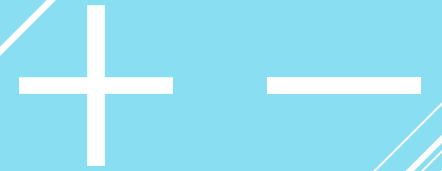
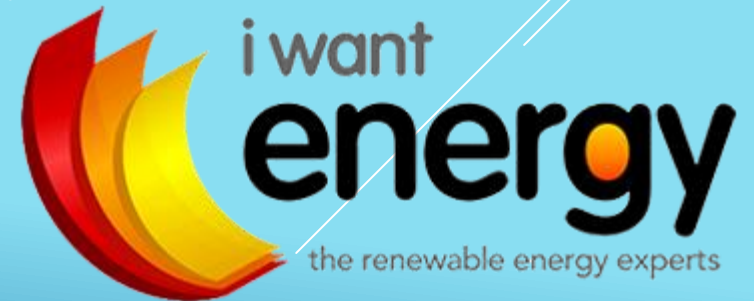


BATTERY STORAGE



Battery storage options for Tasmanian market



▶ **YES** YOU SHOULD CONSIDER
INSTALLING A BATTERY IF YOU WANT;

LOWER ENERGY BILLS

BACK UP POWER

MAXIMISE SELF CONSUMPTION

LOAD SHIFTING WITH TARIFF 93

▶ **NO** YOU SHOULD WAIT FOR
BATTERY STORAGE IF YOU;

HAVE THE 28 CENT LEGACY TARIFF

ALREADY HAVE LOW ENERGY COSTS

DON'T CURRENTLY HAVE SOLAR

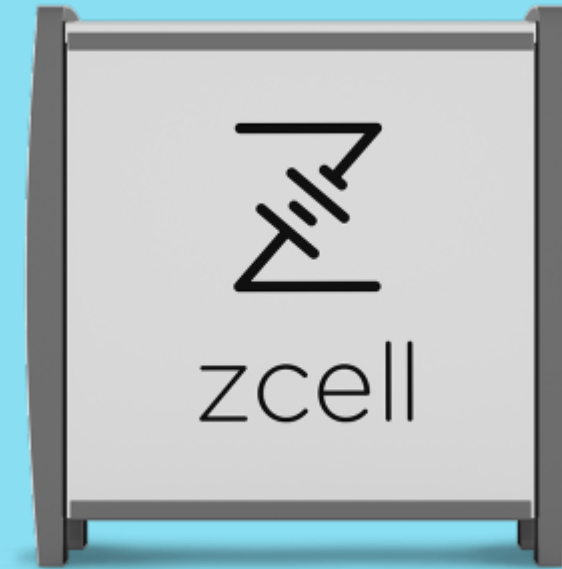
CAN'T AFFORD IT

SHOULD YOU INSTALL BATTERY STORAGE

HYBRID ION



FLOW BATTERY



CURRENT BATTERY STORAGE OPTIONS

HYBRID ION

▶ ADVANTAGES

MORE AVAILABLE ENERGY (DoD 100%)

NO HEAVY METALS

NON FLAMMABLE

▶ DISADVANTAGES

LARGE FOOT PRINT

HEAVY WEIGHT

MANUFACTURER FILED FOR
BANKRUPTCY

FLOW BATTERY

▶ ADVANTAGES

MORE AVAILABLE ENERGY (DoD 100%)

NO SHELF LIFE LIMITATIONS

LESS WEIGHT

SCALABLE

▶ DISADVANTAGES

HIGHER INITIAL COST

NEED TO FULLY DISCHARGE EVERY FEW
DAYS

INSTALLATION REQUIREMENTS

COMPARISON HYBRID ION V FLOW

LEAD ACID



LITHIUM



CURRENT BATTERY STORAGE OPTIONS

LEAD ACID

▶ ADVANTAGES

PROVEN TECHNOLOGY

RELIABLE

LOW COST

▶ DISADVANTAGES

LARGE FOOTPRINT

HEAVY WEIGHT

LESS AVAILABLE ENERGY (DoD 50%)

LITHIUM

▶ ADVANTAGES

MORE AVAILABLE ENERGY (DoD 90%)

