

SUSTAINABLE
DEVELOPMENT
STRATEGY
2009-2013
Update August 2011



SUSTAINABLE DEVELOPMENT STRATEGY 2009-2013

Update August 2011



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NOTE TO READER:

August 2011

The following changes were made:

- The action 1.1.4 target was amended (pages 35 et 69);
- Action 3.3.1 monitoring indicators and targets were replaced or added (pages 44 and 72);
- The action 4.1.1 wording and description were updated. Monitoring indicators and targets were replaced or added (pages 49 and 74).

October 2009

Some action 3.2.1 targets were amended, in accordance with the Ministère's 2008-2012 Strategic Plan (pages 42 and 72).

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MESSAGE FROM THE MINISTER

In recent years, the gouvernement du Québec has made a resolute choice in favour of sustainable development, and has demonstrated its commitment to becoming a leader in this field on numerous occasions. To this end, it introduced the Québec Energy Strategy — 2006-2015, the Québec Action Plan on Climate Change — 2006-2012, and the Québec Public Transit Policy. However, the most significant action was the unanimous adoption of the Sustainable Development Act by the National Assembly.



The enacting of this law clearly signalled the government's commitment to protecting the environment while developing the resources at its disposal for the benefit of all citizens, taking into account the needs of future generations.

Drawing inspiration from its previous initiatives aimed at protecting the environment and promoting sustainable development, the ministère des Transports du Québec has enthusiastically embraced this approach, acknowledging the fact that the transportation sector exerts considerable leverage in the area of sustainable development. The mobility of people and goods is at the heart of economic development, and has a determining influence on social integration and participation, not to mention a significant impact on the environment. In light of this, the ministère des Transports intends to act as a catalyst in the area of sustainable mobility, and to this end, it has taken the initiative of releasing this Sustainable Development Strategy.

This document outlines the Ministère's strategic choices and commitments for the period from 2009 to 2013 in response to the issues that it faces in its attempt to combine mobility and sustainable development.

I am proud to invite all of our partners and fellow citizens to become familiar with this strategy, and to work alongside the ministère des Transports in making sustainable mobility a reality that will benefit everyone.

Julie Boulet Minister of Transport and Minister Responsible for the Mauricie region

MESSAGE FROM THE DEPUTY MINISTER

The ministère des Transports acknowledges that it has a vital role to play in the move toward sustainable development in Québec. The transportation sector is the largest emitter of greenhouse gases and the second largest user of fossil fuels, and therefore, any improvement in its performance in terms of sustainable mobility will have a major impact on the government's approach. In addition, the ministère des Transports has one of the largest workforces among all government departments, and it



is not hard to imagine the influence that its workers will have on the various sustainable development issues once their efforts are focused on this goal.

If the past gives any indication of the future, we can look confidently toward the new era that begins with the publication of this ministerial Sustainable Development Strategy. The ministère des Transports has been actively promoting sustainable mobility for many years, and has already amassed a number of impressive achievements thanks to the expertise of our employees and the initiatives that have been launched and the ingenious solutions that have been proposed by our work teams. In 1992, the MTQ adopted an environmental policy, and has been gradually integrating the concept of sustainable development into its products, services, and activities since that time.

Today, with the introduction of this ministerial Sustainable Development Strategy, the ministère des Transports is demonstrating its renewed and strengthened commitment to meet the challenges of sustainable development. This document, which is the result of a collaborative process involving all of the administrative units of the Ministère, relies on the dedication and involvement of all ministerial personnel in making key contributions to achieving the objectives of sustainable development within in the context of the daily activities of the ministère des Transports.

Denys Jean Deputy Minister of Transport

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INTRODUCTION

The concept of sustainable development has gained significant worldwide support in recent years. Québec has also adopted this concept, and has introduced an innovative approach. In recognizing its responsibilities with respect to the environment in particular, the ministère des Transports du Québec (MTQ) has made sustainable development one of its priorities.

SUSTAINABLE DEVELOPMENT means

"[...] development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is based on a long-term approach which takes into account the inextricable nature of the environmental, social and economic dimensions of development activities."

Sustainable Development Act, R.S.Q., Chapter D-8.1.1, Section 2.

In the current context, the MTQ considers that it is necessary to reaffirm its commitment to attaining sustainable mobility by launching a new process designed to deal with the related issues, and to contribute to the gouvernement du Québec's ongoing process by ensuring that the transportation sector makes a genuine contribution to attaining the goal of sustainable development in Québec.

The MTQ's Sustainable Development Strategy, which is firmly anchored in its mission, is designed to ensure safe, efficient travel at all times while providing support for economic and social development and respecting the environment without compromising the ability of future generations to meet their own needs. It constitutes a mobilizing element for the MTQ and a tool for ensuring that sustainable development is taken into account in all MTQ products, services and activities. This Sustainable Development Strategy replaces the Environmental Policy, and establishes a foundation for the MTQ's future environmental management system.

This Strategy covers the MTQ's three sectors of activity: transportation planning, managing the transportation network, and governance. It is based on 6 major guidelines, and targets 14 objectives based on the implementation of 26 actions, 14 of which are considered to be priority actions. It represents the tangible manifestation of the MTQ's commitment to sustainable development for the period from 2009 to 2013.

THE MINISTÈRE
DES TRANSPORTS
DU QUÉBEC'S APPROACH
TO SUSTAINABLE
DEVELOPMENT



A solid, forward-looking commitment

The approach¹ to sustainable development that has been adopted by the MTQ is based on striking a balance between the demand for development and the need to protect the environment in order to ensure sustainable benefits for the community while taking into account the needs of the population in terms of mobility, and the economic imperative of effective and efficient transportation of goods. Finding a viable balance is one of the MTQ's priorities.

The adoption of the MTQ's Environmental Policy in 1992 marked a significant point in this process. Born of a growing awareness that began in the early 1970s within the MTQ with respect to the importance of environmental protection, the MTQ's Environmental Policy made the choice of environmentally friendly actions official policy as part of the vision of sustainable development in the transportation sector. Pursuant to this Policy, the MTQ adopted a set of principles designed to achieve sustainable development in all of its products, services, and activities, as sustainable development became an essential element in all decisions. The implementation of the Policy improved the environmental integration of MTQ projects by providing for a variety of mitigation measures and a new focus on ecological, cultural and social heritage. The MTQ's manifold achievements since the adoption of this key document clearly demonstrate that the shift toward an environmentally sound approach has led to concrete actions².

Over the years, the MTQ's achievements have reflected its commitment to sustainable development and its willingness to follow this approach as it fulfils its mission. The MTQ's activities can be categorized under three main headings: transportation planning, managing the transportation network, and governance.

Achievements in the area of transportation planning

The MTQ was an active participant in the creation and implementation of the Québec Action Plan on Climate Change $-2006-2012^3$ and the Québec Energy Strategy $-2006-2015^4$, and was responsible for the implementation of the Québec Public Transit Policy⁵.

With respect to the Québec Action Plan on Climate Change — 2006-2012, the MTQ is either solely or jointly responsible for implementing 9 of the 26 actions aimed at reducing or preventing greenhouse gas emissions and for adapting to the impacts of climate change. In terms of the Québec Energy Strategy, all actions relating to the transportation of passengers and goods are the responsibility of the MTQ, and are implemented jointly with the Agence de l'efficacité énergétique, making a direct contribution to reducing fossil fuel consumption in Québec. The MTQ's commitment with respect to the Public Transit Policy is to administer seven assistance programs in order to increase the supply and use of public transit services throughout Québec.

^{1.} This approach is similar to the approach adopted by members of the World Road Association (PIARC). [www.piarc.org]

^{2.} For a detailed description, please see the document entitled: "Major Achievements in the Field of Sustainable Development – Ministère des Transports du Québec – Combining Mobility and Sustainable Development [www.mtq.gouv.qc.ca]

Gouvernement du Québec, Ministère du Développement durable, de l'Environnement et des Parcs, Québec and Climate Change. A Challenge for the Future. 2006-2012 Action Plan. [www.mddep.gouv.qc.ca/changements/plan_action/2006-2012_en.pdf]

Gouvernement du Québec, Ministère des Ressources naturelles et de la Faune, Using Energy to Build the Québec of Tomorrow. Québec Energy Strategy – 2006-2015. [www.mrnf.gouv.qc.ca/english/energy/strategy/index.jsp]

^{5.} Gouvernement du Québec, Ministère des Transports, *Passenger transportation in Québec: Better Choices for Citizens. Québec Public Transit Policy*. [www.mtq.gouv.qc.ca/portal/page/portal/Librairie/Publications/en/transport_collectif/transit_policy_nov06.pdf]

Achievements in managing the transportation network

The durability and security of road and airport infrastructures that the MTQ is responsible for and the need to mitigate the environmental impact of transportation networks are key concerns for the MTQ. Achievements related to sustainable development in this area include carrying out opportunity studies and environmental assessments; focusing on the stability of investments and strategic interventions In terms of maintaining and rehabilitating pavements and structures; drafting and enforcing road safety measures, in cooperation with other partners; recycling paving materials; and managing the land beside highways in an ecologically friendly manner.

Achievements in the area of ecoresponsible governance

The MTQ's achievements in this area include adding hybrid vehicles to the fleet operated by the Centre de gestion des équipements roulants (CGER); applying the LEED⁶ program to building construction; introducing the use of recycling bins in MTQ buildings; and encouraging reduced paper usage and the use of recycled paper.

In addition, in its 2005-2008 Strategic Plan, the MTQ integrated the concept of sustainable development into its mission, which is: "Ensure the mobility of people and goods throughout Québec on safe, efficient transportation systems that contribute to the sustainable development of Québec". With a view to giving the MTQ the means to meet this challenge, the section of the Strategic Plan that focuses on the environment and sustainable development included two objectives applicable the transportation sector. The first was to contribute to the preparation and implementation of the Québec Sustainable Development Plan⁷; and the second was to contribute to the preparation and implementation of the Government Strategy on Climate Change.

