







The world has changed since our last Green Bond Impact Report in 2019. The response to the COVID-19 pandemic has shifted the way organizations operate and do business. It has required TransLink to continue serving its customers in a highly uncertain landscape. But also re-enforced the need to provide safe transportation options that are accessible to everyone in our region, particularly to those most vulnerable.

Alongside the pandemic, the climate emergency has revealed the critical importance of private and public

sectors working together. The imperative to lead the way towards an equitable, net-zero emissions, climate resilient future, has never been greater.

Our \$400 million (2018) and \$200 million (2019) Green Bond issuances have been used solely to finance clean transportation and energy efficiency projects. I am pleased to report that all funds from these two issuances have been dispersed. Thank you to our investors in helping TransLink meet its sustainability, climate, and service goals well into the future.

As we finalize our 2022-2031 Investment Plan, there is an extraordinary need for system and program expansion as well as state of good repair projects. These will enable us to reduce our energy use and greenhouse gas emissions, increase use of renewable energy and prevent pollution. As our systems and programs expand, it is critically important that all our investments result in infrastructure that is designed to be resilient to our changing climate.

Over the past two years, the investment community has increased its efforts to tackle the challenge of the climate emergency. By investing in Green Bonds, TransLink will deliver tangible outcomes — financially and environmentally — that will enable us to become more sustainable and resilient. We're proud to be a leader in this area, and are excited about our ability to make real change.

I encourage you to learn more about TransLink's efforts through our <u>Accountability Report</u> and <u>Green Bond Program</u>.

Sincerely,

Christine Dacre

Chief Financial Officer, TransLink



TransLink is the first multi-modal transportation authority in North America to oversee a broad range of transportation modes, including bus, commuter rail (SkyTrain), cycling, walking, roads and more.



1,800km²

Service area across 21 municipalities.

452.9M boardings

In 2019, total ridership accrued to 452.9 million boardings.

During the COVID-19 pandemic, customer boardings dropped to 218.8 million in 2020 but has since rebounded to 58% of prepandemic levels¹.

Key investment attributes include:

- More than \$5.5 billion in assets
- Strong fiscal management and investment-grade ratings (Aa2/AA)
- Diversified and dedicated revenue sources
- Government-legislated entity
- Only issuing transportation authority in Canada

Our Commitment to Sustainability.

Our vision is to create a better place to live, built on transportation excellence. Guided by our regional transportation strategy, <u>T2050</u>, we work to connect the region and enhance its livability by providing a sustainable transportation system network.

Our <u>Sustainability Policy</u> articulates TransLink's commitment to integrating sustainability into all our strategies, plans, business practices, decisions, and operations. We have two significant targets:



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



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

We've developed a <u>Climate Action Strategy</u> and a roadmap on how we will achieve these targets.

American Public
Transportation
Association (APTA)
Sustainability
Commitment
Recognition:



2016 TransLink is awarded **Platinum level**, the first transportation agency in Canada to receive this award.

¹ As of November 2021.



Use of Proceeds

The use and management of the proceeds of Green Bonds are described in TransLink's Green Bond Framework and can be found in the <u>Investor Relations</u> section of our website.

Impact Reporting

TransLink is committed to promoting integrity in the market through transparency, disclosure, and reporting. TransLink uses the best available methodologies to select and report on project and program indicators demonstrating a positive environmental impact.

In 2018, TransLink developed a Green Bond Program to help finance projects that provide environmental benefits to customers and the communities we serve in the region.

TransLink's Green Bond Framework aligns with the International Capital Market Association (ICMA) Green Bond Principles and has received a second party opinion from Sustainalytics.

TransLink's Green
Bond Framework
received a
Second-Party
Opinion from
Sustainalytics:





Sustainalytics is of the opinion that the TransLink Green Bond Framework is credible and impactful and aligns with the four components of the Green Bond Principles 2018.

TransLink Green Bond Program



CLEAN TRANSPORTATION



ENERGY EFFICIENCY AND CONSERVATION





2018 and 2019 Green Bonds

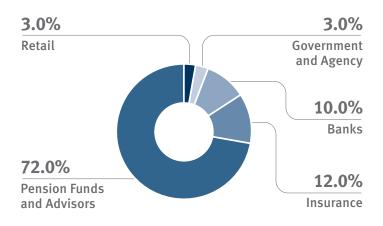
The net proceeds from these issuances were used to finance or refinance, in whole or in part, existing and ongoing capital projects. These projects provide environmental benefits to the region and TransLink, and help make progress towards our sustainability and climate goals. The capital raised were directed to projects in the Green Bond Project Categories of Clean Transportation, Energy Efficiency and Conservation, and Renewable Energy.

These projects also support the United Nations Sustainable Development Goals (UN SDGs).

