

Solar & Energy Usage Monitoring Enlightens Family

CHALLENGE

Increase effectiveness of a non-Enphase installation through a simple monitoring system for electricity generation and consumption.

SOLUTION

Enlighten's low cost, highly compatible monitoring system providing data needed for more intelligent energy decisions.

RESULT

Visually presented, real time data in 15 minute increments that make identifying inefficiencies easy.



“I am now making much more effective use of the power I am producing.”

— Kenneth Jensen,
Homeowner

Having reduced his family's power bill with solar, Kenneth Jensen already knew that solar worked. But without monitoring he felt starved of data he needed to truly optimise his system. Enlighten was the perfect solution.

From Simple Solar to Smarter Solar

Living in a very busy house of four adults and one grand child in outback Western Australia, solar has been a no brainer for the Jensens since receiving a \$780 power bill two years ago. Thanks to ideal weather and little shading, the installation has already helped the family cut power costs. Still, Kenneth felt that he and his family should benefit even more from solar. Clearly what was missing was a way of monitoring how much energy the system produces and how much electricity his family uses every day.

Upgrading his system with the Enphase Envoy®-S Metered and integrating into accompanying Enlighten software, Kenneth was now ready to go from being solar to being solar smart. With real time data on electricity consumption over energy generation, in 15 minute increments, presented with striking and simple visuals – Kenneth could immediately begin to find trends and spikes that pointed to opportunities for improving his system efficiency.

Targeting Inefficiencies

Within a couple of weeks Kenneth was able to find and act on a number of opportunities for improvement. For example, by studying his data over time, Kenneth found consistent periods of low demand during his system's peak solar production. Quickly, he realised this was due to the in-between operation cycles of his pool pump. Acting on this information, Kenneth synchronised his electric hot water system's on times to these low demand periods. The result was effectively a solar hot water system at a much lower cost than actually replacing his existing electric system!

As a result, Kenneth is making more effective use of the power he is producing during the day rather than exporting it for a non-competitive rate of 7c/kWh only to have to buy it back that night or early next morning at 25c/kWh to operate the hot water system. With the release of solar battery systems such as the Enphase AC battery, Kenneth expects he will be able to make even further use of this energy through synergizing the battery's use with Enlighten monitoring.

Being Energy Conscious

With the ability to easily demonstrate when the entire household was using equipment such as dryers and irons and point out inefficiencies in use, Kenneth easily helped change the entire Jensen family's energy consumption behaviour – not just his own. Thanks to clear & visual reporting that anyone can understand, Enphase monitoring has enlightened the entire family's power conscience.

INSTALLATION SUMMARY

Client **The Jensen Family**
Location **Western Australia**
Completion Date **January 2016**
Installer **GoSolar New Castle**



"Initially I was checking the system everyday while I was looking for trends and areas that I could shift loading to better times in the day where I was generating the most power"
says Kenneth Jensen, Homeowner.

About Enphase Energy

Enphase is innovating connected, intelligent solar energy systems that make mainstream access to clean, affordable energy a reality. Our Enphase Home Energy Solution lets you generate, store and manage your home's energy so that you can save money, decrease your impact on the earth, and become more energy independent.

Learn more about how Enphase is changing home energy and solar. Visit enphase.com/au