In its Strategic Plan — 2008-20128, the MTQ confirmed its commitment to sustainable development by including the concept in its mission while adapting it to the transportation sector:

"Ensure the **sustainable mobility** of people and goods throughout Québec using efficient and safe transportation systems that contribute to development in Québec."

The MTQ established the following guidelines in its Strategic Plan — 2008-2012:

- Ensure the durability of transportation systems for future generations
- Support the development of effective, varied and integrated transportation systems that contribute to the reduction of greenhouse gas emissions
- Ensure safe transportation system for users
- Optimize organizational performance in order to provide better services for the general public.

In short, by continuing to build on the work that has been carried out in recent years, the MTQ is working toward establishing the conditions required to attain the goal of sustainable development in Québec in its own sector of activity. This approach has also been shared with the MTQ's partners for the purpose of confirming their cooperation.

^{6.} Leadership in Energy and Environmental Design (LEED) is an American system of standardization for buildings of high environmental quality. It was created in 1998 by the US Green Building Council. [www.usgbc.org]

Gouvernement du Québec, Ministère du Développement durable, de l'Environnement et des Parcs, Miser sur le développement durable: pour une meilleure qualité de vie. Plan de développement durable du Québec. Document de consultation.
 [www.mddep.gouv.qc.ca/developpement/2004-2007/plan-consultation.pdf]

^{8.} Gouvernement du Québec, Ministère des Transports, Strategic Plan – 2008-2012. [www.mtq.gouv.qc.ca]

A transportation system that focuses on sustainable mobility is one that:

- " Allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations.
 - Is affordable, operates efficiently, offers a choice of transport modes, and supports a vibrant economy.
 - Limits emissions and waste within the planet's ability to absorb them, minimizes consumption of non-renewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components, and minimizes the use of land and the production of noise."9

^{9.} The Centre for Sustainable Transportation. [cst.uwinnipeg.ca]

THE MINISTERIAL STRATEGY:
A CONTRIBUTION TO THE
GOUVERNEMENT DU QUÉBEC'S
SUSTAINABLE DEVELOPMENT
PROCESS



This Strategy constitutes an MTQ initiative that is also a dynamic response to the gouvernement du Québec's Sustainable Development Process, which was launched in November 2004 with the release of the Sustainable Development Plan¹⁰. The cornerstone of the Sustainable Development Plan is the Sustainable Development Act, which came into effect in April 2006¹¹. The purpose of the Act was to establish a new management framework for all government departments and agencies in order to ensure that their powers and responsibilities are exercised in the pursuit of sustainable development.

All government departments and agencies must now take into account the 16 principles of sustainable development (Appendix A) when planning and implementing their activities. In addition, a Green Fund was established, and a new right was added to the Charter of Human Rights and Freedoms¹². In order to ensure that government actions comply with this template, the Act includes assessment, monitoring, and accounting mechanisms, and the position of Sustainable Development Commissioner was created. Finally, an integrated system of sustainable development indicators has been introduced for Québec in order to measure and report on the progress achieved.

When it adopted the *Government Sustainable Development Strategy* $-2008-2013^{13}$ in December 2007, the gouvernement du Québec introduced a new reference framework for the public administration with a view to ensuring that actions taken by the government in connection with sustainable development are coherent and cohesive. The Government Sustainable Development Strategy is based on a vision of sustainable development, and defines 3 fundamental issues: develop knowledge, promote responsible action, and foster commitment. These 3 issues are further divided into 9 strategic directions and 29 objectives.

Three of the strategic orientations are considered to be of higher priority¹⁴, and are associated with "essential activities":

Priority strategic directions	Essential activities
Inform, make aware, educate, innovate (Direction I)	A broad-scale awareness, education and training plan with result targets, identifying employee and citizen categories and specifying timetables.
Produce and consume responsibly (Direction 3)	The adoption of environmental management measures and ecoresponsible procurement practices by government departments and agencies.
Practice integrated, sustainable land use and development (Direction 6)	The definition of terms and conditions to guide the key players participating in and leading the local and regional initiatives, starting with the municipalities, establishments of the health and education networks and businesses.

^{10.} See Figure 1 on the next page for an overview of the Sustainable Development Plan.

^{11.} Sustainable Development Act, R.S.Q., Chapter D-8.1.1.

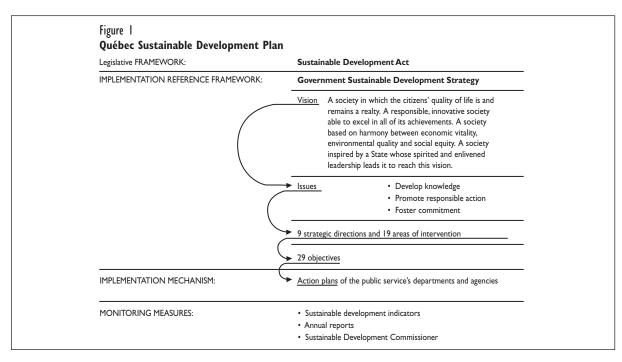
^{12. &}quot;Every person has a right to live in a healthful environment in which biodiversity is preserved, to the extent and according to the standards provided by law." Sustainable Development Act, R.S.Q., Chapter D-8.1.1, section 19.

^{13.} Gouvernement du Québec, Ministère du Développement durable, de l'Environnement et des Parcs, *Government Sustainable Development Strategy* – 2008-2013 – A Collective Commitment. [www.mddep.gouv.qc.ca/developpement/strategie_gouvernementale/index_en.htm]

^{14.} They are given priority "[...]to bring greater coherence to the government's interventions, to accelerate the movement and to stimulate the process throughout Québec society." Ministère du Développement durable, de l'Environnement et des Parcs, op. cit., 21.

Pursuant to the Act and the Government Sustainable Development Strategy — 2008-2013, all government departments, agencies and enterprises are required to prepare a sustainable development action plan and to publish no later than March 31, 2009¹⁵. This action plan constitutes a public document that defines how each organization will help to attain the objectives of the Government Sustainable Development Strategy. The plan must not only take into consideration the 16 principles set out in the Act, but must also be inked to the mission of the organization, define objectives based on the government objectives, and describe the actions that will be taken in order to meet those objectives. In addition, Section 17 of the Act stipulates that each government department, agency and enterprise must state in a special section of its annual report the objectives it had set in order to contribute to sustainable development and the progressive implementation of the Strategy.

The objective of the MTQ's Sustainable Development Strategy is to ensure that the principles of sustainable development are taken into account in the design of its products, services, and activities. To this end, the MTQ has agreed to implement a set of actions, each of which is measurable and verifiable, with corresponding indicators and targets. Some of the actions are considered to be priority actions, and as such, they have been included in the MTQ's Sustainable Development Action Plan — 2009-2013. Three of these priority actions also make a concrete contribution to the essential activities defined in the Government Sustainable Development Strategy. Therefore, while retaining its specific focus, the MTQ's Sustainable Development Strategy complies with and contributes to the gouvernment du Québec's Sustainable Development Process.



Reference: Gouvernement du Québec, Ministère du Développement durable, de l'Environnement et des Parcs, Government Sustainable Development Strategy — 2008-2013. A Collective Commitment, p. 10.

^{15.} Order-in-Council 1080-2007, Adoption de la Stratégie gouvernementale de développement durable, *Gazette officielle du Québec*, part 2, no. 52, 27 December 2007, p. 5922.



TRANSPORTATION PLANNING

The first sector of activity primarily involves the planning processes that guide the actions of the MTQ. Two guidelines and four objectives have been defined for this sector of activity.

Guideline I. Climate change and energy efficiency:

Reduce greenhouse gas emissions and use energy more efficiently

Objective I.I Ensure integrated planning in order to optimize transportation networks

Objective 1.2 Contribute to the prevention and reduction of greenhouse gas emissions by implementing measures aimed at improving energy efficiency in the transportation of goods

Objective 1.3 Promote public transit and active transportation

For the MTQ and its partners (agencies, transit corporations, associations, research centres, universities, private companies, etc.), the fight against climate change represents an enormous challenge that requires immediate and concerted action. Climate change associated with the emission of greenhouse gases is a worldwide issue. In Québec, the transportation sector produces 40% of all greenhouse gas emissions. In fact, road transportation alone, which includes motorcycles, cars, light trucks, and heavy vehicles, emitted 28.0m tonnes of CO₂ equivalent into the atmosphere in 2006, or 82.7% of all emissions attributed to the transportation sector¹⁶. In addition, this sector accounts for nearly the entire petroleum products market. There is a direct correlation between the consumption of fossil fuels and the emission of greenhouse gases, and therefore, the search for solutions to this problem will involve actions aimed at improving energy efficiency and reducing the consumption of fossil fuels¹⁷. For reasons that are environmental (reducing emissions of greenhouse gases and pollutants), social (equity and solidarity between generations), and economic (reducing Québec's energy bill) in nature, the transportation sector has every reason to reduce its consumption and to turn to other sources of energy, including hydroelectricity¹⁸.

The current context, which is characterized by strong international competition and a trend toward higher fuel prices, makes integrated planning for the purpose of optimizing transportation networks even more relevant. This approach will involve rethinking working methods to match current concerns, future prospects, and emerging trends, including climate change and the quest for energy efficiency.

