

Healthy Zero-Carbon Buildings

Vision for 2050

All buildings across Surrey are healthy, energy efficient, and zero-carbon in operational emissions. They are constructed to minimize lifecycle emissions, are comfortable year-round, and help protect occupants from the impacts of climate change.



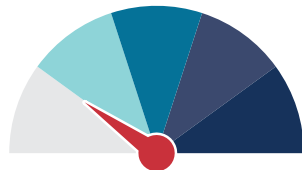
Measures and Targets

- > By 2050, all operational GHG emissions from existing buildings are to be eliminated.
- > By 2030, all new buildings are to be designed to avoid operational GHG emissions.



Avoid carbon pollution and improve energy efficiency and resilience to climate impacts in new buildings

Where We Are Now



"Getting Started"

Strengths to Build On

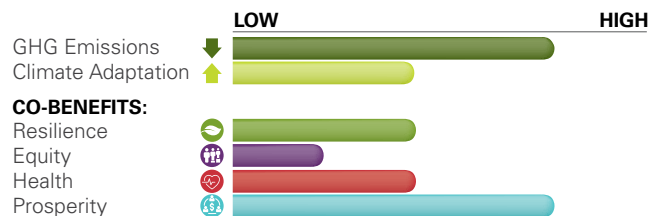
- > Surrey was an early adopter of Energy Step Code
- > Rapid growth rate creates opportunity for new construction standards to make an impact
- > Strong local expertise and building industry leadership

Shifts* – What is needed to reach this Goal?

- B1** Update City policies and bylaws to rapidly phase out fossil fuel combustion in new buildings and improve their energy efficiency and climate resilience.
- B2** Align City zoning, policies, processes, and permitting to reduce barriers to and enable the rapid construction of new resilient zero-carbon buildings.
- B3** Advocate to senior levels of government, BC Hydro, and other agencies to increase capacity and growth of the resilient zero-carbon building industry.
- B4** Implement policies for zero-carbon resilient buildings through continuous improvement processes.

Potential outcomes and benefits of implementing these Shifts

- > Zero-emissions new buildings avoid carbon pollution
- > Improved health and resilience by designing for future climate (e.g. heat) and improved air quality/comfort
- > Reduces costs of future retrofits; large economic development potential



*See Implementation Table (Section G) for specific Actions supporting these Shifts

GOAL 2

Phase out carbon pollution and improve energy efficiency of existing buildings.

Where We Are Now



"Preparing to Start"

Strengths to Build On

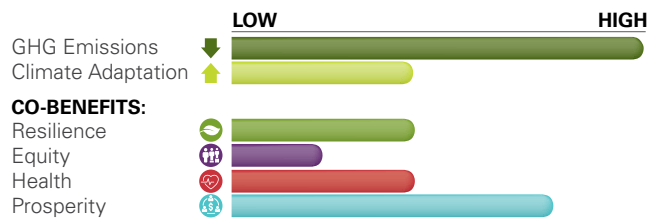
- > Strong regional collaboration and leadership
- > Aligned provincial and federal policies
- > Strong and engaged local construction industry

Shifts* – What is needed to reach this Goal?

B5 Advocate for and implement programs and policies to accelerate affordable and inclusive zero-carbon resilience retrofits.

Potential outcomes and benefits of implementing these Shifts

- > One of largest GHG emissions reduction opportunities, but action will take time
- > Improved comfort and air quality (health)
- > Switching to heat pumps provides cooling (adaptation/resilience)
- > Large economic development potential



*See Implementation Table (Section G) for specific Actions supporting these Shifts