

SAVE NERGY POWER WHAT'S NEXT



The average age of a school in Ontario is almost 40 years.*
A lot can change during this time to impact a school's performance.

Existing building commissioning (EBCx) is a process to optimize a building's performance based on current requirements.





Decreases maintenance costs



Extends equipment life



Improves ventilation and air quality



Addresses persistent issues such as noise, temperature and air and water pressure



Saves 5-15% on energy bills



Reduces greenhouse gas emissions



Enhances staff training and expertise

Consider EBCx if:

- You receive complaints about issues such as air or water temperature, odours, or noises
- Some sections of the building have changed use, such as a former office to a classroom or computer lab
- The number of students and staff has changed by more than 20%
- Your school uses more energy than similar schools
- Ventilation systems are working 24/7

Managing EBCx Projects

Assign an internal leader to work with the EBCx provider. The leader should expect to be closely involved in the planning stages of projects and will provide information about the building, number of students and staff, operation schedules, and current issues or complaints. The time commitment of the leader is 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 (NRCan) Energy benchmarking for Ontario school boards is available through the Ministry of Education's Utility Consumption Database (UCD)
- NRCan Recommissioning Guide
- NRCan 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. <u>Learn more and apply here</u>.





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.
- **Deliverable:** EBCx plan that lays out the steps of the EBCx process for your school.

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.

^{*} Education Ministry Facility Conditions Index 2016