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General Program Frequently Asked Questions



ENERGY IN B.C.

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See also

- > [Smart Metering Program business case](#) [PDF, 550 Kb]
- > [Outages, smart meters and singing in the dark](#)

For more info

[Sign up](#) for email updates on the Smart Metering Program.

Contact us

- > If you have inquiries about the Smart Metering Program, please [contact us](#).
- > Media enquiries: 604 928 6468

1. What is a smart meter?

Smart meters are digital meters that can capture and record the amount of power that is consumed or produced and when.

2. Why do we need smart meters?

The electricity system has changed very little over the past 50 years. Replacing the existing old fashioned meters with a modern, fully integrated, smart metering system is an important step forward in the modernization of BC Hydro's electricity system and will help to ensure that BC Hydro can continue to deliver safe, reliable, and cost effective electricity to customers across the province.

3. Will my rates go up because of smart meters?

The program will pay for itself by delivering \$1.6 billion in benefits, that include avoided costs and efficiencies, over the next 20 years, in today's dollars. Since BC Hydro is publically owned, all of those savings will benefit customers. To learn more about how the smart metering system will pay for itself see the [business case](#) [PDF, 551 Kb].

4. Are you introducing time-of-use rates?

BC Hydro will be maintaining the existing rate structure through the implementation period. Any future consideration of new time-of-use rate structures will include transparent public consultation, extensive research on whether there is any long-term need for time-of-use rates in British Columbia, and the independent regulatory review of the [BC Utilities Commission](#).

The Smart Metering Program will pay for itself without the need for mandatory time-of-use rates.

5. Will customers have to save energy for the Smart Metering Program to work?

No. Smart meters are part of a system that will make the electricity grid more efficient. In fact, operational efficiencies from within the grid make up more than 80 per cent of the program's benefits.

That means that even if customers don't adopt the new conservation tools, they will still benefit from a grid that is safer and more reliable and cost effective.

6. When will I get my smart meter?

Meter exchanges will begin in July 2011.

7. Doesn't BC Hydro already know when the power is off?

No, BC Hydro is not aware of power outages until customers call to inform us that their power is out. Smart meters will pinpoint problems quickly and automatically which will help get the power back on faster and safer.

8. How is BC Hydro ensuring my usage information is protected?

Protecting your privacy is our top priority and extensive security and privacy provisions are in place for the Smart Metering Program. BC Hydro will use data encryption like online banking system. In addition, our security methodology includes 'ethical hacking' testing by an independent security services firm.

9. What data will BC Hydro see?

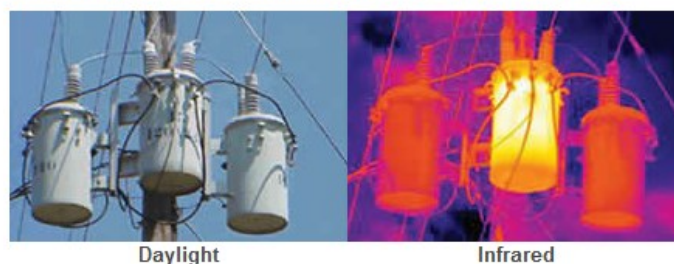
Smart meters will capture and store consumption information at hourly intervals for residential customers. This hourly data is sent back to BC Hydro four to six times a day. An example of the data BC Hydro is collecting is below.

Time	Energy Used
April 1, 2011, 6:00 p.m.	3.14 kWh
April 1, 2011, 7:00 p.m.	2.45 kWh
April 1, 2011, 8:00 p.m.	2.04 kWh

10. How is electricity theft a public safety problem?

Electricity theft is occurring in increasingly dangerous ways, posing major safety risks to the general public, first responders, and BC Hydro employees. Theft can lead to fires in our homes from live wires, high-intensity light bulbs, and overheated electrical ballasts in fluorescent lamps. In addition, the high current draw can overload transformers, creating public safety issues, increasing electricity costs and causing outages. In fact, when a transformer explodes and the lid comes off, the oil inside can cause a fireball. This can result in even larger fires and serious injuries.

Overloaded transformers look the same on the outside but may blow at anytime.



Additional hazards from electricity theft include electrocution, structural damage to homes, environmental damage, power outages, and higher costs. For more information on electricity theft, see [the electricity theft backgrounder](#) [PDF, 55 Kb] or BC Hydro's [electricity theft page](#).