Public Transit Programs & Projects	Key Performance Indicators	GRE	ANSLINK EN BOND T CATEGORY	UNITED NATIONS SDGS
SkyTrain Station Upgrades SkyTrain Operations and Maintenance Program Refurbishment and Purchases of New Rapid Transit Vehicles (Train Cars) Rapid Transit Projects – SkyTrain Extension Cycling and Pedestrian Walking Infrastructure Electric Bus Program	 Ridership (# boardings) GHG emissions (tCO₂e) Reduced/avoided emissions (tCO₂e) due to mode shift Energy saved per year (GJ/yr) Renewable energy consumed (MWh/yr) Support for biking infrastructure (km) 		✓	7 ALFORDABLE AND CLEARING CHIES AND COMMUNITIES 13 CLIMATE ACTION
Building Energy Efficiency Improvements	Key Performance Indicators	GRE	ANSLINK EN BOND T CATEGORY	UNITED NATIONS SDGS
SkyTrain Station Upgrades Transit Centre Energy Upgrades	 Energy saved per year (kWh/yr) Building energy efficiency (kWh/m₂) 	✓	✓	7 AFFORDABLE AND CLEASURED TO THE COLLAR TRANSPORT

TransLink Green Bond Program 2018 Key Features of 2018 Green Bond

- On November 15, 2018, TransLink (Aa2/AA) successfully priced its inaugural Green Bond of \$400 million, making it the first transit authority in Canada to issue a Green Bond (ISIN:CA83740TAG28).
- The \$400 million **10-year bullet maturity bond** was priced with a coupon interest rate of 3.25 per cent, payable semiannually until maturity on November 23, 2028.
- With orders from 41 investors, the issue was oversubscribed. Investors with green mandates and/or UN PRI (Principles of Responsible Investment) signatories represented 73 per cent of overall sales.
- Demand was primarily concentrated in Canada, with
 92 per cent placed domestically.



The net proceeds after issuance costs amounted to \$397,824,000

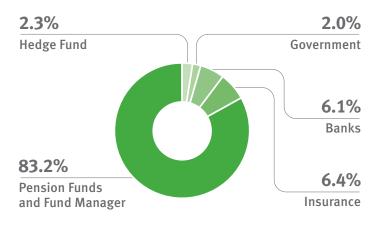
From December 2018 to June 2019, **100% of the proceeds of this bond issuance have been released** from the segregated account, represent funds invested in eligible projects.

Program / Project Name	NET PROCEEDS DISBURSED (\$000s) *	
Millennium Line Evergreen Extension	225,000	
SkyTrain Station Upgrades	103,147	
SkyTrain Operations and Maintenance Projects	44,371	
Refurbishment and Purchases of New Rapid Transit Vehicles (Train Cars)	12,092	
Electric Bus Projects	8,200	
Transit Centre Energy Efficiency Upgrades	3,358	
Cycling and Pedestrian Infrastructure	1,656	
Total	397,824	

^{*} Details of the use of proceeds and allocation can be found in the 2018 Green Bond Impact Report.



- On October 22, 2019, TransLink (Aa2/AA) successfully priced and issued a C\$200 million Green Bond (ISIN:CA83740TAH01).
- The **31-year bullet maturity** bond was priced with a coupon interest rate of 2.65 per cent, payable until maturity on October 29, 2050.
- The transaction was oversubscribed with **34 buyers** participating.
- A total of **16 "Dark Green" investors** (i.e. having specific Green funds or a Green mandate) participated, accounting for approximately 75 per cent of allocations on the transaction.
- Demand was primarily concentrated in Canada, with over **86 per cent placed** domestically.



For the 2019 bond the net proceeds after issuance costs amounted to **\$198,580,000**

From October 2019 to May 31, 2021, 100% of the proceeds of this bond issuance have been released from the segregated account, representing funds invested in eligible projects.

Program / Project Name	TOTAL ALLOCATION (\$000s)
SkyTrain Station Upgrades	45,797
SkyTrain Operation and Maintenance Program	42,837
Refurbishment and Purchase of New Rapid Transit Vehicles (Train Cars)	34,415
Rapid Transit Projects – SkyTrain Extension	26,262
Transit Centre Energy Upgrades	13,648
Cycling and Pedestrian Walking Infrastructure	27,023
Electric Bus Program	8,598
Total	198,580

PROJECT UPDATE | SkyTrain Station Upgrades

Funding for SkyTrain station upgrades include new energy-efficient escalators, LED lighting fixture upgrades, increased customer capacity and improved accessibility.

We have also begun the design of the new Capstan Station on the Canada Line in Richmond, BC. These projects support the ongoing enhancement and expansion of our clean transportation network, ensuring customers have a driving alternative, thereby reducing GHG's and criteria air contaminants.

Total Project Cost

\$312.8M

Green Bond Proceeds

\$148.9M

2018 Green Bond Proceeds \$103.1M 2019 Green Bond Proceeds \$45.8M

Balance of funding received from senior levels of government.

