

# Climate Action and Zero Emissions Fleet Transition @ TransLink

EMA of BC  
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# TransLink – Service Area

- Metro Vancouver
- 1,800 km<sup>2</sup> (695.0 mi<sup>2</sup>)
- 2.5 m residents (3.5 m by 2050)
- 21 municipalities
- One Electoral Area
- One Treaty Nation
- Nine Indigenous Nations
- 4 Subsidiaries
  - Coast Mountain Bus Co
  - BCRTC (SkyTrain)
  - West Coast Express
  - Transit Police



# TransLink - Snapshot



## Bus Services

More than **245 bus routes** with a fleet of **over 1,700 vehicles**. **2<sup>nd</sup> largest electric bus fleet** in North America



## Ferry Services (SeaBus)

**Four** passenger-only ferries linking downtown Vancouver and North Vancouver



## Cycling

102 km of bike paths, seven bike parkades, and more than **400 bike lockers**, as well as cycling projects



## HandyDART

On-demand transit service for people with disabilities, with more than **349 HandyDART** vehicles in our fleet



## Rapid Transit Services (SkyTrain)

79 km of rapid transit, **55 stations**, and **382 cars** on the Expo, Millennium, and Canada lines



## Commuter Rail Service (West Coast Express)

69 km route between downtown Vancouver and Mission, with **8 stations**, **44 cars**, **six locomotives**



## Roads

Operation and maintenance of the **2,660 lane km** of the Major Road Network



## Bridges

Pattullo, Knight Street, Golden Ears, and Westham Island bridges; as well as the Canada Line bike and pedestrian bridge



## Transit Police Force

Dedicated transit police service with **over 180 officers**





# Why Climate Action



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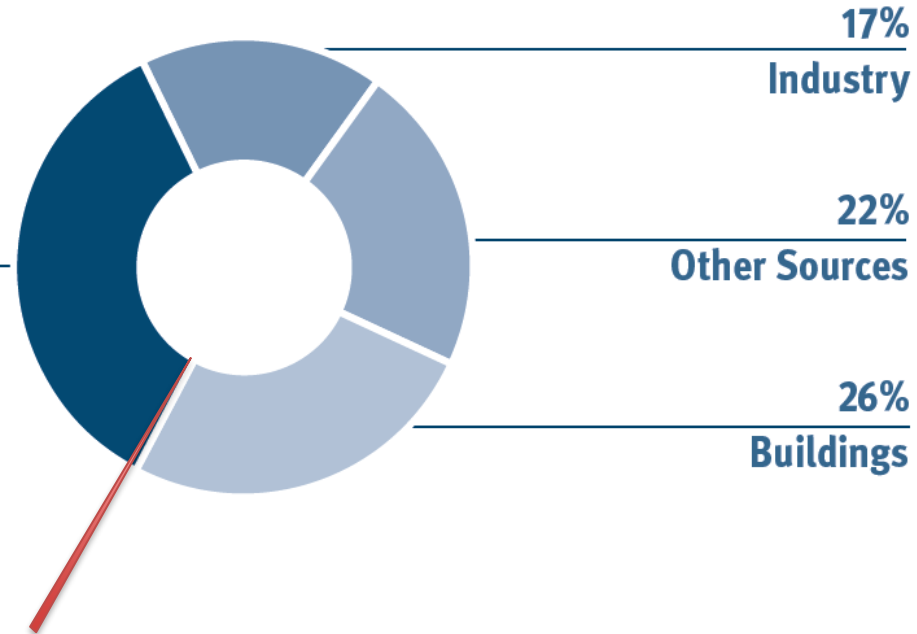


# How We Move Has Big Impact on GHGs

In Metro Vancouver, the largest single source of carbon emissions is on-road transportation.

