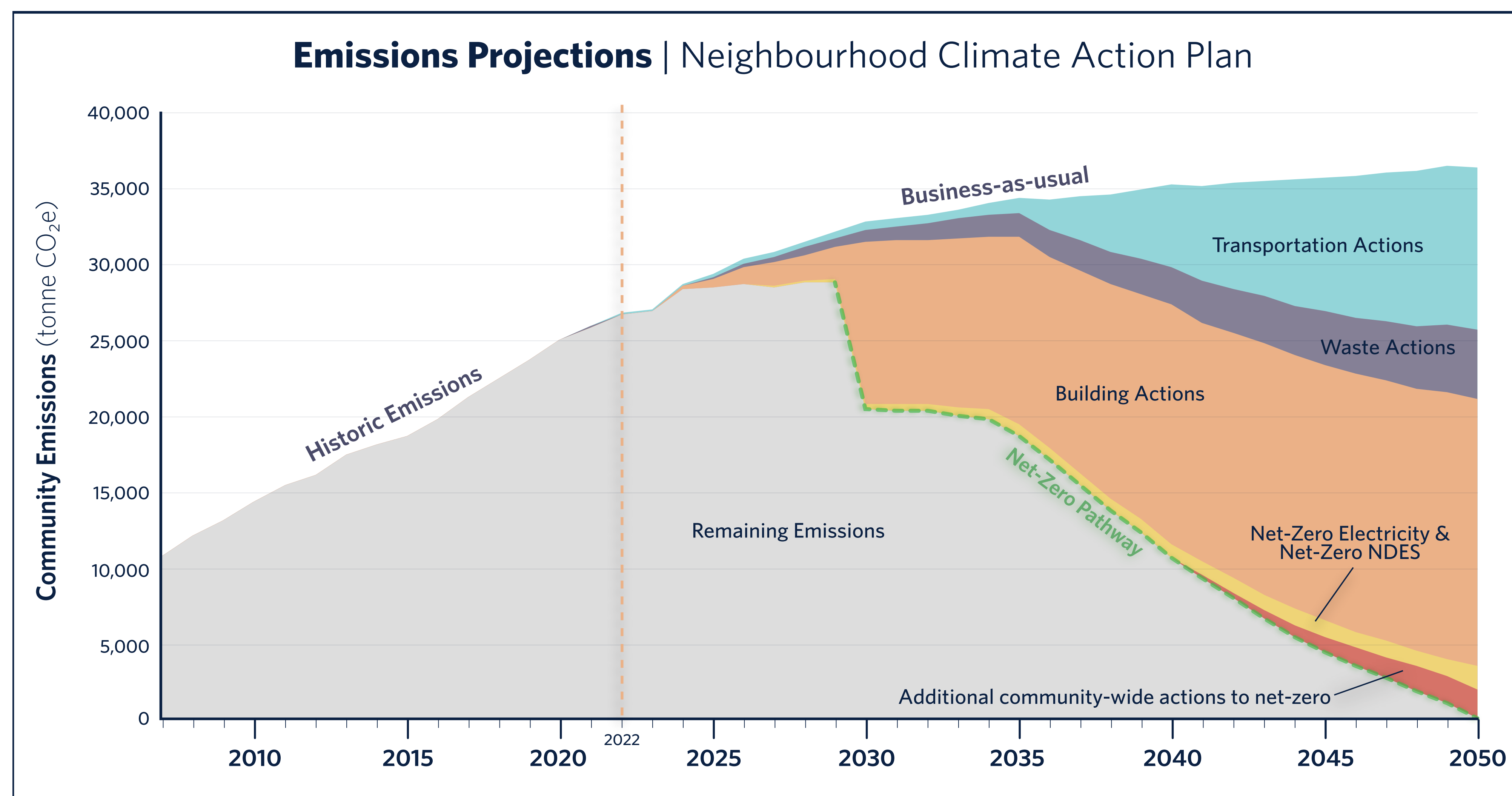


# Welcome

## UBC's Neighbourhood Climate Action Plan is our pathway to a net-zero, climate resilient community.

Welcome to the second round of engagement for the Neighbourhood Climate Action Plan (NCAP). We'd like to hear from you on the draft NCAP goals, targets, and actions that define our pathway to a net-zero, climate resilient community.

Your feedback will help refine the goals, targets and actions in each scope area. We want to know: Did we get it right? Are we missing anything? And what support do you need to make changes in your daily life to take climate action?



This graph summarizes emission reductions as a result of actions in the buildings, transportation and waste scope areas versus emissions if we continue on our current path. Building operations, which includes heating, cooling and hot water, are the largest source of community emissions in the UBC neighbourhoods, followed by emissions from resident vehicle travel and direct emissions from solid waste at the landfill.

## We want to hear from you!

Take our online survey from  
**March 5<sup>th</sup> - March 22<sup>nd</sup>**



Learn more about how you can get involved:

**[planning.ubc.ca/NCAP](https://planning.ubc.ca/NCAP)**

or scan the QR code.

Complete the survey for a chance to win **one of five \$50 Save-On-Foods** gift cards!





# What We Heard

We had a total of **833 engagement touchpoints** through a range of engagement activities. Public engagement ran from October 17<sup>th</sup> until November 3<sup>rd</sup>, 2023.



