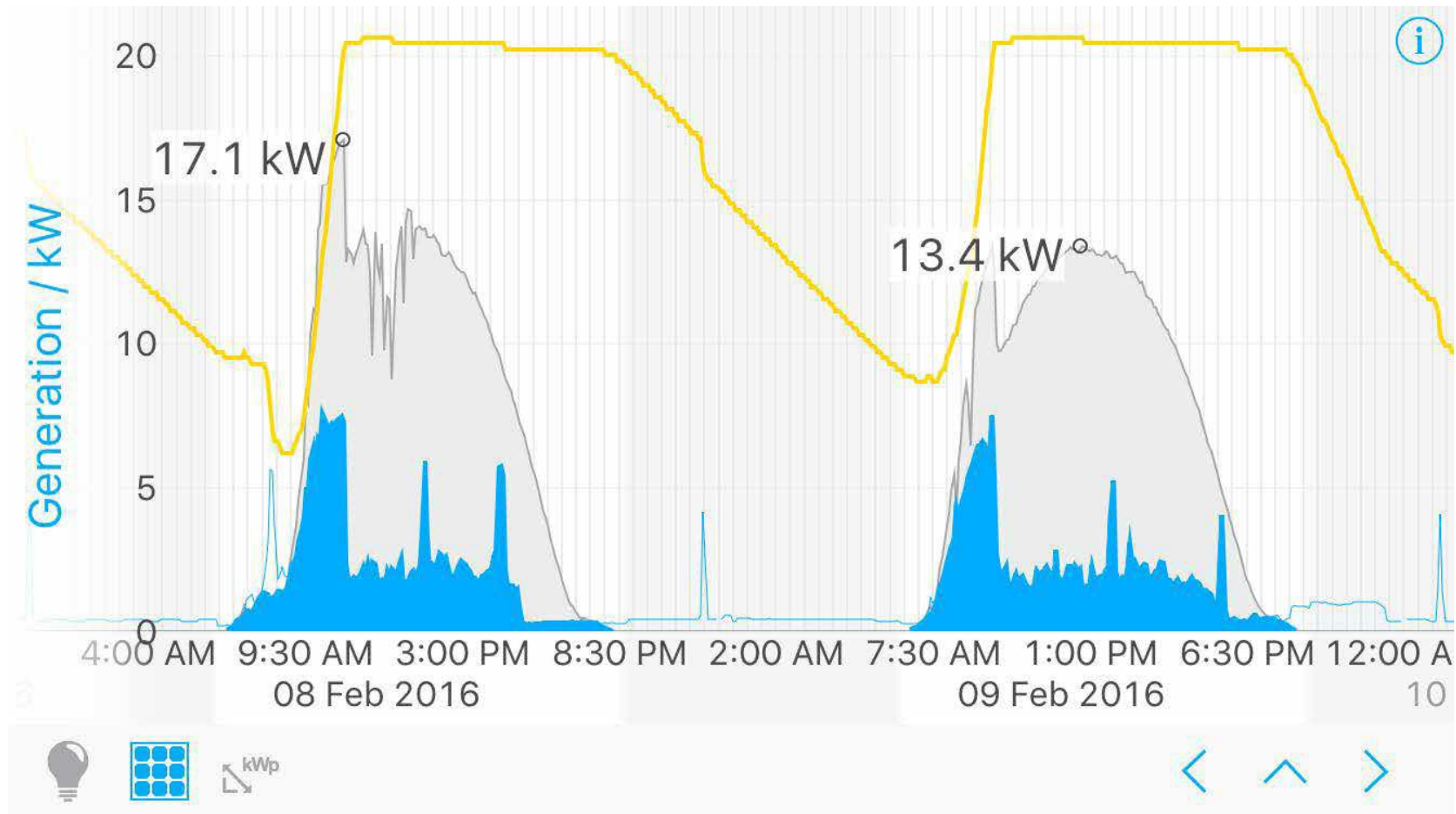
Best projections available - battery storage to fall by 15-20% over next 2 years

- ▶ Option 1 - install now
- ▶ Savings of \$800 per year - at least \$1,600 over 2 years

- ▶ Option 2 - wait for prices to come down
- ▶ Pay \$1,400 - \$1,800 less in 2 years



Example of how it works





Phone: 1300 447 765

www.gippslandsolar.com.au



Live Solar / Battery Storage system on display

5 Rocla Road, Traralgon East

(cnr Princes Highway, next to BP car wash)

