

# The benefits of Smart Meters

## See the difference: Old Meter vs. New Meter

	
Must be read manually by someone on your property	Can communicate wirelessly with CUC
Needs a technician/lineman to visit your home to connect or disconnect electricity	Power can be connected or disconnected remotely
Unable to detect a power outage	Alerts CUC of power outages
Unable to provide consumption data every 15 minutes	Provides consumption data every 15 minutes to help customers conserve energy

## How much money will I save if I have a Smart Meter?

Having a Smart Meter (AMI meter) will not automatically save you money. How much you save on your energy bill will depend on whether you are able to use the information from your Smart Meter or your energy display to work out where you can reduce your energy use, cut your bill and protect the environment by lowering your carbon footprint. If you are already very energy efficient, you may find more ways to save using your Smart Meter.

However, there are also other ways that you may be able to save money on your energy bills. For example, paying through energy efficiency measures or changing to a convenient payment method (paying by monthly direct debit rather than paying by cash or cheque).



For more information on our AMI programme, please contact our Customer Services Department at 949-5200 or via e-mail at [service@cuc.ky](mailto:service@cuc.ky)

Have you wondered how much electricity you're using when your air conditioner is running during the hottest hours of the day?

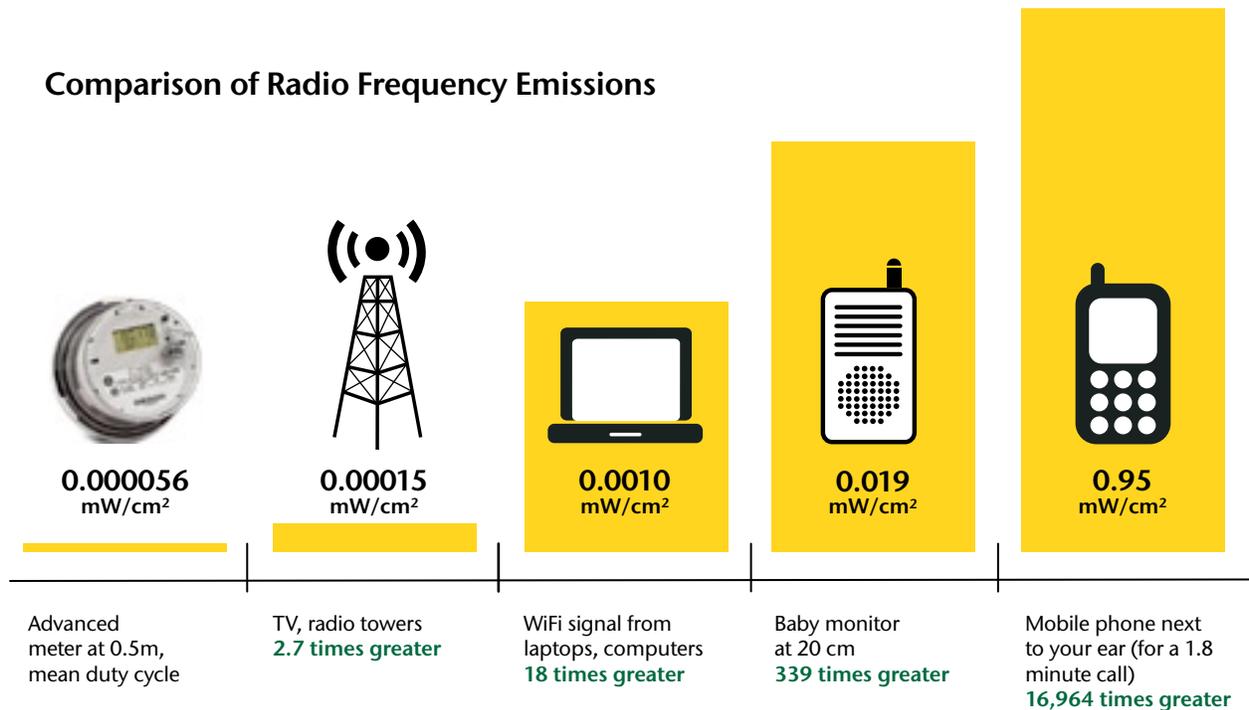
Or how much electricity you're using even when everything is turned off?

CUC's Smart Meters (AMI meters) will help you discover the amount of electricity you're using on a daily basis, giving you online tools to better manage and understand your electricity use. Some of these benefits will be felt immediately, others will build up over time and as the technology evolves:

- ▶ You will have access to tools that will help you better understand your bill and better manage your electricity use.
- ▶ You can find out how much electricity you've used at any point in the billing period - so you don't have to wait for your bill to find out if your consumption is higher or lower.
- ▶ If your power goes out at your home or business, your Smart Meter will notify CUC, allowing our crews to respond more effectively.
- ▶ Smart Meters reduce the environmental footprint of our meter reading operation by eliminating manual meter reading.
- ▶ Less time waiting in for the meter reader, though some visits from CUC may still be necessary to check the meter is working properly. In certain cases, CUC will also still visit occasionally for a routine safety check.
- ▶ Could help you save money by knowing what you're using, and having an idea of which appliances use the most energy, you may be able to reduce your energy usage and save money.
- ▶ Reduced theft of energy - from being able to prevent and detect theft of energy more easily so you won't have to pay for stolen energy.
- ▶ Faster resolution of problems where there are technical problems and faults with the supply of energy, Smart Meters should make it easier and quicker to identify and fix the problem. This means less inconvenience and may mean less time without your energy supply.
- ▶ In the future, as the technology develops and more customers receive Smart Meters, there will be more benefits for customers such as faster and easier connecting and disconnecting, options for prepayment meter customers and improved customer service.

# Smart Meters and Radio Frequency Emissions

## Comparison of Radio Frequency Emissions



Measured in milliwatts per square centimeter (mW/cm<sup>2</sup>)

Source: Exponent report: Status of Release on Radio Frequency exposure and Health in Relation to Advanced Metering Infrastructure (AMI)

In 2011, CUC started the roll-out of the Advanced Metering Infrastructure (AMI) or Smart Meter programme. The project has encountered some delays but we anticipate that it will be completed by the end of 2016.

There have been queries regarding the potential for concern as it relates to Smart Meters impacting the health of individuals. Significant research has been performed relating to this topic. AMI meters are commonly used within the United States, Canada and Europe and meet the required level of safety and reliability.

The health concerns raised relate to the ElectroMagnetic Frequency (“EMF”) emissions. To put this in perspective, the following items also emit electromagnetic frequencies: mobile telephones, baby monitors and computers. The diagram above illustrates how these items compare to the emission from your Smart Meter.

Recent research from top health authorities, including Health Canada and the World Health Organization declare the advanced meters are not harmful.

The typical residential smart meter operates at around 900 megahertz (MHz), which is similar to a household cordless telephone and emits far less EMF than many of the common electronic devices we use each day in our homes such as our microwaves or laptop computers. Advanced meters transmit for a total of one minute each day.

The Radio Frequency (RF) Maximum Permissible Exposure (MPE) levels for such devices are outlined in the Federal Communications Commission (FCC) 1.310, 1.1307(b) and FCC OET-65.

All testing conducted on the AMI meters used by CUC has shown that they fall within the limits outlined in the FCC requirements.

CUC remains committed to using the latest proven safe and reliable technologies to increase efficiencies within the business to benefit our customers. This is a very exciting time for the Company to be moving to such efficient technology using Smart Meters. We appreciate that customers may have questions on this change and we will ensure that up-to-date information with the progress of the AMI project is available on our website.

