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**SAVE ON ENERGY**

# Existing Building Commissioning Program Overview

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May 14, 2024

# Existing Building Commissioning (EBCx) program

- The EBCx program is designed to help owners, operators and managers of commercial and institutional buildings in Ontario improve their energy management
- Participants will realize energy savings from improved facility operations and maintenance (O&M) business practices
- Implementing building management best practices will help reduce energy wastage, enhance occupant comfort and increase profitability



Learn more at [SaveOnEnergy.ca/EBCx](https://www.saveonenergy.ca/EBCx)

# EBCx program – key benefits

- **Increase profitability and property value:** reduce your operating costs, prolong equipment for higher profits and property value
- **Reduce environmental impact:** a commissioning provider (CP) can help you identify ways to reduce your carbon footprint
- **Develop a continuous improvement mindset:** learn how to improve your building management practices and implement a continuous improvement process
- **Enhance occupant comfort:** achieve better indoor air quality and reduced noise for occupant comfort



# EBCx overview

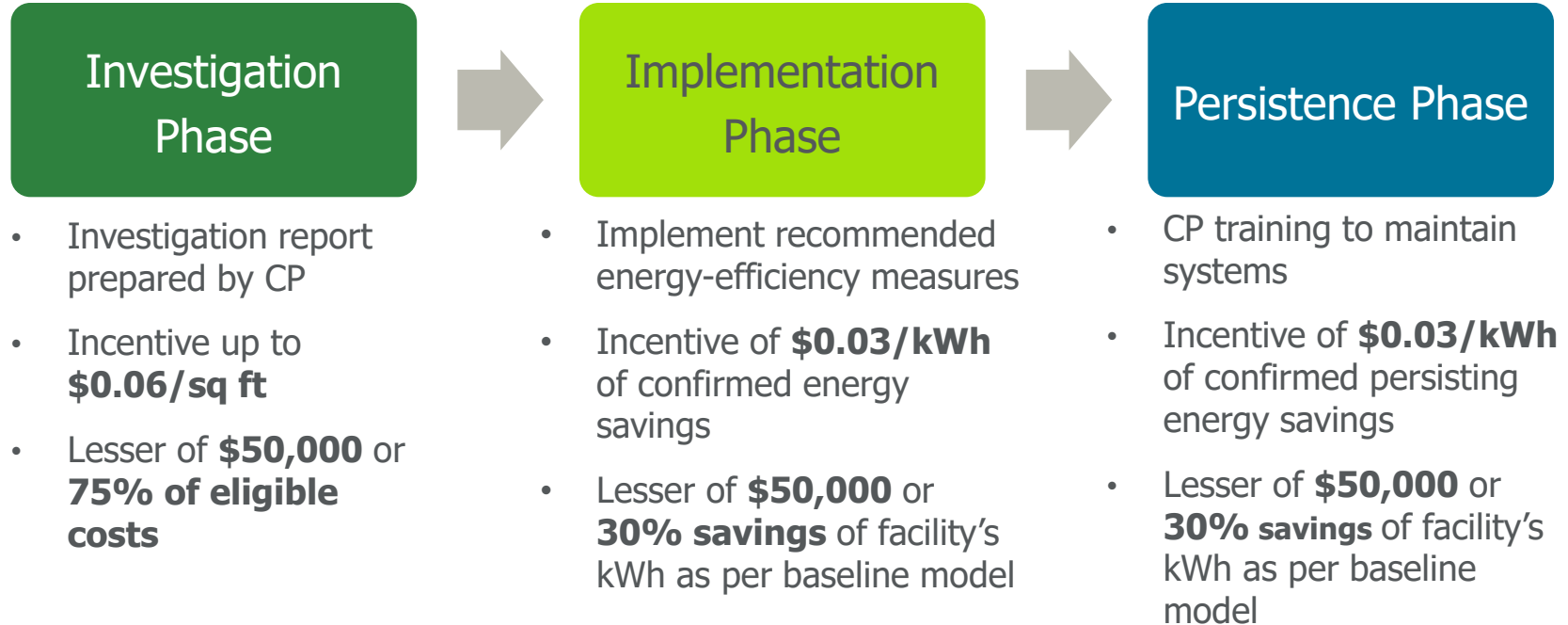
- Commercial and institutional businesses can participate
- Offers incentives for participants to hire a CP to undertake building recommissioning
- The CP will train participants to engage in ongoing commissioning and to integrate this process into their standard management practices
- Designed to help Ontario businesses save energy, reduce costs and increase productivity