Transportation costs represent a key factor in the competitive edge that Québec businesses enjoy, and new intermodal projects can help to preserve rail and sea infrastructures as a complement to the road network, in addition to reducing the cost of transporting both imports and exports. Complementary transportation modes can make an essential contribution to the attainment of sustainable development objectives, particularly by helping to reduce or prevent the emission of greenhouse gases, increasing the useful life of road infrastructures, and improving road safety by reducing the number of heavy vehicles on the roads.

^{16.} Ministère du Développement durable, de l'Environnement et des Parcs, *Inventaire québécois des émissions de gaz à effet de serre en 2006 et évolution depuis 1990* (2006 Québec inventory of greenhouse gas emissions and trends since 1990), 2008, p. 11. [www.mddep.gouv.qc.ca/changements/ges/2006/inventaire2006.pdf]

^{17.} The fact that the actions that are placed under the responsibility of the MTQ in the Québec Action Plan on Climate Change – 2006-2012 are also found in the Québec Energy Strategy – 2006-2015 is a clear indication of the existence of this correlation.

^{18.} According to the *Inventaire québécois des émissions de gaz à effet de serre en 2006 et évolution depuis 1990*, electricity production accounted for only 0.5% of all greenhouse gas emissions in Québec in 2006.

In terms of passenger travel, each modal transfer that replaces a car trip with a public transit trip helps to reduce emissions of greenhouse gases and pollutants. One full passenger bus means 40 fewer cars on the road during rush hour!9. This highlights the importance of introducing measures aimed at promoting the use of public transit. In addition, public transit contributes to the social aspect of sustainable development, because it is the only affordable form of transportation for many people. Similarly, so-called "active" forms of transportation, including walking and cycling, contribute to modal transfers away from cars, while improving individual health and quality of life in highly urban environments.

Guideline 2. Land use:

Plan the development of transportation systems with a view to ensuring sustainable land use and development

Objective 2.1 Promote joint action with the main stakeholders in the area of land use and development

Transportation planning and land use are inextricably linked. Urban sprawl often leads to an increase in trip lengths, and some approaches to land planning tend to reduce access for pedestrians, cyclists and public transit users, which generates extra car traffic. From the perspective of sustainable development of the transportation network, planning activities must involve more joint action with the main land use planning stakeholders in Québec: municipalities, Regional County Municipalities (RCM) and metropolitan communities.

MANAGING THE TRANSPORTATION NETWORK

This sector of activity involves the MTQ's responsibility for planning and carrying out work to construct, improve, rehabilitate, maintain, and operate the highway network and other transportation infrastructures under its responsibility in a manner that ensures safety and respect for the environment. Two guidelines and six objectives have been defined for this sector of activity.

Guideline 3. Maintain community assets:

Ensure the durability of transportation infrastructures and equipment

- Objective 3.1 Integrate the concept of sustainable development into the design and construction of transportation infrastructures and equipment
- Objective 3.2 Ensure the durability of infrastructures by improving their current condition
- Objective 3.3 Promote the use of transportation infrastructures with a reduced impact on the environment
- Objective 3.4 Adapt transportation infrastructures and activities to the impacts of climate change

^{19.} Obviously, this type of substitution does not reduce the need to introduce new technologies to improve energy efficiency and reduce greenhouse gas emissions from buses.

Québec operates extensive transportation networks that represent an essential economic lever and a key element in its community-owned heritage. Almost 200,000 km of Québec's highways are concentrated in the southwestern and southern areas of the province, in an around six metropolitan regions, including Montréal and the city of Québec.

The MTQ is responsible for the highway system and for access roads for resources, covering a total length of close to 30,000 km. The road component of strategic network that provides support for trade (RSSCE — Réseau stratégique en soutien au commerce extérieur), which covers 7,685 km, is a subset of the main road network that includes the principal infrastructures for supporting trade between Québec and the rest of Canada, along with major international trading partners such as the United States.

The highway system includes more than 5,000 engineering structures (overpasses, river bridges, tunnels, retaining walls), and in 2007, the MTQ took responsibility for close to 4,300 bridges located on roads in municipalities with fewer than 100,000 inhabitants. Given the extent of these assets, improving the state of the road network represents a major challenge for the MTQ.

One objective in the area of road infrastructures is to improve the quality of the pavement and the structures. The work that has been carried out in recent years has led to an improvement in the condition of the pavement and the structures, not only on the RSSCE, but also on other major highways. For example, the MTQ completed work on 1,994 km of highways in 2007-2008, at a cost of \$431.2 million, including expenditures related to conservation. In addition, 574 structures were repaired, including 226 structures for which all deficiencies were corrected in 2007²⁰.

The Québec Infrastructures Plan: Foundations for Success helps to ensure the durability of public infrastructures, with the goal of leaving future generations an inventory of high-quality structures, with a view to achieving inter-generational equity. The MTQ has also adopted a modernization plan for the highway network that addresses the maintenance, improvement and development of the road network for the period from 2007 to 2022.

The MTQ owns 27 airports and aerodromes, most of which are located in outlying or remote regions, along with 8 heliports in the Basse-Côte-Nord and Bas Saint-Laurent regions. Airports play an essential role in isolated and remote communities, providing access to healthcare, education, justice and land administration services.

It is important to note that, in terms of the design and construction of road infrastructures, environmental assessments are required before any project is launched. The first environmental assessments undertaken by the MTQ were carried out in the 1970s. A study of the human and physical impacts is required for any project that is subject to the environmental procedure set out in the Environment Quality Act.

Finally, the MTQ contributed to the upcoming Québec Strategy respecting Biological Diversity, which targets three main issues, including maintaining Québec's biological diversity and ecological services.

Guideline 4. Safety:

Ensure the safety of the users of transportation infrastructures and nearby residents

Objective 4.1 Ensure the safety of users

Objective 4.2 Reduce harmful effects for the users of transportation infrastructures and nearby residents

It is widely recognized that unsafe roads generate high social and economic costs, and are a source of concern for the population. Québec's road safety results for 2007, which was designated as "road safety year", showed a clear improvement over the results for preceding years in terms of the number of deaths and serious injuries. The official document states that there were 608 road deaths in 2007, or 113 fewer than in 2006, which represents a decrease of 15.7%. Compared to the average for the five preceding years, the total number of deaths in 2007 decreased by 10.6%. The number of serious injuries also decreased by 23%, with 2,866 victims compared to 3,721 in 2006. A comparison with the average for 2002 to 2006 reveals a decrease of 24.2% in the number of serious injuries. In order to constantly improve the positive road safety results, the MTQ is committed to continuing its efforts to make safety a society-wide issue.

GOVERNANCE

This sector of activity involves the MTQ's routine organizational activities and its actions aimed at reducing consumption. It also covers the promotion of the concept of sustainable development among its employees, the general public, and its partners. Two guidelines and four objectives have been defined for this sector of activity.

Guideline 5. Ecoresponsible management:

Produce and consume responsibly

Objective 5.1 Optimize the taking into account of sustainable development and the environment in the management of products, services and activities

As is the case with the government as a whole, the MTQ must set the example in terms of consumption practices and production activities. In keeping with this approach, the MTQ has implemented concrete actions and practices aimed at environmentally sound management and ecoresponsible procurement.

6. Information, awareness, education and innovation:

Publicize the principles and applications of sustainable development in the transportation sector

Objective 6.1 Raise awareness and train personnel with respect to the principles and applications of sustainable development in the transportation sector

Objective 6.2 Promote sustainable development guidelines and actions in the transportation sector among the general public

Objective 6.3 Stimulate research and innovation in the area of sustainable development

^{21.} Société de l'assurance automobile du Québec. Bilan routier 2007. [www.saaq.gouv.qc.ca/prevention/bilan_routier_07/index.php]

The MTQ's large workforce²² must be encouraged to integrate the principles of sustainable development into their professional and personal activities. The MTQ also intends to promote the adoption of ecoresponsible behaviour patterns in the transportation sector among the general public. Finally, research and innovation activities that integrate the concept of sustainable development will be given priority by the MTQ, especially if they target the durability of transportation infrastructures and equipment, trip safety and efficiency, mobility in the urban environment, and services for rural regions and communities.

SECTORS OF ACTIVITY, GUIDELINES AND OBJECTIVES			
	GUIDELINE	OBJECTIVE	
I. Climate change and energy efficiency: Reduce greenhouse gas emissions and use energy more efficiently		 I.1 Ensure integrated planning in order to optimize transportation networks I.2 Contribute to the prevention and reduction of greenhouse gas emissions by implementing measures aimed at improving energy efficiency in the transportation of goods I.3 Promote public transit and active transportation 	
Transpo	2. Land use: Plan the development of transportation systems with a view to ensuring sustainable land use and development	2.1 Promote joint action with the main stakeholders in the area of land use and development	
he transportation network	3. Maintain community assets: Ensure the durability of transportation infrastructures and equipment	 3.1 Integrate the concept of sustainable development into the design and construction of transportation infrastructures and equipment 3.2 Ensure the durability of infrastructures by improving their current condition 3.3 Promote the use of transportation infrastructures with a reduced impact on the environment 3.4 Adapt transportation infrastructures and activities to the impacts of climate change 	
Managing t	4. Safety: Ensure the safety of the users of transportation infrastructures and nearby residents	4.1 Ensure the safety of users4.2 Reduce harmful effects for the users of transportation infrastructures and nearby residents	
9	5. Ecoresponsible management: Produce and consume responsibly	5.1 Optimize the taking into account of sustainable development and the environment in the management of products, services and activities	
Governanc	6. Information, awareness, education and innovation: Publicize the principles and applications of sustainable development in the transportation sector	6.1 Raise awareness and train personnel with respect to the principles and applications of sustainable development in the transportation sector6.2 Promote sustainable development guidelines and actions in the transportation sector among the general public6.3 Stimulate research and innovation in the area of sustainable development	
	Governance Managing the transportation network Transportation planning	I. Climate change and energy efficiency: Reduce greenhouse gas emissions and use energy more efficiently 2. Land use: Plan the development of transportation systems with a view to ensuring sustainable land use and development 3. Maintain community assets: Ensure the durability of transportation infrastructures and equipment 4. Safety: Ensure the safety of the users of transportation infrastructures and nearby residents 5. Ecoresponsible management: Produce and consume responsibly 6. Information, awareness, education and innovation: Publicize the principles and applications of sustainable development in the	

ACTIONS





In order to meet each of the objectives defined in the area of sustainable development, the MTQ is committed to implementing 26 actions, 14 of which have been given priority status based on the following criteria:

- The action makes a "significant" contribution to attaining the goal of sustainable development;
- The action is linked to one of the "essential activities" as defined in the Government Sustainable Development Strategy.

