



February 24, 2020 - Backgrounder

TransLink Low Carbon Fleet Strategy

Updated January 18, 2021

Transportation accounts for over 35% of all greenhouse gas (GHG) emissions in Metro Vancouver. As one of the region's largest consumers of diesel fuel and operator of a fleet of heavy-duty vehicles, TransLink plays an important role in reducing emissions in our own operations. The Low Carbon Fleet Strategy lays out a path for meeting TransLink's environmental targets.

TransLink's Sustainability Targets

In October 2018, the Mayors' Council and the TransLink Board of Directors approved the following targets:

- Reduce greenhouse gas emissions by 80% by 2050
- Use only renewable energy in all operations by 2050

Phase One Key Findings

- Only significant fleet electrification can achieve a reduction of TransLink's GHG emissions by at least 80% by 2050. Use of renewable fuels in existing buses provides a cost-effective way to get early reductions while the fleet transitions.
- Although life-cycle cost of battery electric buses may match existing technologies by 2025, over half of the cost of the strategy is in the significant charging infrastructure development and changes to bus operations pushing out total cost parity beyond 2040.
- Fleet electrification will require additional capital funding, and this will only be partially offset by operating savings in the first decade – primarily fuel cost savings.

Phase Two Steps 2020-2050

1. Begin purchase of additional battery electric buses in 2021, for delivery in 2023.
2. Design next Transit Centre (Marpole) to accommodate 100% electric buses.
3. Retrofit an existing Transit Centre to accommodate 100% electric buses in 2024.
4. Implement on-route charging for remaining routes.
5. Utilize Renewable Fuels in existing fleet, when available.
6. Continually assess commercial availability and cost of long-range battery buses and hydrogen fuel cell buses for highway coaches and shuttle buses.

PURPOSE	LOCATION	SCOPE	COMPLETION	BUS NUMBERS
In-route Charging	PTC	Install 8 in-route chargers	2023	
	PTC	Install depot chargers and maintenance area upgrades	2024	115
	PTC	Install 8 in-route chargers	2026	
Depot Charging	MTC	Make ready for full depot electrification; installation of 163 SAE J3105 chargers	2024	
	MTC	Installation of 79 SAE J3105 chargers	2025	280
	MTC	Installation of 38 SAE J3105 chargers	2025	
Depot Charging	BTC	Make ready for full depot electrification; installation of 127 SAE J3105 chargers	2026	
	BTC	Depot expansion	2029	267
	BTC	Installation of 140 SAE J3105 chargers	2029	

For more information, see the [Low Carbon Fleet Transition Plan Update](#).