



THE INSTITUTIONAL OWNER'S CASE FOR BUILDING TO ZERO CARBON

Canada Green Building Council®

THE OPPORTUNITY IS CLEAR

Buildings are a significant contributor to greenhouse gas (GHG) emissions. In fact, building operations are responsible for 17 per cent of Canada's carbon emissions, with construction and materials representing a further 11 per cent. Institutional and government building owners can demonstrate carbon leadership by taking substantive and long-term climate action that also delivers financial returns and greater asset resiliency by making new and existing assets zero carbon buildings.

EVERY BUILDING ZERO

The Zero Carbon Building Standard (ZCB Standard) is a made-in-Canada solution based on learnings from real-world projects. The Standard offers a framework to future-proof Canada's building stock with proven solutions that will help make significant progress toward the country's 2030 carbon reduction goals, and the 2050 target of a decarbonized built environment. Designed to minimize and then offset carbon emissions, ZCB Standard buildings can reduce life-cycle costs and future-proof asset values against extreme weather, rising energy and carbon pollution prices, and the need for extensive retrofits.

THE ECONOMICS ARE SOUND

The Canada Green Building Council commissioned a ground-breaking study that demonstrates the financial viability of zero carbon buildings. The research shows that zero carbon buildings can yield a positive financial return over a 25-year lifecycle, while requiring only a modest 8 per cent capital cost premium. What's more, the business case will only get stronger over time as the cost of carbon rises. Zero carbon buildings also drive innovation and market transition, creating jobs and opportunities for all Canadians in a low-carbon economy.

THE TIME TO ACT IS NOW

The cost of not adopting a zero-carbon building approach increases with each passing day. To unlock the value of zero carbon buildings, owners are encouraged to task project teams with the following:

- Ask design teams to meet the requirements for Zero Carbon Building Standard certification, undertake feasibility studies, and evaluate zero carbon building options using life-cycle costing that recognizes the rising price for carbon pollution.
- Projects that are unable to achieve ZCB Standard requirements today should incorporate measures to ensure they can more easily transition to the ZCB Standard in the future. This includes ensuring a low heating demand (or 'thermal energy demand intensity') to enable the use of low-grade heating and making provisions for the use of heat pump technology and solar photovoltaics in the future.
- Take advantage of the wide range of existing financial incentives and capital improvement grants to achieve a ZCB design.

ZERO CARBON BUILDING CERTIFICATION

The ZCB Standard is a made-in-Canada solution to help building owners and investors protect and enhance the value and marketability of their assets. It provides enough flexibility to be achieved by all project types. Certification to the ZCB Standard provides independent, third-party verification of climate change mitigation efforts at the building design stage and in operations to achieve the full potential benefits provided by zero carbon buildings.

LEARN MORE ABOUT ZCB STANDARD

Visit cagbc.org/zerocarbon.

BENEFITS OF ZERO CARBON BUILDINGS



Reduce risk to asset value due to future extreme weather



Achieve lifecycle value through O+M savings



Meet climate leadership objectives cost effectively



Drive innovation and economic growth with the jobs of tomorrow



Improve comfort, health and productivity



Protect against rising energy and carbon pollution prices