The actions that have been selected are associated with the MTQ's mission as set out in the Strategic Plan -2008-2012. In fact, the actions are the means by which the MTQ will contribute to the sustainable mobility of people and goods in Québec. They reflect an ongoing commitment to provide citizens with access to diversified, efficient, economical, safe transportation infrastructures that are compatible with the health of humans and ecosystems and that allow of viable long-term social and economic development.

SECTOR OF ACT	TRANSPORTATION PLANNING		
GUIDELINE	I. Climate change and energy efficiency: Reduce greenhouse gas emissions and use energy more efficiently		
OBJECTIVE	I.I Ensure integrated planning in order to optimize transportation networks		
PRIORITY ACTION	I.I.I Draft and implement a Québec Vision for transportation between now and 2030		
Description	The Vision will describe the current and future state of transportation in Québec over a 20-year period. It will include a more precise definition of the trends that will prevail in the coming years in order to support the strategic guidelines. Major international trends will be integrated into long-term planning. Vision statements will focus on emerging concerns with respect to the economy, health and quality of life, along with the problems associated with climate change and energy efficiency, among others.		
Monitoring indicator	% of the Vision completed (drafted and published)		
Target	• 100% of the Vision will be completed by 2010		
Outside partners	A number of government departments will be consulted in connection with this action, including the Ministère des Affaires municipales, des Régions et de l'Occupation du territoire and the Ministère du Développement durable, de l'Environnement et des Parcs. Other partners will also be consulted, including the Société de l'assurance automobile and the Agence métropolitaine de transport.		

SECTOR OF ACTIVITY GUIDELINE OBJECTIVE ACTION Description

TRANSPORTATION PLANNING

I. Climate change and energy efficiency: Reduce greenhouse gas emissions and use energy more efficiently

1.1 Ensure integrated planning in order to optimize transportation networks

PRIORITY

1.1.2 Draft a strategy and an action plan aimed at supporting the Ontario-Québec Continental Gateway and Trade Corridor from the perspective of sustainable development, and monitor progress

concerns while taking into consideration the jurisdiction of the three governments involved: the gouvernement du Québec, the Ontario government and the federal government.

In order to make enlightened choices with respect to investments and measures that respect the principles of sustainable development, it is important for the three administrations to discuss their points of view and to agree on the criteria and principles of sustainable development to be applied. This will allow for the establishment of a vision over a 20-year planning timeframe. The overall objective will be to combine strong economic growth with sustainable development policies aimed at responding to the emerging environmental issues of the 21st century. The strategy that will be developed will be based on this vision, which will be brought to fruition through the implementation of the measures.

The goal is to draft an intervention strategy that respects economic, social and environmental

Monitoring indicators

- % of the strategy for the Ontario-Québec Continental Gateway and Trade Corridor completed (drafted and published)
- · Potential quantity of greenhouse gas emissions that can be prevented or reduced

Targets

- 100% of the strategy for the Ontario-Québec Continental Gateway and Trade Corridor will be completed by 2010
- The potential quantity of greenhouse gas emissions that can be prevented or reduced from 2010 to 2013, in kilotonnes (to be determined based on the measures selected)

Outside partners

Transport Canada, Ontario Ministry of Transportation, Ministère du Développement durable, de l'Environnement et des Parcs, Ministère du Développement économique, de l'Innovation et de l'Exportation, Ministère des Relations internationales, Ministère des Affaires municipales, des Régions et de l'Occupation du territoire, Ministère de l'Emploi et de la Solidarité sociale, and various private-sector partners (shippers/transporters, federations of chambers of commerce, etc.)

SECTOR OF ACTIVITY	TRANSPORTATION PLANNING		
GUIDELINE	I. Climate change and energy efficiency: Reduce greenhouse gas emissions and use energy more efficiently		
ОВЈЕСТІVЕ	1.1 Ensure integrated planning in order to optimize transportation networks		
PRIORITY ACTION	I.I.3 Draft and implement a Québec policy respecting intermodal transportation		
Description The go continu advanta The dra The dra The indi The be continue The dra	dective of the Québec draft policy respecting intermodal transportation for passengers ods is to create conditions conducive to the development of intermodal transportation. all will be to make individual transportation modes more effective as part of a nous and efficient transportation supply chain, relying on Québec's comparative ages and targeting the development of intermodality. If policy respecting intermodal transportation is based on two fundamental principles: use of multiple modes of transportation is desirable when the advantages of each ividual mode can be combined for the benefit of users; basic network for each mode of transportation must be protected, and conditions must created that promote the effectiveness of each mode.		
between Intermo governi	plementation of the policy will rely on mobilization, concerted action and cooperation in the stakeholders. odality contributes to sustainable development because it helps to meet the ment's objectives by defining a global approach to transportation systems based on the cy of supply chains, regardless of the transportation modes involved.		
Monitoring indicators	 % of the Québec policy respecting intermodal transportation completed (drafted and published) Potential quantity of greenhouse gas emissions that can be prevented or reduced 		
Targets	 100% of the Québec policy respecting intermodal transportation will be completed by 2009 The potential quantity of greenhouse gas emissions that can be prevented or reduced from 2010 to 2013, in kilotonnes (to be determined based on the measures selected) 		
Outside partners	Several government departments will be consulted: Ministère du Développement économique, de l'Innovation et de l'Exportation, Ministère des Finances, Conseil du trésor, Ministère du Développement durable, de l'Environnement et des Parcs, etc. Public sector and private sector partners will also be consulted, including the Agence métropolitaine de transport, port authorities, shipping companies, trans-shippers, etc.		

SECTOR OF ACTIVITY GUIDELINE OBJECTIVE

TRANSPORTATION PLANNING

- **I. Climate change and energy efficiency:** Reduce greenhouse gas emissions and use energy more efficiently
- 1.1 Ensure integrated planning in order to optimize transportation networks

PRIORITY ACTION

1.1.4 Implement the MTQ's policy respecting the transportation of goods by road $-\,2009\text{-}2014$

Description

In keeping with its mission, the MTQ must ensure the mobility of people and goods throughout Québec on safe, efficient transportation systems that contribute to the sustainable development of Québec. To support the growth and competitiveness of the goods transportation industry, the MTQ and its government partners²³ have drafted a departmental policy specifically respecting the transportation of goods by road. One of its main objectives is to contribute to the development of efficient transportation systems as an economic and strategic lever for Québec in the contemporary North American economic environment. The policy specifies the government's directions in the area of goods transportation by road, which are covering all of the aspects that are within the jurisdiction of the MTQ and the other agencies that it is responsible for. It demonstrates the gouvernement du Québec's clear commitment to work toward the consolidation of a strong and dynamic industry.

The policy is also in keeping with the application of the Sustainable Development Act and the implementation of the Sustainable Development Strategy, the Québec Action Plan on Climate Change — 2006-2012 and the Québec Energy Strategy — 2006-2015. It is designed as a practical, realistic tool to be used by all stakeholders in the areas of goods transportation by road to allow them to consolidate their work in an efficient manner and improve the general level of knowledge within the industry.

The implementation of the policy is based on an annual action plan drawn up in collaboration with the main public and private partners in the sector.

Monitoring indicator

• % of actions contained in the annual action plans completed

Target

Overall, 80% of actions under the annual action plans will be carried out

Outside partners

Société de l'assurance automobile du Québec, Commission des transports du Québec, Forum des intervenants de l'industrie du camionnage général, Agence de l'efficacité énergétique, Contrôle routier Québec, Comité sectoriel de maind'œuvre de l'industrie du transport routier au Québec, Comité interrégional pour le transport des marchandises

^{23.} Commission des transports du Québec (CTQ) and Société de l'assurance automobile du Québec (SAAQ).

SECTOR OF ACTI	TRANSPORTATION PLANNING		
GUIDELINE	I. Climate change and energy efficiency: Reduce greenhouse gas emissions and use energy more efficiently		
ОВЈЕСТІVЕ	I.2 Contribute to the prevention and reduction of greenhouse gas emissions be implementing measures aimed at improving energy efficiency in the transportation of goods		
PRIORITY ACTION	1.2.1 Implement the prevention and reduction actions set out in the Québe Action Plan on Climate Change — 2006-2012 and the energy efficience measures set out in the Québec Energy Strategy — 2006-2015 that are with the jurisdiction of the MTQ in the goods transportation sector		
Description	Within the context of the government's effort to fight climate change and to improve energy efficiency, the MTQ is responsible for the implementation of several actions contained in the Québec Action Plan on Climate Change — 2006-2012 and the Québec Energy Strategy — 2006-2015. These actions ²⁴ involve: • promoting the introduction of intermodal projects for the transportation of goods; • establishing a program aimed at supporting the penetration of technological innovations in the area of energy efficiency in the goods transportation sector; • adopting regulations to make speed limiters compulsory on all trucks, and to set the maximum speed at 105 km/h.		
Monitoring indicator	 Potential quantity of greenhouse gas emissions set out in the Québe Action Plan on Climate Change — 2006-2012 that can be prevented of reduced that is within the jurisdiction of the MTQ²⁵ 		
Target	 Potential reduction and prevention of 1,460 kilotonnes of greenhouse ga emissions by 2012 		
Outside partners	Agence de l'efficacité énergétique, Ministère du Développement durable, c l'Environnement et des Parcs, Ontario Ministry of Transportation, Transpo Canada		

^{24.} The actions include the development and use of public transit by individuals and the alternative modes of transportation described in the Québec Action Plan on Climate Change – 2006-2012, which are discussed in the context of Action 1.3.1. The action pertaining to the various assessments and research projects in connection with the impact of and adaptations to climate change is discussed in the context of Action 3.4.1.

