

# Township of Esquimalt Community Climate Mitigation Plan

Esquimalt Council  
October 26, 2020



**Community Energy**  
Association

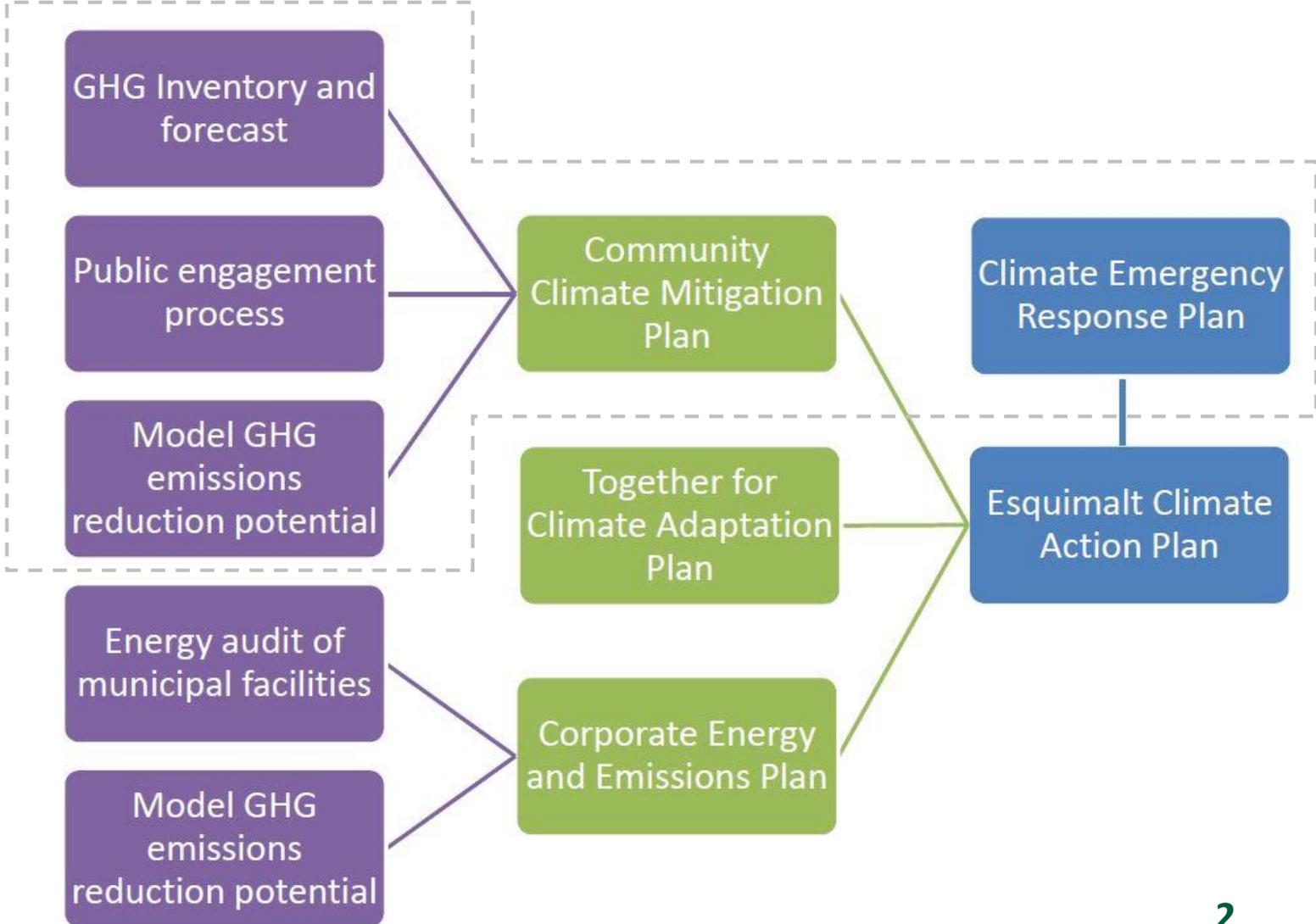
# What is the Community Climate Mitigation Plan?