Project Categories



Clean Transportation



Energy Efficiency and Conservation



Renewable Energy



TransLink's two green bond issuances have supported upgrades at the following stations:

2018 Green Bond

2019 Green Bond

Commercial-Broadway SkyTrain Station Upgrade (completed Feb 2019)

Surrey Central SkyTrain Station Upgrade (completed Feb 2019)

Joyce-Collingwood SkyTrain Station Upgrade (completed June 2019)

Canada Line – Station Escalator Enhancements (in progress)	Canada Line - Capstan Station Design (in progress)
New Westminster SkyTrain Station Upgrade (completed November 2016)	Expo Line - Escalator Replacement, Accelerated Program (in progress)
Metrotown SkyTrain Station Upgrade (completed March 2018)	Expo and Millennium Lines - Signage and Station Fixture Replacement (in progress)

Program Benefits

We increased overall station capacity, supporting growth in ridership and access to clean transportation

3.2%

SkyTrain boardings were up by 3.2 per cent in 2019 over 2018, with 114.8 million boardings.

Due to COVID-19, SkyTrain boardings in 2020 were down 53% (54.55 million boardings)

.... 5.0%

2020 GHG emissions from SkyTrain operations was 5% lower than 2019 (1,763,253 vs 1,864,015 tonnes)

PROJECT UPDATE | SkyTrain Operations and Maintenance Projects

Utilizing BC Hydro's renewable electricity grid, SkyTrain gives our customers a near zero-emission transportation option.

SkyTrain connects major transit-oriented communities and destinations in Vancouver, Burnaby, Coquitlam, Port Moody, New Westminster, and Surrey. It is the oldest and longest (79km) automated driver-less electric light rapid transit system in the world and extremely energy efficient due to its linear induction motor technology.

Total Project Cost

\$266.5M

Green Bond Proceeds

\$87.2M

2018 Green Bond Proceeds 2019 Green Bond Proceeds

\$44.4M \$42.8M

Balance of funding received from senior levels of government.

Project Categories



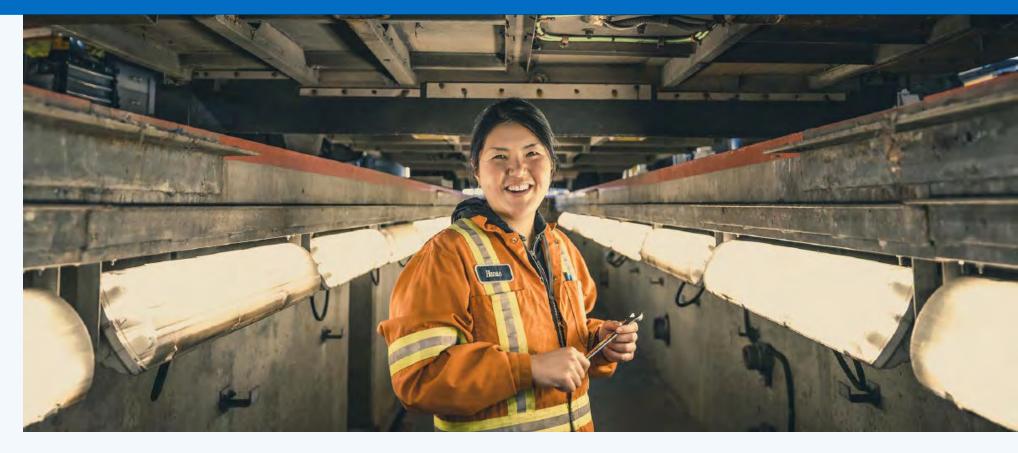
Clean Transportation



Energy Efficiency and Conservation



Renewable Energy



Proceeds were disbursed to the following projects:

Power system upgrades: Upgrades to operations and maintenance centres, mainline power, and control systems to support more frequent train service and longer trains.

Running rail and rail pad replacement: As part of our commitment to keeping the system in a state of good repair and energy efficiency, approximately 5,000 linear metres of running rail, and an average of 7,800 rail pads, are replaced every year.

Automatic train control system upgrades: This provides automatic driverless SkyTrain operations on the electric rail network, supporting mode shift away from personal vehicles, and reducing GHGs and other air pollutants.

Traction and propulsion power upgrades: The SkyTrain power supply and distribution system is made up of electric propulsion power substations, fed by BC Hydro's utility service. This service provides TransLink with electricity derived from a clean renewable energy source.

Maintaining our SkyTrain system is critical to ensuring a reliable, clean transit network

131,506 MWh

In 2020, the SkyTrain utilized 131,506 MWh of renewable energy.

7,800 rail pads

Approximately **5,000 linear metres of running rail**, and an average of **7,800 rail pads**, are replaced every year

PROJECT UPDATE | Refurbishment and Purchase of New Train Cars

In 2019 and 2020, the SkyTrain system had 165 and 75 million boardings respectively.

Despite the pandemic, we continued to operate and provide service to those who needed it most. The average SkyTrain car operates more than 180,000 kilometres every year. Refurbishing the train cars ensures they are energy efficient and that customers are comfortable. Increasing SkyTrain capacity by providing new train cars reduces personal vehicle use and lowers associated greenhouse gas and air pollutants in the region. This program included purchasing 80 new rail cars (56 Bombardier ART Mark III and 24 Hyundai Rotem), and the refurbishment of 36 existing rail cars.