^{25.} The Québec Energy Strategy – 2006-2015 specifies that a significant percentage of the objective of reducing petroleum product consumption will be achieved through the implementation of the measures that are contained in the Québec Action Plan on Climate Change – 2006-2012.

SECTOR OF ACTIVITY TRANSPORTATION PLANNING I. Climate change and energy efficiency: Reduce greenhouse gas **GUIDELINE** emissions and use energy more efficiently 1.3 Promote public transit and active transportation **OBJECTIVE** 1.3.1 Implement the programs provided for in the Québec Public Transit Policy **PRIORITY ACTION** that are within the jurisdiction of the MTQ The objectives of the Québec Public Transit Policy are: • to promote the development and use of public transit; to promote the development and use of modes of transportation other than the **Description** automobile. The Policy includes seven financial assistance programs, five of which are financed by the Green Fund. • % of increase in public transit ridership **Monitoring** • % of increase in adapted transportation ridership indicators Number of incentives to active transportation created within the context of the Programme d'aide gouvernementale aux modes de transport alternatifs à l'automobile, or PAGMTAA (government assistance program for modes of transportation other than the automobile) Potential quantity of greenhouse gas emissions that can be prevented or reduced 8% increase in public transit ridership between 2007 and 2012 **Targets** 10% increase in adapted transportation ridership by 2012 Total number of incentives to active transportation supported by the **PAGMTAA** Potential reduction and prevention of 130 kilotonnes of greenhouse gas emissions by 2012 Public transit corporations (9), intermunicipal transportation councils (13 in Outside Greater Montréal and 9 outside of Montréal), municipal and intermunicipal partners transportation bodies, Agence métropolitaine de transport (AMT),

permits, school bus services

municipalities, Regional County Municipalities (48 that provide services in rural areas), regional conferences of elected officials, regional transportation councils, taxi permit holders and holders of intercity, charter and tourist bus

SECTOR OF ACTIVITY	TRANSPORTATION PLANNING
GUIDELINE	I. Climate change and energy efficiency: Reduce greenhouse gas emissions and use energy more efficiently
OBJECTIVE	1.3 Promote public transit and active transportation
ACTION	1.3.2 Implement the Cycling Policy (revised edition, May 2008)
the Cy of cycl aspect Description (plant netwo the pr progra	voling Policy was initially introduced in 1995, and was revised in May 2008. The goal of cling Policy is to structure actions taken by the MTQ and other organizations in the field ling as a mode of transportation. The Policy contains 22 statements pertaining to various its of cycling, from human and socioeconomic factors to vehicles and infrastructures ning, funding). In addition to ongoing actions taken by the MTQ (investment in the road rk, standardization, supervision, etc.), the revised Cycling Policy establishes links with rograms that are set out in the Québec Public Transit Policy (government assistance am for alternatives to the automobile) with a view to supporting the development of g infrastructures in urban environments.
Monitoring indicators	 % of increase in the modal share of the bicycle throughout Québec, calculated for major agglomerations using data from the latest origin-destination surveys % of increase in the share of utilitarian bicycle trips (work, study, business, shopping, etc.) Additional kilometres of bikeways
Targets	 25% increase in the modal share of the bicycle by 2013, using data from the latest origin-destination surveys (50% by 2020) 5% increase in the share of utilitarian bicycle trips (work, study, business, shopping, etc.) between the 2005 and 2010 surveys 15% increase in the total number of kilometres of bikeways in Québec by 2013 (30% by 2020)
Outside partners	 Municipalities (for the introduction of cycling infrastructures in urban settings) Cycle path managers (including the members of the Association des réseaux cyclables du Québec) Vélo Québec Association (for the completion of surveys and the mobilization of municipalities)

SECTOR OF ACTIVITY

TRANSPORTATION PLANNING

GUIDELINE

2. Land planning: Plan the development of transportation systems with a view to ensuring sustainable land use and development

OBJECTIVE

2.1 Promote joint action with the main stakeholders in the area of land use and development

PRIORITY ACTION AND ESSENTIAL ACTIVITY IN THE GOVERNMENT STRATEGY

2.1.1 Implement the provisions of the government's action plan to provide direction for municipal players that support territorial dynamism

Description

The implementation of this "essential activity" is based on the MTQ's contribution to the completion of the government's action plan to provide direction for municipal players that support territorial dynamism

Monitoring indicator

 Number of provisions contained in the government plan applied with assistance from the MTQ

Target

 All of the provisions contained in the government plan involving the MTQ will be applied by 2013

SECTOR OF ACTIVITY	MANAGING THE TRANSPORTATION NETWORK		
GUIDELINE	3. Maintain community assets: Ensure the durability of transportation infrastructures and equipment		
OBJECTIVE	3.1 Integrate the concept of sustainable development into the design and construction of transportation infrastructures and equipment		
ACTION	3.1.1 Continue to carry out advisability studies and environmental assessments		
submit Description for eac order t	TQ intends to prepare an analysis grid in order to determine which projects must be ted to the departmental process of advisability studies and environmental assessments h sector of the infrastructure action program. The analysis grid will then be applied in o ensure that the projects that meet the criteria are submitted for advisability studies vironmental assessment.		
Monitoring indicators	 State of readiness of the analysis grid % of projects on the approved program that the analysis grid has been applied to Number of advisability studies completed compared to the number of projects for which an advisability study is required in accordance with the analysis grid Number of environmental assessments completed compared to the number of projects for which an environmental assessments is required in accordance with the analysis grid 		
Targets	 Design of the analysis grid by 2009-2010 Application of the analysis grid to 100% of projects beginning in 2010-2011 Completion of advisability studies for 80% of projects in 2010-2011, 90% of projects in 2011-2012, and 100% of projects in 2012-2013 Completion of environmental assessments for 80% of projects in 2010-2011, 90% of projects in 2011-2012, and 100% of projects in 2012-2013 		

MANAGING THE TRANSPORTATION NETWORK **SECTOR OF ACTIVITY 3. Maintain community assets:** Ensure the durability of transportation **GUIDELINE** infrastructures and equipment 3.1 Integrate the concept of sustainable development into the design and **OBJECTIVE** construction of transportation infrastructures and equipment 3.1.2 Continue to integrate sustainable development principles when drafting **ACTION** or revising standards, the document Cahier des charges et devis généraux, and specifications The standardization process covers the production of standards-based documents and contractual documents. This ongoing process allows for optimal solutions to be determined by consulting all stakeholders. Measuring effects of all kinds is a constant concern. This action involves continuing to integrate the principles of sustainable development into the process **Description** that is currently in place for preparing standards-based documents and contractual documents, and integrating the same principles into the regular work of standardization boards, with the objective of ensuring that the revision of standards, the document Cahier des charges et devis généraux, and specifications takes into account the principles of sustainable development. **Monitoring** Progress in terms of updating the standardization process indicator 100% of the process updated by 2011 **Target**

SECTOR OF ACTI	MANAGING THE TRANSPORTATION NETWORK
GUIDELINE	3. Maintain community assets: Ensure the durability of transportation infrastructures and equipment
OBJECTIVE	3.2 Ensure the durability of infrastructures by improving their current condition
PRIORITY ACTION	3.2.1 Continue to implement the 2007-2022 plan to upgrade the road networ in order to improve the quality of road structures
Description	In accordance with the Québec Infrastructures Plan: Foundations for Success, the MTQ had prepared a plan to upgrade the road network during the period from 2007 to 2022. The platincludes a section pertaining to upgrading the road network with the objective of ensuring that Québec's road infrastructures meet North American standards within 15 years. In terms of improvements to the quality of road structures, it is expected that 80% of a structures will be in good condition by 2022. Other intermediate targets have also been set. In addition, in order to optimize work and investment over the long term, a strategic planning module will be used in the form of a computer application that makes recommendations to managers with respect to the most cost-effective maintenance at the most appropriate time. This application allows for optimization of the useful life of structures, which will help to
Monitoring indicators	 * % of structures within the highway system in good condition (54.5% i 2007-2008) * % of MTQ bridges within the municipal road network in good conditio (43.0% in 2007-2008)
Targets	 58.2% of structures within the highway system in good condition i 2009-2010, 61.6% in 2010-2011, and 65.0% in 2011-2012 41.1% of MTQ bridges in the municipal road network in good condition i 2009-2010, 43.5% in 2010-2011, and 45.3% in 2011-2012

SECTOR OF ACTIVITY

MANAGING THE TRANSPORTATION NETWORK

GUIDELINE

3. 3. Maintain community assets: Ensure the durability of transportation infrastructures and equipment

OBJECTIVE

3.2 Ensure the durability of infrastructures by improving their current condition

PRIORITY ACTION

3.2.2 Continue to implement the 2007-2022 plan to upgrade the road network in order to improve the condition of pavement

Description

In accordance with the Québec Infrastructures Plan: Foundations for Success, the MTQ has prepared a plan to upgrade the road network during the period from 2007 to 2022. The plan includes a section pertaining to upgrading the road network with the objective of ensuring that Québec's road infrastructures meet North American standards within 15 years.

