



THE STM'S THIRD SUSTAINABLE DEVELOPMENT PLAN

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Presentation outline

- The STM today
- STM's Sustainable Development Timeline
- Corporate engagement
- The Sustainable Development Plan 2025
- Key factors of success for integrating sustainability in all sectors

The STM today



- 3rd largest public transit organization in North America
- 429,5 million linked trips in 2017 (639,1 million unlinked)
 - Over 1.4 million linked trips per average weekday



- Métro
 - 4 lines, 68 stations, 91 trains



- Bus
 - 221 bus lines, 1807 buses



- Paratransit
 - 4 million passenger trips, 31 640 clients



- 9 754 employees



- Budget: \$1.4 billion
- Replacement value of assets: \$26 billion



The STM's Sustainable Development Timeline



Sustainable Development at the hearth of the Organizational Strategic Plan 2025



PLAN STRATÉGIQUE ORGANISATIONNEL 2025

MOUVEMENT COLLECTIF  **stm**

“The STM will continue its efforts to make sustainable development a central element of its operations and projects, and in so doing consolidate its position as a leader in this field.”

PSO 2025, page 29

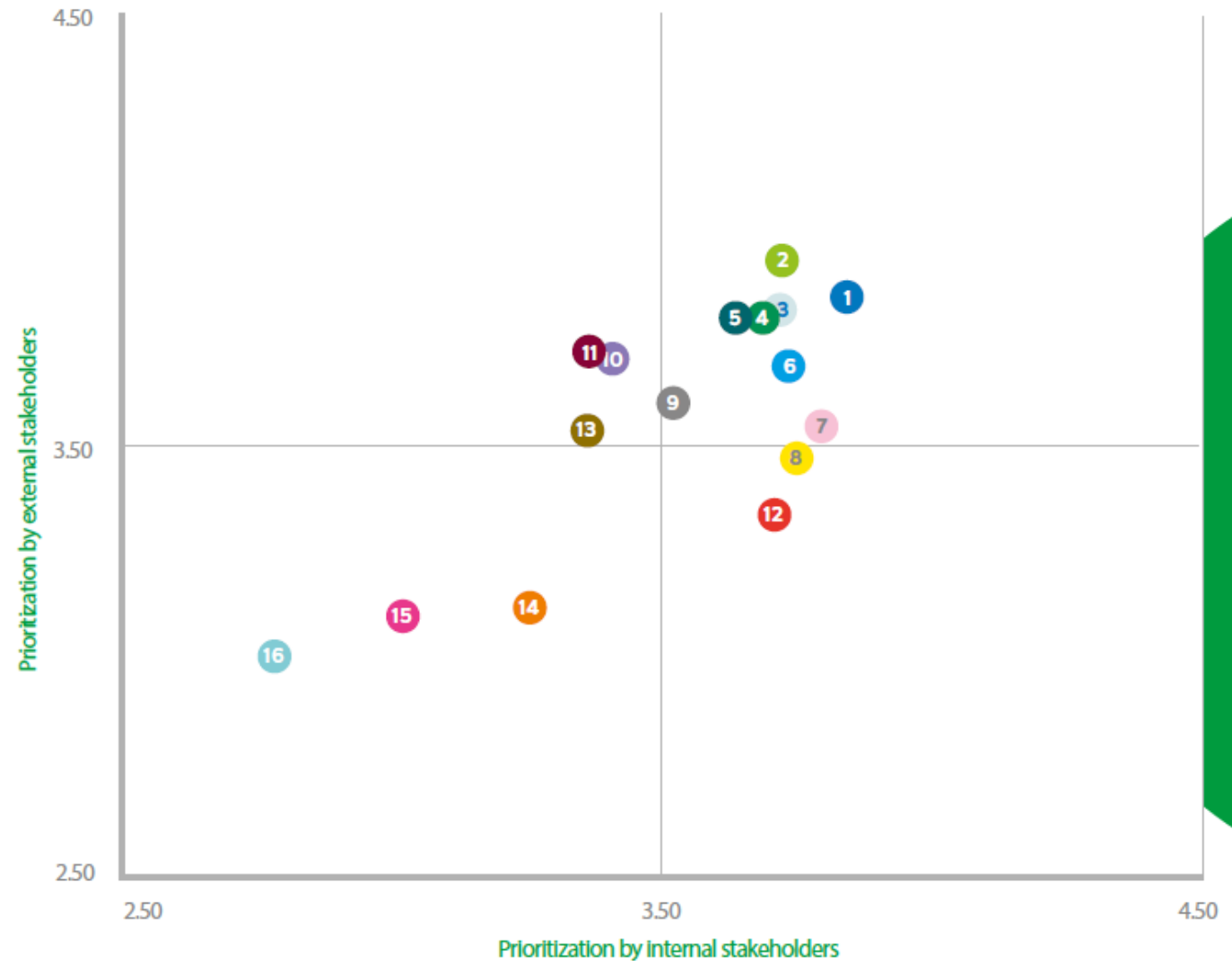
Stakeholder consultation on sustainability issues