Total Project Cost

\$380.0M

Green Bond Proceeds

\$46.5M

2018 Green Bond Proceeds \$12.1M 2019 Green Bond Proceeds \$34.4M

Balance of funding received from senior levels of government.

Project Categories



Clean Transportation



Energy Efficiency and Conservation



Renewable Energy



Program Benefits New Train Cars

10% increased capacity on Expo Line

23% increased capacity on Millennium Line

30% increased capacity on Canada Line

8,200 additional spaces per peak hour in both directions on all three lines

500 tonnes of CO₂e have been avoided through mode shift¹



Increased energy efficiency of the linear induction motor (LIM) propulsion system from the use of lightweight aluminum train car material and regenerative braking

Improved customer service through redesigned new train car layout and larger windows

 1 Approximate - estimating 180,000 km per new rail car, 10 per cent mode shift factor and 10.3L/100 km fuel efficiency

Program Benefits Refurbishment of Mark I Train Car

- New LED lighting improves energy efficiency of the cars
- Upgraded LIM improves energy efficiency from previous models



PROJECT UPDATE | Rapid Transit Project – Millennium Line SkyTrain Extension

The Millennium Line Evergreen Extension opened in December 2016.

The extension added 11 kilometres of guideway and 6 new stations to our existing network to service Burnaby, Port Moody and Coquitlam. Boardings at the new Millennium Line Evergreen Extension stations have grown by one million since 2017.

The Millennium Line Evergreen Extension makes Metro Vancouver's SkyTrain network the world's longest fully-automated rapid transit system.

Total Project Cost

\$398M¹

Green Bond Proceeds

\$225M

2018 Green Bond Proceeds

Balance of funding received from senior levels of government.

Project Categories



Clean Transportation



Renewable Energy



Evergreen Line Project Benefits	2018	2019	2020
Due to impacts of COVID-19 in 2020, ridership decreased 53% .	6,442,900	6,814,800	3,225,800
	riders	riders	riders
Use of electricity (renewable energy) decreased 4% from 2019 in 2020	12,405	13,332	12,835
	MWh	MWh	MWh
Due to few boardings in 2020, energy use per boarding increased in 2020	1.93	1.96	3.98
	kWh/boarding	kWh/boarding	kWh/boarding



Due to the impacts of COVID-19 in 2020, ridership decreased on the Evergreen Line by **53 per cent.**

NOTE: data revised from 2019 GB Impact Report due to improved energy tracking methods.

^{1 \$398}M is the value of TransLink's project and TransLink's contribution. There was significant additional senior government contributions, for the portion of the project delivered by the province.

PROJECT UPDATE | Rapid Transit Project – SkyTrain Extensions



Surrey Langley SkyTrain

The Surrey Langley SkyTrain project will extend the Expo Line along Fraser Highway, improving connectivity and accessibility for residents and businesses south of the Fraser River with high-speed and frequent transit service.

The 16-kilometre extension will connect the City of Langley to the Cities of Surrey, New Westminster, Burnaby, Vancouver, and the rest of Metro Vancouver. The project, scheduled to be completed in 2028, will meet the population growth needs of the region while expanding our transit system, and reducing congestion on our roads. The project along the Fraser Highway corridor will help support municipal development by providing more transportation choices for those travelling in and around Surrey-Langley and those commuting within the greater region. Proceeds were used for pre-project planning.

Total Project Cost

\$443.2M

Green Bond Proceeds

\$26.2M

2019 Green Bond Proceeds

Balance of funding received from senior levels of government.

Project Categories



Clean Transportation



Renewable Energy **Surrey Langley SkyTrain Project Benefits**



- SkyTrain runs on electricity with **no operating emissions**
- Projected to serve 62,000 daily riders in year 2035; and an estimated
 71,200 riders by year 2050.

By 2035 approximately 5,000 tonnes of CO₂e

avoided annually through a 10% mode shift.

This is equivalent to taking 1,100 cars off the road each year.

By 2050 approximately
5,800 tonnes of CO₂e
avoided annually.



This is equivalent to taking 1,250 cars off the road each year.

Support Healthy, Transit-Oriented Communities: Mixed-use development around stations will support active, vibrant, and diverse neighbourhoods for walking, cycling and connections to multi-modal transportation options.

Increased Transit Capacity: SkyTrain extension will provide capacity to move 6,800 passengers per hour per direction — more than 10 times the capacity of bus service today — with the ability to add further capacity in the future.

Reduced Travel Times: Travel time from Langley City Centre to King George SkyTrain Station are estimated at 22 minutes - two times faster than current local bus service, and 10 minutes faster than express bus service.

Increased Access to Opportunities and Housing: More transit options will help people move around the region – between work, home, and other opportunities.

Support Economic Development: The project will help grow our economy by spurring development, land-use change and creating diverse job opportunities through increasing business access to the region's labour force.