In terms of improving the condition of pavement, it is expected that 83% of all pavement will be in good condition by 2022. Other intermediate targets have also been set.

In addition, a process aimed at calculating the residual life expectancy of pavements (using dimensioning software and standards) based on the road profile, the structural capacity of the pavement and the type of heavy traffic will be used to design and construct pavements with longer life expectancy.

Monitoring indicator

 % of pavement within the highway system in good condition: strategic road network providing support for trade (82.1% in 2008-2009); roads other than the strategic road network providing support for trade (62.0% in 2008-2009); the MTQ network as a whole (67.7% in 2008-2009)

Targets

- 83.0% of the strategic road network providing support for trade in good condition in 2009-2010, 83.5% in 2010-2011, and 84,0% in 2011-2012
- 64.0% of roads other than roads within the strategic road network providing support for trade in good condition in 2009-2010, 66.0% in 2010-2011, and 68.0% in 2011-2012
- 69.0% of the MTQ network as a whole in good condition in 2009-2010, 70.0% in 2010-2011, and 72.0 % in 2011-2012

MANAGING THE TRANSPORTATION NETWORK **SECTOR OF ACTIVITY 3. Maintain community assets:** Ensure the durability of transportation **GUIDELINE** infrastructures and equipment 3.3 Promote the use of transportation infrastructures with a reduced impact **OBJECTIVE** on the environment 3.3.1 Aim for reduction at source, re-use, recycling and the recovery of **PRIORITY ACTION** residual materials before disposal Among other things, a reduction in the environmental impact of transportation infrastructures requires sound management of residual materials. The MTQ intends to continue to prioritize the recovery of cement concrete and bitumen concrete. As long as they meet certain quality criteria, they will continue to be used as backfill in road construction and reconstruction **Description** projects. The MTQ also intends to ensure that priority is given to the re-use, recovery or recycling of other materials related to the construction or operation of road infrastructures, wherever possible (scrap aluminium, tires and timber gathered from roadways, etc.). The management tools and procedures used to award contracts do not currently allow the MTQ to establish measurable indicators and targets in a sufficiently precise manner in terms of creating accountability methods that meet the strict requirements that it has set. Given the importance that the MTQ ascribes to this action, it has taken steps to produce one or more measurable indicators at a level that is compatible with the statement for this action within two years. The results of the action will then be measured from 2011 to 2013 using the selected indicators. Degree of completion (preparation and publication) of indicators and **Monitoring** indicators • % of hot mix asphalt containing reclaimed asphalt pavement % of recycled aggregates used for road infrastructures • % of recycled aggregates used for pavement structure % of steel wood bridges replaced by another type of bridge on an annual basis (without pressure treated lumber) Amount of scrap metal recycled on an annual basis by the Ministère (in metric tonnes) Establishment of one or more indicators and targets by 2011 **Targets** • 25% in 2013 • 8% in 2013

10% in 201325% in 2013

Amount of scrap metal recycled by the Ministère (in metric tonnes)

MANAGING THE TRANSPORTATION NETWORK **SECTOR OF ACTIVITY 3. Maintain community assets:** Ensure the durability of transportation **GUIDELINE** infrastructures and equipment 3.3 Promote the use of transportation infrastructures with a reduced impact **OBJECTIVE** on the environment 3.3.2 Coordinate the preparation and implementation by the MTQ of a Québec **ACTION** strategy respecting the environmental management of road salt The salt that is used to de-ice roads has a detrimental impact on groundwater, soil, flora, aquatic and terrestrial fauna, and infrastructures, to varying degrees. With the advent of new knowledge and technologies, salt can now be spread more effectively in the right quantity at **Description** the right time and in the right place. The Québec road salt management strategy defines best practices for local administrations in order to help them to apply an environmental approach to the management of road salt. **Monitoring** • % of annual targets in the departmental plan met indicator • The 14 regional divisions will meet 100% of the annual targets in the **Target** departmental plan by 2013 Ministère du Développement durable, de l'Environnement et des Parcs, Outside

municipalités

partners

Ministère des Affaires municipales, des Régions et de l'Occupation du

territoire, Union des municipalités du Québec, Fédération québécoise des

SECTOR OF ACTIVITY	MANAGING THE TRANSPORTATION NETWORK			
GUIDELINE	3. Maintain community assets: Ensure the durability of transportation infrastructures and equipment			
ОВЈЕСТІVЕ	3.3 Promote the use of transportation infrastructures with a reduced impact on the environment			
ACTION	3.3.3 Finalize and implement the departmental directive respecting roadway lighting			
select harm Description four increa chara	The departmental directive respecting roadway lighting was drawn up in order to guide the selection of lighting solutions, to respond to issues over the short and medium term, and to harmonize management of the road network that is within the jurisdiction of the MTQ. It has four aims: to create a framework for work to improve lighting on the road network, to increase the efficiency of roadway lighting, to take the importance of the route and the characteristics of the road into account, and to demonstrate its concern with the light pollution created by roadway lighting.			
Monitoring indicators	 % of the lighting handbook (Manuel d'éclairage) completed (drafted and published) % of the inventory of lighting systems completed 			
Targets	 100% of the lighting handbook (Manuel d'éclairage) will be completed by the end of 2009 100% of the inventory will be completed by the end of 2010 			
Outside partners	Municipalities (for the recovery of used bulbs and outmoded equipment)			

SECTOR OF ACTIVITY MANAGING THE TRANSPORTATION NETWORK **3. Maintain community assets:** Ensure the durability of transportation **GUIDELINE** infrastructures and equipment 3.3 Promote the use of transportation infrastructures with a reduced impact **OBJECTIVE** on the environment 3.3.4 Help draft and implement the 2009-2014 Québec strategy on biological **ACTION** diversity The 2004-2007 Québec strategy and action plan on biological diversity covered the period ending March 31, 2007. The MTQ and its partner departments and agencies agreed to develop a new approach. The 2009-2014 Québec strategy and action plan on biological diversity are designed to protect, restore and ensure the sustainable development of genetic diversity, **Description** species diversity and ecosystem diversity. Three fundamental issues have been defined: 1) maintain biodiversity and ecological services; 2) promote economic development without affecting biodiversity and ecological services; 3) acquire and disseminate knowledge pertaining to biodiversity and ecological services. The MTQ will contribute to the Strategy by delegating a representative to the interdepartmental committee on biological diversity, and by taking part in some of the actions implemented, in accordance with its areas of expertise. **Monitoring** Number of actions implemented in which the MTQ takes part indicator

Target

Total number of actions in which the MTQ takes part between now and 2013

SECTOR OF ACTIVITY		MANAGING THE TRANSPORTATION NETWORK		
GUIDELINE		3. Maintain community assets: Ensure the durability of transportation infrastructures and equipment		
ОВЈЕСТIVE		3.4 Adapt transportation infrastructures and activities to the impacts of climate change		
ACTION		3.4.1 Improve knowledge concerning the impact of climate change or infrastructures, and prepare strategies and adaptation measures for sectors that the MTQ designates as priority sectors		
Description	The objective of this action, which is linked to action 23 of the Québec Action Plan on Climate Change — 2006-2012 ²⁶ , is to promote research projects and experiments aimed at defining strategies and adaptation measures in Nunavik (airport and harbour infrastructures), the Gulf and Estuary of St. Lawrence (sites experiencing erosion, lower water levels and slower			
Monitoring indicators	currents) a	 % of research reports produced on each target theme Number of adaptation strategies defined for each target theme Number of adaptation measures defined for each target theme 		
Targets		 100% of research reports will be published by 2013 Total number of adaptation strategies defined for each target theme by 2013 Total number of adaptation measures defined for each target theme by 2013 		
Outside partners		Ministère de la Sécurité publique du Québec, Consortium Ouranos, Universit du Québec à Rimouski, Institut national de la recherche scientifique — Centre Eau, Terre et Environnement de l'Université du Québec, Centre d'étude		

^{26.} This action is one of the measures that were announced on December 6, 2007 to strengthen the Québec Action Plan on Climate Change – 2006-2012. [www.mddep.gouv.qc.ca/changements/plan_action/n_planaction.pdf]

MANAGING THE TRANSPORTATION NETWORK **SECTOR OF ACTIVITY 4. Safety:** Ensure the safety of the users of transportation infrastructures **GUIDELINE** 4.1 Ensure the safety of road users **OBJECTIVE** 4.1.1 Publish and implement the 2009-2012 Departmental Road Safety Action **PRIORITY ACTION** Plan (Road infrastructure component) From 2003 to 2007, there was a total of 183,181 accidents leading to bodily injuries on Québec roads. They harmed 251,042 people, 18,033 of which suffered serious injuries and 3,316 of which died. According to the SAAQ, the social costs of these accidents, including victim care and compensation, lost production, material damages, and prevention, are estimated at **Description** \$20 billion for that period. The Ministère has found partners that share its goals to help Québec become a world leader in road safety. As a leader in the matter, the Ministère has included one of its road safety contributions to its departmental action plan, which was published on May 4, 2010, and which aims to improve Québec road safety and guarantee optimum road project safety improvements over the next few years. The main goal of the action plan is to provide a safer road environment through significant investments every year and more productive involvement, especially for sites with potential for improvement, and by carrying out road safety audits to find and correct shortfalls prior to implementing projects. % of road safety investments from a total of \$3 billion (\$1 billion a year **Monitoring** for three years) indicator % of sites with potential for improvement that have been addressed from a total of 60 sites (20 sites a year for three years) % of combined measures for specific regional issues that were successfully implemented vs. measures successfully implemented as a whole 100% of planned investments under the Departmental Road Safety Action **Target** Plan will be completed • 100% of identified sites with potential for improvement under the Departmental Road Safety Action Plan will be addressed • 100% of measures identified for specific regional issues under the Departmental Road Safety Action Plan will be implemented