- The STM consulted with its stakeholders in order to identify the priority sustainability issues in preparation for its new Sustainable Development Plan 2025.
- Step 1
 - List of issues was submitted to internal and external stakeholders to ensure that they were relevant, complete and clearly stated.
- Step 2
 - Consultation on prioritization of issues:

“In your opinion, how relevant is it for the STM to take the following issues into account when shaping its Sustainable Development Plan?”

Prioritization of issues

1	Energy efficiency and renewable energy
2	Climate change and air pollution
3	Ridership, service offering, integrated mobility, customer experience (PSO 2025)
4	Universal accessibility (UADP Plan 2016–2020)
5	Safety, resilience, climate change adaptation
6	Workplace health and safety, mobilization, diversity
7	Resources and residual materials
8	Soil and groundwater contamination
9	Economic efficiency and performance (PSO 2025)
10	Environmental, social and economic impacts of the supply chain
11	External stakeholder dialogue and social acceptability
12	Water consumption, wastewater disposal and rainwater management
13	Economic spinoffs, responsible investment
14	Revegetation, biodiversity, heat island reduction
15	Community involvement, fight against homelessness
16	Promotion of works of art and heritage of the STM (not retained)



The nine priorities of the Sustainable Development Plan 2025

Priority 1

Decarbonize public transit in order to contribute to air quality and the fight against climate change



Priority 2

Build and operate sustainable, resilient buildings and infrastructures



Priority 3

Maintain our position as a responsible employer



Priority 4

Reduce resource consumption and production of residual materials



Priority 5

Prevent and reduce water and soil contamination



Priority 6

Strengthen our sustainable procurement approach



Priority 7

Engage external stakeholders and expand ties with local communities



Priority 8

Increase the STM's economic and social contribution



Priority 9

Consolidate the STM's sustainability governance



Priority 1: Decarbonize public transit in order to contribute to air quality and the fight against climate change

- In 2016, various municipal and provincial partners and transit authorities collaborated in a study on **GHG emissions avoided by public transit** in the Greater Montréal area.
- The study shows that the total GHG emissions avoided from public transit in the Greater Montréal are **3.9 million tons of CO₂ e per year**

For every ton of GHGs emitted by STM activities



20 are avoided in the Greater Montréal area



Priority 1: Decarbonize public transit in order to contribute to air quality and the fight against climate change

- Continue electrification demonstration projects
- Acquire only **100% electric buses by 2025** at the latest in order to achieve zero emissions in 2040
- Favour the use of **materials with a low carbon footprint** (concrete, steel, etc.) in major projects

Indicator	2015	Target 2020	Target 2025
Percentage of trips made using electricity	69.5 %	79.7%	88.6%
Bus GHG emissions per seat-km (g CO ₂ e)	33.0	32.3	31.0
GHG emissions per passenger-km (g CO ₂ e)	47.4	46.2	44.7
Average GHG emissions from small service vehicles (g CO ₂ e)	216	155	130



Priority 2: Build and operate sustainable, resilient buildings and infrastructures

- Aim for **LEED** certification for new buildings and **Envision** certification for new infrastructures
- Obtain **operational sustainability certification** for certain existing buildings
- Develop and implement a **climate change adaptation plan**
- Integrate green measures as much as possible into construction and renovation projects



