

# GREEN BOND NEWSLETTER

PROVINCE OF QUÉBEC  
July 2021



QUÉBEC GREEN BOND PROGRAM	2
QUÉBEC GREEN BOND ISSUES	3
USE OF PROCEEDS FROM QUÉBEC GREEN BONDS	4
ALLOCATION OF GREEN BOND PROCEEDS	7
FINANCED PROJECTS - UPDATE	8
ESTIMATED BENEFITS FOR THE ENVIRONMENT	19

# QUÉBEC GREEN BOND PROGRAM

Québec's Green Bond program draws on the Green Bond Principles (GBP).

Québec has been a member of the GBP group since October 2018.

Québec has committed to publish an annual information bulletin for investors.

To demonstrate its commitment to protecting the environment and developing the Green Bond market, Québec put in place a Green Bond program in February 2017.

- Since then, the Québec government has launched six Green Bond issues and has committed to being a regular issuer on the Green Bond market.
- Québec is promoting its Green Bond program in a dedicated section of the Ministère des Finances website: [www.finances.gouv.qc.ca/Green-bond](http://www.finances.gouv.qc.ca/Green-bond).

CICERO (Center for International Climate Research) issued an independent opinion on the framework and the selection process of Québec's Green Bond program.








- Québec's Green Bond framework was awarded the highest possible rating - dark green.
- The most recent version of CICERO's Second Opinion is available on the Ministère des Finances website.

Consult document<sup>1</sup>  
from CICERO



<sup>1</sup> [http://www.finances.gouv.qc.ca/documents/Autres/en/AUTEN\\_Quebec\\_2nd\\_Opinion.pdf](http://www.finances.gouv.qc.ca/documents/Autres/en/AUTEN_Quebec_2nd_Opinion.pdf)

# QUÉBEC GREEN BOND ISSUES

	1 <sup>st</sup> issue 1.65% - March 3, 2022 (5-year)	2 <sup>nd</sup> issue 2.45% - March 1, 2023 (5-year)	3 <sup>rd</sup> issue 2.60% - July 6, 2025 (7-year)	4 <sup>th</sup> issue* 2.25% - February 22, 2024 (5-year)	5 <sup>th</sup> issue 1.85% - February 13, 2027 (7-year)	6 <sup>th</sup> issue 2.10% - May 27, 2031 (10-year)
ISSUE SIZE	CAD 500 M	CAD 500 M	CAD 500 M	CAD 800 M	CAD 500 M	CAD 500 M
ORDER BOOK SIZE AND NUMBER OF INVESTORS	> CAD 1.1 B > 60	> CAD 1.8 B 50	> CAD 1.9 B 55	> CAD 2.4 B 55	> CAD 2.75 B 62	> CAD 2.8 B 63
PRICING DATE	February 24, 2017	February 22, 2018	June 28, 2018	February 14, 2019	February 6, 2020	May 19, 2021
REOFFER SPREAD	+57.0 bps (CAN 0.50% March 1, 2022)	+38.0 bps (CAN 1.75% March 1, 2023)	+52.5 bps (CAN 2.25% June 1, 2025)	+46.0 bps (CAN 2.25% March 1, 2024)	+48.0 bps (CAN 1.50% June 1, 2026)	+57.0 bps (CAN 0.50% Dec. 1, 2030)
FORMAT	Global					MTN-CAN
EXCHANGES	Luxembourg Green Exchange (LGX) – Euro MTF Market					
LEADS	HSBC, RBC and TD	CIBC, HSBC, RBC and TD		BMO, CIBC, HSBC and RBC	BMO, HSBC, RBC and Scotia	HSBC, RBC, Scotia and TD
SENIOR CO-LEADS	SEB		SEB and BMO	SEB and TD	SEB	
GREEN MANDATE OR UN PRI SIGNATORIES	> 90%	> 85%	> 90%	94%	85%	91%
DOMESTIC / INTERNATIONAL INVESTORS	60% / 40%	79% / 21%	86% / 14%	80% / 20%	80% / 20%	90% / 10%
PROJECT CATEGORIES	Public transit				Public transit and energy efficiency	
ELIGIBLE PROJECTS	AZUR métro cars, Réno-Systèmes, Réno-Infrastructures and electric or hybrid bus purchase		Réseau express métropolitain (REM)	REM, Réno-Systèmes, Réno-Infrastructures and electric or hybrid bus purchase	AZUR métro cars, Réno-Systèmes, Réno-Infrastructures, electric or hybrid bus purchase, Bellechasse bus garage, East end of Montréal bus garage and Montréal métro's blue line extension	
ALIGNMENT WITH THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDG)	 				    	
INCLUSIONS IN GREEN BOND INDEXES	Bloomberg Barclays MSCI Green Bond Index / ICE BofA Merrill Lynch Green Bond Index Solactive Green Bond Index / S&P Green Bond Index					ICE BofA Merrill Lynch Green Bond Index <i>Other indexes: to come</i>

