



The ZEN team interviews **THORSTEN KELS**, Cooroibah local and solar/battery owner.

# Batteries lead charge

## What made you decide to get batteries for your solar system?

Over the years we had a few lengthy power outages at our property in Cooroibah, so when we started to plan the extension of our solar system we decided to try and become more independent from the grid and to use as much of the electricity generated by the system in our house. Normally we would both spend the day away from home at work while our solar system was happily generating electricity and exporting it to the grid. In the evening when we got back we would have to buy the same amount of electricity back from the grid at a much higher rate.

## How long have you had the system and how has it been running so far?

We were quite early adopters and installed the system in mid-2015. Our batteries are made up of individual Lithium Ion cell blocks, so it's not one of the modern integrated systems that can just be attached to a wall. It has been running for six years so far and we only had a few minor hiccups that were quickly fixed by the manufacturer. The system is powering most of our property, but we're still connected to the grid as a backup if we have several cloudy days in a row. It would be great to completely disconnect, but our system is not quite large enough, at least not yet.

## Did you have to adapt your lifestyle to life with a battery?

Because we are still connected to the grid we probably didn't have to change our lifestyle as much as we did, but we have taken it as a bit of a challenge to maximise our self-consumption and to get the most out of the system. In our daily life that meant that we had to shift things around a bit so that we use most of our electricity during daylight hours. In the beginning it was a bit tricky, but after a while it just becomes automatic behaviour. The washing machine and the dishwasher are set on delayed start so that they run during the day and finish when we get home. The irrigation pumps and the hot water booster are on timers that switch off automatically when the sun sets and we have converted our cooking to gas. The last, really big challenge is the oven because we can't always run it during the day and it can use up half of our battery capacity in two hours.

## Was it worth the investment and would you buy it again?

That's not an easy question to answer. If you just look at the economic side of things, we probably bought it a few years too early. We are on track to break even after about 12 years and so far the battery has only lost a few per cent of its capacity. We hope that it will last for at least 15 years. After that we'll have to replace



The solar dream.

Picture: SUPPLIED

the battery cells which will hopefully be much cheaper by then. Newer battery systems have already come down in price and they are much easier to integrate with solar systems now.

On the other hand, the battery came in really handy after the 2019 bushfire in Cooroibah. When we returned to our property after the fire

the freezers were still running and for several days we were the only house with electricity and water.

Yes, we would definitely buy the battery again and with the newer, cheaper technology we would probably get a bigger one to improve our self consumption even more.