# WHAT ARE THE BENEFITS OF HAVING A SMART METER?

The first benefit of having a smart meter is an accurate electricity bill. With older analogue meters, your retailer would frequently estimate your bill rather than sending a meter reader to your house every month.

These days some retailers are offering online forecasts of what your electricity bill will look like, based on the data your smart meter records. This means when it comes to paying your bill, you know how much it is likely to be.

For example, if they have turned off your hot water cylinder to reduce peak loads on the network, your smart meter will ensure you are charged the correct amount and given the discount for allowing your tariff to be controlled.

Retailers are also introducing an increasing range of time-of-use tariffs, where the cost of electricity varies depending on the time of day. If you have a smart meter you will be able to choose to schedule things like your dishwasher and washing machine for times when you pay less for your electricity, knowing that the meter will accurately record your consumption during these low cost periods.

The Parliamentary Commissioner for the Environment says: Smart meters are a technological solution that could lead to more efficient use of electricity in New Zealand households. By using electricity more efficiently, reducing consumption and peak demand, carbon dioxide emissions and other environmental impacts will be reduced.

### **KNOW YOUR FACTS**



### SMART METERS AND MY HEALTH

The maximum exposure from radio frequency radiation from a smart meter has been measured at one five hundredth of the allowed limit for New Zealand.

These standards are set by the Minstry of Health and you can read the report in our useful links. The Ministry also has information on smart meters on their website.



## **RADIATION FREQUENCY**

**HIGH FREQUENCY** HIGH ENERGY RADIATION

**ELECTROMAGNETIC SPECTRUM** 

#### **IONIZING RADIATION**

Can affect your DNA and creates a risk of cancer cells developing

NON-IONIZING RADIO FREQUENCY RADIATION

Smart meters



















Natural

Man-made









# MORE INFORMATION

What is a smart meter? ea.govt.nz/smart-meters **Understanding my bill** ea.govt.nz/your-bill

# USEFUL LINKS

Ministry of Health on smart meters bit.ly/MoHsmartmeterinfo

**Interagency Ministerial report on** radio frequency fields bit.ly/MoHreport

**Parliamentary Commissioner for the Environment smart meter resource** for consumers

bit.ly/PCEsmartmeterreport

Email: info@ea.govt.nz Online: ea.govt.nz



twitter.com/electricityauth



in electricity-authority-of-new-zealand



You youtube.com/user/ElectricityNZ

### **KNOW YOUR FACTS** CONTINUED

The amount of exposure to radiation from a smart meter would still be extremely low compared to the New Zealand limits, even if the meter is installed inside the house.

This means that smart meter radio frequency radiation is much lower than the limit set in the New Zealand Standard, which is more than 50 times lower than the recognised threshold for effects.

Smart meters also use very little power when they transmit your electricity data because their transmission times are intermittent and only add up to about 1 minute per day.

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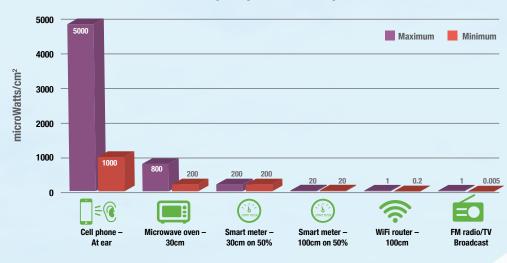
#### The Ministry of Health says:

The rules in NZ for public exposures are set at levels more than 50 times lower than the recognised threshold for established effects.

Exposures to radio frequency radiation from a smart meter are very low in comparison to the limits set out in the New Zealand radio frequency exposure standard.

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### **Instantaneous Radio Frequency Power Density Levels of Common Devices**



### HOW IS THE DATA FROM MY SMART METER TRANSMITTED?

The data that is transmitted from your smart meter back to your retailer is typically delivered via the metering equipment provider (MEP). An MEP is like a middle man and they only transfer your usage statistics and your Installation Control Point (ICP) number. Your ICP number is like a barcode that identifies your connection point. It doesn't even know your address, it just acts as reference to your location on the grid network. MEPs can only disclose meter data to the account holder or persons authorised by the account holder.

Once your retailer has received your data, they match your ICP number to your account details and record your electricity usage on your account.

Retailers are required to outline all of the purposes they have for your smart meter data in their privacy policy. This is readily available on your retailer's website or can be requested by contacting your retailer.

### Your data is protected in three ways.



Data travelling from your smart meter to your retailer is encrypted to ensure the security of your information



All electricity industry participants are bound by the Privacy Act 1993



The Electricity Industry Participation Code 2010 binds the metering equipment provider to protect your consumption information, ensuring only you or persons authorised by you have access to your meter data.





