

Climate-Positive Resilient Ecosystems



Vision for 2050

In 2050, the City is threaded with protected and restored forests, streams, and wetlands, along with parks, urban trees and rain gardens. These ecosystems provide places for people to enjoy nature, support biodiversity, store carbon, reduce air and water pollution, and improve climate resilience.



Measures and Targets

- > The Urban Forest Management Strategy includes a 2038 target of 30% urban forest tree canopy.
- > Other Measures and Targets for Climate-Positive Resilient Ecosystems will be defined in the future, such as for carbon sequestration by natural areas, estimation of the value of ecosystem services, and parkland acquisition.

GOAL 1

Protect, connect, and restore ecosystems

Where We Are Now



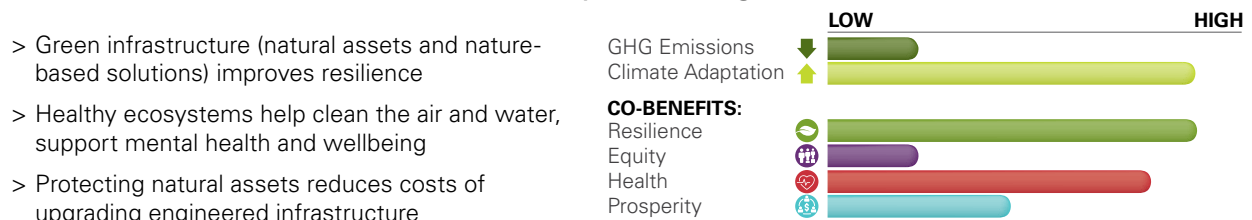
Strengths to Build On

- > Large geographic area with variety of ecosystems such as forests and streams
- > Policies such as Biodiversity Conservation Strategy, Urban Forest Management Strategy
- > Pilot projects exploring nature-based solutions, natural assets inventory

Shifts* – What is needed to reach this Goal?

- E1** Explore opportunities to further protect, manage, and restore ecosystems, and incorporate green infrastructure on City-owned lands, to improve ecological and climate resilience.
- E2** Implement policies and practices to manage natural assets and biodiversity for ecological and climate resilience.
- E3** Review opportunities to strengthen environmental review processes, bylaws and policies for development and infrastructure projects to better support climate resilience and biodiversity.
- E4** Inventory, assess, and monitor ecosystems and green infrastructure to support decision-making, education, and compliance.
- E5** Manage rainwater to improve ecological and climate resilience.

Potential outcomes and benefits of implementing these Shifts



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

GOAL 2

Explore opportunities for regenerative agriculture and negative emissions

Where We Are Now



"Preparing to Start"

Strengths to Build On

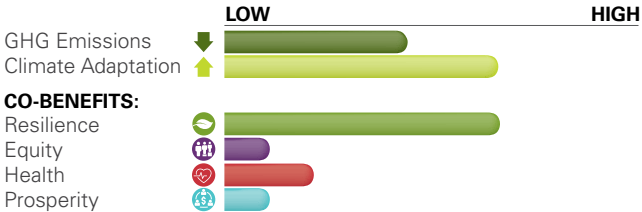
- > 30% of the city's lands are agricultural lands
- > Strong partnerships with academia
- > Interest and leadership from agricultural operators

Shifts* – What is needed to reach this Goal?

- E6** Explore opportunities and partnerships to support ecologically regenerative agriculture and land use practices in the Agricultural Land Reserve for GHG reduction, carbon sequestration, and improved climate resilience.
- E7** Explore opportunities for negative emissions, especially through ecosystem restoration, to remove carbon from the air and store it in plants and soil.

Potential outcomes and benefits of implementing these Shifts

- > Negative emissions can help reach 2050 net zero target, but this potential is not well quantified
- > Large potential to improve resilience of farming and ecosystems to climate impacts



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