A plan to:

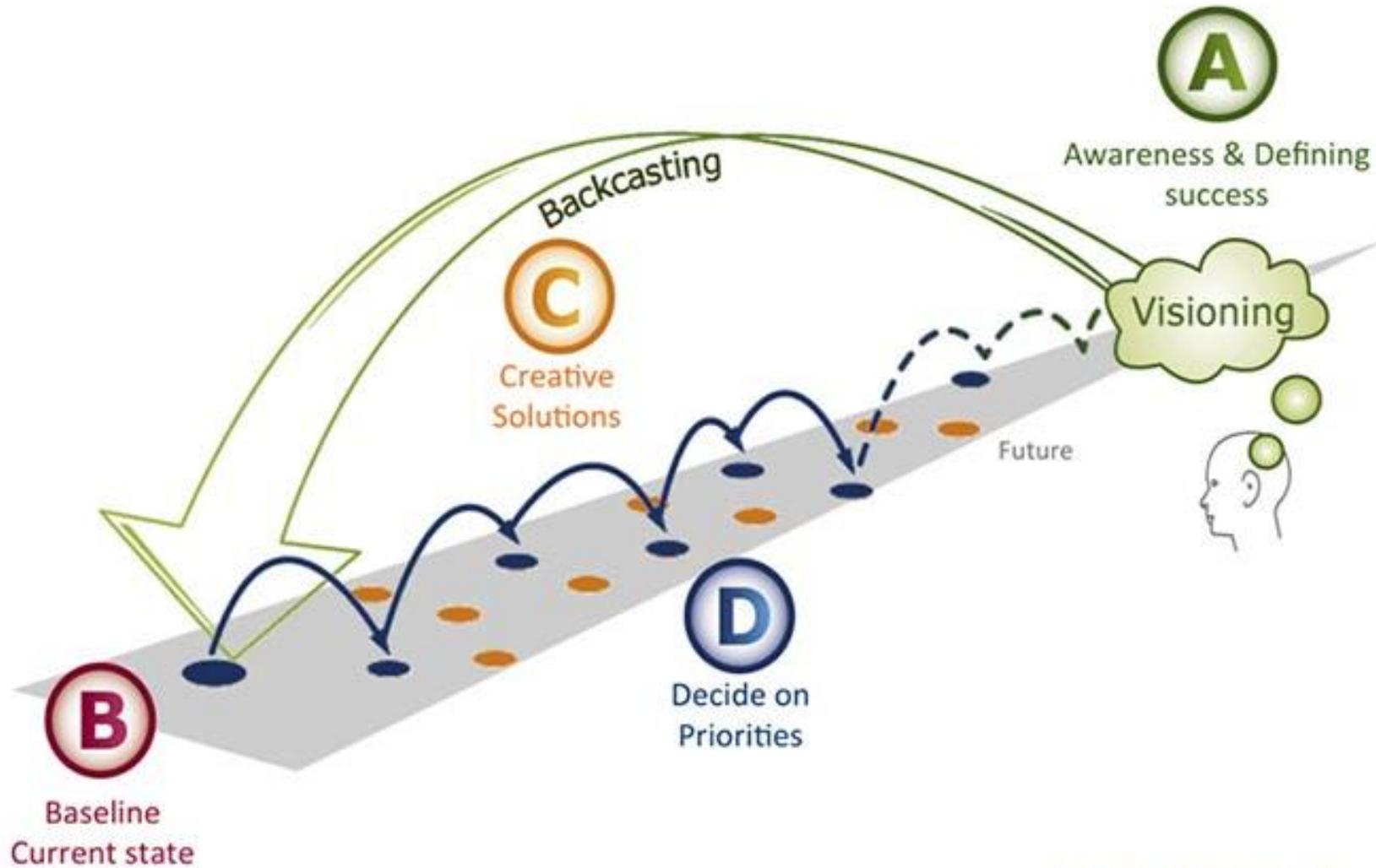
Leverage local government powers to...

save residents & businesses...

energy, emissions & money



# Backcasting Approach



We still combine this with **forecasting** to understand where we can get to knowing what we know now.

