

research snapshot

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Governments Must Do More to Involve Local Electricity Distribution Companies in Promoting Conservation

What is this research about?

The Ontario electricity system faces several major challenges. The province needs to dramatically reduce its electricity-related emissions of greenhouse gases (GHGs), smog, and other pollutants, released mainly by Ontario's remaining fossil fuel burning power plants. In addition approximately 80% of Ontario's generating units will need to be replaced within the next 20 years. The Conservation and demand management (CDM) initiatives have the potential to reduce the need to build new generating facilities, reduce the emissions and other impacts of the operations those facilities that are needed, reduce costs for electricity consumers and improve the overall efficiency and competitiveness of Ontario's economy.

Local distribution companies (LDCs), with their strong knowledge of their customer bases and well established trust relationships with their customers can be very effective agents for implementing CDM initiatives. LDCs currently need to apply to either the Ontario Power Authority (OPA) or the Ontario Energy Board (OEB) for funding to undertake CDM work. Both the OPA and the OEB use a cost effectiveness test called the Total Resource Cost (TRC) test to decide if proposed programs can receive funding. The TRC test has been recognized as a barrier for LDC delivered CDM programs for a number of reasons:

What you need to know:

Local Distribution Companies can to play a greater role in the design and delivery of conservation demand management programs (CDMs), but need a framework of more stable and comprehensive policies and institutional arrangements to do so. Failure to optimize Ontario's CDM policy framework means that more power plants will be built than are really needed, resulting in higher environmental impacts and higher costs to electricity consumers.

- The Ontario TRC can work against conservation initiatives that are more expensive in the short run, but may produce larger reductions of electricity use in the future.
- The TRC test may not recognize innovative programs that have not yet been proven to work over a long time period.
- The way the OPA and OEB apply the test encourages smaller programs without integrating them into a larger CMA approach.

What did the researchers do?

The researchers looked at the effect of the Total Resource Cost test on electricity conservation and demand management (CDM) efforts in Ontario.

Some of the questions that researchers used to direct their research were:

- What is the effect of the TRC test as it is applied by the OEM and OPA on LDC CDM programs?
- How is Ontario's approach to regulating CDM programs by distribution utilities different from the approach of other places in North America that are leaders in CDM?
- How can the TRC test be changed to encourage CDM programs by LDCs in Ontario?

For their study, the researchers:

- Carried out a literature review
- Looked at case studies of cost effectiveness tests on CDM efforts in other parts of North America.
- Held interviews with key CDM practitioners in Ontario

What did the researchers find?

The researchers found that Ontario's CDM policies are lagging behind those of other jurisdictions in North America. British Columbia, New York, and California all have much more comprehensive CDM policy frameworks. Despite the establishment of ambitious CDM goals Ontario's policy framework remains incomplete, confusing and fragmented by comparison.

How can you use this research?

The study presents a number of recommendations Ontario's electricity CDM policy framework can be improved. The research also recommends mechanisms to improve public accountability for CDM programs. The key recommendations include:

- The Minister of Energy and Infrastructure carrying out a detailed review of the ways that CDM programs are funded in Ontario. This will include the roles of the OPA, the OEB, and the ministry itself.

- The Ministry of Energy and Infrastructure creating a new office within the ministry called Energy Efficiency Ontario. This office would co-ordinate energy efficiency and CDM programs in the province.

About the Researchers

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