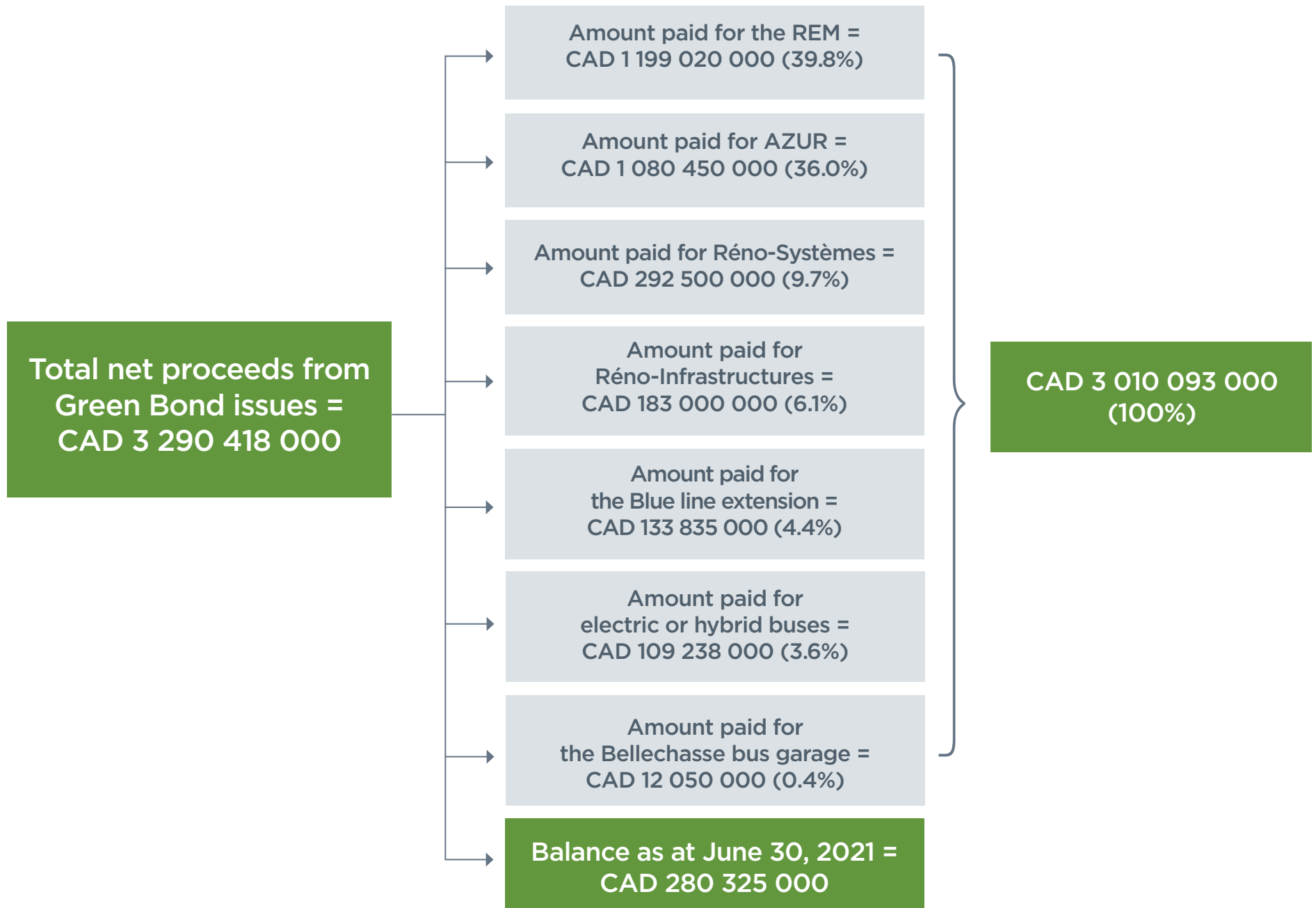
\* Environmental Finance Bond Awards 2020 – Green Bond of the Year – Local/Municipality (2019 Green Bond Issue)

# USE OF PROCEEDS FROM QUÉBEC GREEN BONDS

## USE OF PROCEEDS AS AT JUNE 30, 2021

<b>Balance as at March 31, 2020</b>		<b>CAD 400 913 000</b>
Balance from the fourth Green Bond issue (CAD 88 000)		
Proceeds used for the Réno-Infrastructures project	(CAD 88 000)	
	(CAD 88 000)	
<b>Balance from the fifth Green Bond issue (CAD 400 825 000)</b>		
Proceeds used for the AZUR project	(CAD 211 200 000)	
Proceeds used for the Réno-Systèmes project	(CAD 68 700 000)	
Proceeds used for the Blue line extension	(CAD 61 750 000)	
Proceeds used for the Réno-Infrastructures project	(CAD 36 512 000)	
Proceeds used for the Bellechasse bus garage project	(CAD 12 050 000)	
Proceeds used for the electric or hybrid bus purchase project	(CAD 10 613 000)	
	(CAD 400 825 000)	
<b>Balance as at March 31, 2021</b>		<b>CAD 0</b>
Net proceeds from sixth Green Bond issue	CAD 497 510 000	
Proceeds used for the Blue line extension	(CAD 72 085 000)	
Proceeds used for the AZUR project	(CAD 53 000 000)	
Proceeds used for the Réno-Systèmes project	(CAD 49 600 000)	
Proceeds used for the Réno-Infrastructures project	(CAD 42 500 000)	
	CAD 280 325 000	
<b>Balance as at June 30, 2021</b>		<b>CAD 280 325 000</b>