**ONLINE SURVEY**  
323 responses



**OPEN HOUSE**  
8 participants  
Oct 19, Wesbrook CC



**POP-UPS**  
111 participants  
Oct 21, Oct 23, Oct 26



**COMMUNITY CONVERSATIONS**  
64 participants  
7 events



**PUBLIC WORKSHOPS**  
39 participants  
Oct 25, Oct 28, Oct 31



**TARGETED WORKSHOPS**  
48 participants  
Oct 3, Oct 18, Oct 23



**WALKING TOURS**  
22 participants



**ROADSHOWS**  
218 participants  
6 events  
Oct 11 - Oct 25

## Overview of What We Heard

- Residents want to know how NCAP will be implemented at the neighbourhood scale and how it will influence daily life in the neighbourhoods.
- Timing and ambition of NCAP needs to match the urgency of the climate crisis.
- Feelings of climate anxiety and a need for community support hubs.
- Concern about barriers to climate action.

Visit [planning.ubc.ca/ncap](https://planning.ubc.ca/ncap) to read the full NCAP Emerging Directions Engagement Summary Report.

## New & Existing Buildings, Embodied Carbon

- Strong support for ambitious reduction of buildings emissions
- Concerns about the affordability of housing and costs of implementation of this scope area
- Consider how development will factor into the future of UBC neighbourhoods

## Ecology

- Strong support for goals around climate resilient soils and plantings, prioritizing Indigenous species and plants, and creating nature-focused community spaces
- Details around how Musqueam feedback and values, functional and natural landscapes would be integrated into this scope area

## Climate Emergency Preparedness

- Strong desire for clear and accessible emergency plans, resources, and education
- Increase opportunities and infrastructure for community connectivity
- Increase public spaces for gatherings and emergency cooling spaces

## Neighbourhood Infrastructure

- Expanded and improved stormwater and energy infrastructure
- More accessible information about neighbourhood infrastructure
- Consider population growth and efficient and mindful resource consumption

## Transportation and Mobility

- Expansion of bike infrastructure and safer and more accessible active transportation infrastructure.
- More reliable and frequent public transportation

## Waste, Materials and Consumables

- Consistent messaging about waste management and waste sorting
- Expanded waste diversion services and public facilities
- A need for waste reduction initiatives such as tool-sharing, repair, and second-hand use facilities

Feedback from Fall 2023 engagement alongside targeted workshops with UBC and UNA staff, faculty and external subject-matters experts have helped inform the refined goals, targets and detailed actions you'll see as you browse these display boards.



