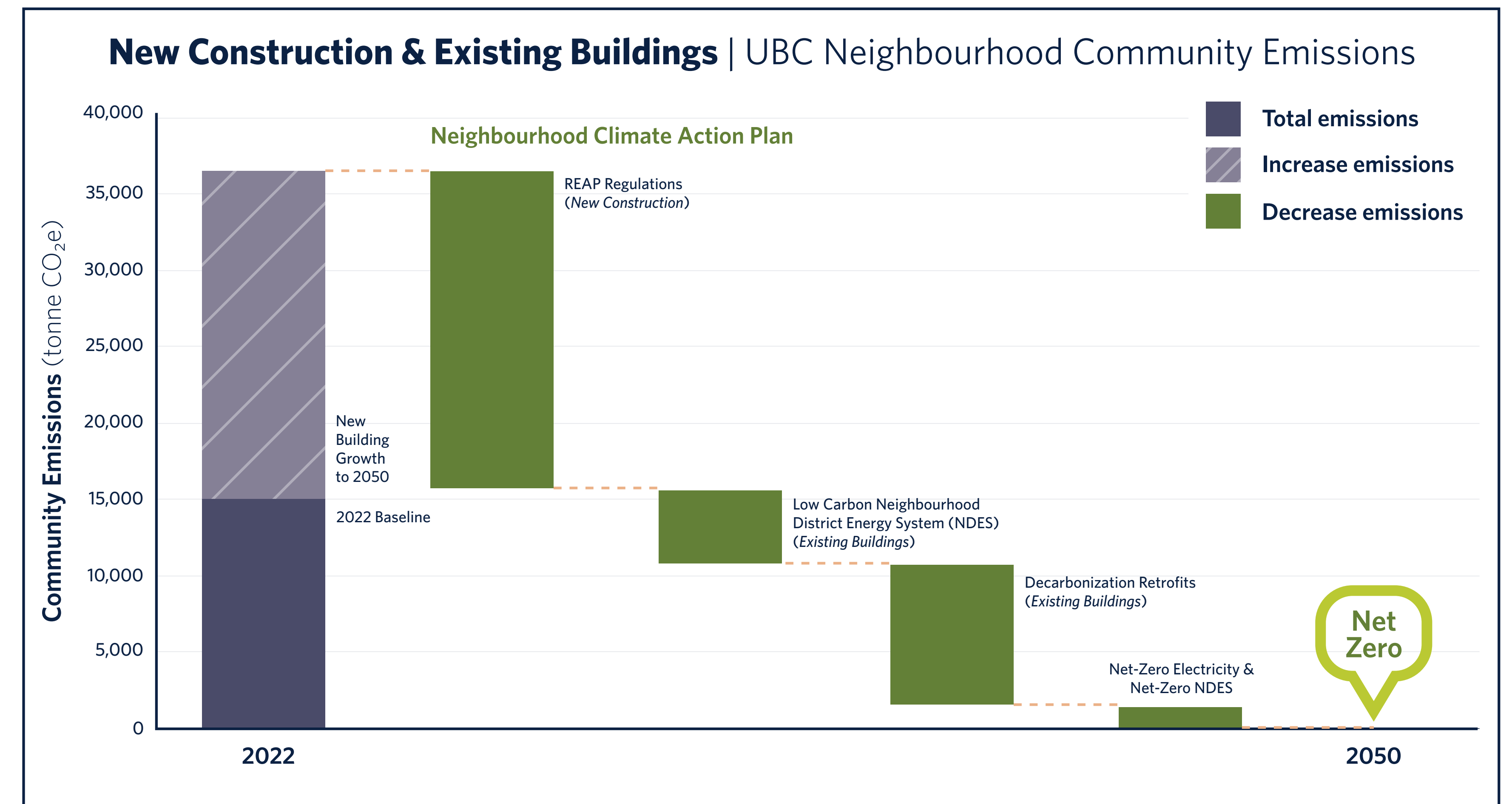


New Construction & Existing Buildings

Goal: New and existing buildings achieve low carbon, energy efficient operations, incorporate low embodied carbon materials and design, and provide residents with safe and healthy homes that are resilient to the effects of climate change.

Targets

- By 2030, at least 50% of homes have active, low carbon cooling and before 2050, 100% have cooling.
- By 2035, building operational emissions are reduced by at least 60% from 2022 levels.
- By 2050, all buildings in UBC’s residential neighbourhoods achieve net zero operational and embodied emissions and are resilient to current and future climate conditions.



Actions

New Construction

Next 1 - 2 years

- Technical study on energy efficiency, future climate design and embodied carbon targets
- Regulate by updating Residential Environmental Assessment Program (REAP) in 2025 to require: near zero operational emissions and climate resilient design (e.g. improve thermal comfort, indoor air quality and provide low carbon heating and cooling systems) and 10% embodied carbon reduction.

Next 3 - 5 years

- Complete Neighbourhood District Energy System (NDES) expansion in Wesbrook neighbourhood to provide low carbon heating and cooling to new Wesbrook homes.
- Demonstrate and build capacity for design of efficient, low carbon and resilient buildings with new housing projects.

In 6+ years

- Regulate by updating UBC’s Residential Environmental Assessment Program in 2030 to require a minimum 40% embodied carbon reduction to align with or exceed the City of Vancouver target.

New Construction

These strategies will ensure new buildings meet our climate action objectives from day one.

Actions

Existing Buildings

- Make the retrofitting process easier for owners and tenants by producing educational materials, identifying incentives and streamlining the permitting process for in-suite heat pumps.

Existing Buildings

These strategies will support residents in installing low carbon equipment in their homes and buildings (e.g. heat pumps for heating and cooling)

- Facilitate partnerships to develop demonstration projects and to support low carbon heating and cooling system retrofits to residents and building owners. (e.g. using electric systems to replace hot water and space heating systems while adding cooling).
- Identify regulatory mechanisms to enable low carbon and resilient performance requirements for domestic hot water and space heating retrofits.

- Fully transition the NDES, which has provided heat and domestic hot water to all new residential developments since 2015, to low carbon energy supply (target 2030).
- From 2030, require all retrofits of domestic hot water and space heating at regular equipment replacement cycles be supplied by low carbon energy and provide cooling under future climate conditions.