## USE OF PROCEEDS FROM QUÉBEC GREEN BONDS



## USE OF PROCEEDS FROM QUÉBEC GREEN BONDS

### TOTAL COST OF THE PROJECTS AND PORTION FINANCED WITH GREEN BONDS AS AT JUNE 30, 2021 (in million \$)

Project Name	Total cost authorized	Financed with Green Bonds	%
Réseau express métropolitain (REM)	6 900.00 \$	1 199.02 \$	17.4%
AZUR	2 623.80 \$	1 080.45 \$	41.2%
Réno-Systèmes	1 888.20 \$	292.50 \$	15.5%
Réno-Infrastructures	1 047.00 \$	183.00 \$	17.5%
Blue line extension	829.50 \$	133.84 \$	16.1%
Electric or hybrid bus purchase	1 346.10 \$	109.24 \$	8.1%
Bellechasse bus garage	370.30 \$	12.05 \$	3.3%
East end of Montréal bus garage	315.50 \$	- \$	0.0%
	<b>15 320.40 \$</b>	<b>3 010.09 \$</b>	

# ALLOCATION OF GREEN BOND PROCEEDS

Project name	Category	1 <sup>st</sup> issue	2 <sup>nd</sup> issue	3 <sup>rd</sup> issue	4 <sup>th</sup> issue	5 <sup>th</sup> issue	TOTAL
New AZUR métro cars	Public transit	100%	64%	0%	0%	42%	<b>37%</b>
Réno-Systèmes	Public transit	0%	15%	0%	12%	33%	<b>13%</b>
Réno-Infrastructures	Public transit	0%	10%	0%			
Electric or hybrid bus purchase	Public transit	0%	11%	0%	1%	10%	<b>4%</b>
Réseau express métropolitain (REM)	Public transit	0%	0%	100%	87%	0%	<b>43%</b>
Bellechasse bus garage	Energy efficiency	0%	0%	0%	0%	3%	<b>1%</b>
East end of Montréal bus garage	Energy efficiency	0%	0%	0%	0%	0%	<b>0%</b>
Blue line extension	Public transit	0%	0%	0%	0%	12%	<b>2%</b>

# FINANCED PROJECTS – UPDATE

## RÉSEAU EXPRESS MÉTROPOLITAIN (REM)



### REM IN NUMBERS

The Réseau express métropolitain (REM) is a light rail transit system under construction in the Greater Montréal area. The REM will serve 26 high-frequency stations 20 hours a day, 7 days a week.

CDPQ Infra, a subsidiary of the Caisse de dépôt et placement du Québec, is responsible for developing and operating the REM.

The REM is a project worth 6.9 billion Canadian dollars. The Québec government made an equity investment of \$1.28 billion. It will finance the investment, in total or in part, by issuing Green Bonds.

### A FEW NUMBERS

- \$6.9 billion for the construction of the project
- 100% electric
- 34 000 direct and indirect jobs created in Québec during the construction phase and more than 1 000 permanent jobs once the REM starts running
- 67 km of tracks
- 4 directions from downtown Montréal (South Shore, Montréal's Pierre-Elliott-Trudeau Airport, Sainte-Anne-de-Bellevue, Deux-Montagnes)
- 26 stations
- 3 connections with the métro (Bonaventure, McGill and Édouard-Montpetit stations)
- 2022-2024: progressive commissioning of the REM



### MAIN SUSTAINABILITY ADVANTAGES

- Increase in public transit use, and reduction in car use and the associated social costs
- Decrease of nearly 680 000 tonnes in GHG emissions over 25 years
- Significant reduction in noise levels, adverse visual impacts, and air pollution linked to the passing of cars
- Contribution to the electrification of transportation and improvement of the sector's energy efficiency to develop the economy and reduce GHG emissions
- Contribution to the academic, professional and social integration of people with mobility impairments, thanks to universally accessible stations and cars

Photo credit: REM



## SCOPE OF THE WORK TO BE PERFORMED

A BRAND NEW TRANSIT NETWORK BUILT FROM A TO Z

**67**

KM OF TRACK OF WHICH  
**18.2 KM**  
IS ON AN ELEVATED GUIDEWAY



**14**

PARK-AND-RIDE LOTS



**26**

STATIONS



**5**

KM OF TUNNEL TO BE MODERNIZED



**3**

KM OF TUNNELS



**11**

BUS STATIONS



**8**

ELEVATED STATIONS



**13**

GROUND-LEVEL STATION



**5**

UNDERGROUND STATIONS



**5**

BRIDGES  
**1.16 KM**



**2**

MAINTENANCE CENTRES

## FINANCED PROJECTS - UPDATE

### UPDATED PROJECT SCHEDULE

COVID-19, as well as the two unforeseen issues in the safety of the Mount Royal Tunnel, had the consequence of delaying by a few months the commissioning of the various REM branches.