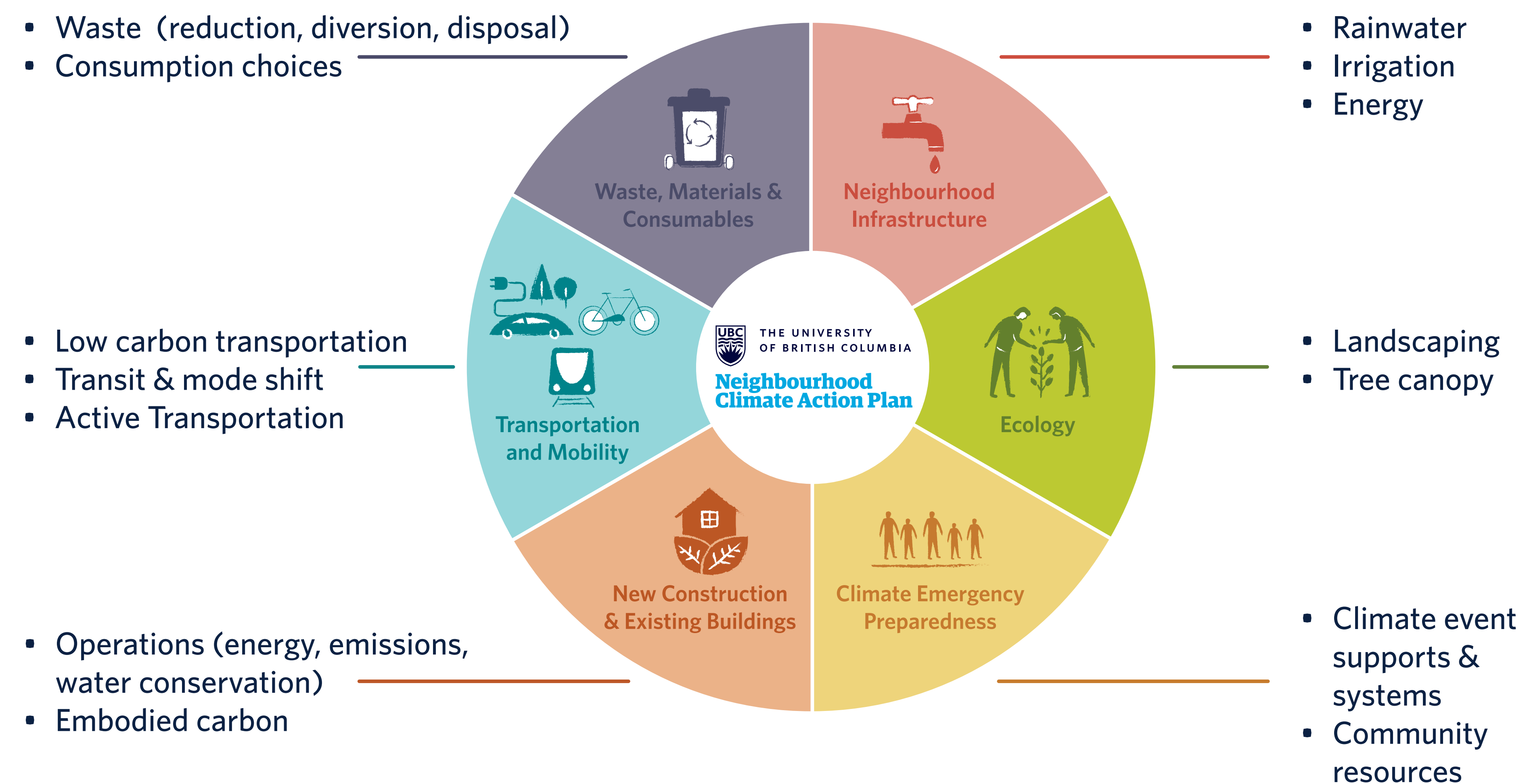


# About NCAP

With the increased frequency of intense climate events, there is a renewed and urgent focus on climate action, as outlined in UBC's Climate Emergency Response. In 2021, UBC launched Climate Action Plan 2030, which charts a course to reach net zero emissions for the academic campus. NCAP will do the same for residential neighbourhoods as well as plan for adaptation to our already changing climate.

## Scope Areas

NCAP provides policy directions, targets and actions in the following key scope areas:



## Guiding Principles

The Guiding Principles for NCAP inform how we prioritize the NCAP goals and actions and evaluate their success. To learn more, visit: [planning.ubc.ca/NCAP](http://planning.ubc.ca/NCAP).

## NCAP in Context

NCAP guides any amended and future Neighbourhood Plans, shaping how UBC's Land Use Plan is implemented, as well as other initiatives like transportation and zero waste planning. NCAP is informed by and will inform the following sustainability plans and policies:



\*Replaces Community Energy and Emissions Plan and adds adaptation scope  
 \*\*Current and future plans align with and are informed by Campus Vision 2050



# Working Together

Collaboration with the community is critical in ensuring that the plan is achievable.

## UBC Residential Neighbourhoods

<b>University Neighbourhoods Association (UNA)</b>	<b>University of British Columbia (UBC)</b>	<b>UBC Properties Trust</b>	<b>Neighbourhood Residents</b>
<ul style="list-style-type: none"> <li>• Maintain neighbourhood programming such as community gardens, community centres, recycling and composting initiatives and recreational and community building initiatives.</li> <li>• Maintain infrastructure such as street and sidewalk repairs, public waste and landscaping.</li> <li>• Regulate matters of concern in the public realm such as parking, noise and local emergency response.</li> <li>• Communicate directly with stratas and rental residents to support the distribution of information.</li> </ul>	<ul style="list-style-type: none"> <li>• Develops the policy and plans around how land is used and buildings are built.</li> <li>• Oversees permitting process.</li> <li>• Leads the community engagement process that helps shape UBC plans and policy.</li> <li>• Provides campus-wide infrastructure such as rainwater management.</li> </ul>	<ul style="list-style-type: none"> <li>• Builds and manages rental homes and retail in accordance with UBC's Land Use Plan, Housing Action Plan, Neighbourhood Plans as well as sustainability related plans and guidelines.</li> <li>• Build infrastructure such as transportation networks, greenways, parks and community gardens in accordance with UBC's Land Use Plan, Neighbourhood Plans as well as sustainability related plans and guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>• Strata operations and retrofits.</li> <li>• Mobility choices (e.g. transit, walking and rolling, zero emission vehicles).</li> <li>• Waste sorting (recycling, organics) and waste reduction.</li> <li>• Energy and water conservation</li> <li>• Consumption choices.</li> </ul>

The draft NCAP goals, targets, and actions are the result of technical and collaborative work with the campus community, faculty and external subject-matter experts, the University Neighbourhoods Association (UNA) and UBC Properties Trust to identify a path to net-zero emissions and how to be resilient and adapt to a changing climate.