Indicator	2015	Cible 2020	Cible 2025
Number of new buildings and infrastructures with sustainability certification	1	3	8
Number of buildings (owned or rented) and infrastructures with operational sustainability certification	3	5	To be determined after the pilot projects



Priority 3: Maintain our position as a responsible employer

- Offer employees a **mobilizing, safe and inclusive** working environment
- Roll out the **diversity program**, including the Equal Employment Opportunity Plan
- Implement the **mobilization** approach and measure mobilization on a recurring basis
- Roll out sector action plans for prevention in **workplace health and safety**



Indicator	2015	Target 2020	Target 2025
Diversity of workforce*			
Percentage of women	24.7%	24.7%	27%**
Percentage of visible and ethnic minorities	24.9%	27.9%	28.6%
Percentage of employees with a disability	0.4%	0.5%	0.6%
Percentage of Indigenous employees	0.5%	0.6%	0.7%
Frequency of work-related accidents	6.0	5.8	5.7
Severity of work-related accidents	339	300	275

Priority 4: Reduce resource consumption and production of residual materials

- Integrate and apply the **4R principle** in projects and operations
- Maximize the **reclamation** of goods and equipment, such as buses and metro cars, at the end of their useful life
- Draw up a portrait of **drinking water** and reduce consumption



Indicator	2015	Target 2020	Target 2025
Rate of diversion from disposal	64.3%	75%	80%
Rate of CRD waste diversion from disposal	NA	75%	80%
Percentage of water meters installed in our buildings	8%	100%	100%
Average drinking water consumption per bus washed (litres)	324	276	147

Priority 5: Prevent and reduce water and soil contamination

- Establish an action plan for the management of **hazardous materials**
- Maintain the action plan for the **prevention** and management of hazardous material **spills**
- Draw up guidelines for **environmental site management**
- Improve **recovery of water** from washing concrete slabs in metro stations



Indicator	2015	Target 2020	Target 2025
Non-compliance notices	4*	Objective zero	Objective zero
Number of hazardous material spills	8	Objective zero	Objective zero

Priority 6: Strengthen our sustainable procurement approach

- Include **sustainability clauses** in contracts for goods and services that have been **prioritized** on the basis of their environmental and social impacts
- Include the STM **suppliers' code of conduct** in all new contracts
- Maintain the sustainable procurement **training and awareness** program
- Apply the **total cost of ownership** approach
- Promote the holding of **sustainable events**



Indicator	2015	Target 2020	Target 2025
Percentage of the value of contracts in progress* during the year that include sustainability criteria	74%	80%	85%
Percentage of contracts in progress* during the year for goods and services prioritized on the basis of environmental and social impacts that include sustainability criteria	27%	45%	50%

Priority 7: Engage external stakeholders and expand ties with local communities

- Strengthen the implementation of the sector guidelines on **projects' social acceptability**
- Maintain **public participation** in the STM's governance
- Review the public **consultation policy** for metro projects
- Continue to develop **mechanisms** for informing and consulting external stakeholders

Indicator	2015	Target 2020	Target 2025
Percentage of construction projects valued at \$15 million or more in progress during the year that have undergone an external stakeholder analysis and/or strategy	75%	90%	100%



Priority 8: Increase the STM's economic and social contribution

- Include environmental, social and governance (ESG) factors in the analysis of pension plan investments
- Uphold the STM's commitment to the **social and local economy**
- Increase collaboration with services providing psychological and social interventions in order to maintain an approach of support and mediation with **homeless individuals in the metro network**
- Continue the **employee generosity campaign**
- Contribute to the execution of **major urban development and public transit projects**



Indicator	2015	Target 2020	Target 2025
Value of contracts and agreements with social enterprises	\$20,000	\$60,000	\$100,000
Amount of projects in progress funded through Green Bonds issued by the Québec government	NA	\$1.0 billion	\$1.2 billion

Priority 9: Consolidate the STM's sustainability governance

- Strengthen the integration of sustainability into **decision-making processes**
 - Project portfolio management
 - Design standards and criteria
 - Procurement
 - Recommendations to the Board of Directors and the Director General
- Implement and maintain an ISO 14001-based **environmental management system**.
- Continue to produce a **sustainable development report** based on the GRI guidelines, and an annual management review of sustainable development.