- Commissioning of the South Shore to Central Station segment is now scheduled for Spring/Summer 2022.
- On the Deux-Montagnes line, the commissioning will still be done by segment (fall 2023 for the Central Station to Du Ruisseau segment, spring 2024 for Du Ruisseau to Sunnybrooke and fall 2024 for Sunnybrooke to Deux-Montagnes).
- Commissioning of the West Island segment is scheduled for spring 2024 and that of the airport antenna is scheduled for the end of 2024.

For more information about the updated REM schedule in relation to the exceptional events of 2020: <https://rem.info/en/news/2020-schedule>.



### RÉSEAU EXPRESS MÉTROPOLITAIN (REM)

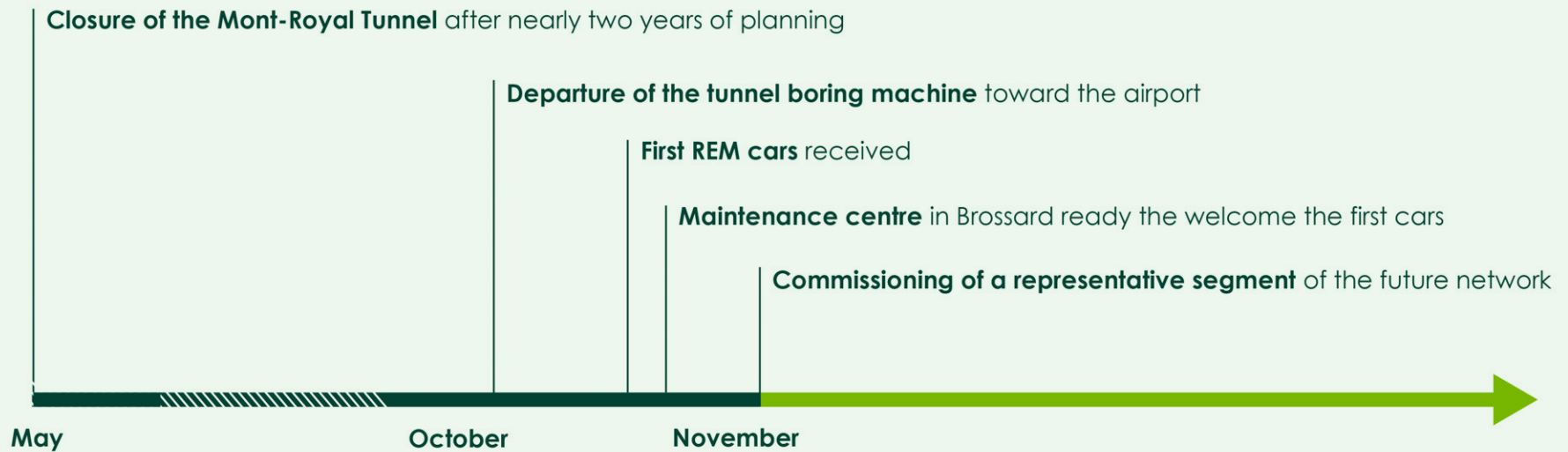


### ACHIEVEMENTS OF 2020 IN A FEW FIGURES

- Kilometres of track installed: **9**
- Stations under construction: **17**
- Kilometres of aerial structures installed: **10**
- Number of segments installed: **2 162**
- Number of spans installed: **78**
- Number of pillars installed: **455**
- Excavated rock in cubic metres: **22 791**

## 2020: A DEFINING YEAR

### MAJOR MILESTONES TO REACH



REM Semi-annual update (June 3, 2021): <https://rem.info/en/newsrelease/reseau-express-metropolitain-semi-annual-update>.



For more information on the project progress, you can visit the REM website: <https://rem.info/en>.

### ACQUISITION OF AZUR MÉTRO CARS



#### PROJECT DESCRIPTION

- The project involves the Société de transport de Montréal's (STM) acquisition of 71 AZUR trains (639 cars), 38 of which are to replace the 1963 métro cars (MR-63), 7 of which are to replace the 1973 métro cars (MR-73) and 26 are additional metro cars. These new trains feature leading-edge design and technology.
- For Montréal métro users, the new rolling stock significantly improves service: an 8% increase in capacity, high-tech information systems, a new ventilation system, 27% wider doors than the previous ones and an optimized layout.
- Powered 100% by hydroelectricity, these cars manufactured with 60% Canadian content will be 92.5% recyclable at the end of their useful life.
- Thanks in part to the AZUR métro cars, the STM aims to increase electric-powered travel on its network from 69.5% in 2015 to 88.6% in 2025.