Outside

partners

Société de l'assurance automobile du Québec, Sûreté du Québec, police forces,

municipalities, road transportation associations and others

SECTOR OF ACTIVITY		MANAGING THE TRANSPORTATION NETWORK
GUIDELINE		4. Safety: Ensure the safety of the users of transportation infrastructure and nearby residents
OBJECTIVE		4.1 Ensure the safety of users
ACTION		4.1.2 Implement the action plan respecting the management of large gam animals
Collision only m death. Description efforts		in 6,000 road accidents involving large game animals occur in Québec every year is with relatively small wild animals, such as deer, caribou or bears, generally caussiverial damage. However, a collision with a moose can cause serious injuries, and even increase in this type of accident in recent years has led the MTQ to redouble it remind road users that, by observing a few basic safety rules, they can use the road without danger, even when large game animals are present along the sides of the
	road net decided particula	to minimize the risks associated with the presence of large game animals close to the work while respecting the movements of moose and white-tailed deer, the MTC to draft an action plan respecting the management of large game animals rly for zones with a high risk of accidents with large game animals, and to propose ate mitigation measures to reduce the number of accidents involving injuries.
		Degree of completion of a management guide on road accidents caused by large game animals
Monitoring indicators		 % of priority accident zones in which mitigation measures have been applied

MANAGING THE TRANSPORTATION NETWORK **SECTOR OF ACTIVITY 4. Safety:** Ensure the safety of the users of transportation infrastructures **GUIDELINE** and nearby residents 4.1 Ensure the safety of users **OBJECTIVE** 4.1.3 Complete the installation of the Centre intégré de gestion de la circulation **ACTION** de Québec (Québec City integrated traffic management centre) An intelligent transportation system (ITS) is an interactive system that processes and disseminates information related to transportation using integrated information and communications technologies to improve the management and operation of transportation networks and user services. ITS systems create communication links between **Description** drivers/operators, the infrastructure, and vehicles via a management centre that links them in real time. It can also create a link between vehicles, helping to improve the ability to intervene in an emergency situation. The integration of traffic management services throughout the Capitale-Nationale region will strengthen the intervention capacity of traffic management while improving the information provided to road users. Monitoring indicator % of the Centre intégré de gestion de la circulation de Québec completed • 100% completed by 2010 **Target**

SECTOR OF ACT	MANAGING THE TRANSPORTATION NETWORK		
GUIDELINE	4. Safety: Ensure the safety of the users of transportation infrastructures and nearby residents		
OBJECTIVE	4.1 Ensure the safety of users		
ACTION	4.1.4 Establish a safety management system in certified airports that are within the jurisdiction of the MTQ		
Description	Security in airport operations is a priority for the MTQ, and in this context, a Safety Management System (SMS) that meets the requirements of the Canadian Aviation Regulations will be established in four phases over four years. The implementation of the SMS will introduce a new approach to airport management based on proactive measures. The 24 airports that are within the jurisdiction of the MTQ are subject to the new regulations. Three aerodromes will also be included in the program.		
Monitoring indicator	 Degree of completion of the safety management system in the 27 airports and aerodromes that are within the jurisdiction of the MTQ 		
Target	• 100% of phase I completed in 2009, 100% of phase 2 completed in 2010, 100% of phase 3 completed in 2011, and 100% of phase 4 completed in 2012		

SECTOR OF ACTIVITY GUIDELINE OBJECTIVE ACTION Description

MANAGING THE TRANSPORTATION NETWORK

- 4. Safety: Ensure the safety of the users of transportation infrastructures and nearby residents
- 4.2 Reduce harmful effects for the users of transportation infrastructures and nearby residents

4.2.1 Revise and implement the road noise policy

The road noise policy, which includes a corrective approach and an integrated planning approach, has been in effect since March 1998. It targets improvements for residents along roads subjected to high levels of noise pollution (through the introduction of mitigation measures), along with preventive measures to ensure that noise pollution is not made worse by road projects, and that acceptable noise levels are respected when land use is being planned by Regional County Municipalities.

The policy will be revised in order to take into account the most recent studies in the field of noise pollution assessment, among others. It is expected to be adopted in 2009. Threshold values and noise impact assessment factors for road projects will be redefined in order to provide better control over the noise impacts of transportation and to respect the principles of sustainable development.

Monitoring indicators

- Annual % of projects²⁷ including sensitive zones studied in detail in connection with noise levels
- % of acoustic monitoring carried out²⁸ in zones where an acoustic survey has predicted a zero, low or significant impact
- 100% of projects will be checked for sound by 2013
- 100% of the surveys required during the first three years of the project will be completed within four years

Targets

^{27.} Other than projects otherwise subject to an environmental assessment or Order-in-Council.

^{28.} Other than road projects otherwise subject to an environmental assessment or Order-in-Council.

SECTOR OF ACTIVITY	GOVERNANCE
GUIDELINE	5. Ecoresponsible management: Produce and consume responsibly
OBJECTIVE	5.1 Optimize the taking into account of sustainable development and the environment in the management of products, services and activities
PRIORITY ACTION AND ESSENTIAL ACTIVITY IN THE GOVERNMENT STRATEGY	5.1.1 Implement measures and activities that contribute to attaining the objectives of the policy respecting ecoresponsible government, including in particular an environmental management system (EMS)
Description	The implementation of this "essential activity" results from the policy respecting ecoresponsible government. In order to ensure that the environment and sustainable development are taken into account to the proper degree in all of its products, services and activities, the MTQ will implement an overall approach to environmental management in the form of an environmental management system. The system that will be established will include management tools designed for all MTQ divisions, planning, activities, processing procedures, procedure
	divisions, planning activities, responsibilities, practices, procedures, resources and procurement. In the field of procurement, the MTQ will introduce ecoresponsible purchasing policies based on the systematic examination of options for selecting products that demonstrate a clear advantage in terms of sustainable development.
Monitoring indicators	 Degree of implementation of the MTQ's environmental management system Degree of implementation of measures or activities that contribute to provincial environmental management objectives Degree of implementation of ecoresponsible purchasing practices
Targets	 Adoption of the environmental management system by 2011 Number of measures or activities implemented that make a direct contribution to the achievement of provincial environmental management objectives Number of ecoresponsible purchasing practices introduced

SECTOR OF ACTIVITY

GOVERNANCE

GUIDELINE

6. Information, awareness, education and innovation: Publicize the principles and applications of sustainable development in the transportation sector

OBJECTIVE

6.1 Raise awareness and train personnel with respect to the principles and applications of sustainable development in the transportation sector

PRIORITY ACTION AND ESSENTIAL ACTIVITY IN THE GOVERNMENT STRATEGY 6.1.1 Introduce activities that contribute to the implementation of the government's awareness and training plan for public administration personnel

Description

Adopting a sustainable development approach involves modifying existing practices, adapting to new tools, and targeting innovation in routine activities. In order to support personnel in the sustainable development process, foster their commitment to the departmental guidelines, and promote changes to practices, the MTQ will draft and implement a departmental awareness and training plan that is in keeping with the government-wide approach.

Monitoring indicators

- % of personnel reached by sustainable development awareness-raising activities
- % of personnel who were reached and who have acquired sufficient knowledge of the sustainable development process to apply it in the context of their routine activities

Targets

- 80% of personnel reached by 2011
- 50% of personnel who are reached will have acquired sufficient knowledge of the sustainable development process by 2013 to apply it in the context of their routine activities

SECTOR OF ACTIVITY	GOVERNANCE			
GUIDELINE	6. Information, awareness, education and innovation: Publicize the principles and applications of sustainable development in the transportation sector			
ОВЈЕСТІVЕ	6.2 Promote sustainable development guidelines and actions in the transportation sector among the general public			
ACTION	6.2.1 Implement awareness-raising activities in order to publicize sustainable development in the transportation sector			
Description commusustair	Before the end of 2009, the MTQ will draft and implement a departmental plan for outside communications, among other things, in order to publicize its achievements in the field of sustainable development, disseminate the findings of the research projects that it funds, and promote alternative modes of transportation.			
Monitoring indicator	% of activities contained in the departmental plan for outside communications completed			
Target	 40% of the activities will be completed by 2009-2011, 70% by 2011-2012, and 100% by 2012-2013 			

SECTOR OF ACTIVITY	GOVERNANCE			
GUIDELINE	6. Information, awareness, education and innovation: Publicize the principles and applications of sustainable development in the transportation sector			
ОВЈЕСТІVЕ	6.3 Stimulate research and innovation in the area of sustainable development			
PRIORITY ACTION	6.3.1 Draft and implement a departmental framework in order to prioritize research and innovation that focuses on sustainable development, among other things			
guide proce watcl Description the d in or To th	At the MTQ, innovation will be used to address the needs defined in its mission and strategic guidelines for the period from 2008 to 2012. More specifically, innovation at the MTQ is a process that includes four complementary functions: research and development, information watch, technology transfer, and retention of expertise. The MTQ places special importance on the dissemination of the findings generated by its R&D activities, which must be maintained in order to optimize benefits in the areas of socio-economics, the environment and security. To this end, the MTQ produces a variety publications, including Études et recherches en transport and Innovation Transport.			
pract mech other	ITQ will introduce a management framework in 2009, with a view to improving research ices at the MTQ, maximizing the benefits of investments in research, using new research anisms as levers for investment, identifying the research fields that are of interest to public transportation organizations and ensuring that sustainable development remains earch priority.			
Monitoring indicator	 Number of research projects with a strong sustainable development component launched during the year as compared to the total number of projects launched under the annual research program 			
Target	 Strong sustainable development component in 50% of all projects launched each year 			

IMPLEMENTATION



The adoption of this Sustainable Development Strategy constitutes a formal undertaking by the MTQ to ensure that sustainable development plays a greater role in the planning and implementation of all of its activities. In order to ensure proper implementation, the departmental process includes establishing a series of indicators aimed at monitoring, assessing and reporting on the results achieved.