SMALL FOOTPRINT

LESS WEIGHT

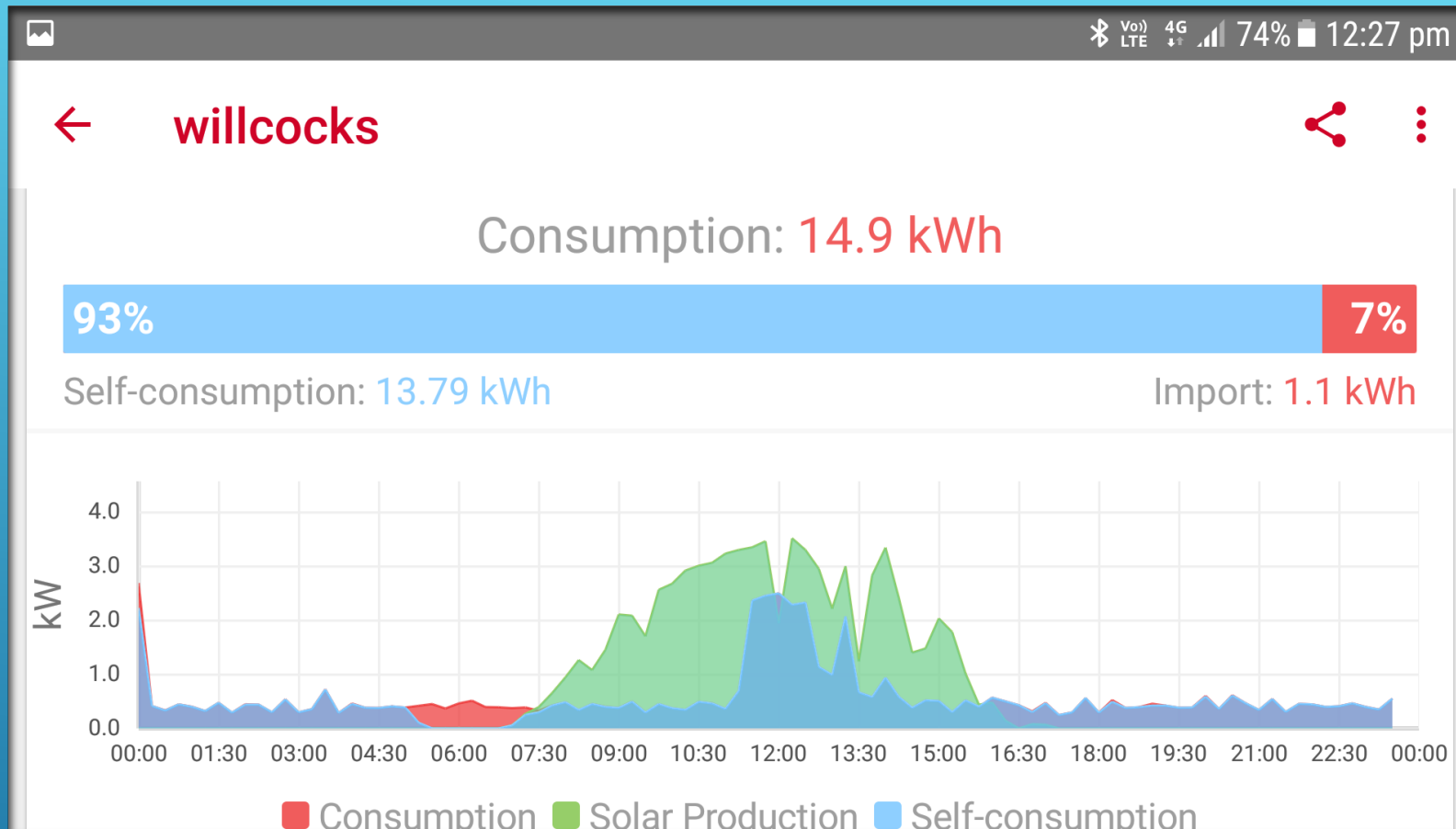
▶ DISADVANTAGES

HIGHER INITIAL COST

INSTALLATION REQUIREMENTS

LOWER DISCHARGE RATE THAN LEAD

COMPARISON LEAD V LITHIUM



- ▶ 5 kW Solar Array
- ▶ Tesla Powerwall 1 – 6.4 kWh
- ▶ Solar Edge inverter

WHAT CAN WE ACHIEVE WITH A BATTERY?
MAXIMISE SELF CONSUMPTION
REDUCE ENERGY COSTS

WHAT CAN I EXPECT TO PAY?

- ▶ **Solar already installed you can expect to pay \$8,000.00 to \$12,000.00 for between 6 kWh to 14 kWh Lithium**
- ▶ **For new installations a 5 kW solar array plus a 10 kWh battery will cost between \$16,000 to \$20,000 depending on which inverter charger combination you choose**





- ▶ Currently there are approximately 35 x 10 kWh batteries being installed in residential properties on Bruny Island with a grant from ARENA.
- ▶ The aim of the trial is to offer network support for peak load events to assist TasNetworks to keep the lights on for south Bruny Island visitors.
- ▶ The interface between the battery and the network is being provided by Reposit Power, an Australian company. This will allow stored energy in the battery to be sold by the home owner to TasNetworks for a premium.
- ▶ This has the potential to allow other battery owners to do the same here in Tasmanian in the future.

BRUNY ISLAND BATTERY TRIAL AND REPOSIT POWER



Reposit Customer App Manual



REPOSIT COMPATIBLE BATTERIES

LG CHEM

TESLA POWERWALL

SAMSUNG

PYLONTECH

All of these batteries
are Lithium Ion.

SUMMARY

- **Lithium is the most popular**
- **Multiple brand choice**
- **10 year warranties are now standard**
- **Trading battery energy is now possible**
- **Proven reduction in power bills**
- **Prices have decreased a lot recently**
- **How much lower can they go?**