

**Climate Action Committee Meeting  
February 25, 2019**

**On-Table Item(s)**

<b>Item Type</b>	<b>Date</b>	<b>Item No.</b>	<b>Item Name</b>	<b>Reason For On-Table Distribution</b>
Document	February 25, 2019	4.1c	Climate Action Plan Development and Implementation Strategy	Received after agenda distribution
Presentation	January 22, 2019	4.1e	Proposed Climate Action Public Consultation Plan	Received after agenda distribution
Presentation	February 25, 2019	4.3	UBCM Resolution – Greenhouse Gas limits in the BC Building Code	Received after agenda distribution

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# Climate Action Plan

A Climate Action Plan is a strategy document that outlines a collection of measures and policies that reduce GHG emissions. Using the GHG emissions inventory as the foundation, a CAP defines GHG reduction goals based on local priorities for reducing emissions and provides the guiding framework for achieving those goals.

Goal is to address climate change by decreasing greenhouse gas emissions to mitigate its effects, while preparing for climate change through adaptation and mitigation.

- Step 1 - Determine Leadership and Framework
- Step 2 – Development of Communications and Engagement Strategy
- Step 3 – Complete and Analyze Baseline Assessments
- Step 4 – Identify Goals and GHG Reduction Targets
- Step 5 – Identify Existing and Potential Initiatives
- Step 6 – Quantify Potential Impacts of Initiatives
- Step 7 - *Prioritizing Initiatives*
- Step 8 – Develop a Plan for Implementation
- Step 9 – Establish Matrix
- Step 10 – Write the Climate Action Plan
- Step 11 – Implement the Plan
- Step 12 – Track and Report Progress

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## City of Port Moody Presentation to Council January 22, 2019

### Climate Action Public Consultation Plan

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## Climate Action Plan (CAP)

... A strategy outlining commitments to reduce local GHG emissions and identify measures to build resilience in preparation for a changing climate

- Climate Action Committee initiative



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## Council Resolution

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July 10, 2018

- THAT the proposed strategy for writing and implementing a Climate Action Plan be endorsed as recommended in the report dated June 27, 2018 from the Climate Action Committee regarding Climate Action Plan Development and Implementation Strategy;
- AND THAT staff be directed to report back on financial implications.

## Climate Action Plan Development Strategy

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1. **determine leadership framework;**
2. **develop communication and engagement strategy;**
3. complete and analyze a baseline assessment;
4. identify goals and set targets;
5. identify potential initiatives;
6. quantify potential impact of initiatives;
7. prioritize initiatives;
8. establish metrics;
9. develop implementation and action plans;
10. write the plan;
11. implement the plan; and
12. track and report progress.

## Scope of Engagement

### Scope

- Provide education
- Gather suggestions and feedback on actions
- Identify potential challenges related to proposed actions

### Key Issue Areas

Mitigation	Adaptation
Buildings	Natural Environment
Transportation and Mobility	Infrastructure
Waste	Emergency Response and Human Health
Land Use and Growth Management	

