Sustainable Energy Association New Zealand

Residential Solar Power Case Studies

Case Study - The Wright's in Taranaki

The Wright's 2.4kW Solar Power System
"It's nice to see more people going solar"

The Real Numbers

One years worth of performance data

First year savings	**$654.10**
Simple return on investment after one year	**6.59%**
Actual one year solar production	**3,329 kWh**
Self-consumption rate	**51%**

Future Estimates*

*See assumptions page

Payback period	**14.2 years**
25 years savings	**$18,474.90**

Solar panels: 8 x 300W panels. Inverter: 3kW string inverter with optimisers. Total cost: $9,924. Electricity price: $0.31. Solar export price: $0.08 . Installation date: April 2018.

Family's like the Wright household are proving to friends and associates that solar power really is as beneficial as it sounds, recently saying "I am a teacher and a couple of parents at the school have decided to install a (solar power) system since we have, it's nice to see more people going solar - and it's nice knowing that it's reducing the (power) bill."

The family don't need to be as cautious using power (as they had in the past using grid power), commenting that at times they now have the freedom to use more power.

The Wright family also changed some of their power consumption patterns, such as using their solar power when it is created (when possible), as opposed to exporting it to the grid. They use timers on their washing machine, dishwasher and also the hot water cylinder.

In terms of their system performance, they say it's meeting their expectations.