



Gridwatch Backgrounder





Backgrounder outline

The bad news (in brief):

- Ontarians don't feel they know how to conserve power effectively.
- Ontarians don't understand how the power system works.
- Ontarians don't believe public institutions do enough to educate them.
- Ontarians don't understand the purpose of programs like Time of Use billing.
- Ontarians don't think we're meeting climate change goals.

For more details on these points, see page 2.

The good news (in brief):

- A huge majority of Ontarians want to help.
- Studies show when people feel informed and empowered, they do the right thing.
- Data streams and studies on power use and carbon emissions exist today.
- Mobile applications like Gridwatch can make such data easier to find and understand.
- Ontarians can now easily see how their actions are part of the big picture.

For more details on these points, see page 3.

The bad news:
Ontario energy consumers feel confused and powerless.

In Ontario, we haven't done a good job sharing information or helping people become good Gridizens. There are many, many resources that attempt to explain Ontario's electricity system. However, most miss the mark. The information presented is too complicated so people stick to the status quo, which is an easier option, instead of actively changing behavior (CCBRP, 2010). An overwhelming majority of Ontario residents want to get more involved but few are confident about how the system works or what they can do to help.

- Ontarians don't understand the power system. Only 15% are familiar with the Independent Electricity System Operator (IESO) – the central organization that runs the entire Ontario grid. (OPA, p.79)
- Ontarians say they don't know enough about how to use electricity wisely. Six in ten feel they don't know enough to effectively conserve energy in their homes. (OPA, p.10 p.63)
- Ontarians don't believe public institutions do enough to help. Only 34% of Ontarians feel they're not getting clear and simple information and advice. (OPA, p.58)
- Ontarians wish they had more evidence. 83% said that they wanted to clearly see results of their efforts to conserve electricity. (OPA, p.49)
- Only 13% believe we're making progress. Most Ontario Gridizens are deeply skeptical that we're meeting our climate change goals. (OPA, p. 50)



The good news: Ontarians want to help.

Studies show when people feel informed and empowered, they do the right thing. The Ontario Power Authority says: "When Ontario electricity consumers are aware of their impact and shown the benefits/how to change, the majority take action." The real issue to tackle is a lack of energy literacy. Gridwatch helps to foster a greater understanding of the power system by showing our collective impact. Ontarians can now easily see how their actions are part of the big picture.

- A large (92%) majority of Ontario residents understand that reducing electricity usage helps to ensure a better future for coming generations (OPA, p. 49).
- 80% of Ontarians say they want to help the province meet its climate change goals (OPA, p. 49).
- Data about power use and carbon emissions exist but they have never been put together before.
- A new emissions factor study (Niagara College, 2011) combined with hourly reports from the IESO show Ontarians the environmental impact of electricity usage.
- Gridwatch displays this data in a clear, simple way. The app also helps people make the connections between Time-of-Use, carbon emissions, and demand so they can alter their behaviour in a meaningful way.



Sources and Further Reading

- Ontario Power Authority (OPA), "Conservation Attitudes and Behaviours" (2001). Available at: www.powerauthority.on.ca/sites/default/files/2011_Energy_Conservation_Attitude_and_Behavior.pdf
- Climate Change Behaviours Research Programme (CCBRP), Conference: "What Works in Behaviour Change?" (July 2010). Available at: <http://www.scotland.gov.uk/Topics/Research/by-topic/environment/social-research/Behaviour-Change-Research>
- <http://ieso.ca>
- <http://www.ontarioenergyboard.ca/OEB>
- Environmental Commissioner of Ontario, "Restoring Balance: A Review of the First Three Years of the Green Energy Act" (June 5th, 2012). The 2011 Annual Energy Conservation Progress Report - Volume 1. Available at: http://www.eco.on.ca/index.php/en_US/pubs/energy-conservation-reports/restoring-balance
- Niagara College, "Calculating Hourly Emission Factors for the Consumption of Purchased Electricity within a Specific Power Market" (2011).