**35%** of regional GHGs come from on-road transportation

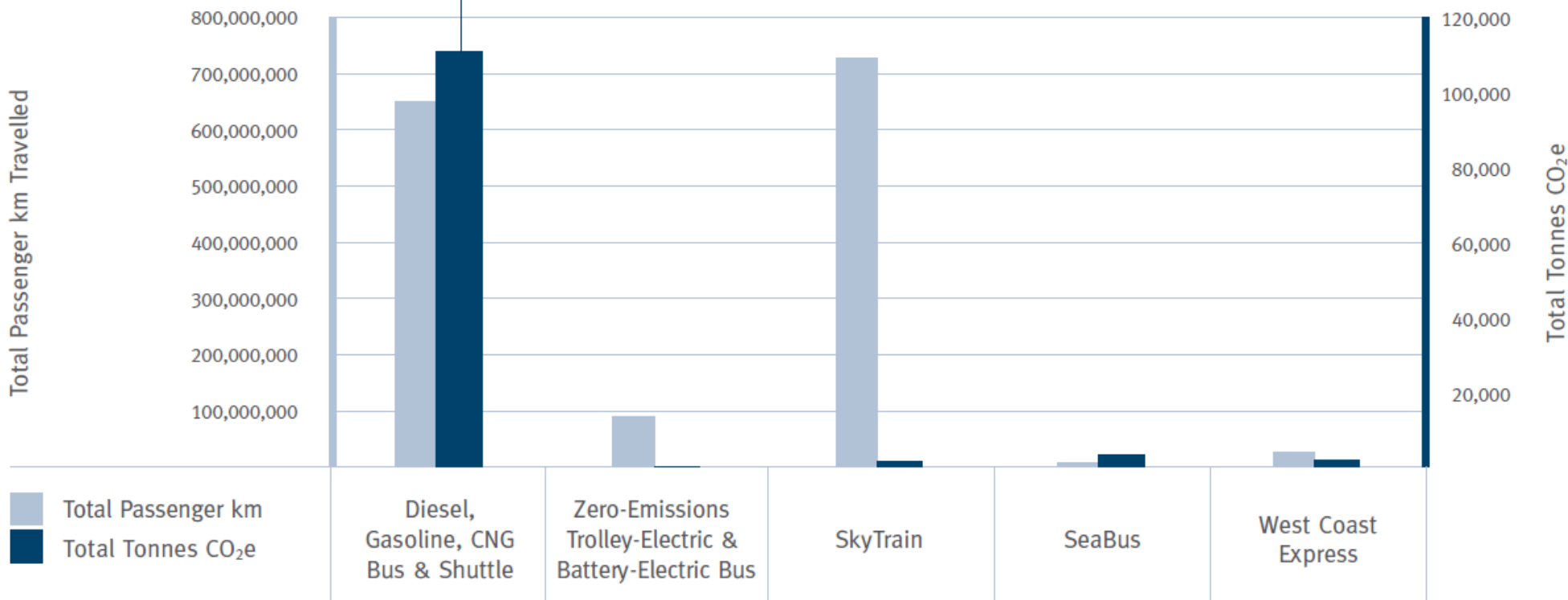
**1%** of regional GHGs come from TransLink



# Passenger KM and GHG Emissions

2020 Total Passenger  
km Travelled and Total  
Tonnes CO<sub>2</sub>e

• The consumption of fossil fuels in our bus fleet  
is our number one challenge.



# Vision and Targets

*Achieve net-zero GHG emissions by 2050, with an interim reduction of 45% by 2030, from 2010 levels.*

*Net zero emissions from our bus fleet by 2040.*

*Ensure our infrastructure and operations are resilient to the impacts of climate change.*

## TransLink Climate Action Strategy

January 2022



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[translink.ca](https://translink.ca)



# Climate Action Strategy



## REDUCE GHG EMISSIONS

- 1 Implement Low Carbon Fleet Strategy (LCFS)
- 2 Develop Net Zero Facilities Strategy (NZFS).



## ADAPT TO CLIMATE IMPACTS

- 3 Develop Climate Change Adaptation and Resiliency Roadmap
- 4 Support a More Climate-Resilient Region and Low Carbon Economy

