

Existing Building Commissioning (EBCx)

An Effective Approach to Eliminate Energy Waste



What Is EBCx?

A QUALITY-FOCUSED PROCESS

to ensure that a building operates optimally and as intended based on its current use.



A COST-EFFECTIVE INVESTMENT

to optimize the performance of existing equipment and systems through low-cost or no-cost operational improvements.



A BROAD CONCEPT

that includes other terms such as recommissioning (RCx), retro-commissioning and ongoing commissioning (OCx).

Why Choose an EBCx Project?



Requires a **lower investment** than capital investment projects



Generates payback in typically **3 years or less**



Produces **energy and cost savings** in the range of **5 to 20%**



Differences between EBCx projects and energy audits:

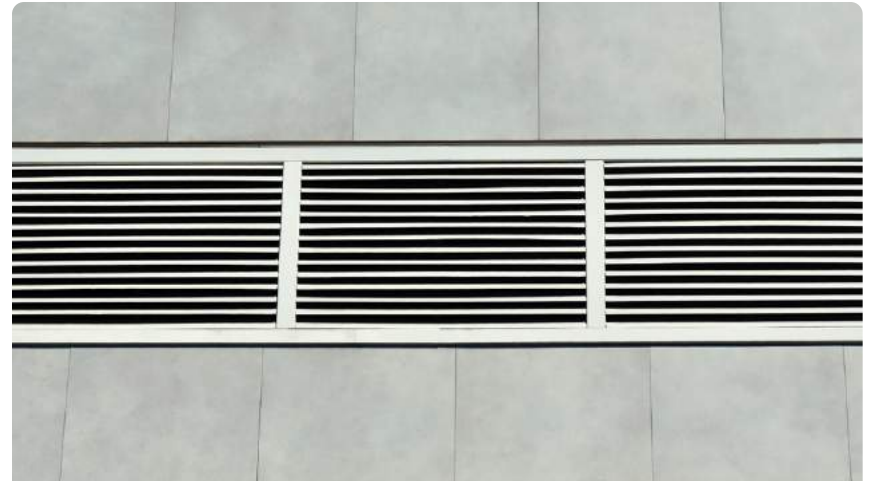
COMPARISONS	EBCx	ENERGY AUDIT
Primary focus	Optimizing existing systems performance (energy, water, air quality, occupant comfort)	Determining where, when, why and how energy is being used
Main outcome	O&M improvements and low-cost savings opportunities	Low-cost and capital retrofit savings opportunities
Expected energy & cost savings	5 to 20%	Often up to 30%
Payback	Typically less than 3 years	Typically greater than 3 years



Examples of EBCx measures:



Aligning operation schedules with actual building use
Optimizing the sequence of operation for building systems