# Backcasting in CleanBC

- Zero Emissions Vehicle (ZEV) Mandate: 10% by 2025, 100% by 2040
- 100% of inland ferries electric by 2040
- Net-Zero Ready new homes by 2032
- 95% organics diversion by 2030



# Defining Success - Transportation

## Shifting Beyond the Car



the quality of life has shifted towards future elements and includes less roads and higher density living

# Defining Success - Transportation

## Electrify Passenger Transportation

### Describe your vision for this sector in the year 2040

- 1 • Write your answer on a sticky and place it below. Imagine a future scenario that is unimpeded by limitations or constraints of your past experience. You are not limited by current trends or projections.

Wuppertal

The naval base (dnd) need to buy in

'current taxi' seems to work  
Encourage like solutions

SHARING

Shared electric vehicles as transportation alternative

Electric rail or boat to connect Westshore, Esquimalt & downtown

### Consolidate themes and refine the vision

A2

- Assign a scribe, gather themes and work to create a single vision from your groups ideas.

Walkable neighbourhoods

Larger sidewalks & bike paths to accommodate electric scooters, wheelchairs, etc

Electric community buses for persons with mobility challenges

Wider sidewalks - Esquimalt Rd, Songhees Trail, Craigflower

No vehicle ownership— automated Evs with most people walking and cycling

EV are cheap o

Leverage interest in evs to electrify building/everything!

Electric charging stations at major hubs

electric ferry from colwood. need a port

Incentives for old buildings to retrofit for electric charging

Electric Transportation provided as a service (fully integrated and multi-modal)

Need to address range

Hubs - Westbay, Saxe Point, City Centre, Craigflower

elevated rail with other uses below electric rail

Incentives for new buildings to incorporate charge stations

densification in Esquimalt Road, Old E Road and Craigflower and Admiralty Road

# Defining Success - Buildings



- green energy (low carbon sources)
  - livable, comfortable, light, thermal comfort
  - trees and green spaces (preservation, protection, and enhancement)
  - increased density
  - higher standards, aspire to living building challenge
- Neighbourhoods support walking, cycling and being outdoors. The buildings are well designed, highly energy efficient and use renewable energy sources.

# Defining Success – Waste and Food



# GHG Emissions Reduction Target

## Esquimalt Target

- Take action to reduce community greenhouse gas (GHG) emissions by at least **38% by 2030**, compared to 2007 levels.
- Strive for the ultimate objective of **carbon neutrality** by realizing zero net community GHG emissions **by 2050**.

The plan will outline specific strategies and actions for the Township to help achieve the **2030 target**.

Carbon neutrality by 2050 is the longer term vision.