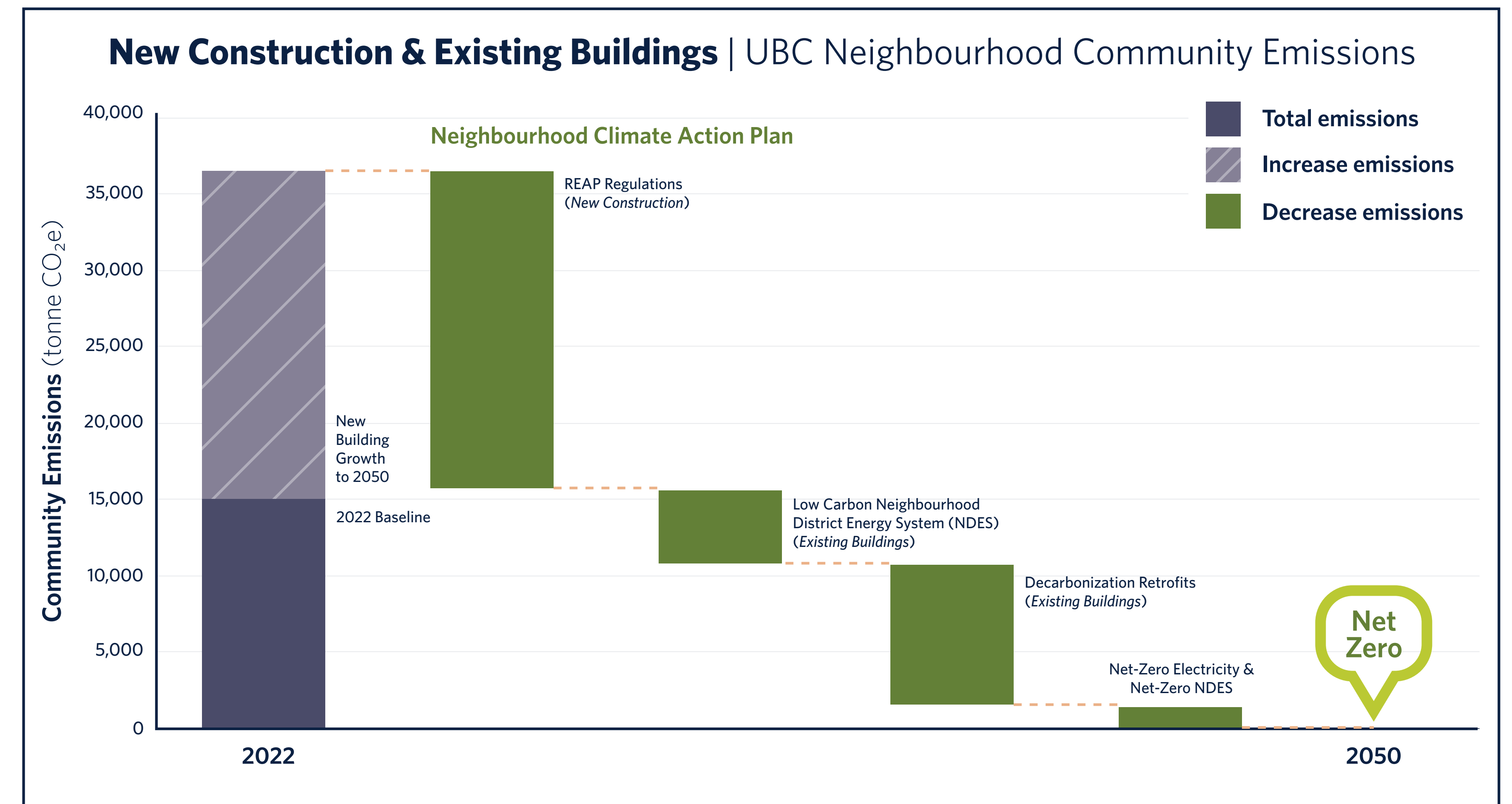


# New Construction & Existing Buildings

**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.



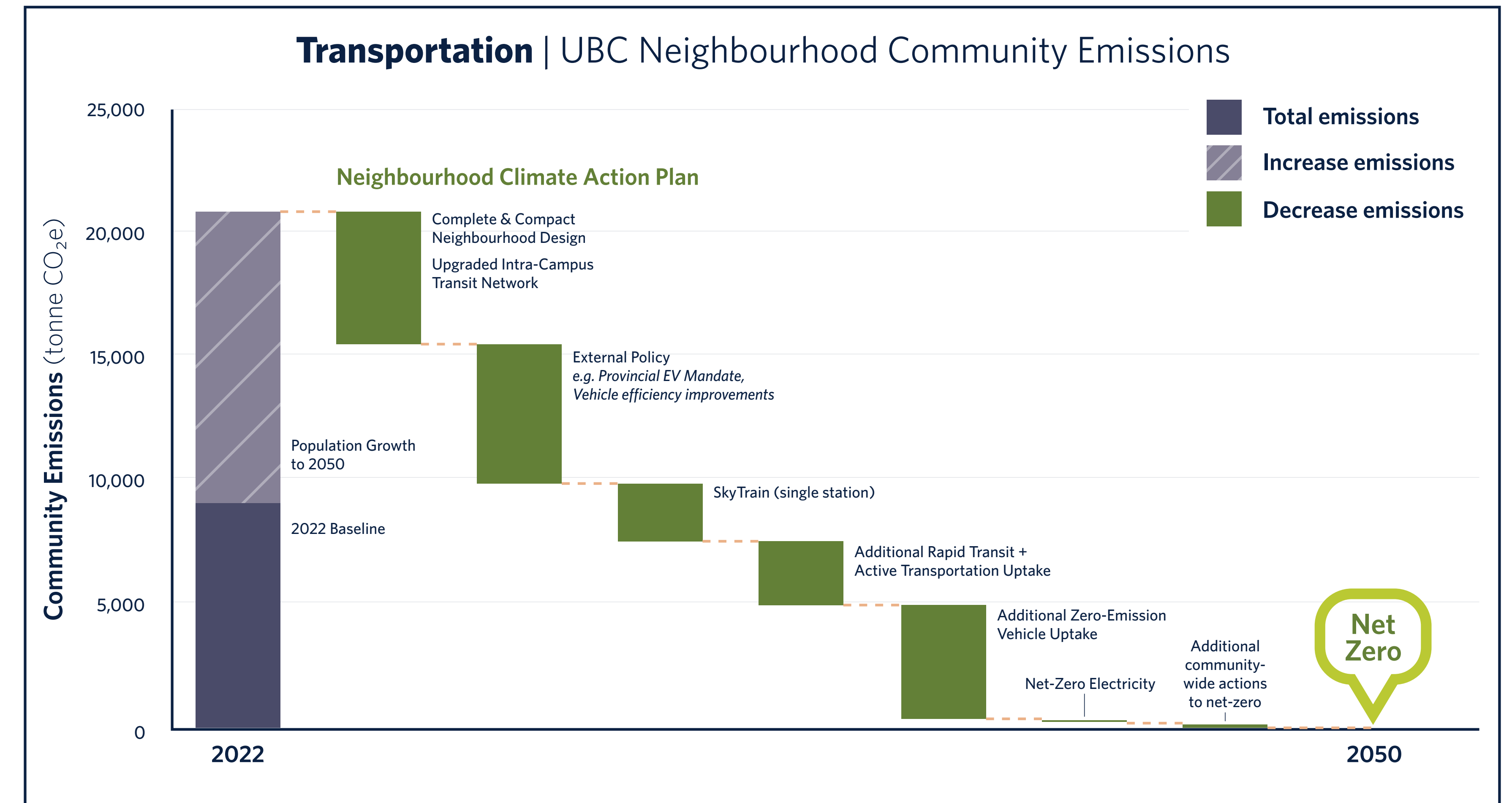


# Transportation and Mobility

**Goal:** Residents benefit from faster and easier transit access and an expanded on-campus mobility network (e.g. shared bike programs and cycling infrastructure) that prioritizes active and sustainable modes for people of all ages and abilities. These initiatives better support residents in ensuring they get to where they need to go, comfortably and safely, while reducing greenhouse gas emissions.

## Targets

- By 2035, per capita transportation emissions are reduced by at least 25% from 2022 levels, supported by:
  - UBC neighbourhood contributions to overall campus target of at least 66% of trips to and from UBC made by walking, cycling, rolling, or transit.
  - 12% of residents' light-duty vehicles are zero emissions vehicles.
- By 2050, 100% of trips by UBC residents are made by walking, cycling, rolling, transit or zero emissions vehicles and are net-zero operational emissions.



## Actions

### Next 1 - 2 years

- Continue advocacy and planning for SkyTrain and expanded and upgraded intra-campus transit network including more frequent and convenient shuttle service.
- Design transit-oriented neighbourhoods to support increased transit ridership, convenience and access.
- Plan for expanded active transportation networks, including sidewalks, connected greenways, and cycling routes.
- Expand bike share and car share programs.
- Support zero emissions vehicle adoption, including expanded public charging stations - including dedicated stations for car share and ride hailing.
- Support resilient, safe, low carbon mobility for all ages and abilities through updates to UBC's Transportation Plan and amended and future Neighbourhood Plans.

### Next 3 - 5 years

- Roll out sustainable transportation infrastructure plans such as expanded and enhanced cycling routes, sidewalks and transit stops that are safe and resilient (e.g. have shaded and covered shelters at public transit facilities, shading along walking and cycling routes and public misting stations).
- Continue to expand infrastructure to support transition to zero emissions vehicles and provide resources (e.g. information, permitting, incentive availability) to install EV charging stations in existing buildings.

**These strategies will support residents in the following ways:**

- Feeling safe walking, cycling, or rolling while moving around the neighbourhoods.
- Increasing transit use.
- Considering low carbon options for errands and shorter trips (e.g. cargo bikes or e-bike share).
- Considering purchasing a zero emissions vehicle or using zero emissions car share.

### In 6+ years

- Prepare for the arrival of SkyTrain on campus, as well as an expanded and upgraded intra-campus transit network.