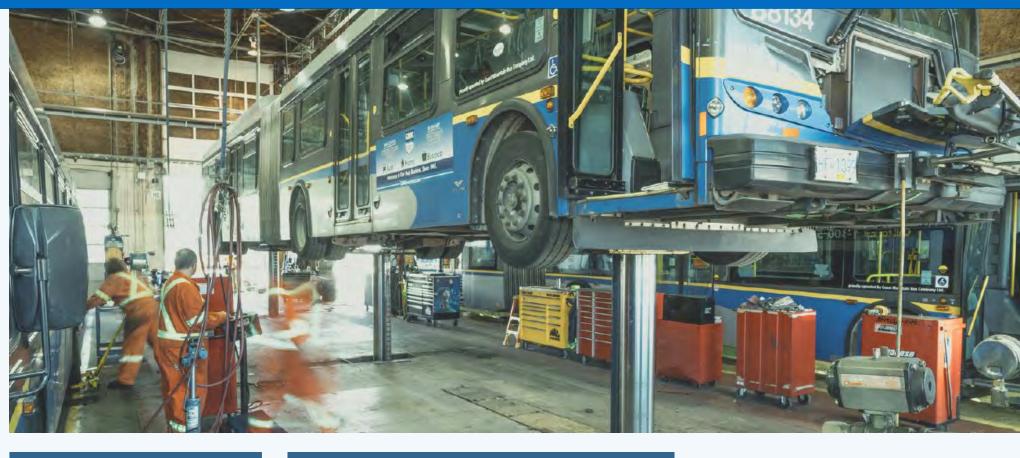
PROJECT UPDATE | Transit Centre Energy Upgrades

TransLink's seven transit centres are the hub of our bus system. Each center is a maintenance, fueling and washing facility for the fleet of buses they serve.

One maintenance facility does the same for SeaBuses. These centres and facilities are key to sustaining our operations to serve our customers.

Our ongoing energy management programs at Coast Mountain Bus Company and BC Rapid Transit Company are supported through long standing relationships with our utility providers, BC Hydro and FortisBC. Every year, Strategic Energy Management Plans are developed to identify areas of energy conservation, and improve efficiency.

Facilities energy management systems track real-time energy data at our transit centres, allowing us to monitor energy consumption and detect in-efficient or failing equipment.



Total Project Cost

\$31.8M

Green Bond Proceeds

\$17.0M

2018 Green Bond Proceeds2019 Green Bond Proceeds\$13.6M

Balance of funding received from senior levels of government.

Project Categories



Energy Efficiency and Conservation



Renewable Energy

Program Benefits

PROJECT LOCATION AND DESCRIPTION	ANNUAL ELECTRICITY SAVINGS (KWH)	ANNUAL GHG SAVINGS (TONNES)
Richmond Transit Centre – PowerSmart lighting upgrade	592,705	5.9
Vancouver Transit Centre – PowerSmart lighting upgrade	1,156,986	11.6
West Vancouver Transit Centre – PowerSmart lighting upgrades	161,774	1.6
Surrey Transit Centre – PowerSmart lighting upgrades and door replacements	636,302	6.4
Port Coquitlam Transit Centre – PowerSmart lighting upgrades and door replacements	106,766	1.1
SeaBus Terminals – building envelope rehabilitation and construction	89,600	0.9
Program Total	2,744,133	27.5



2,744,133 kWh savings is enough to provide electricity to 270 homes for a whole year

TRANSLINK 2020-21 GREEN BOND IMPACT REPORT

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PROJECT UPDATE | Cycling and Pedestrian Infrastructure

The future of transportation in Metro Vancouver is multi-modal.

Continual improvement of cycling and pedestrian infrastructure throughout the region is critical to reducing greenhouse gas emissions and improving air quality. TransLink partners with municipalities and other stakeholders to develop the BC Parkway and improve facilities and infrastructure that enable walking and cycling.

Total Project Cost

\$102.5M

Green Bond Proceeds

\$28.7M

2018 Green Bond Proceeds 2019 Green Bond Proceeds

\$1.7M \$27.0M

Balance of funding received from senior levels of government.

Project Categories



Clean **Transportation**



Energy Efficiency and Conservation



Program Benefits

Maintenance of cycling infrastructure on the BC Parkway

Reduction of GHG emissions and other air pollutants, due to customer use of the cycling network (instead of using cars)