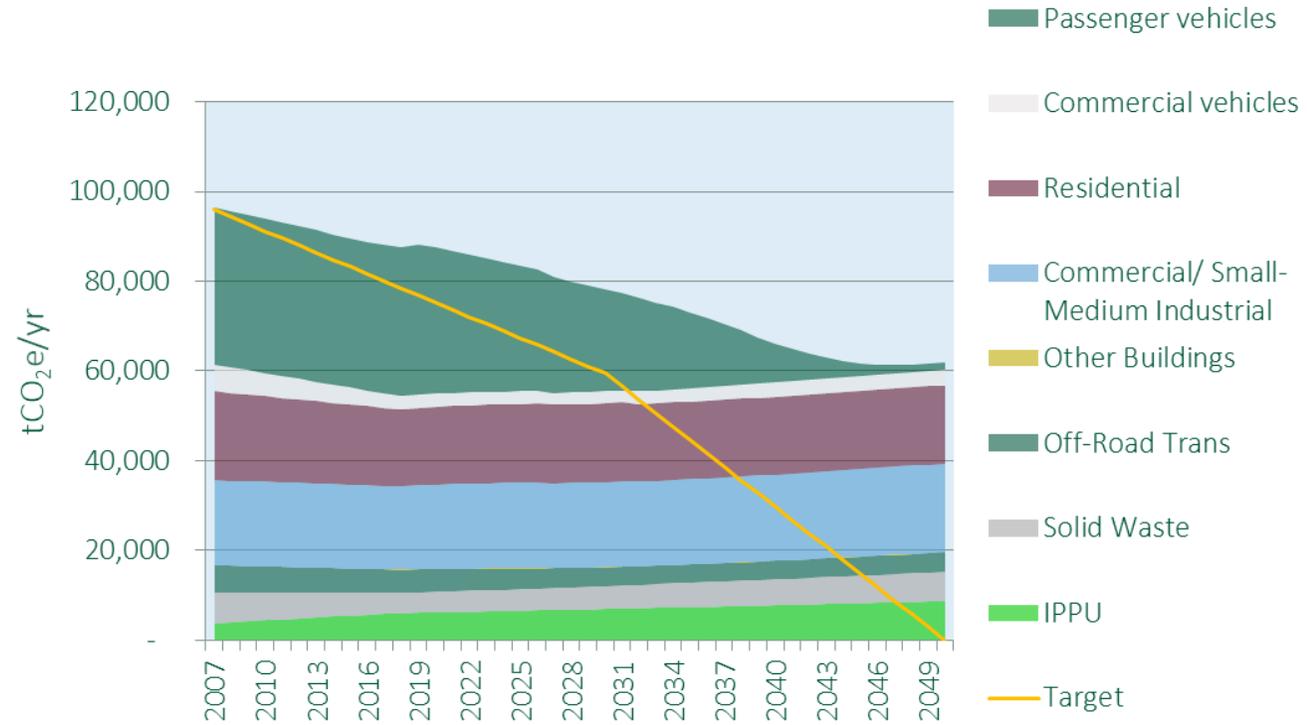
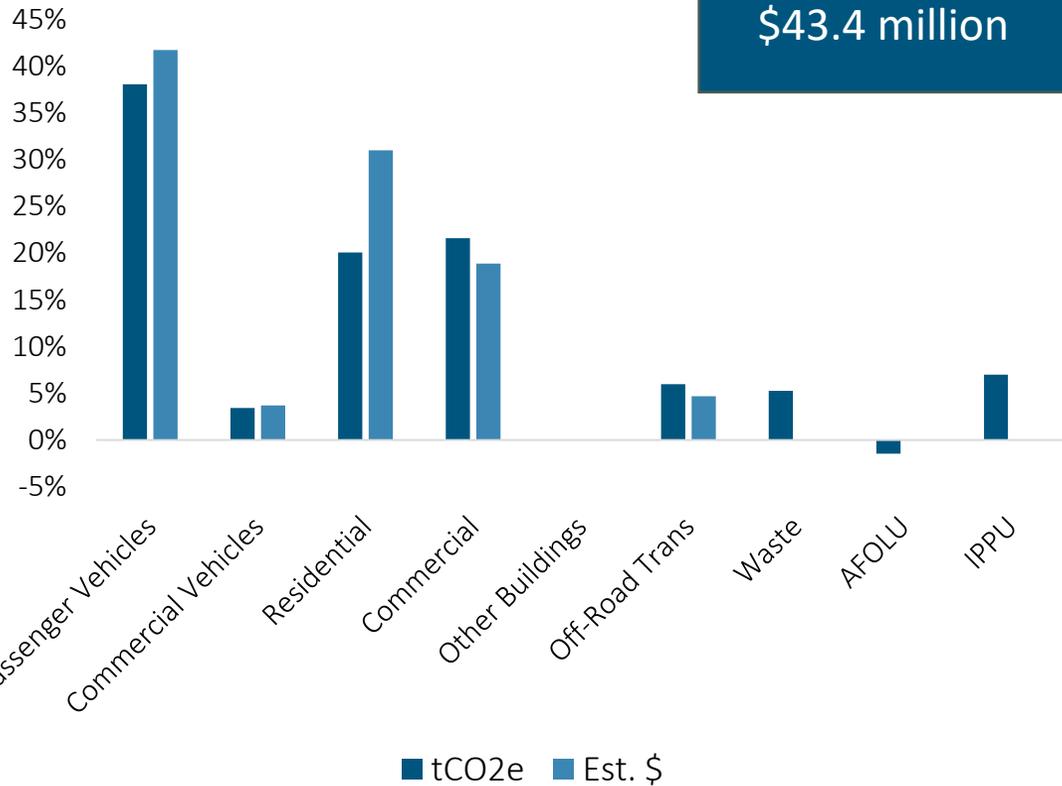
Ambitious action needs to start now to achieve BOTH the **2030 target** and **2050 vision**.