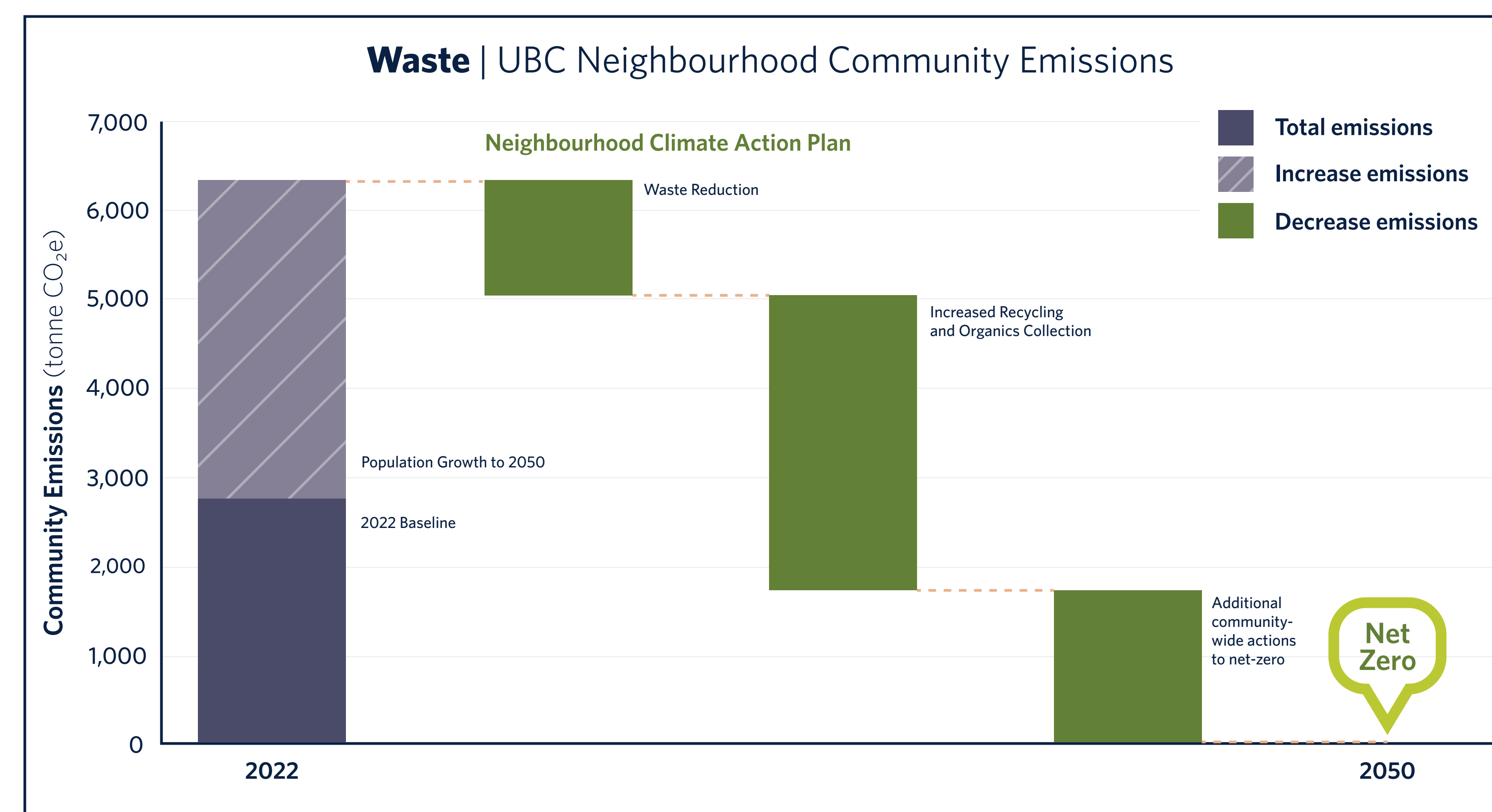


# Waste, Materials and Consumables

**Goal:** Transition towards a zero-waste community by creating opportunities for residents to share, reuse, and repair, supporting the circular economy. Thoughtful building and neighbourhood design, along with community programming, make waste sorting for recycling and organics easy and efficient for all residents and visitors. Construction and demolition practices make efficient use of building materials and optimize their reuse and diversion from landfill.

## Targets

- By 2035, per capita waste emissions are reduced by at least 30% from 2022 levels.
- By 2050, UBC's residential neighbourhoods will have achieved net zero emissions from solid waste.



These strategies will support residents in doing the following:

- Recycling more items at local recycling depot.
- Composting your food waste, yard trimmings and soiled paper
- Buying secondhand items and donating used goods.

## Actions

### Next 1 - 2 years

- Regulate by updating UBC's Residential Environmental Assessment Program (REAP) in 2025 to require: 90% diversion of construction and demolition waste from landfill.
- Facilitate awareness campaigns on waste reduction and diversion.

### Next 3 - 5 years

- Explore how to expand and enhance UNA Green Depot.
- Review and update REAP requirements for recycling and organics facilities in new neighbourhood buildings.

### In 6+ years

- Facilitate opportunities for expansion of community recycling facilities.
- Create community hubs and programming to support sharing, re-use and repair (clothing, bicycles, electronics, etc.).



# Ecology

**Goal:** Trees, landscapes and other natural assets provide vital ecosystem services to help UBC's neighbourhoods adapt to a changing climate. UBC's ongoing engagement with Musqueam to enhance Musqueam values on campus and climate adaptive planting support a network of resilient, connected green public spaces, courtyards, and corridors integrated with neighbourhood buildings and provide welcoming and restorative places for the community to come together and build connections.

## Targets

- Targets related to neighbourhood climate action, to support mitigation and adaptation, will be defined through technical work over the next one to two years, including the Integrated Rainwater Management Plan, Biodiversity Strategy, and amended and future Neighbourhood Plans.
  - Targets will help define some of the UBC neighbourhood contributions to the overall campus target set in the draft updated Land Use Plan that commits to campus-wide net gain in tree canopy cover by 2050.



## Actions

### Next 1 - 2 years

- Work with academic partners to develop baseline data related to ecosystem services supporting climate action (e.g. *shade, urban heat island effect mitigation*).
- Support nature-based solutions to climate action under future climate conditions at the neighbourhood scale through updates to UBC's amended and future Neighbourhood Plans (e.g. *planting and soils guidelines, tree retention and planting locations, flood regulation*).
- Identify opportunities to increase biodiversity and ecosystem services at the site scale through future REAP updates.
- Continue supporting the UNA on sustainable landscape practices (e.g. *operations, equipment, climate resilient replanting guidelines*).
- Include future climate projections and localized climate impacts to natural systems in scoping for the Biodiversity Strategy.

### Next 3 - 5 years and beyond

- Set performance targets relating to neighbourhood shade coverage.
- Develop demonstration projects showcasing different approaches to climate resilient plantings incorporating Musqueam and other Indigenous knowledge.
- Begin upgrades to rainwater infrastructure, focusing on adaptive, green infrastructure that responds to seasonal variability and future climate conditions.
- Expand and enhance ecosystem services (e.g. *shade, flood regulation, carbon sequestration*).