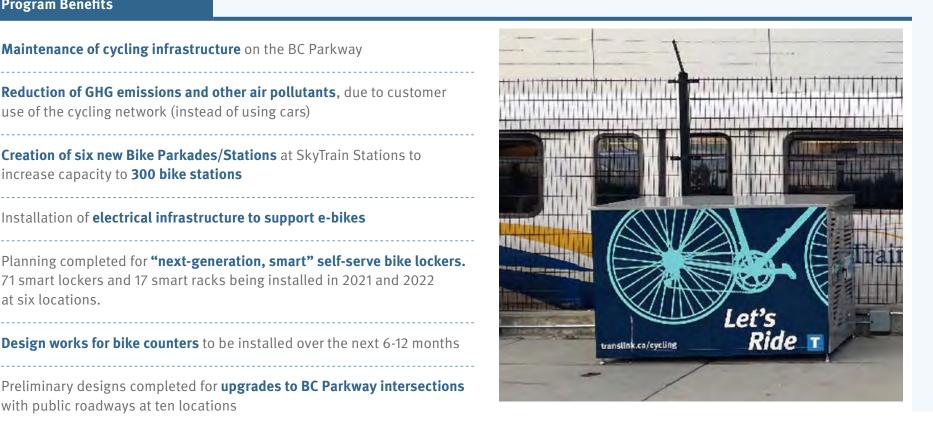
Creation of six new Bike Parkades/Stations at SkyTrain Stations to increase capacity to **300 bike stations**

Installation of electrical infrastructure to support e-bikes

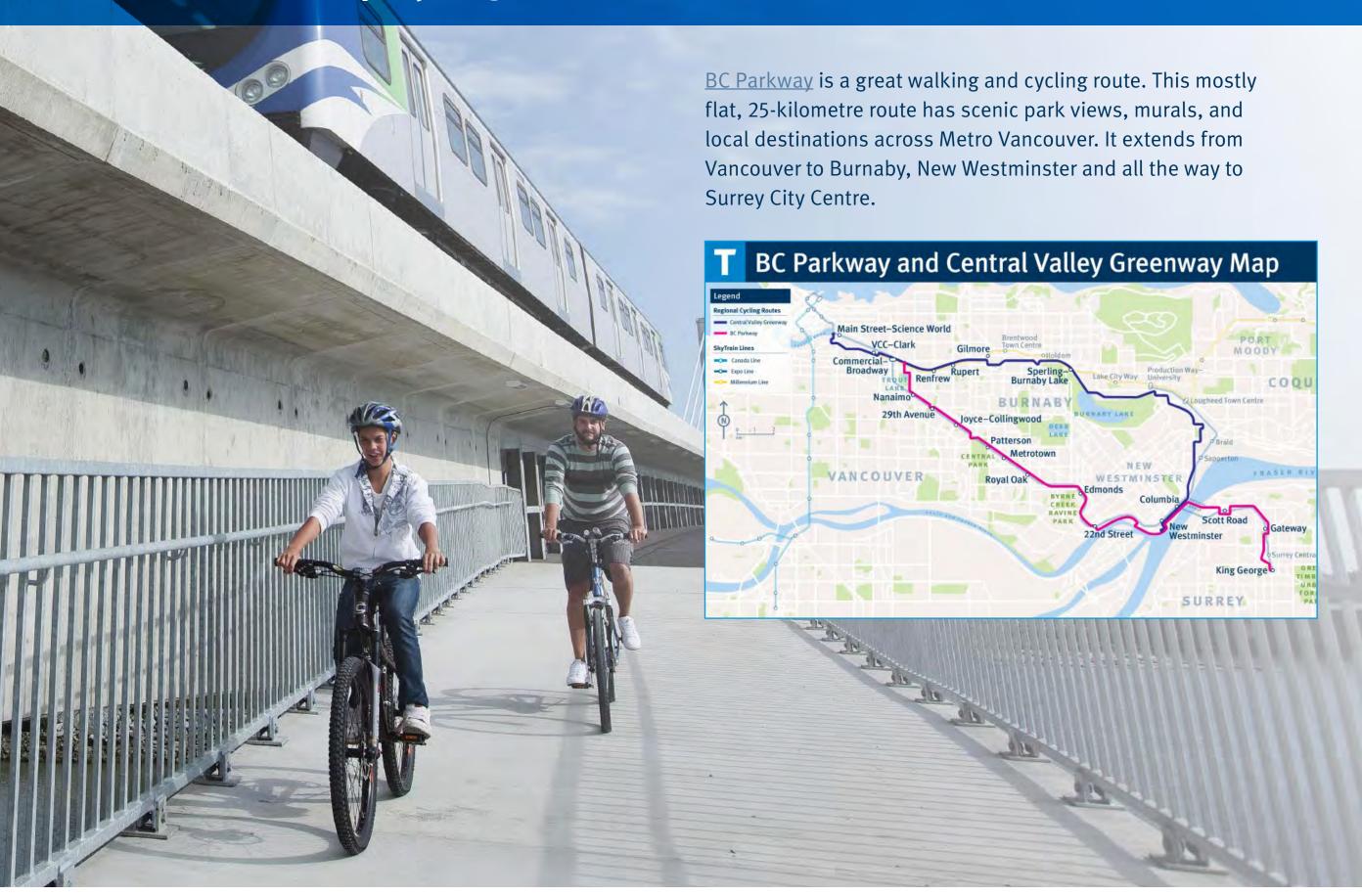
Planning completed for "next-generation, smart" self-serve bike lockers. 71 smart lockers and 17 smart racks being installed in 2021 and 2022 at six locations.