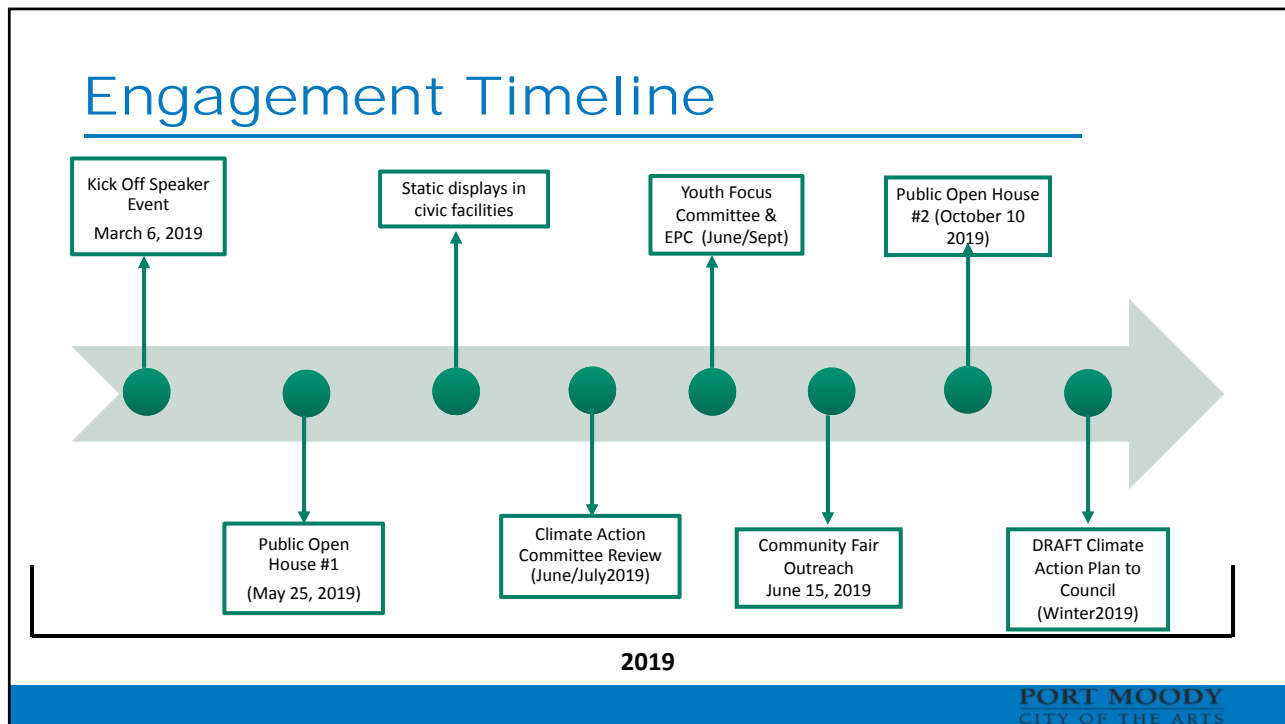
## Stakeholders & Advisory Committees

### Stakeholders

Primary	Secondary
Residents	Environmental Protection Committee
Business owners/operators	School District 43
Youth	Parks & Recreation Commission
Community Associations	Tri-Cities Chamber of Commerce
Citizen Advisory Group	Environmental Stewardship Group
	Local First Nations

### Advisory Committees

Climate Action Committee
Climate Action Internal Working Group
Technical Advisory Committee



### Financial Implications

- Public consultation is expected to incur costs of approximately \$11,000
- Carbon Offsets Reserve
  - Estimated 2019 opening balance of \$534,267

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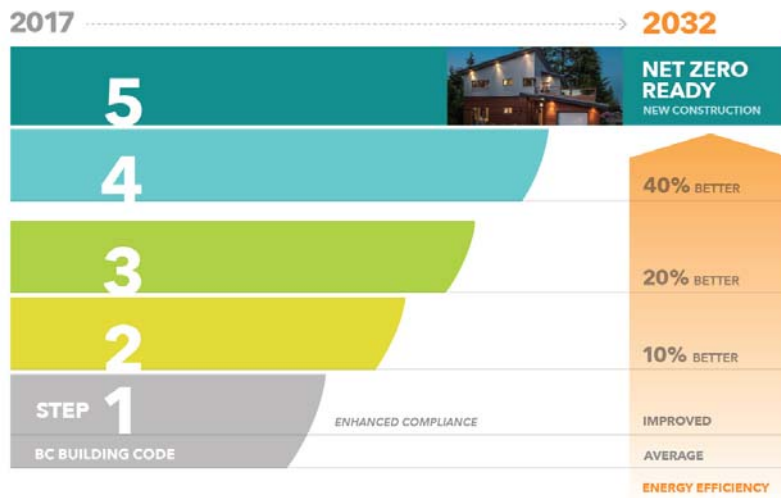


THANK YOU

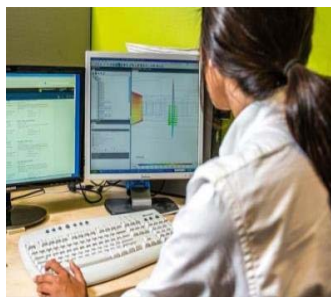
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### Part 9 | Step 5: Net Zero Ready New Construction



