



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, representing 17% of emissions nationally. Building owners have an opportunity to take real and long-term climate action in a way that delivers financial returns and greater asset resiliency by making new and existing assets Zero Carbon Buildings (ZCBs). Designed to minimize carbon emissions and then offset any remaining emissions by generating clean, renewable energy onsite or offsite, ZCBs can reduce life-cycle costs and future proof asset values

against future weather, rising energy and carbon pollution prices, and the need for future retrofits.

THE ECONOMICS ARE SOUND

The Canada Green Building Council commissioned a ground-breaking study that demonstrates the financial viability of ZCBs. The research shows that ZCBs can yield a positive financial return over a 25-year life-cycle, while requiring only a modest 8% capital cost premium. What's more, the business case will only get stronger over time as the cost of carbon rises.

THE TIME TO ACT IS NOW

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

- Ask design teams to develop designs that meet the requirements for Zero Carbon Building certification, undertake feasibility studies and evaluate ZCB options using life-cycle costing that recognizes the rising price for carbon pollution.
- Projects that are unable to achieve ZCB requirements today should incorporate measures to ensure the buildings can readily transition to ZCB 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 ZCBs.

Contact us at zerocarbon@cagbc.org to learn more about the ZCB standard and the economic case for ZCBs in your portfolio.

BENEFITS OF ZERO CARBON BUILDINGS



Meet climate leadership objectives cost effectively



Avoid costly and disruptive future retrofits



Achieve lifecycle value through O+M savings



Improve comfort, health and productivity



Reduce risk to asset value due to future extreme weather



Drive innovation and economic growth with the jobs of tomorrow



Protect against rising energy and carbon pollution prices