

APRIL 19, 2024

Efficient Electrification: Feasibility Analysis with RETScreen

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Agenda

1. Welcome and introduction
2. Review of the Efficient Electrification Toolkit
3. Feasibility analysis using RETScreen – hands-on practice
4. RETScreen tools and future training
5. Q&A

Workshop objectives

1. Overview of the Efficient Electrification Toolkit
2. Learn how RETScreen Expert can assist with efficient electrification planning.
3. Apply RETScreen Expert in a practice setting (three methods)
4. Provide an update on next steps in the Efficient Electrification Toolkit series:
 - a. RETScreen mini-workshops
 - b. Technical helpdesk



Review of the Efficient Electrification Toolkit

Five-step approach to efficient electrification

1

Establish goals and constraints

Understanding each building's constraints and establishing intelligent, realistic objectives are key to project success.

2

Reduce heating demand

Reduce the amount of energy needed to heat a building through envelope and mechanical upgrades to improve energy performance and reduce capital costs of new systems.

3

Optimize the HVAC system

Reduce energy waste in building mechanical systems through temperature controls, zoning and heat recovery.

4

Electrify heating systems

Use the life-cycle cost analysis section to compare the energy and emissions reductions and operating costs of electric heating systems over the lifecycle of systems under consideration.

5

Balance heating and cooling sources

Explore the cost and GHG emission implications of different fuels, including hybrid and all-electric HVAC systems.

What's in the toolkit?

The Efficient Electrification Toolkit is a resource for anyone considering, planning or designing building electrification projects in Ontario.

This toolkit can be used to support informed decision-making based on your organization's goals and constraints.

Using a five-step decision-making process, the toolkit helps building operators across Ontario address energy and/or GHG reduction objectives in an energy-efficient and cost-effective manner.



Technical planning tools

- Fuel-switching calculators
- Lifecycle cost assessment tools
- RETScreen templates



Training opportunities

- Net-zero planning with RETScreen
- Financial analysis
- Electrifying HVAC with heat pumps



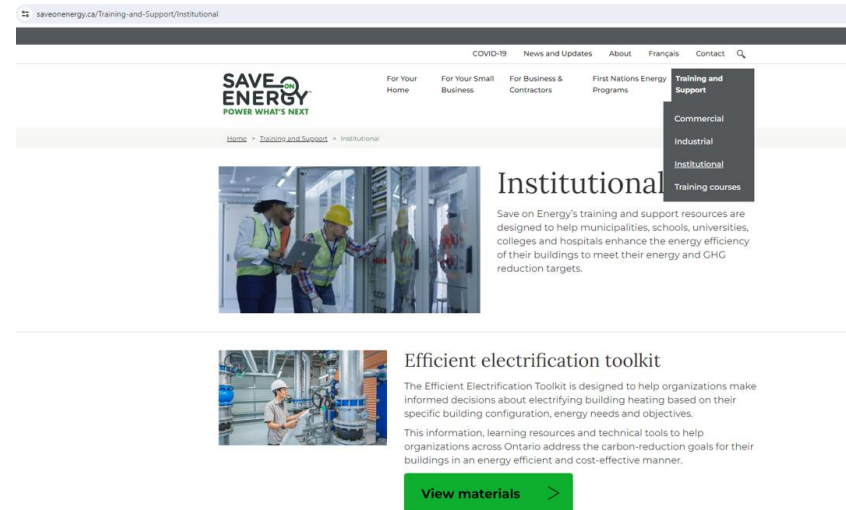
Hands-on support

- Technical support with the tools or post-training support
- Contact trainingandsupport@ieso.ca

Accessing Save on Energy resources

- Go to www.saveonenergy.ca/Training-and-Support
- The Efficient Electrification Toolkit is accessible to all building sectors listed:
 - Commercial
 - Industrial
 - Institutional
- Resources are laid out according to each step in the process.

Training and Support



The screenshot shows the Save on Energy website's 'Training and Support' page for the 'Institutional' sector. The page features a navigation menu with options for 'Home', 'For Your Small Business', 'For Business & Contractors', and 'First Nations Energy Programs'. A dropdown menu is open, showing 'Training and Support' with sub-options for 'Commercial', 'Industrial', 'Institutional', and 'Training courses'. The main content area includes a header for 'Institutional' with a sub-header 'Training courses'. Below this is a large image of two workers in safety gear reviewing a laptop. To the right of the image, text states: 'Save on Energy's training and support resources are designed to help municipalities, schools, universities, colleges and hospitals enhance the energy efficiency of their buildings to meet their energy and GHG reduction targets.' Below this is a section for the 'Efficient electrification toolkit' with a sub-image of a worker and text explaining that the toolkit is designed to help organizations make informed decisions about electrifying building heating based on their specific building configuration, energy needs and objectives. A 'View materials' button is located at the bottom right of this section.



Planning for Efficient Electrification: What's Next?

Efficient Electrification Toolkit and Helpdesk

The webinar recording and materials will be shared with you by email.

The tools can be accessed at SaveonEnergy.ca/Training-and-Support.

For questions and technical support regarding the Efficient Electrification Toolkit, contact trainingandsupport@ieso.ca.

Please use “EE toolkit helpdesk” as your email subject line. Requests will be triaged and addressed in the order they are received.

Efficient Electrification Webinar Series

Next events:

Using the Net Zero Planning Tool – May 16

Financial Analysis using RETScreen – June 14

View upcoming [events on our calendar](#).

[Sign up for our bulletin](#) to stay informed when registration opens.

Thank you!

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