### These strategies will support residents in:

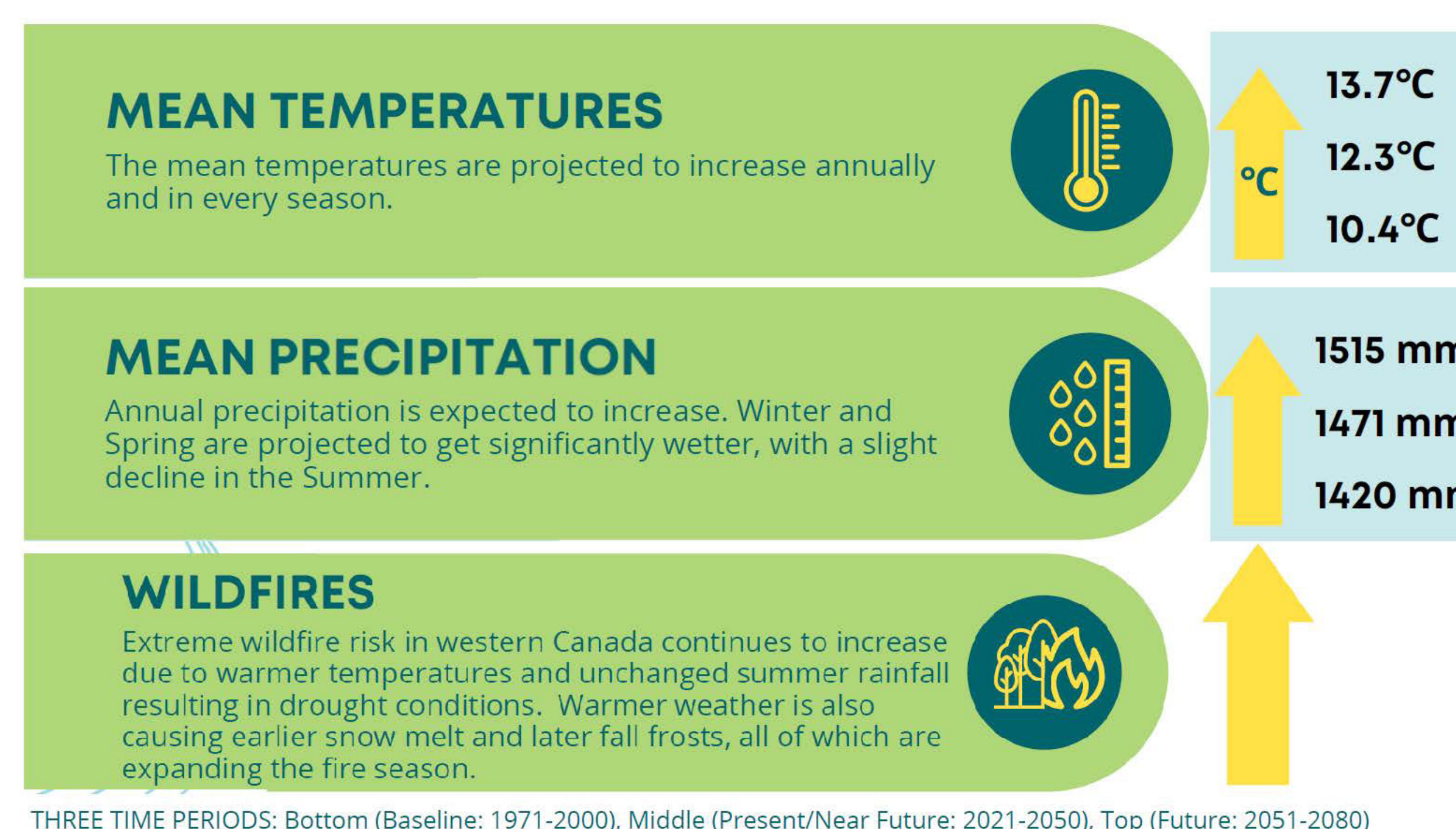
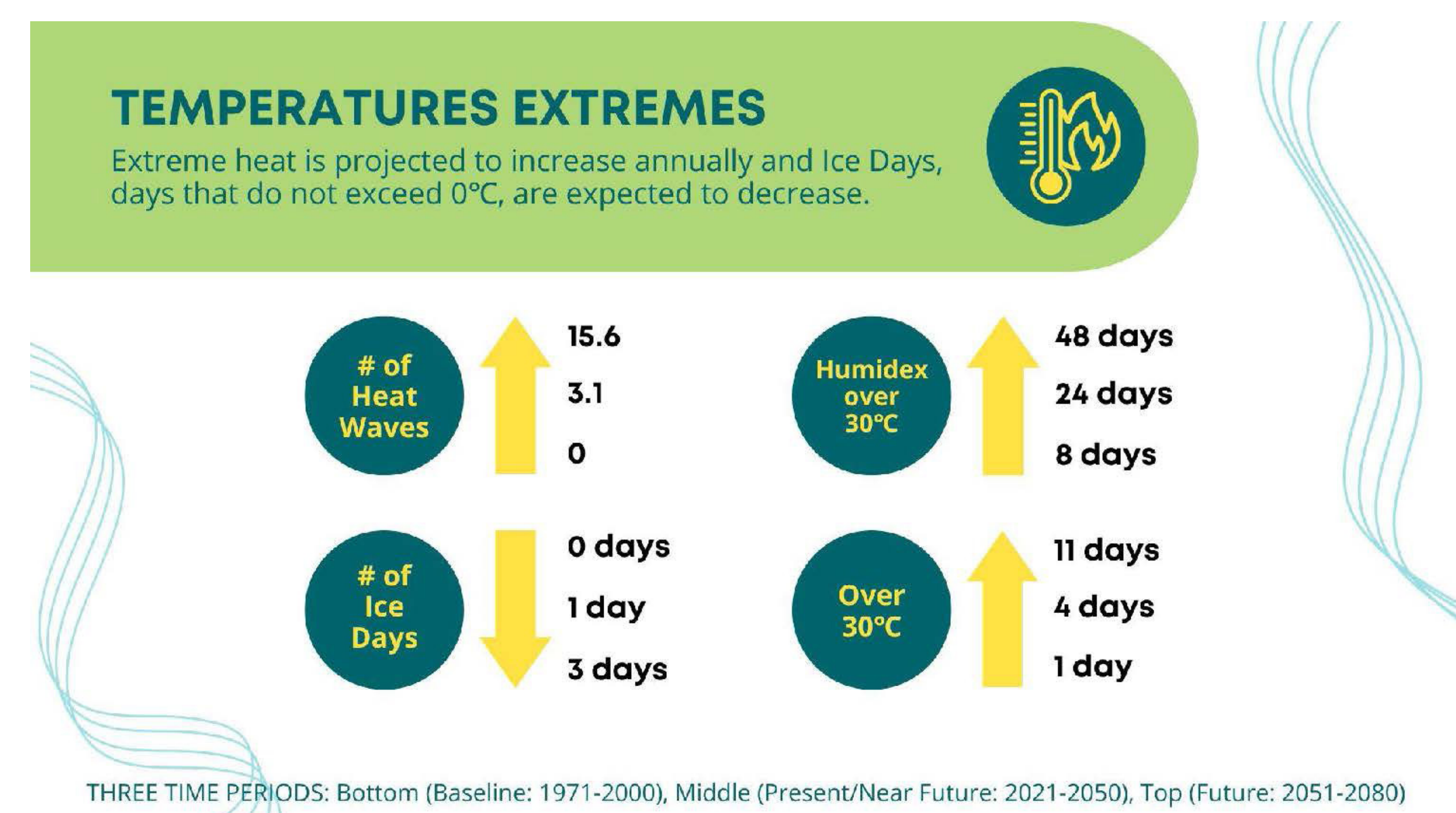
- Planting climate resilient plants that thrive in our changing climate (e.g. *hotter temperatures, less summer rain, increased spring and fall rain*).
- Participating in a community garden program.





