



REFRIGERATED WAREHOUSES AND DISTRIBUTION CENTRES.

PUT A CHILL ON ENERGY COSTS.

Energy is the second-highest cost for most temperature-controlled warehouses and distribution centres. Existing building commissioning (EBCx) is a process to optimize a facility's performance to reduce energy costs, increase product integrity and extend the life of compressors and other equipment.

EBCx has many benefits, including:



Increases product integrity and reduce spoilage



Decreases maintenance costs and add diagnostic tools



Extends equipment life, reliability, and productivity



Addresses persistent issues such as noise and temperature to improve worker comfort and safety



Saves 5-15% on energy bills



Reduces greenhouse gas emissions



Enhances staff training and expertise

Consider EBCx if:

- Temperature, humidity, or other product requirements have shifted over time
- You have minor, persistent issues with compressors or other refrigeration equipment
- You have noticed unusual noises, odours, or moisture
- Compressor performance has slipped
- There have been changes or additions to the facility design
- The Global Adjustment portion of your energy bill has increased significantly

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 employees, 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 (NRCan) EBCx Guide
- NRCan EBCx Pre-Screening tool

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

- Receive a 50 percent incentive for completing <u>EBCx training courses</u>
- 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 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.