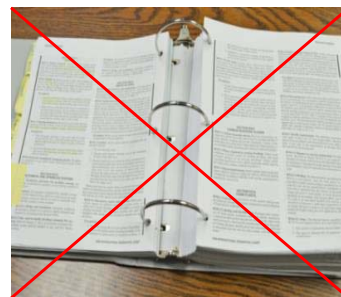
### Performance Compliance



Energy modeling



Air-Tightness Testing

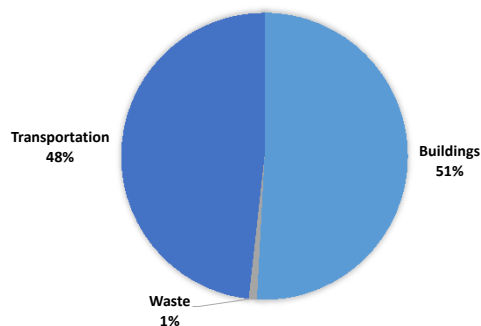


No Prescriptive Requirements

# Carbon (GHGi) Target in New Buildings

## Building Emissions

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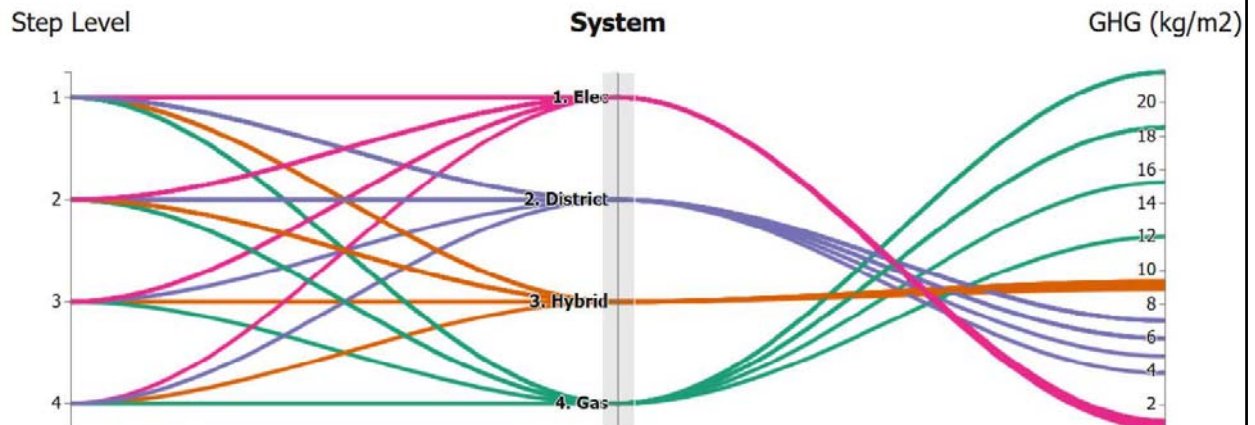


### Why Focus on New Buildings?

- Half of community greenhouse gas emissions
  - Heating, cooling, domestic hot water
- Buildings are around on average 50+ years
- No plan or strategy to address GHG emissions from buildings
- Implementing low carbon solutions is most cost effective in new builds
- Existing buildings are expensive to retrofit

## Greenhouse Gas Emissions & Step Code

**Greenhouse Gas Emissions:** Any gas that has the ability to trap heat in the atmosphere such as carbon dioxide & methane. Ex: emissions from heating/cooling, cars etc.



## Carbon (GHG) Intensity Target

$$\frac{\text{Building energy use (kWh/y)} \times \text{Emissions factor kgCO}_2\text{e/kWh}}{\text{Building's Floor Area (m}^2\text{)}} = \text{GHGI (kgCO}_2\text{e/m}^2\text{/y)}$$

- Total annual GHGs resulting from building's energy use
- Performance based target
- Most effective way to reduce building carbon emissions
- Complements Step Code to reduce energy use (efficient, comfortable, affordable) AND reduce emissions
- Accelerate our transition to low-carbon society

## Greenhouse Gas Emissions & Step Code

- Greenhouse gas intensity target/low carbon energy systems
  - Rezoning

### Low Carbon Energy System

*A professionally operated and maintained, highly efficient mechanical system that supplies a building's space heating, cooling and domestic hot water heating demand primarily from renewable energy sources, and meets defined greenhouse gas emissions limits.*

## Heating/cooling systems with a GHGI target?

### Heating and Cooling

- Heat pump systems: air source, geothermal or supplied by low-carbon district energy
- Natural gas based heating and cooling (hydronic) systems, with high attention to system efficiency and a very high performing building envelope.
- A combination of the above, with appropriate design for both envelopes and system efficiency.



## UBCM Resolution

Asks two things of the Province:

1. The Province to add GHG limits in the BCBC in a way that LG's can enforce it (Division B) with a timeframe that corresponds with BC's GHG reduction targets; and
1. Amend the goal in the CleanBC Plan to include "net-zero energy ready" AND "zero-emissions" by 2032.

## UBCM Resolution Path

- ✓Climate Action Committee
  - ✓Today!
- Port Moody Council
  - March 12, 2019
- Lower Mainland Local Government Association
  - Submitted by March 15, 2019
  - Conference May 8-10, 2019
- Union of British Columbia Municipalities
  - Conference September 23-27, 2019