#### PROJECT PROGRESS AS AT MARCH 31, 2021

- The 54 AZUR trains of the first phase had been transferred to the STM.
- Of the 17 trains of the second phase, 8 were received by the STM.
- The last 9 trains are expected to be delivered by fall 2021.
- Currently, 62 AZUR trains run on the STM network.
- 356 AZUR cars were financed with the proceeds from Québec's Green Bond Program.

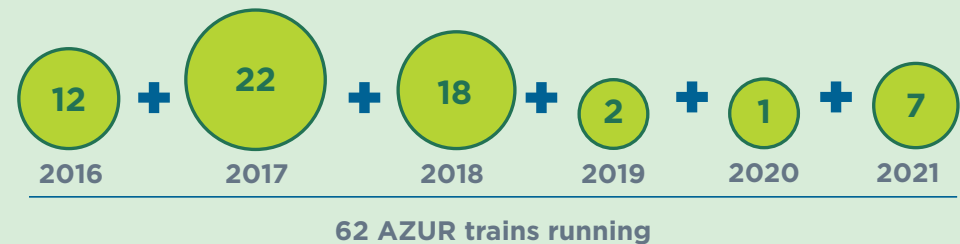


Photo credit: STM



### STM FINALIST FOR A PRESTIGIOUS INTERNATIONAL PROJECT MANAGEMENT AWARD

The STM was among the three finalists for the 2019 PMI International Project of the Year Award for its project to acquire the AZUR métro cars. The purpose of this award is to give international recognition for excellence in project management.

About the PMI Project of the Year Award

Founded in 1969, the Project Management Institute (PMI) is a globally recognized organization in project management research and development. The PMI's prestigious Project of the Year Award recognizes an organization for its professionalism and expertise in the field of project management. Specifically, the award recognizes major, complex projects that have demonstrated superior performance in their project management practices, organizational results and impacts on society.



### MR-63 RECLAMATION APPROACH HONOURED AT NOVÆ GALA

The quality of the work performed by the STM to ensure reclamation of the MR-63 cars, and its conclusive results, motivated the jury of the Novæ Citizen Enterprise Awards to present the STM with an award in the "Residual Materials Management" category. The Novæ Awards recognize best practices in sustainable development and social responsibility in Québec.

### RECLAMATION OF MR-63 AND MR-73 CARS

Following the arrival of the AZUR métro cars, the MR-63 cars were either sent for recycling (318 cars) or reused for artistic or conservation projects (15 cars). The reclamation rate of the MR-63 cars is 85%. More than 50 types of parts were reused on the MR-73 cars and the locotractors, which resulted in major savings. In total, more than 85% of the 8200 tonnes of MR-63 materials were reclaimed.

In order to free up parking space in the tunnel to accommodate the new AZUR métro cars, the STM also had to dispose of 63 MR-73 métro cars in 2021. On the strength of the high diversion rate obtained during the disposal of its MR-63 métro cars, the STM began the preparatory work for the disposal of these 63 cars in 2020; 62 cars were recycled and 1 car was sold for a second life project.

### RÉNO-SYSTÈMES AND RÉNO-INFRASTRUCTURES



#### PROJECTS DESCRIPTION

- The Réno-Systèmes program attends to the replacement, construction or refurbishment of Montréal métro's network operational stationary equipment. The Réno-Infrastructures program attends to the replacement or refurbishment of the métro infrastructure.
- The two projects are essential to improve the quality and performance of the métro service and are therefore closely linked to the AZUR métro car acquisition project, partly funded through the first two Québec Green Bond issues.

#### BENEFITS

##### ADVANTAGES - RÉNO-SYSTÈMES

- Improvement in the reliability, availability and safety of the métro's network operational stationary equipment (fewer service outages)
- Improvement in communications (public address system)
- Improvement in response times in the event of a service outage
- Improvement in universal accessibility

##### ADVANTAGES - RÉNO-INFRASTRUCTURES

- Maintenance of the infrastructure's condition and reliability
- Maintenance of the métro network's availability and safety
- Improvement in universal accessibility
- Restoration of several works of art

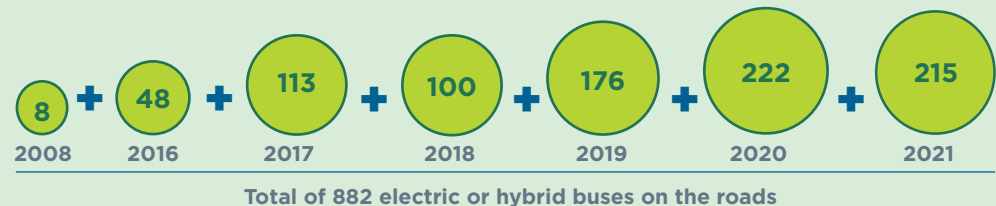
### PURCHASE OF ELECTRIC OR HYBRID BUSES



### PROJECT DESCRIPTION AND PROGRESS

- The purchase of electric buses and hybrid biodiesel-electric buses is a key element in the STM's strategy toward electrification.
- Based on projections, the STM should hold a fleet of vehicles comprised entirely of electric and/or hybrid vehicles from 2030 onwards.
- In addition, the STM aims to buy only 100% electric buses from 2025 onwards, and to have a fully electric fleet by 2041.
- Phase 2 of the 12-metre bus acquisition project aims, for the period 2019 to 2024, the acquisition of 716 buses:
  - 416 hybrid buses to replace buses at the end of their useful life;
  - 266 hybrid buses added to the fleet;
  - 30 electric buses with garage charging added to the fleet;
  - 4 fast-charging electric buses added to the fleet.