Optimizing fresh air intake

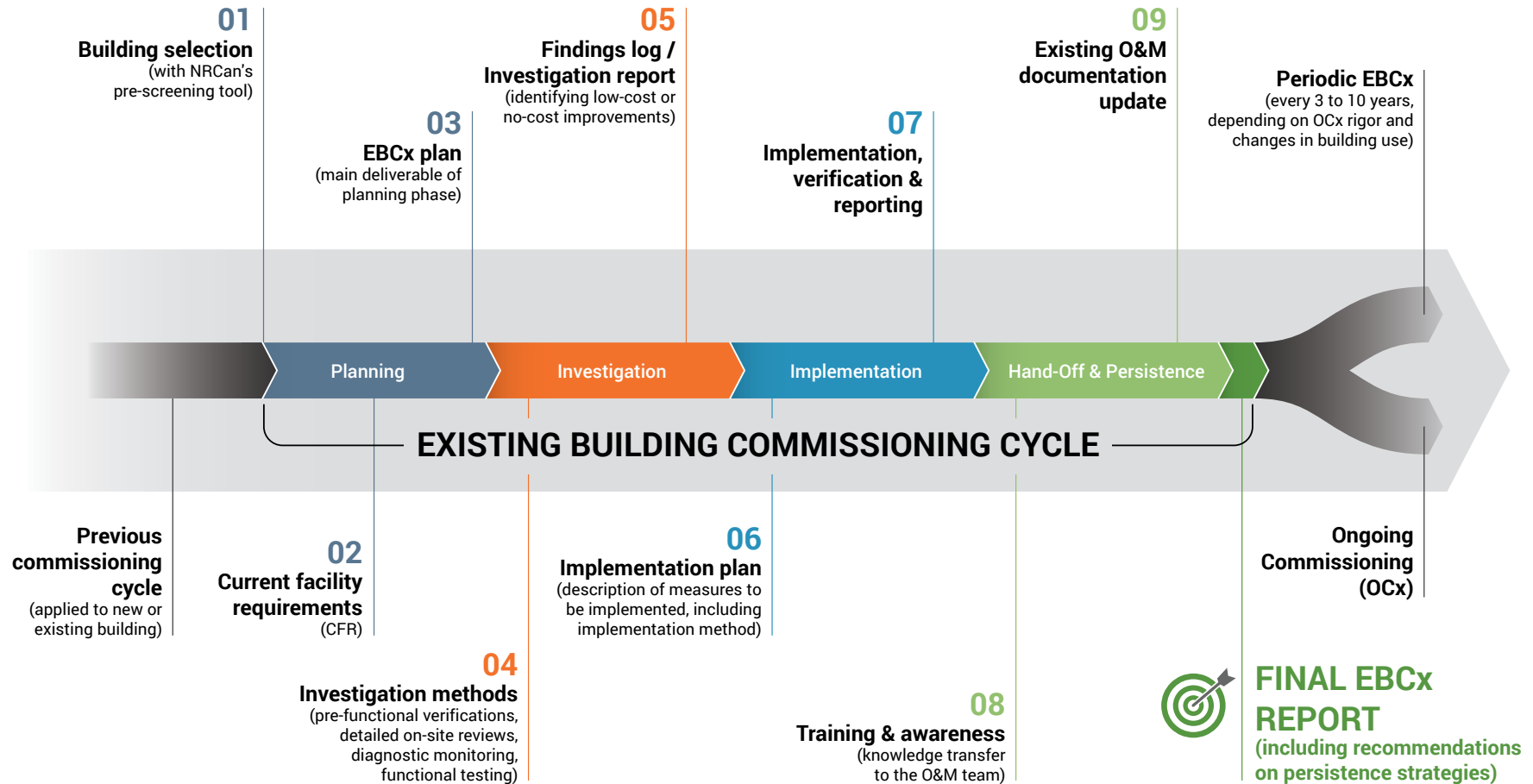


Readjusting or optimizing setpoints



Eliminating simultaneous heating and cooling

EBCx Cycle, Phases & Milestones



How Much Does it Cost?



The cost of an EBCx project ranges from

\$0.86 to \$4.95/m²

with an average cost of

\$2.58/m²



Typically, the cost of the EBCx provider represents

35 to 75%

of the total project cost.

The remaining budget is used to implement the measures.

The project cost can be impacted by the:

- › Number and complexity of systems to investigate
- › Size of the facility
- › Age and condition of equipment and systems
- › Knowledge level of on-site staff interfacing with the project
- › Extent of the O&M program and documentation

Is My Building a Good Candidate for EBCx?

Most buildings can benefit from an EBCx project. However, the following characteristics help to determine whether a building is a good candidate:



Age and condition of
mechanical equipment



Financial
considerations



O&M staff
participation



Type and capabilities
of building controls



Available and
up-to-date building
documentation



Owner support
with an in-house
champion



No major upcoming
retrofit projects

Evaluate the potential of your building with the NRCan pre-screening tool



Want to Learn More About EBCx?

CLICK HERE



No cat.: M154-155/2023E-PDF | ISBN: 978-0-660-48258-3

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