

Smart meters – information for households

This fact sheet answers some questions commonly asked by households about smart meters. Household consumers should contact their electricity retailer for further information about smart meters and their rollout plans for smart meters.

What is a smart meter?

A smart meter is an electronic meter that can record more regular and more accurate electricity consumption information and has two-way remote communication capability.

New Zealand has about 835,000 smart meters installed as at 31 December 2012. There should be about 1 million smart meters installed by the end of 2013 and about 1.6 million by April 2015.

What are the benefits to consumers of smart meters?

Many benefits will flow to electricity consumers over time, as new tariffs, products, appliances and opportunities can now be made available with smart meter technology. However, the immediate benefits to consumers include

- **bills based on actual reads** – not estimates – your retailer should be able to bill you on your actual consumption
- **remote meter reading**, removing the need for the regular visits to your property by a meter reader, and a smart meter also enables remote connection and reconnection
- **changing retailers is easier** – the final read required when leaving a property or changing retailer can occur almost immediately
- **more information** available to you about your electricity consumption.

How do I get a smart meter at my house?

Contact your retailer to find out about their plans for the rollout of smart meters. If you are unsatisfied, you may wish to switch to a retailer that can offer you what you want.

The rollout of smart meters is currently at no extra cost to consumers.

Do I have to have a smart meter at my house?

If your retailer informs you that they intend to install a smart meter at your premises and you have concerns, contact your retailer.

In contracts with consumers, retailers almost always reserve the right to replace meters at their discretion. This means that refusal to allow the installation of a smart meter may be a breach of your electricity contract. You may be able to switch to a retailer that is not using smart meters or has less-restrictive contract terms.





Note that:

- at some stage, all retailers may opt to replace existing meters with smart meters
- if the certification for the existing meter in your house is due to expire, the retailer you switch to will still require access to certify the metering installation before expiry to ensure that the meter is accurate
- consumer contracts occasionally include penalty clauses for early termination of a contract, so check your contract terms and conditions carefully.

How much will a smart meter cost me?

The rollout of smart meters is currently at no extra cost to consumers unless additional work is required, for example, if work is needed at your meter box or switchboard to make it safe.

Will my electricity bill increase as a result of a smart meter being installed?

There should be no cost increase to you. However, there have been cases where the existing traditional meter has deteriorated and has been under-recording electricity use. In such cases, once a smart meter is installed and accurately records electricity consumption, the bill would increase.

Where will a smart meter be installed in my house?

A smart meter will usually be installed in the same location as the meter it replaces. Relocation of meters may be agreed between the retailer and consumer. The consumer may be responsible for any costs.

What do I do if my retailer has told me they've been unable to install a smart meter at my premises because of unsafe wiring?

This is usually the responsibility of the property owner to resolve. Failure to resolve this may lead to disconnection of the premises. Offences under the Electricity (Safety) Regulations 2010 can result in fines of up to \$10,000 for individuals or up to \$50,000 for bodies corporate.

The regulations are available at www.legislation.govt.nz/regulation/public/2010/0036/latest/DLM2763501.html.

What happens to my existing meter if a smart meter is installed?

A smart meter usually replaces the existing meter. If there are multiple meters on the site, these may be replaced by a single smart meter. The replaced meter is returned to the organisation that owns it, where it will be disposed of if it has reached the end of its useful life.

What happens if I move house?

The smart meter remains at your original property and you would use the existing meter at your new property, which may or may not be a smart meter.

If I have a smart meter, am I still able to switch retailers?

Yes.

If a smart meter is installed, will it need to be replaced if I switch retailers?

There should be no need to replace meters if you switch retailer. However, there are two instances where your new retailer may want to replace the existing meter. The first is if the meter does not provide the functions that your new retailer needs. The second is where your new retailer can achieve cost savings with an alternative meter supplier.

Radio transmissions from smart meters must comply with local council and Ministry of Business, Innovation and Employment requirements. Contact your retailer with any questions about radio frequency fields from smart meters.

Where can I find out about radio frequency fields from smart meters?

Radio transmissions from smart meters must comply with requirements set by the local council and Ministry of Business, Innovation and Employment. Contact your retailer with any questions about radio frequency fields from smart meters.

General information about exposure standards and health effects is available from the National Radiation Laboratory of Environmental Science and Research (ESR) – see: www.esr.cri.nz/competencies/nrl/faq/Pages/SmartMeters.aspx.

Many studies have been conducted on the effects of radio frequency fields and to measure the radio frequency fields of smart meters. These are two of the reports:

- *Health and Safety Aspects of Electricity Smart Meters*, available at www.epecentre.ac.nz/media/smartmeter.shtml.

This is the only report the Electricity Authority is aware of that examines radio frequency concerns in the context of smart meters in New Zealand. It was commissioned by Arc Innovations and conducted by the Electric Power Engineering Centre, College of Engineering, University of Canterbury.


- *Health Impacts of Radio Frequency from Smart Meters*, available at: www.ccst.us/publications/2011/2011smartA.pdf.

This is a report for the Californian electricity market, commissioned and conducted by the California Council on Science and Technology.

Are smart meters required to be home area network (HAN) enabled?

The smart meters are one of a number of developing technologies that could act as the hub in a home area network that would control smart appliances, for example, washing machines, dryers and hot water cylinders.

Smart meters are not required to have HAN transmitters built into them. A number of providers of smart meters have decided to install them or have meters that can be retrofitted with the functionality very easily.

 **Fact sheets in this series** cover topics including residential electricity supply and how the electricity sector is regulated in New Zealand. The full set can be found at ea.govt.nz/consumer/factsheets.