- In 2020, the STM put 2 electric buses and 220 hybrid buses into service and disposed of 109 diesel buses at the end of their useful life. As a result, the share of electric or hybrid buses in the bus fleet increased from 23.8% in 2019 to 34.2%.
- As of March 31, 2021, there were on the road 7 electric air-conditioned buses and 667 hybrid buses, of which 652 were air-conditioned.
  - Of these 674 electric or hybrid buses, 115 buses were financed with the proceeds from Québec's Green Bond Program.
- By the end of 2021:
  - 54 new air-conditioned hybrid buses will replace diesel buses;
  - 30 additional electric buses will be on the road and 124 hybrid buses will be added to the fleet.



### THE EXTENSION OF THE MONTREAL MÉTRO'S BLUE LINE



#### PROJECT DESCRIPTION

- The Blue Line extension project includes:
  - 5 new universally accessible métro stations, and a tunnel length of 5.8 kilometers
  - 2 bus terminals
  - 1 rolling stock garage (10 trains) and a maintenance pit
  - 1 underground pedestrian tunnel providing a link to the future Pie-IX bus rapid transit (BRT)
  - 6 auxiliary structures located between the stations and in the rear station

The Project aims to obtain Envision certification in sustainable development. This certification makes it possible to reduce the impacts during the construction and operation of the extension of the blue line (consumption of resources, energy, water, reduction of GHG emissions, etc.) while maximizing the benefits for the environment and community.

#### BENEFITS

- Improve mobility in the metropolitan region of Montréal
- Promote sustainable mobility
- Support urban and economic development
- Consolidate the public transportation network



#### MAIN SUSTAINABILITY-RELATED ADVANTAGES

- Increase the modal share by increasing its service offer and increasing ridership
- Reduce GHGs per passenger-kilometer

## PROPOSED EXTENSION ROUTE



## PRELIMINARY TIMETABLE

- 2020:** Public consultation process to obtain by-law urban planning rules and preparatory work on two sites, near the future Pie-IX station and the auxiliary structure of De La Villanelle. The work will essentially involve relocating urban public utilities, in preparation for when the STM is ready to carry out the mass excavation necessary for the construction of the new infrastructure.
- 2021:** Preparatory work will be completed at two sites and should start at two other sites by fall 2021, near the future Viau and Lacordaire stations.
- 2022:** Beginning of preparatory work in the Langelier and Anjou station sectors.

**Inauguration date:** Under revision.

Find out the details of the progress of the extension works: <http://www.stm.info/en/info/service-updates/stm-works>.

### LEED PROJECT - BELLECHASSE BUS GARAGE



#### PROJECT DESCRIPTION

- The Bellechasse bus garage will be the STM's first garage designed to be able to accommodate a fleet of 100% electric buses. This new centre will thus contribute to the Québec government's electrification plan.
- This project, as part of the STM's strategy to add 300 new air-conditioned hybrid buses to its fleet, announced in January 2018, will also allow an increase in the service offer.
- This bus garage will accommodate up to 250 buses-equivalent. The layout of the building will be planned to accommodate new technologies and therefore, allow the maintenance of all types of vehicles (standard, hybrid and electric). This concept of multistage underground building with indoor circulation will also reduce noise in the neighborhood and will include space for the "client revenues" service.
- The innovative concept of the bus garage will improve working conditions and help improve the quality of life in the area. The administrative sections and certain zones dedicated to employees will be universally accessible.

In addition, the STM aims to obtain LEED Gold level certification for this new building, one of the highest certification in the industry, in order to meet the objectives of sustainable development.



#### MAIN SUSTAINABILITY-RELATED ADVANTAGES

- Energy savings and reduction in GHG emissions thanks to a high energy efficiency system
- Reduction of heat islands thanks to significant greening, part of which will be accessible to the public
- Reduction in drinking water consumption thanks to efficient equipment and the recycling of water from the bus wash
- Maximized diversion rate from the landfilling of construction, renovation and demolition residues/waste

#### PROJECT PROGRESS

- Work began in spring 2019.
- The first phase, during which the STM carried out the preparatory work, i.e. the demolition of the building, the removal of materials and residues, the decontamination of the soil and the excavation of the rock, is completed.
- The second phase, i.e. the construction of the new transportation centre, is underway.
- The garage is scheduled to open at the end of 2022.