11. Is the radio frequency emitted by smart meters safe?

Residential smart meter signals are short and infrequent. They transmit accumulated readings 4 to 6 times per day – for an average daily total of no more than one minute. The exposure from a smart meter over its entire 20-year life span is equivalent to the exposure during a single 30 minute cell phone call.

For more information, please see [Radio Frequency and BC Hydro's Smart Meters](#) and our meter vendor's [factsheet on radio frequency](#) [PDF, 171 Kb].

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12. If the World Health Organization (WHO) says cell phones are "possibly carcinogenic", are smart meters still safe?

The WHO has not drawn any definitive conclusions, but has called for further investigation.

While smart meters and cell phones both communicate wirelessly, they have different parameters. Smart meters are located outside of the home and transmit less than one minute per day at one hundredth the power of a cell phone. The exposure to radio frequency from a smart meter – over its entire 20-year lifespan – is the equivalent to a 30 minute cell phone conversation.

For more information on the WHO's recent announcement, please refer to Provincial Health Officer [Perry Kendall's statement](#).

13. Is there any mercury in BC Hydro's smart meters?

BC Hydro's smart meters do not contain any mercury. For more information, please visit the meter vendor's [website](#).

14. What have you learned from the experiences of other jurisdictions?

Examples of lessons learned from other utilities include using proven meter technology, maintaining existing rate structures through the installation period and dedicating more resources to ensuring customers are informed throughout the process.

15. What's the difference between a smart meter and an in-home display?

An [in-home display](#) is a separate device from a smart meter and is a bit like what a speedometer is to a car. It communicates with your smart meter in near real-time to show you how much energy you are using, when you are using it and at what cost in dollars and cents. Timely information about your consumption will help you and your family conserve in new ways.

In-home displays are expected to be available to customers in 2013. A secure website will also be available to provide customers with additional tools to help them manage their electricity consumption in spring 2012.

16. How will I be able to track my energy consumption?

Smart meters enable you to receive more timely information on your energy consumption. Once the smart metering system is in place, you will be able to choose optional in-home feedback tools that will allow you to better monitor your energy use, helping you and your family conserve in new ways.

For example, a secure BC Hydro website will display how much energy you have used, when it was used and at what cost – up to the previous day. This tool will be available in spring 2012.

[Additional tools](#), like optional in-home displays which provide you with near real-time electricity consumption information, are expected to be available in 2013.

17. What are the benefits?

The Smart Metering Program will:

- Improve safety and reliability;
- Enhance customer service;
- Reduce electricity theft;
- Improve operational efficiency and reduce wasted electricity;
- Support greater customer choice and control; and
- Help modernize British Columbia's electricity system.

Upgrading to a smart metering system is a key first step in modernizing BC Hydro's overall electricity system. By providing more measurement points throughout the electricity system, and the ability to measure electricity to and from customer homes and businesses, a more modern grid will enable the large scale accommodation of electric vehicles, customer generation and microgrids that will help communities throughout British Columbia become more self sufficient.

The realization of all of the above benefits begins with smart meters. For more information, please visit [Smart Metering Benefits](#).

18. Will the program create new jobs?

The actual installation of the new smart meters will create approximately 350 temporary jobs and generate \$30 to \$40 million in direct wages throughout the province.

There will be new jobs in field investigation and the call centre as well as new technology-rich jobs to maintain and operate the smart metering system.

In addition, the program will provide the infrastructure to support other economic development initiatives such as community based micro-grids, electric vehicles, and distributed generation.

19. You say the program will create jobs – what about all of the meter readers who will be out of work?

BC Hydro must invest in our infrastructure, mitigate rates and reduce costs for all our customers while being mindful of job impacts on Accenture employees.

20. Which technologies will be used?

BC Hydro has selected Itron Inc. as the metering system provider to supply over 1.8 million new electric meters as part of its Smart Metering Program. Itron will provide its OpenWay® smart meters, run over a multi-application communication network powered by Cisco.

Please visit [Smart Meter Technology](#) for details on how the technology works.

21. Will I need new appliances for my smart meter to work?

No. Smart meters measure the total amount of electricity consumed by your household – they do not measure the amount of electricity consumed by individual appliances or devices. Customers who choose to take advantage of energy saving appliances can reduce their electricity consumption and save money.

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WHO WE ARE

Our Commitment
Three Bottom Lines
Company Information
Our System

PLANNING & REGULATORY

Meeting Demand Growth
Regulatory
Acquiring Power
Site C

YOUR ACCOUNT

New Account
Moving
Rates
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