## EBCx facility eligibility

- Minimum of **12 months** of continuous energy data
- Minimum facility consumption of **750,000 kWh** per annum, not including industrial and manufacturing processes
- Must not have undertaken recommissioning exercise in last two years
- Must not be participating in a Building Certification Program that requires EBCx as a prerequisite
- Must be working with a CP who is approved and on the Qualified Commissioning Provider List

# EBCx program incentive structure





## Ideal candidates for EBCx

- Frequent operator controls overrides
- Simultaneous or unnecessary heating/cooling
- Poor building pressurization
- Indoor air quality issues
- Deferred maintenance issues
- Occupant comfort complaints

# EBCx program project and measures eligibility



- Occupant behavioural measures
- Set point and scheduling optimization
- Air and water balancing
- Other operational and maintenance changes
- Equipment repair and minor replacements



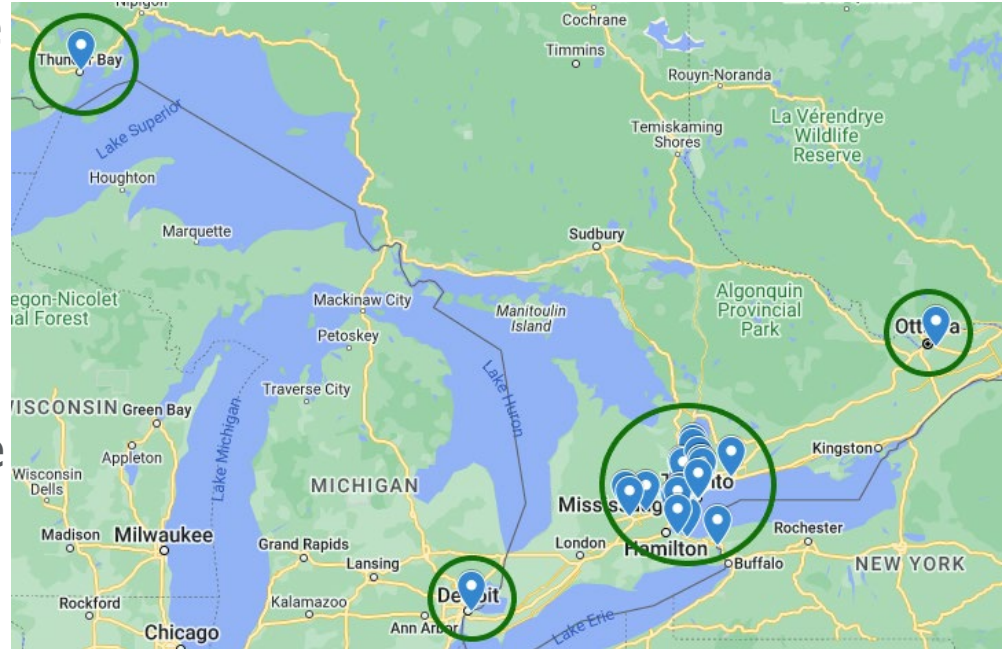


## Common EBCx measures

1. Reduce equipment runtime
2. Optimize economizer operation
3. Eliminate simultaneous heating and cooling
4. Optimize supply air temperature
5. Optimize zone/setback temperature set points
6. Eliminate unnecessary lighting hours
7. Optimize ventilation rates
8. Optimize static pressure/differential pressure control of fans and pumps
9. Add/optimize chilled water temperature reset
10. Eliminate passing (leaky valves)

# How to get started

- Assess if your facility meets the minimum eligibility requirements and has eligible measure(s) potential
- Engage with one of the Qualified CPs about the EBCx program and recommissioning
- The qualified CP will submit the application and all reports on the applicant's behalf



# EBCx program timelines

- CP registration
- Deadline for application submission
- Deadline for persistence completion

Ongoing

December 31, 2024


December 31, 2027

# Online resources

- [Program requirements](#)
- [Program brochure](#)
- [Participant agreement](#)
- [Measurement & Verification \(M&V\) guide](#)
- [Additional resources: webinars and fact sheets](#)



# Fact sheets & Guides








**TUNE UP YOUR OFFICE BUILDING.**  
**REDUCE ENERGY WASTE.**

Space configurations, occupancy levels and tenant requirements in office buildings all change over time, affecting energy performance and costs. **Existing building commissioning (EBCx) is a process to optimize a building's performance** based on current requirements using operational funds.