Indicator	2015	Target 2020	Target 2025
Percentage of projects valued at over \$1 million that have undergone a sustainability assessment	100%	100%	100%
Percentage of employees that have completed an awareness workshop or training related to sustainability in the last five years	22%	30%	35%

Key factors of success

- Sustained and strong **corporate commitment** to sustainability
 - In the Strategic Plan
 - In the Sustainable Development Plan targets
- **Consultation** of internal and external stakeholders in drafting the Sustainable Development Plan and various tools
- Development of **tools** for helping employees and managers identify sustainability issues and solutions
- Presentation of annual **sustainable development results** to
 - Senior management Committee
 - Board of directors SD committee

RAPPORT D'AMÉNAGEMENT 2017 • Rapport de développement durable 2017 • 64

Chantier 4 Réduire la consommation des ressources et la production de matières résiduelles

La STM désire promouvoir dans tous ses secteurs une culture de saine gestion des ressources qui tient compte du principe des 3R-V-E (réduction à la source, réutilisation, recyclage, valorisation, et élimination). Elle peut ainsi contribuer à l'économie circulaire et limiter l'impact de ses projets et activités sur l'ensemble de leur cycle de vie.



Taux de débournement de l'élimination des matières résiduelles (%)

Année	Taux (%)
2015	64,3%
2016	73,8%
2017	78,2%
Cible 2020	75%
Cible 2025	80%

Mise en valeur des voitures de métro MR-63
En 2017, la STM a disposé de 173 voitures de métro MR-63, laissent place aux trains AZUL. La qualité du travail effectué par l'entreprise pour assurer un taux de mise en valeur des voitures de métro MR-63 d'un niveau de 85 % a amené le jury des Prix Nouvelles Entreprises citoyennes 2017 à lui décerner un prix dans la catégorie « matières résiduelles ». Ce projet a également été finaliste au Gala de reconnaissance un environnement et développement durable de Montréal dans la catégorie Entreprises et institutions.

Gestion des matières résiduelles
Le taux de débournement de l'élimination des matières résiduelles est en hausse de 1,2 point pour atteindre 78,2 %. En 2017, deux principaux facteurs ont influencé l'évolution de l'indicateur : la disposition des voitures de métro MR-63 et la gestion des résidus de construction rénovations d'installation (RC) des grands projets de la STM.

En 2017, plus de 3 400 tonnes de matériaux ont été mis en valeur par la réutilisation de pièces, par le démantèlement et le recyclage des voitures ou encore par leur réutilisation dans des projets spéciaux. Ainsi, une voiture a été utilisée pour le projet « Station Grand Métro » aux Jardins de Métis. Une seconde voiture a quitté les installations de la STM à l'automne pour le projet MR-63 qui vise à utiliser huit voitures MR-63 pour créer un lieu de diffusion artistique et un café-bar. Enfin, un ensemble de 16 portes et leurs mécanismes d'ouverture-fermeture ont été utilisés par l'artiste Michèle de Brée pour réaliser une œuvre extérieure située qui a été exposée au Guichet des spectacles à l'automne.



	-1	0	1	2	non applicable
1. Consommation d'énergie et émissions atmosphériques (GES et polluants)					
1.1 Consommation d'énergie					
en intensité (par places-km, par km parcouru, par m ²) VS situation actuelle	Augmente	Demeure stable	Diminue de moins de 20%	Meilleure technologie disponible ou diminue de plus de 20%	
au total VS situation actuelle	Augmente	Demeure stable	Diminue de moins de 20%	Meilleure technologie disponible ou diminue de plus de 20%	

RÉCUPÉRER L'ANTIGEL C'EST ESSENTIEL



Utiliser les équipements pour filtrer ou recycler l'antigel préserve la qualité de l'eau.

L'antigel non contaminé, une fois filtré, est propre à être réutilisé.





The SD Plan 2025 is available at
www.stm.info/en/sd

Thank you for your attention