# Green Fleet Plan – City of Vancouver



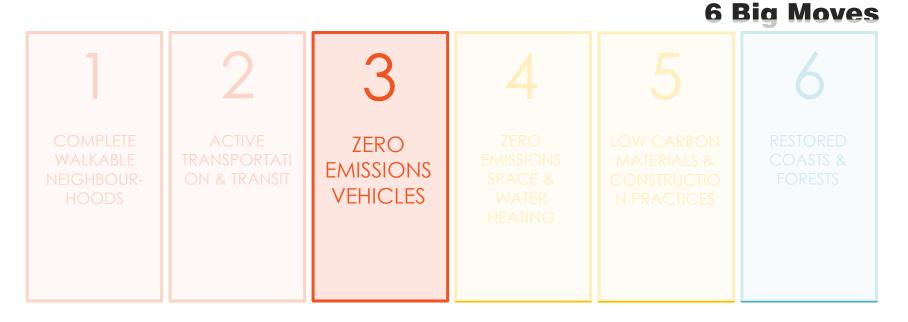
**Evan Dacey** Manager of Fleet Strategy and Asset Management 11/22/2021



# Background

### City of Vancouver – Climate Emergency



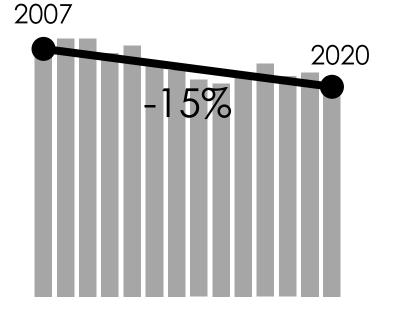


On November 17, 2020, Council approved the Climate Emergency Action Plan.

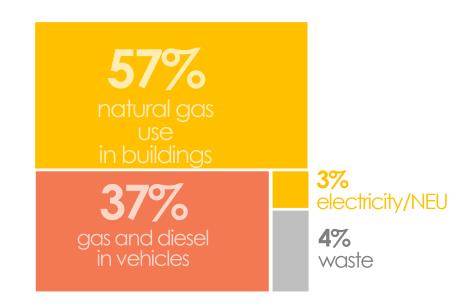
This puts Vancouver on track to reduce our carbon pollution by 50% by 2030, in alignment with the findings of the United Nations Intergovernmental Panel on Climate Change to limit global warming to 1.5°C.



#### Community GHGs by Year:



#### Community GHGs by Area:



## Fleet and Manufacturing Services







Adopted by Council, the Climate Emergency Action Plan has key actions for the City's fleet which are embedded in City's Green Operations Plan

Key adopted recommendations:

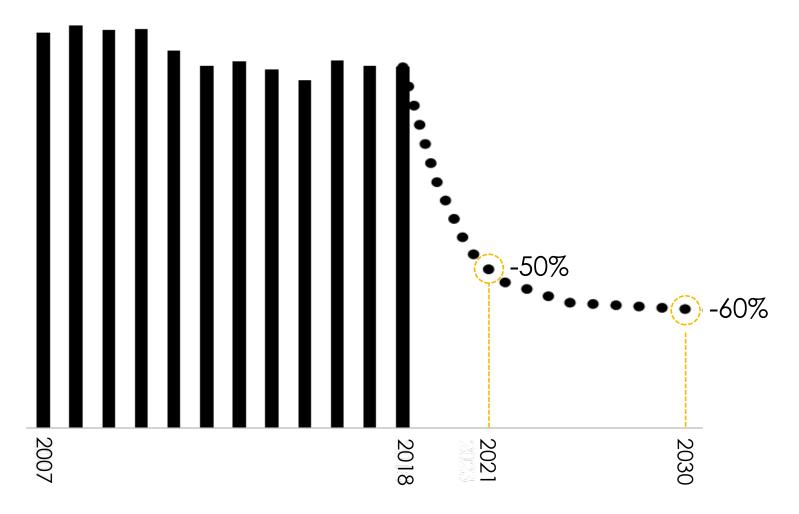
- 1. Corporate Emissions to be reduced to 60% below 2007 levels.
- 2. By 2030, **50 percent** of the kilometers driven on Vancouver's roads will be by zero emissions vehicles ("Big Move #3").

