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Australia-wide trials – Demand for a better deal

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After a spate of trials, is there a better deal in store for householders using smart meters, asks Jack Nicholls?

In the 21st century, traditional electricity meters have become something of a quaint anachronism. The meter sits outside your house, wheels clicking, and if the electricity company wants to know how much energy you are using they have to send someone around to check. Imagine if your phone company had to send someone out to physically poke around your mobile before they could bill you. Imagine the cost of it, which would be passed on in your phone bills. The mind boggles. And yet this is exactly how our electricity network is structured in the 21st century.

But that is changing. For some, it has already changed. Smart meters are being installed in household trials around Australia. These devices record electricity use in real time, sending an automatic report through to your electricity provider every 30 minutes. More usefully, via connected display units or web portals, smart meters can tell you how much energy you're using, when you're using it and what it's costing you.

A 'smart' system?

As anybody who has been snared by the honeyed words of door-to-door energy providers knows, Australia's electricity market operates in a world of imperfect information. Smart meters are a way to give consumers and providers real-time, accurate information. In turn, consumers can make an informed choice about their electricity plan and save money through increased awareness of the cost of their idling plasma televisions.

Energy monitoring can take different forms. Web pages can be set up cheaply to display household energy use and offer comparisons with regional averages. At the high end, so-called in-home displays provide real-time feedback on consumption and costs. With in-home displays, the cost of a house full of idling PCs and plasma televisions becomes perceptible. Every time you glance at the screen, you are reminded you could be saving money and pollution.

That's the theory, anyway.

In practice, people are wary. The authors of Perth's Solar City 2012 report wryly noted that "the majority of the community could be described as being in a state of 'positive apathy' in relation to the rollout of smart meter technology". Meanwhile A Current Affair has raised "questions about cost

effectiveness and health concerns", while a report by Smart Grid Australia showed that the people of Victoria, who had by far the highest awareness of smart meters, also had the least favourable opinions of them. People are suspicious of being ripped off by energy providers or fried by electromagnetic radiation.

The effects of energy monitoring

The good news is hidden behind a forest of acronyms in the technical reports lying on government desks. But the news is good. Given the opportunity to actively monitor their own energy use, trial households are reducing their energy consumption by an average of 7–8%. That's a significant cut in electricity bills and if repeated Australia-wide would mark a meaningful reduction in our national carbon bill as well.

These Australian results have been corroborated the world over. An Accenture Consulting report looked at 76 energy monitoring trials from across the world: 90% of trials have recorded marked energy savings, with a mean reduction in use of 7.9%. The results have been clear. The more immediate and detailed the feedback to customers is, the higher the energy saving. In some studies the energy savings have reduced over time, perhaps after the initial flush of enthusiasm dies down, but importantly there are still long-term savings. Energy monitoring isn't just a gimmick, it marks a permanent change in the way we use our energy.

Read the full article in ReNew 124

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- Climate Change
- Energy Efficiency
- Environmental Policy
- Green living
- Greywater
- Heating
- Lighting
- Member Profile
- Pears Report
- Q & A

- Rainwater collection
- Recycling
- ReNew's 'Browser'
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- Solar PV
- Sustainable Homes
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