# Esquimalt's Current State

2018 Totals:

86,000 t CO<sub>2</sub>e

\$43.4 million



# The Big Moves



## Transportation



### **Shift Beyond the Car**

Encourage active & assisted transportation and transit



### **Electrify Passenger Transportation**

Accelerate the adoption of zero emission vehicles



### **Decarbonize Commercial Transportation**

Support low-carbon options for medium & heavy-duty vehicles



## Buildings



### **Step Up New Buildings**

Enhance energy efficiency and low carbon heating in new buildings



### **Decarbonize Existing Buildings**

Support deep energy retrofits and fuel switching



## Waste



### **Close the Loop on Waste**

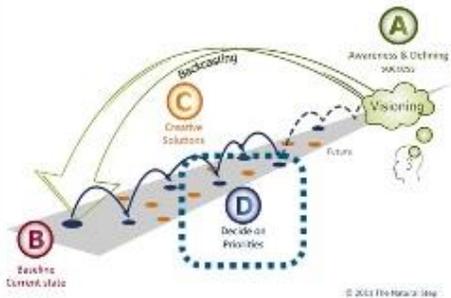
Divert organics and capture value from waste

# Prioritizing the Strategies

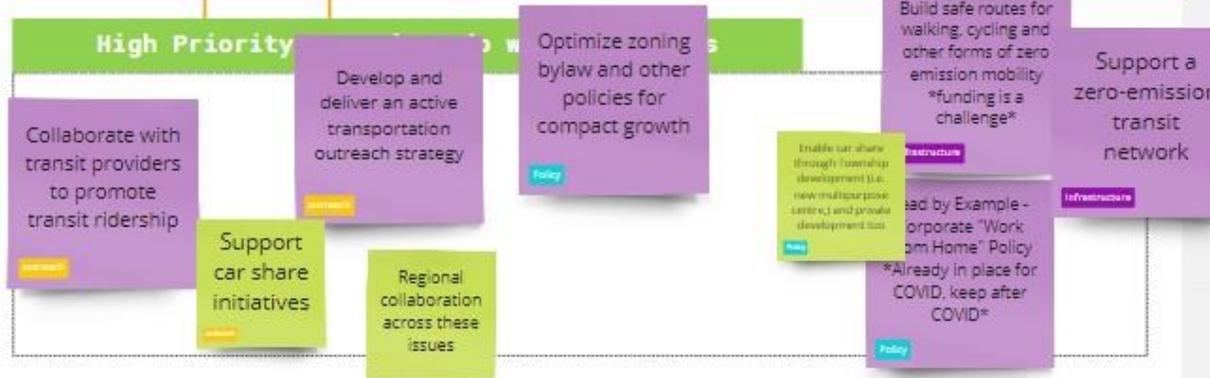
Example from the Shift Beyond the Car group

## STEP 2 PRIORITIZATION

### Breakout 4 - Transportation - Shift Beyond the Car



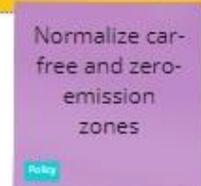
#### High Priority



#### Neutral - Possible in the next 1-5 years



#### Low Priority - not possible or very long timeframe



#### EXERCISE

##### Prioritize & Add strategies

»Select a volunteer to report back to group on priorities and new strategies.

1. In your group, discuss which strategies are high priority, which are not.
2. If there are strategies you think are missing, add them to a new sticky.

#### NOTES & TIPS

- Notes and Tips: new ideas should be on a different colour sticky
- right click and "add a comment" if needed
- add text to document any important discussion points

# Prioritizing the Strategies

Example from the Buildings group

## STEP 3 CONSIDERATIONS

### Breakout 2 - Buildings



Enable retrofits through supportive policies and removing barriers  
Existing Policy

Marketing campaign for energy efficiency upgrades and low carbon energy systems  
Existing Outreach

# Shift Beyond the Car



## The Top Strategies

What needs to happen?