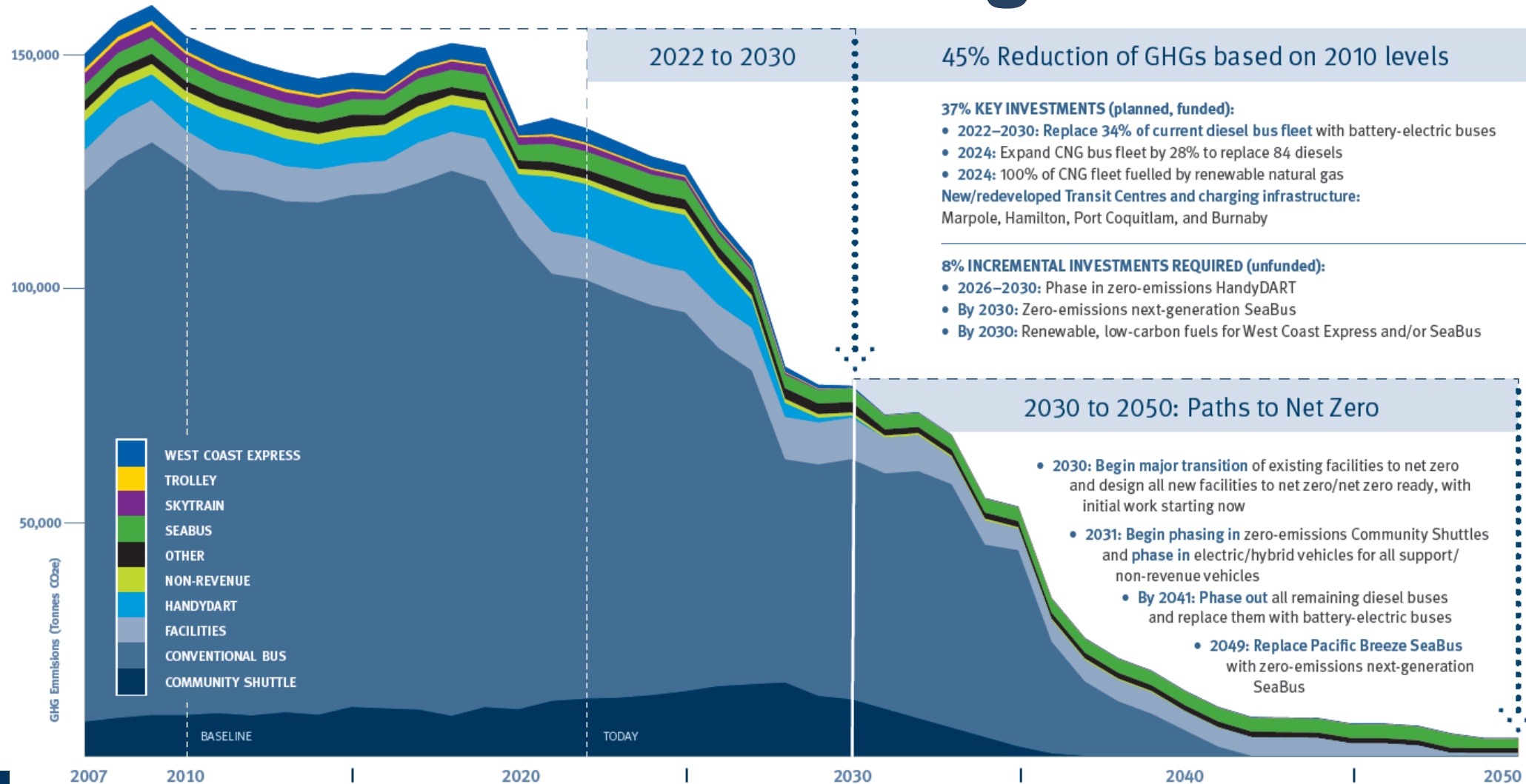


## ADVANCE GOVERNANCE AND FUNDING

- 5 Develop and Implement Supporting Climate Policies, Plans, and Processes
- 6 Enhance Climate Education and Communication
- 7 Secure Funding for Net Zero and Climate Resilience



