



WHAT ARE SMART METERS?

Smart meters – also called advanced or digital meters - are installed across Victoria and in other areas of Australia.

They replace a household's old existing meter with upgraded digital technology.

A traditional electricity meter (or accumulation meter) can only record the amount of electricity used since a meter reader last visited your home to manually record your household's energy usage.

WHERE ARE SMART METERS INSTALLED?

The majority of Australia's smart meters are installed in Victoria, where the rollout to upgrade residential and small business customers to a smart meter was mandated by the Victorian government in 2008. The upgrade was completed in 2014, and now almost 2.8 million households and small businesses across Victoria have a smart meter installed.

Other states also have smart meters, mostly for household solar photovoltaic (PV) installations. Smart meter policies vary from state to state, however installation is not mandated (except in Victoria) and is on a voluntary basis. In 2014 the New South Wales government announced that the state's smart meter upgrade will be a voluntary and market-led rollout for households and small businesses.



'Smart grid', 'smart meter', 'smart appliance' – what's the difference?

Smart grid is a term used to describe technology and systems that have better communication and integration between the supply and demand of electricity. The grid also has the capability for two-way communication between an electricity business and a customer.

Smart meters connect and communicate through the smart grid. A smart meter has two-way communication capability and can send and receive information between a customer and an electricity business.

Smart appliance is a term used to describe an appliance that offers wider functions and capability through connecting with other appliances or networks. Within the smart grid, some manufacturers are developing smart appliances to take advantage of lower electricity price periods, so a smart appliance can receive information and respond by adjusting its settings accordingly - depending on the settings of the user. You can plan when you want to use a smart appliance ahead of time and when it will be most economical to operate.

HOW DO SMART METERS WORK?

A smart meter improves communication between a customer and electricity retailer. Real time data is sent directly to energy retailers so a manual meter reading is no longer required, reducing the need for estimated bills and making it easier when you move house or switch electricity retailer.

Compared to the old metering system, smart meters offer enhanced capability to customers. They have the potential to:

- Make it easier and cheaper to switch energy companies;
- Simplify power connection when moving house through remote connections;
- Encourage a greater uptake of renewable energy;
- More accurate billing and real-time information on energy usage and costs;
- Allow remote management of household 'smart' appliances
- Automatically alert energy companies to a power failure and identify the location; and,
- Support new product offerings, including new electricity tariffs and services.

GREATER TRANSPERANCY

Smart meters provide real-time electricity information that can be captured and viewed through devices like web portals or in-home displays. In-home displays bring your household's electricity information directly to you. They show how much electricity you are using in real time so you can keep track of your household's use.

With this information, customers have the option to adjust their electricity use or swap their energy plan to better manage their bill and energy costs. If you are on a time of use tariff with your energy retailer, an in-home display may be able to show the 'peak', 'shoulder' and 'off-peak' times, so you can plan to use appliances at an off-peak rate to save on energy costs.



Will my retail plan change?

The current tariff (or plan) you have with your energy retailer will not change when you have a smart meter installed, you can stay on a single rate tariff.

However households that have a smart meter installed can access a wider range of flexible pricing options, allowing a customer to pay different rates at different times of the day. Plans vary from retailer to retailer, so shop around to find the best plan for you.

How much does a smart meter cost?

Electricity customers pay for the meters, poles and wires they use within their bill's 'service charge' - similar to a phone line rental charge. The cost of a new meter is recovered in the same way.

Energy distributors pass smart meter installation costs on to electricity retailers, and customers pay for these charges through their electricity bill over a number of years.

PRIVACY AND SAFETY

Smart meters have a range of security features to prevent unauthorised access and ensure all metering data is protected. Data is encrypted and securely transmitted to your energy distributor's management system, which is read through a telecommunications network – like a mobile phone network. This information is then sent directly to your energy retailer for billing.

Smart meters are required to meet safety standards made by the Australian Communications and Media Authority, which includes compliance with the electromagnetic exposure limits developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

[ARPANSA report](#) that with the combination of the low power of the smart meter transmitters, their outside location, and the short time spent transmitting, electromagnetic exposure from smart meters is very low and well below the limits of the ARPANSA standard.

SOLAR PANELS

Customers who have household solar PV need a smart meter (or a time of use meter) to manage the use of solar power, the power it generates, and the power that it feeds back into the grid.

Customers who have a smart meter installed may also be eligible to apply for a state government solar feed-in tariff scheme to help offset the initial cost of the panel installation – schemes vary from state to state.