Policy &  
Regulation

- **Optimize and apply OCP policies, development permit guidelines and zoning bylaws that enable complete and compact growth**
- Support car share initiatives including through Township development
- Enable e-mobility on demand (eg. e-scooters and e-bikes)



Outreach &  
Engagement

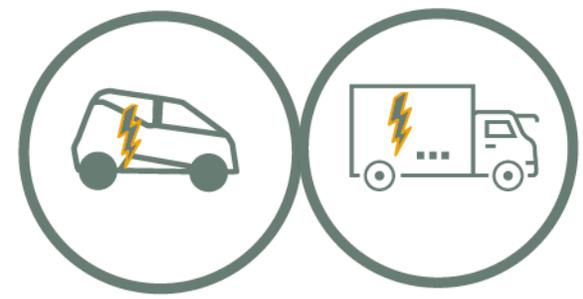
- **Develop active transportation and transit outreach strategy and collaborate regionally**
- **Collaborate with transit providers to promote transit ridership**
- Collaborate with ride-hailing providers for a regional low-carbon approach



Infrastructure

- **Build safe routes for walking, cycling and other forms of zero-emission mobility**
- **Support a zero-emission transit network**

# Electrify Passenger Transportation & Decarbonize Commercial Transportation



## The Top Strategies

### What needs to happen?



#### Policy & Regulation

- **Adopt EV-ready building requirements (Part 9 and Part 3)**
- Implement supportive policies to accelerate EV adoption
- Develop a community vision and strategy for decarbonized commercial transport



#### Outreach & Engagement

- Develop an EV outreach strategy
- Provide incentives to accelerate EV adoption such as priority parking
- Provide incentives for other electric transportation (not only cars)
- Engage commercial and institutional operators of medium/heavy duty fleets



#### Infrastructure

- **Collaborate with the Region to design, fund and build a public EV charging network**
- **Lead by example by electrifying the municipal fleet and providing workplace charging**

# Decarbonize Existing Buildings



## The Top Strategies

### What needs to happen?



#### Policy & Regulation

- **Enable retrofits through supportive policies and removing barriers**
- Establish requirements for labelling, benchmarking and energy performance
- Work with the Province to regulate oil heating



#### Outreach & Engagement

- Encourage deep energy retrofits through a coordinated outreach program
- Engage utilities and other orders of government to support local retrofit programs



#### Infrastructure

- **Lead by example by retrofitting municipal facilities**

# Step Up New Buildings



## The Top Strategies

### What needs to happen?



Policy &  
Regulation

- **Adopt the Energy Step Code and prioritize a low carbon approach (and lead by example)**
- Eliminate parking requirements in new buildings/bicycle infrastructure
- Support missing middle housing alternatives



Outreach &  
Engagement

- **Encourage the construction of high performance buildings through outreach and incentives**
- Build industry capacity through training and education programs



Infrastructure

- Lead by example by building any new municipal facilities to upper steps of the Step Code, net-zero energy ready, and/or low carbon.

# Close the Loop on Waste



## The Actions

### What needs to happen?



#### Policy & Regulation

- **Adopt policies that increase organics diversion**
- **Support CRD to evaluate opportunities for landfill gas capture and other resource recovery opportunities**



#### Outreach & Engagement

- **Develop and deliver a comprehensive zero-waste outreach program**



#### Infrastructure

- **Build a local or regional organics processing facility**
- **Implement enhanced organics collection**
- **Collect construction, demolition, agricultural, and industrial wood waste**
- **Implement or enhance landfill gas capture**

# Others



**Organizational**



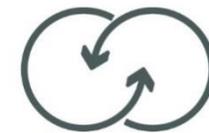
**Sequestration/  
Net Negative Emissions**



**Local Food Production**



**Nature-based Solutions**



**Adaptation/  
Low Carbon Resilience**

# Full Implementation

Wedge Analysis - Emissions Reductions By Action From BAU, tonnes/year