Design works for bike counters to be installed over the next 6-12 months

Preliminary designs completed for **upgrades to BC Parkway intersections** with public roadways at ten locations



PROJECT UPDATE | Cycling and Pedestrian Infrastructure



PROJECT UPDATE | Electric Bus Program | Electric Trolley Buses Program

TransLink's electric trolley system provides 315 kilometres of a clean, zero-emissions transportation solution to our customers.

The electric trolley bus system has its roots in the origins of our system. It began operations in 1948 by converting electric streetcars to electric bus trolley systems. Its extensive network serves some of Vancouver's densest neighbourhoods with 262 electric trolley buses and 315 kilometres of overhead (catenary) infrastructure. Our electric trolley system provides a clean, zero-emissions transportation solution to our customers.

The Green Bond proceeds were used for equipment upgrades and replacements, trolley bus overhead pole installation, power rectifier upgrades, roof replacements, wire replacement and fleet maintenance - all of which improve energy efficiency and maintain the electric trolley system in a state of good repair.

Total Project Cost

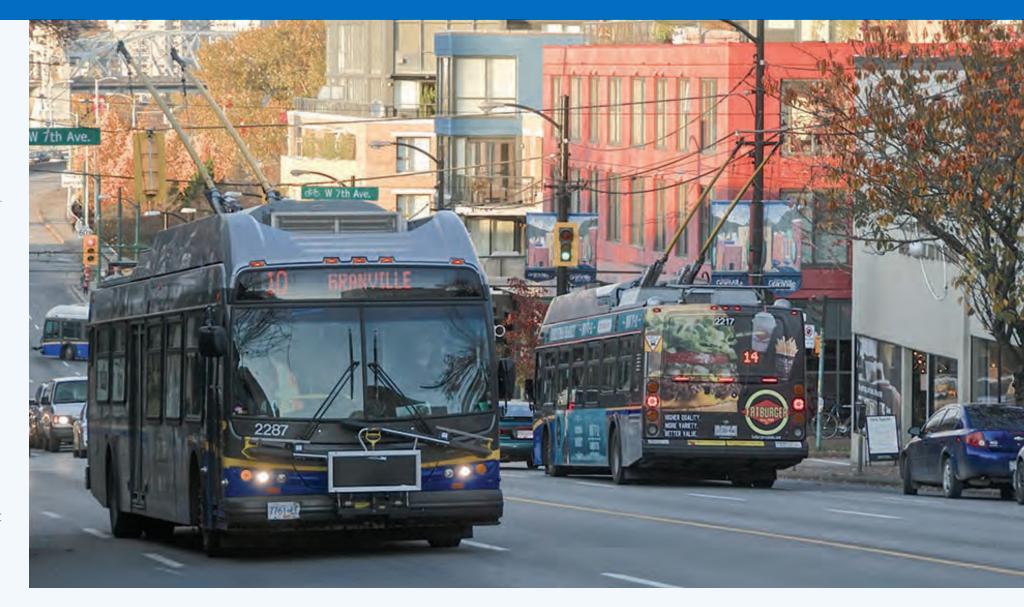
\$23.6M

Green Bond Proceeds

\$16.8M

2018 Green Bond Proceeds \$8.2M 2019 Green Bond Proceeds \$8.6M

Balance of funding received from senior levels of government.



Project Categories



Clean Transportation



Renewable Energy

Program Benefits

11.3 MILLION

In 2020, the electric trolley buses travelled 11.3 million km and consumed 27.1 million kWh of electricity

ZERO tailpipe air pollutants

(i.e., particulate matter, nitrogen oxides, non-methane hydrocarbons).

98 per cent reduction in GHG emissions compared to diesel bus equivalent kilometres

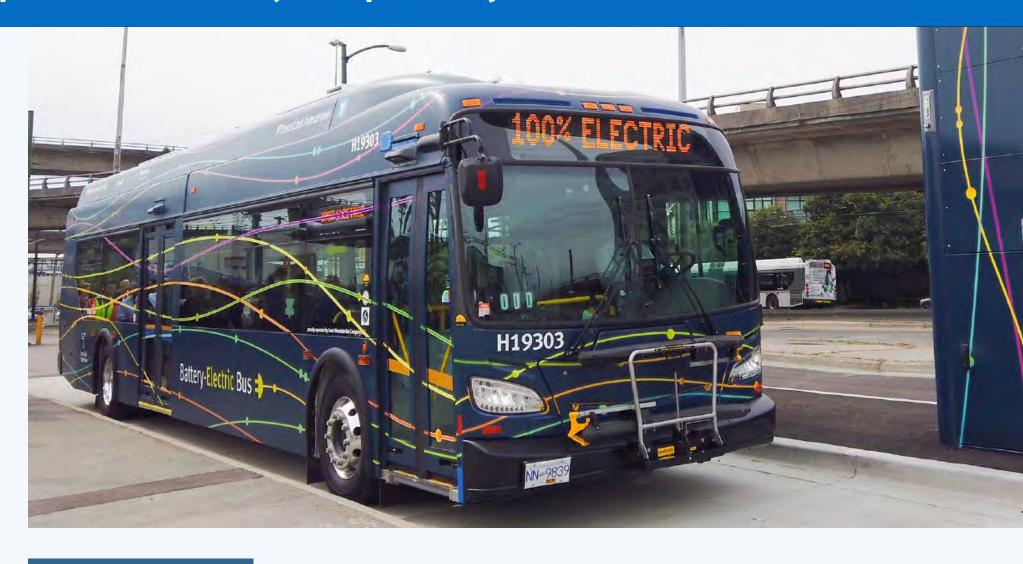
PROJECT UPDATE | Electric Bus Projects | Battery-Electric Buses