Complements **Renewable City** target of 50% emissions reduction below 2007 levels by 2030

#### Green Fleet Plan – Emissions Projection



Fleet GHGs – Scope 1 (CO2e)





Incorporates Climate Emergency actions in addition to existing Greenest City and Renewable City targets.

Three Key Pillars:

## 1 – Electrifying the Fleet

All vehicle replacements firstly consider an electric option

#### 2 – Fueling the Fleet

All fuel used contains a high proportion of renewable, biologically derived content

## 3 – Optimizing the Fleet

Ensuring all vehicle usage is optimized through technology and driver behaviour



All fuel used contains a high proportion of renewable, biologically derived content

Split into 4 major projects:

- 1. Renewable Natural Gas
- 2. Renewable Diesel
- 3. Gasoline
- 4. Other Fuels

Renewable Natural Gas through FortisBC

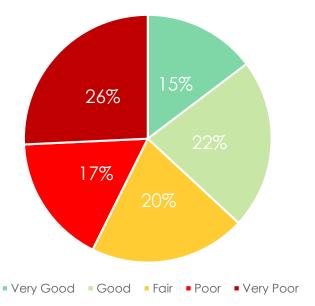
- Supply from City Landfill coming online in 2023

#### Renewable Diesel through Suncor/Petrocan

# Asset Replacement Considerations

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#### Condition Score



Need to balance with asset management considerations:

- Currently, 63% of our fleet reaching/at end of life
- Requires replacement of 200
  assets at ~\$25 mill per year

Medium/long term goal is electrification, but short term goal is fleet health which requires renewable fuels



In 2018, started project to renew liquid fuels contract. Focus of project was access to Renewable Diesel

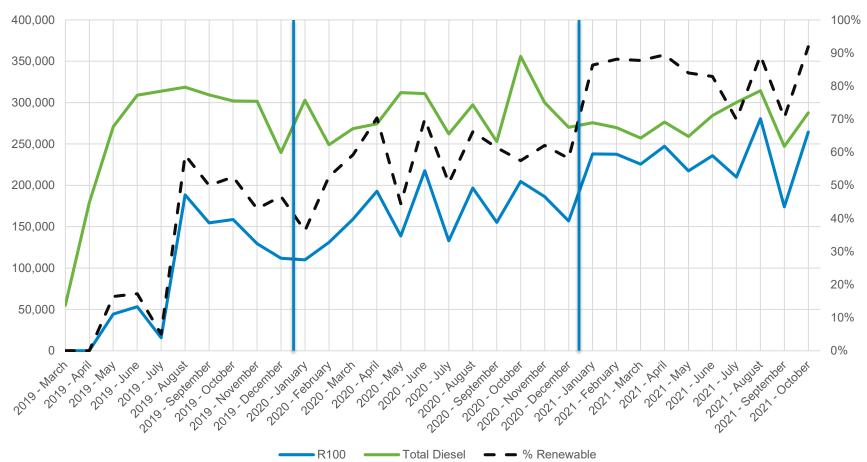
Challenges encountered:

- Misconceptions about Renewable Diesel
- Costs unknown and changing
- Fuel compliance/quality issues
- Delivery Logistics

Each major challenge required support and buy-in from different areas of the organization

## Renewable Diesel Implementation





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# Green Operations Plan – Next Steps



What's next for our Green Fleet Plan?

## **Electric** for Light Duty

 Focus on Sedans, Vans and Pickups

# Renewable Fuels for Medium

and Heavy Duty

 Take advantage of funding for electric pilots

# **Renewable Fuels** for Heavy

Equipment

 Continued market research / awareness for opportunities





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