**EBCx has many benefits, including:**

-  **Decreases maintenance costs**
-  **Extends equipment life**
-  **Improves ventilation and air quality**
-  **Addresses persistent issues such as noise, temperature and pressure to enhance occupant comfort and satisfaction**
-  **Saves 5-15% on energy bills**
-  **Reduces greenhouse gas emissions**
-  **Enhances operator training and expertise**

### Consider EBCx if:

- Ventilation systems are working 24/7
- You receive regular complaints, such as about air or water temperature, odours, or noises
- Doors blow open or get stuck closed
- Some sections of the building have changed in use – such as a new workspace configuration or a meeting room converted to storage space
- You need to run your heating system late in the spring and early in the fall
- Your building uses more energy than similar office buildings

### Managing EBCx Projects

Assign an internal leader such as a project or facilities manager to coordinate the process, provide information about the building, number of occupants, operation schedules and current issues or complaints. The internal leader should expect to be closely involved in the planning stage and to accompany the EBCx provider for several days over six to twelve months during the investigation and implementation stages.

### What to look for in an EBCx provider

- Excellent communication skills
- Expertise in ventilation and mechanical systems and automation controls

### What to expect from your EBCx provider

- EBCx plan with current facility requirements (CFR)
- Investigation findings log
- Detailed implementation plan
- Persistence plan and staff training

### EBCx tools and resources

- [Natural Resources Canada \(NRC\) Energy benchmarking for office buildings](#)
- [NRC.ca EBCx Guide](#)
- [NRC.ca EBCx Pre-Screening Tool](#)

### Save on Energy incentives are available for your next EBCx project

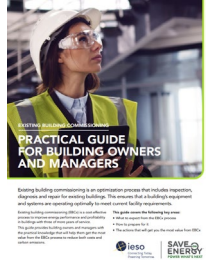
- Receive a 50 percent incentive for completing [EBCx training courses](#)
- The EBCx program offers incentives to participants who undertake EBCx activities and achieve energy savings. [Learn more and apply here.](#)



### THE EBCx PROCESS

- 1. Planning**
  - **Building owner or internal leader** selects an EBCx provider from the list of [qualified commissioning providers](#) for the EBCx program.
  - **EBCx provider** leads interviews and a building walk-through with operations and maintenance staff to plan and prioritize detailed investigation activities in the fall.
  - **Deliverable:** EBCx plan that lays out the steps of the EBCx process for your building.
- 2. Investigation**
  - **EBCx provider** conducts a detailed investigation of the site to ensure mechanical systems are operating properly and to identify performance issues. This involves on-site inspections and monitoring equipment performance with data loggers over several months.
  - **Deliverable:** Findings log with savings estimates.
- 3. Implementation**
  - **Deliverable:** Implementation plan, including: recommended actions, roles and responsibilities, timeline, verification and monitoring requirements, and operator training and persistence activities.
  - Implementation may be led by the internal leader or the EBCx provider, and should be guided by the implementation plan.
- 4. Hand-off**
  - **Deliverable:** Persistence plan to guide operations and maintenance actions over time, to maintain energy and performance improvements.
  - EBCx provider trains building staff in persistence strategies.

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# FAQ's

## **Q. Who is responsible for completing and submitting the application on the online portal?**

- The commissioning provider

## **Q. What is the minimum facility electricity consumption requirement to participate in the EBCx program?**

- 750,000 kWh annual consumption

## **Q. Should an application be submitted for each facility?**

- Yes, each application is tied to one facility

## FAQ's cont'd

### **Q. What are examples of ineligible measures in the EBCx program?**

- Lighting projects
- Process load ECMs
- Behind-the-Meter generation projects
- Fuel switching
- Measures funded under other Save on Energy incentive programs

### **Q. What are considered eligible project costs in the EBCx Program?**

- Required inspection and testing costs
- Analysis and ECM design costs where applicable
- Project management costs

## FAQ's cont'd

### Q. What are the approximate timelines for the review process?

- A. Should all necessary information be made available for technical review, the following timelines can be expected:

Review stage	Approximate processing time (weeks)
Application	2
Investigation phase	2
Implementation phase	2
Persistence phase	3
Incentive invoices per phase	1



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# Thank you!

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