Battery Electric Buses (BEBs) are the keystone of our Low Carbon Fleet Strategy. In 2019, TransLink began to electrify buses and procure on-route and depot charging infrastructure.

In 2020 and into 2021, we continue to participate in Canadian Urban Transit Research & Innovation Consortium's test project of battery-electric buses and onroute charging infrastructure. Four battery-electric buses as part of the 2.5-year demonstration project are running along Route 100 in Vancouver and are serviced out of our Hamilton Transit Centre.

We continue to test interoperability between bus and charger manufacturers, collect data on bus performance, maintenance, and the overall customer experience.

By 2030, we will have over 462 BEBs in service throughout Metro Vancouver. Together with other measures, this will reduce our enterprise-wide greenhouse gas emissions by 37% against 2010 levels by 2030.



Program Benefits

The four battery-electric buses will result in:

21,725 km

The four battery-electric
buses covered a combined total
of 21,725 km and consumed
112,559 kWh of electricity
in 2020



annually



ZERO tailpipe emissions and criteria air contaminants

(i.e., particulate matter, nitrogen oxides, non-methane hydrocarbons)

Reduction in noise pollution

(battery-electric buses are quieter than conventional diesel buses)

OUTLOOK

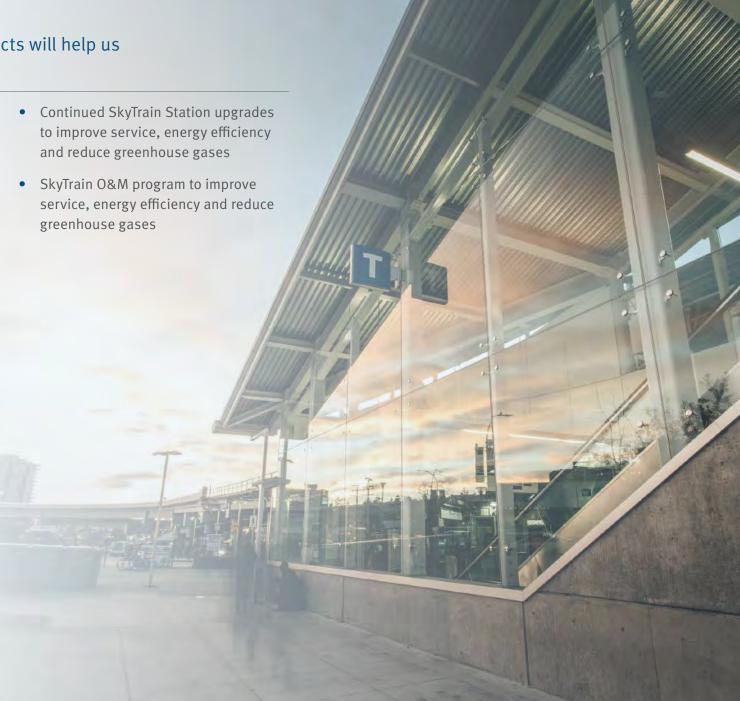
We have big plans for 2022 and beyond. A range of priority capital projects will help us achieve our sustainability and climate goals, including:

- Continued Low Carbon Fleet Strategy implementation with the procurement of additional of Battery Electric Buses and the design and construction of required charging infrastructure
- Land acquisition, design and construction of new SkyTrain Operations and Maintenance centres
- Continued energy efficiency and PowerSmart projects throughout our facilities
- Refurbishment and Replacement of SkyTrain cars to improve quality of service and comfort

In addition to these capital projects, our sustainability and climate priorities for 2022 and beyond include:

- Implement our first <u>Climate Action</u>
 <u>Strategy</u> and Plan, including a detailed climate change adaptation plan based on risk and vulnerabilities
- Review and update of our Sustainability Policy
- Work with suppliers to expand the supply and use of renewable fuels
- Work with industry and government to build regional capacity for low carbon technologies such as fuel cells
- Develop and implement our Sustainable Procurement Plan
- Identify key elements of a future energy and emissions management framework to improve transparency, accountability, and reporting

We value strong and productive relationships with our investors.





Questions? Feedback? Suggestions?

Please Contact Us

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