# Reduce Emissions: Mitigation



# Milestones

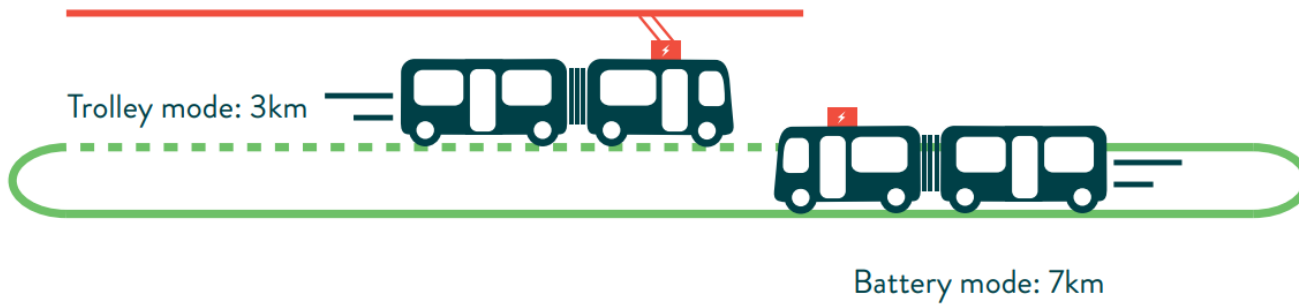
- **2024** - expanded CNG fleet fueled by 100% RNG
- **2027** - all-electric Transit Centre in Marpole to serve 350 battery-electric buses
- **2028** - all buses will have air conditioning
- **2030** - 460+ zero-emissions battery-electric buses will be in service
- **2040** - entire bus fleet will be zero emission, alongside fully electric SkyTrain and electric-trolley systems



# The Future is Diverse

- Renewable Natural Gas & Renewable Diesel
- Hydrogen Fuel Cell Electric Bus
- Electric Bus Rapid Transit
- In-Motion Charging Electric Trolley

## IN MOTION CHARGING ELECTRIC BUS

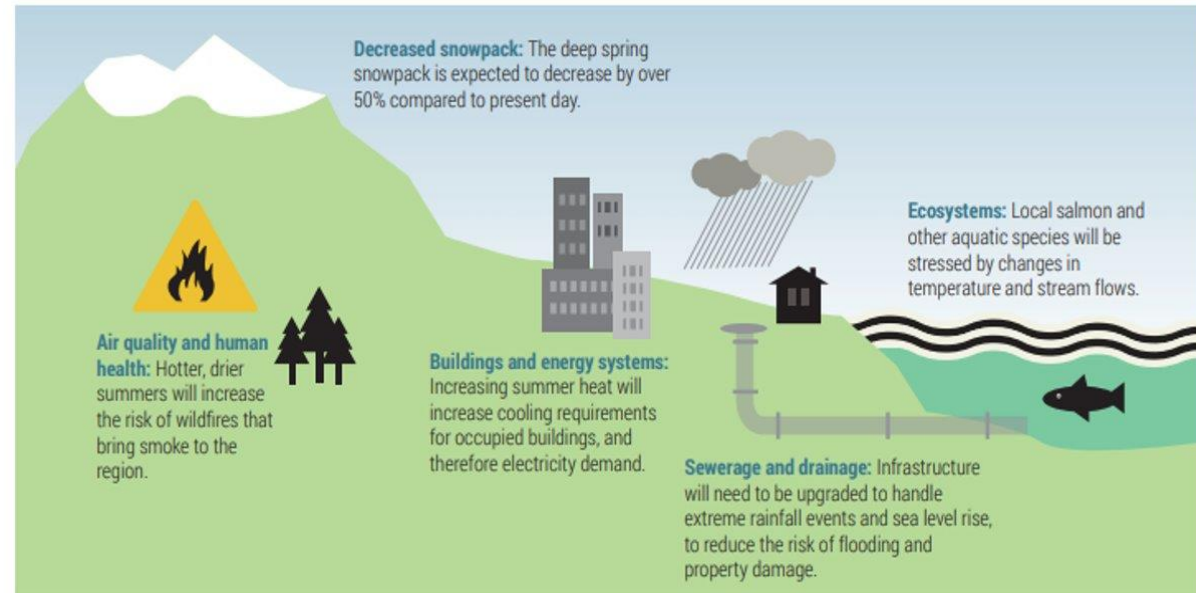


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# Adapt to Climate Impacts: Years 1-3

- Flood risk assessments and response plans
- Uniform specifications for key employees
- Tree Canopy/Cooling Corridor
- Design guidelines for transit facilities
- Internal Price of Carbon Policy
- Sustainable Procurement Strategy and Policy
- Collaborate with regional partners, Indigenous Peoples and key stakeholders

EXAMPLES OF CLIMATE CHANGE IMPACTS







# Challenges & Opportunities

- Funding
- Land for Expansion & e-Infrastructure
- Timely Project Approvals
- Labour Constraints
- Collaborate w. Utilities
- Regional support
- Regional Climate Resilience
- Equity
- Embrace the ambiguity



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# Thank you

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