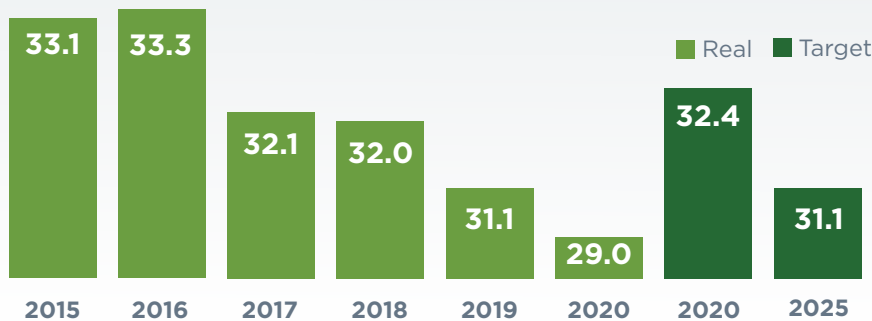
# ESTIMATED BENEFITS FOR THE ENVIRONMENT



## ELECTRIC OR HYBRID BUSES

- Thanks to electric and hybrid buses, the STM aims to reduce GHG emissions per seat-kilometre from buses by 6.0% (from 33.1 g CO<sub>2</sub> eq. per seat-kilometre in 2015 to 31.1 g CO<sub>2</sub> eq. per seat-kilometre in 2025).

Bus GHG emissions per seat-km (g CO<sub>2</sub> eq.)



- GHG emissions from buses per seat-km decreased by 7% between 2019 and 2020 to reach 29.0 g CO<sub>2</sub> eq. The target set for 2025 has been exceeded since 2019.
- This improvement is mainly explained by:
  - the increase in the share of electric or hybrid buses in the bus fleet. In 2020, the STM added 220 hybrid buses and 2 electric buses to its fleet, and disposed of 143 diesel buses at the end of their useful life. Thus, the share of electric and hybrid buses in the fleet increased from 23.8% in 2019 to 34.2%;
  - the decrease in the frequency of acceleration and deceleration phases in connection with the decrease in ridership and the fact that buses stop less often.
- Hybrid buses offer two main benefits in terms of GHG reductions.
  - The GHG emissions avoided that correspond to car trips avoided by public transportation users. These benefits are quantified using the same method as for AZUR's benefits. Direct emissions from hybrid buses are deducted from these avoided GHGs.
  - Replacing diesel buses with hybrid buses reduces STM fuel consumption per km travelled.

# ESTIMATED BENEFITS FOR THE ENVIRONMENT

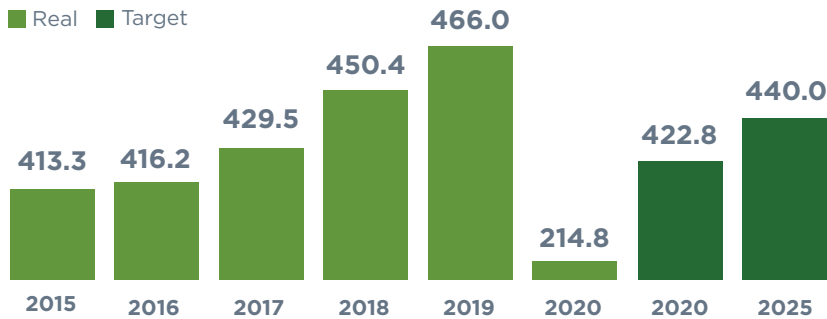
## MÉTRO AZUR AND ELECTRIC OR HYBRID BUSES

Thanks to, among other things, AZUR cars and electric or hybrid buses, the STM aims to:

- Reach 440 million public transit trips on the STM network by 2025:

### Ridership based on fares' sales

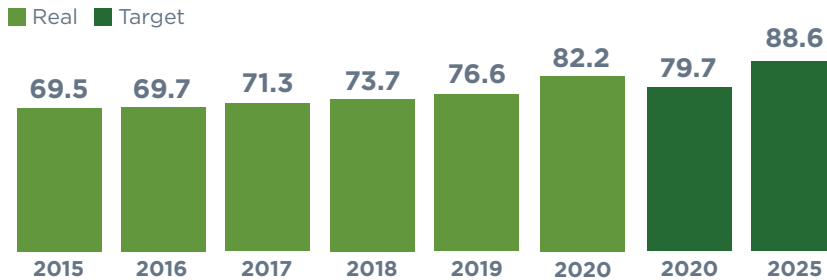
(millions of trips)



- Increase electric-powered travel on its network from 69.5% to 88.6% in 2025:

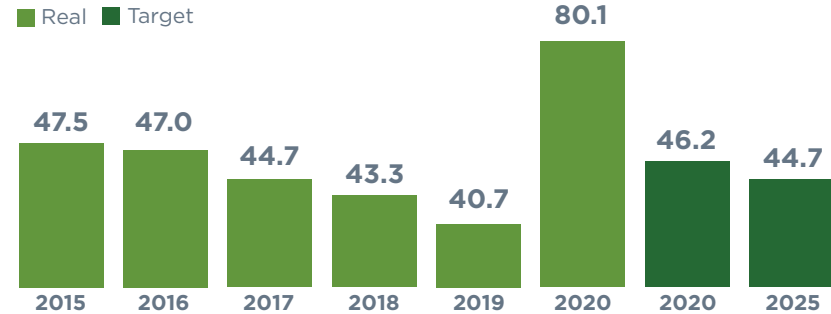
### Percentage of trips made using electricity

(percentage)



- Reduce GHG emissions per passenger-kilometre by 6% between 2015 and 2025:

### Total GHG emissions per passenger-km (g CO<sub>2</sub> eq.)



Note: The emission factors used for the inventory of GHG emissions have been updated following the publication of the "National Inventory Report 1990-2018: Greenhouse Gas Sources and Sinks in Canada".

### GHG EMISSIONS PER PASSENGER-KM

GHG emissions per passenger-km, which is the ratio between the STM's total GHG emissions and the cumulative distances traveled by customers on the network during the year, are directly affected by the decrease in ridership in 2020 and jump 97% to reach 80.1 g CO<sub>2</sub> eq. Although the 2025 target for this indicator was exceeded in 2017, the year 2020 is unequivocally an exceptional year and the result of this indicator must be placed in its context: that of maintaining the service offer by the STM at a level similar to 2019 to ensure its role as an essential service and a drastic drop in ridership due to the COVID-19 pandemic.

It is also important to mention that the kilometers traveled by customers are based on the ridership to which the typical trip profile is applied. These typical trips are taken from data from the 2018 Origin-Destination Survey, which shows an increase in the share of trips by métro compared to the 2013 Origin-Destination Survey previously used. In addition, the results of the 2018 Origin-Destination Survey are based on the behaviour of customers surveyed in a pre-pandemic context.

# ESTIMATED BENEFITS FOR THE ENVIRONMENT

## TOTAL GHG EMISSIONS

The STM is a major player in the fight against climate change. For every tonne of GHGs emitted by its activities, it allows 20 tonnes to be avoided in the Greater Montréal area. In addition to this regional contribution, the STM aims to serve as an example by reducing its own emissions and being a leader in electromobility.

## STM 2020 - A FEW NUMBERS



**8.9%**

reduction in total GHG emissions

**82.2%**

of trips using electricity

**7**

projects aim for LEED or Envision certification

**75.4%**

of residual materials are recycled

**87%**

of the contracts' value includes sustainable development

**10 193**

psychosocial interventions for homeless people

**34.2%**

of buses are electric or hybrid

**98%**

of construction projects over \$ 15 million have an external stakeholders strategy

**\$1.7B**

in Green Bonds for STM projects

## STM - EMPLOYEES

Number of employees



**10 768**

**35.8%**

From ethnic, visible and Aboriginal minorities

**23.3%**

Women

The STM's total GHG emissions decreased by 8.9% compared to 2019, reaching 144 833 t of CO<sub>2</sub> eq. This variation is explained in particular by:

- the 8.2% decrease from bus GHG emissions, or 9992 t of CO<sub>2</sub> eq, although the service was maintained at a level comparable to 2019;
- the 6.3% decrease in gas consumption used to heat ring-shaped buildings;
- the 52.8% drop in GHG emissions from paratransit taxi services linked to the reduction in activities in the context of the pandemic;
- the 39% increase in other direct emissions, which represent 0.9% of total emissions, due to the increase in the number of air-conditioned buses and their estimated refrigerant leaks.

## Total GHG emissions from 2015 to 2020 by type of emissions

GHG emissions (tonnes CO <sub>2</sub> eq.)*	2015	2016	2017	2018	2019	2020	Difference 2019-2020
Direct emissions from mobile sources	132 970	133 719	131 789	131 684	127 257	116 827	-8.2%
Direct emissions from stationary sources	25 128	25 375	24 528	26 885	26 189	24 466	-6.6%
Other direct emissions	2 382	686	483	664	888	1 238	39.4%
Indirect emissions (electricity and paratransit service)	4 206	4 139	4 337	4 416	4 672	2 302	-50.7%
<b>Total GHG emissions</b>	<b>164 687</b>	<b>163 919</b>	<b>161 136</b>	<b>163 648</b>	<b>159 006</b>	<b>144 833</b>	<b>-8.9%</b>

\* The emission factors used for the inventory of GHG emissions have been updated following the publication of the "National Inventory Report 1990-2018: Greenhouse Gas Sources and Sinks in Canada".

[More information on the STM's calculation methodology](#)

[Sustainable Development Reports for 2020 \(French only\)](#)

[Complete Table of Sustainable Development Indicators for 2011-2020 \(French only\)](#)

[GRI Content Index \(French only\)](#)

# GREEN BOND NEWSLETTER

PROVINCE OF QUÉBEC - JULY 2021

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