# Climate Emergency Preparedness

**Goal:** Residents are prepared for and well supported during extreme climate events such as heavy rainfalls, windstorms, wildfires and extreme heat. Through expanded resources, infrastructure, and proactive communication, residents feel safe and protected in their communities. Community-led social connectedness programs have strengthened ties between neighbours, creating a more resilient community network.



Climate projections show the UBC Vancouver campus will have more extreme day-to-day weather and also gradual constant changes, including rain, droughts, and warmer summer temperatures. NCAP will define how UBC adapts to these changes to build a resilient neighbourhood community.

## Target

- By 2030, at least 50% of homes have active, low carbon cooling and before 2050 100% have cooling.

### Actions

#### Next 1 - 2 years

- Provide educational tools and resources for residents to help prepare for climate emergency events supported by research collaborations with UBC's academic community.
- Continue to partner with the UNA to build programming that supports community connection and awareness.

#### Next 3 - 5 years and beyond

- Develop comprehensive emergency response plan for local wildfire events
- Expand cooling centres in the neighbourhoods. For example, facilitate partnerships and identify funding to support UNA in developing a demonstration project to retrofit Old Barn Community Centre HVAC systems to decarbonize and add cooling and other resilience measures such as air filtration.

#### These strategies will support residents in:

- Preparing for extreme weather events.
- Building better connections with neighbours to enable community-led support in emergencies.



# Neighbourhood Infrastructure

**Goal:** Water and energy infrastructure servicing UBC's residential neighbourhoods is resilient and ready to respond to our changing climate. Upgraded systems support climate action and prioritize efficient, affordable, resilient services.

## Target

- By 2035, at least 65% of neighbourhood energy supply is from low carbon sources (electricity or low carbon Neighbourhood District Energy)
- By 2050, 100% of neighbourhood energy supply is from net zero sources.



## Actions

### Next 1 - 2 years

- Finalize plans and update agreements to convert Neighbourhood District Energy System (NDES) to low carbon energy supply.
- Finalize updates to the Integrated Rainwater Management Plan (IRMP) to ensure rainwater systems are adapted to future climate conditions.

### Next 3 - 5 year

- Complete NDES expansion in Wesbrook neighbourhood to provide low carbon heating and cooling to new Wesbrook homes.
- Coordinate upgrades to electricity infrastructure to support climate action.
- Begin upgrades to rainwater infrastructure, focusing on adaptive, green infrastructure (e.g. *bioswales, rain gardens, ponds*) that improves the neighbourhood capacity to respond to intense rain events.

### In 6+ years

- Fully transition entire NDES to low carbon energy supply (target 2030).





# Your Feedback

**How does the Draft NCAP align, or not align, with your vision for the future of neighbourhood climate action at UBC?**





# Thank You + Next Steps

Feedback from this engagement will inform the final draft plan before going to UBC's Board of Governors for approval in June 2024. NCAP will guide any amended and future Neighbourhood Plans, shaping how UBC's Land Use Plan is implemented, as well as other initiatives like transportation and zero waste planning.

The final NCAP will include an implementation plan with detailed actions, timelines and responsibilities. As with any climate action plan, NCAP will adapt and evolve in the future to ensure we're taking advantage of all opportunities including new technical advancements and government policies.

Monitoring our progress will be critical to ensuring that we are on the right path to achieving the targets set out in NCAP. Regular reporting will be an essential part of NCAP Implementation to share our progress with the community.



## We want to hear from you!

Take our online survey from **March 5<sup>th</sup> - March 22<sup>nd</sup>**

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