At the outset, the Strategy indicates that responsibility for the implementation of the various actions will be assigned to individual divisions within the MTQ, which must not only establish the measures required to meet the objectives and targets of the Strategy, but also report on the progress achieved each year. In light of the fact that the contribution of all personnel is essential to the success of the Strategy, the MTQ intends to focus immediately on activities to inform, raise awareness and train its staff in order to solicit their commitment to the principles of sustainable development and to their application in the transportation sector.

The MTQ will also monitor and assess the implementation of the Strategy. Progress will be reported mainly in the annual management report, because from now on, sustainable development will be a theme that underlies all MTQ activities.

APPENDIX A

THE 16 PRINCIPLES OF SUSTAINABLE DEVELOPMENT



- a) "HEALTH AND QUALITY OF LIFE": People, human health and improved quality of life are at the centre of sustainable development concerns. People are entitled to a healthy and productive life in harmony with nature;
- "SOCIAL EQUITY AND SOLIDARITY": Development must be undertaken in a spirit of intra- and inter-generational equity
 and social ethics and solidarity;
- "ENVIRONMENTAL PROTECTION": To achieve sustainable development, environmental protection must constitute an integral part of the development process;
- d) "ECONOMIC EFFICIENCY": The economy of Québec and its regions must be effective, geared toward innovation and economic prosperity that is conducive to social progress and respectful of the environment;
- e) "PARTICIPATION AND COMMITMENT": The participation and commitment of citizens and citizens' groups are needed
 to define a concerted vision of development and to ensure its environmental, social and economic sustainability;
- f) "ACCESS TO KNOWLEDGE": Measures favourable to education, access to information and research must be encouraged in order to stimulate innovation, raise awareness and ensure effective participation of the public in the implementation of sustainable development;
- g) "SUBSIDIARITY": Powers and responsibilities must be delegated to the appropriate level of authority. Decision-making centres should be adequately distributed and as close as possible to the citizens and communities concerned;
- "INTER-GOVERNMENTAL PARTNERSHIP AND COOPERATION": Governments must collaborate to ensure that
 development is sustainable from an environmental, social and economic standpoint. The external impact of actions in a given
 territory must be taken into consideration;
- i) "PREVENTION": In the presence of a known risk, preventive, mitigating and corrective actions must be taken, with priority given to actions at the source;
- j) "PRECAUTION": When there are threats of serious or irreversible damage, lack of full scientific certainty must not be used as a reason for postponing the adoption of effective measures to prevent environmental degradation;
- k) "PROTECTION OF CULTURAL HERITAGE": The cultural heritage, made up of property, sites, landscapes, traditions and knowledge, reflects the identity of a society. It passes on the values of a society from generation to generation, and the preservation of this heritage fosters the sustainability of development. Cultural heritage components must be identified, protected and enhanced, taking their intrinsic rarity and fragility into account;
- "BIODIVERSITY PRESERVATION": Biological diversity offers incalculable advantages and must be preserved for the benefit
 of present and future generations. The protection of species, ecosystems and the natural processes that maintain life is essential if
 quality of human life is to be maintained;

- m) "RESPECT FOR ECOSYSTEM SUPPORT CAPACITY": Human activities must be respectful of the support capacity of ecosystems and ensure the perenniality of ecosystems;
- n) "RESPONSIBLE PRODUCTION AND CONSUMPTION": Production and consumption patterns must be changed in order to make production and consumption more viable and more socially and environmentally responsible, in particular through an ecoefficient approach that avoids waste and optimizes the use of resources;
- o) "POLLUTER PAYS": Those who generate pollution or whose actions otherwise degrade the environment must bear their share of the cost of measures to prevent, reduce, control and mitigate environmental damage;
- p) "INTERNALIZATION OF COSTS": The value of goods and services must reflect all the costs they generate for society during their whole life cycle, from their design to their final consumption and their disposal.

Sustainable Development Act, R.S.Q., Chapter D-8.1.1, Section 6.

APPENDIX B

OVERVIEW
OF THE MTQ'S
SUSTAINABLE
DEVELOPMENT
STRATEGY - 2009-2013



SECTOR OF ACTIVITY: Transportation planning

GUIDELINE I. Climate change and energy efficiency: Reduce greenhouse gas emissions and use energy more efficiently

OBJECTIVE 1.1 Ensure integrated planning in order to optimize transportation networks

ACTION I.I.I Draft and implement a Québec Vision for transportation between now and 2030

PRIORITY ACTION

INDICATOR

• % of the Vision completed (drafted and published)

TARGET

100% of the Vision will be completed by 2010

ACTION 1.1.2 Draft a strategy and an action plan aimed at supporting the Ontario-Québec Continental Gateway and Trade Corridor from the perspective of sustainable development, and monitor progress

PRIORITY ACTION

INDICATORS

- % of the strategy for the Ontario-Québec Continental Gateway and Trade Corridor completed (drafted and published)
- · Potential quantity of greenhouse gas emissions that can be prevented or reduced

TARGETS

- 100% of the strategy for the Ontario-Québec Continental Gateway and Trade Corridor completed by 2010
- The potential quantity of greenhouse gas emissions that can be prevented or reduced from 2010 to 2013, in kilotonnes (to be determined based on the measures selected)

ACTION 1.1.3 Draft and implement a Québec policy respecting intermodal transportation

PRIORITY ACTION

INDICATORS

- % of the Québec policy respecting intermodal transportation completed (drafted and published)
- Potential quantity of greenhouse gas emissions that can be prevented or reduced

TARGETS

- 100% of the Québec policy respecting intermodal transportation completed by 2009
- The potential quantity of greenhouse gas emissions that can be prevented or reduced from 2010 to 2013, in kilotonnes (to be determined based on the measures selected)

ACTION 1.1.4 Implement the MTQ's policy respecting the transportation of goods by road — 2009-2014

PRIORITY ACTION

INDICATORS

% of actions contained in the annual action plans completed

TARGET

Overall, 80% of actions under the annual action plans will be carried out

SECTOR OF ACTIVITY: Transportation planning

OBJECTIVE 1.2 Contribute to the prevention and reduction of greenhouse gas emissions by implementing measures aimed at improving energy efficiency in the transportation of goods

ACTION 1.2.1 Implement the prevention and reduction actions set out in the Québec Action Plan on Climate Change — 2006-2012 and the energy efficiency measures set out in the Québec Energy Strategy — 2006-2015 that are within the jurisdiction of the MTQ in the goods transportation sector

PRIORITY ACTION

INDICATOR

 Potential quantity of greenhouse gas emissions set out in the Québec Action Plan on Climate Change — 2006-2012 that can be prevented or reduced that is within the jurisdiction of the MTQ

TARGET

Potential reduction and prevention of 1460 kilotonnes of greenhouse gas emissions by 2012

OBJECTIVE 1.3 Promote public transit and active transportation

ACTION 1.3.1 Implement the programs provided for in Québec Public Transit Policy that are within the jurisdiction of the MTQ

PRIORITY ACTION

INDICATORS

- % of increase in public transit ridership
- % of increase in adapted transportation ridership
- Number of incentives to active transportation created within the context of the Programme d'aide gouvernementale aux modes de transport alternatifs à l'automobile, or PAGMTAA (government assistance program for transportation modes other than the automobile)
- Potential quantity of greenhouse gas emissions that can be prevented or reduced

TARGETS

- 8% increase in public transit ridership between 2007 and 2012
- 10% increase in adapted transportation ridership by 2012
- Total number of incentives to active transportation supported by the PAGMTAA
- Potential reduction and prevention of 130 kilotonnes of greenhouse gas emissions by 2012

ACTION 1.3.2 Implement the Cycling Policy (revised edition, May 2008)

INDICATORS

- % of increase in the modal share of the bicycle throughout Québec, calculated for major agglomerations using data from the latest origin-destination surveys
- % of increase in the share of utilitarian bicycle trips (work, study, business, shopping, etc.)
- · Additional kilometres of bikeways

- 25% increase in the modal share of the bicycle by 2013, using data from the latest origin-destination surveys (50% by 2020)
- 5% increase in the share of utilitarian bicycle trips (work, study, business, shopping, etc.) between the 2005 and 2010 surveys
- 15% increase in the total number of kilometres of bikeways in Québec by 2013 (30% by 2020)

SECTOR OF ACTIVITY: Transportation planning

GUIDELINE 2. Land planning: Plan the development of transportation systems with a view to ensuring sustainable land use and development

OBJECTIVE 2.1 Promote joint action with the main stakeholders in the area of land use and development

ACTION 2.1.1 Implement the provisions of the government action plan to guide and counsel municipal players that support territorial dynamism

PRIORITY ACTION AND ESSENTIAL ACTIVITY IN THE GOVERNMENT STRATEGY

INDICATOR

Number of provisions contained in the government plan applied with assistance from the MTQ

TARGET

All of the provisions contained in the government plan involving the MTQ will be applied by 2013

SECTOR OF ACTIVITY: Managing the transportation network

GUIDELINE 3. Maintain community assets: Ensure the durability of transportation infrastructures and equipment

OBJECTIVE 3.1 Integrate the concept of sustainable development into the design and construction of transportation infrastructures and equipment

ACTION 3.1.1 Continue to carry out advisability studies and environmental assessments

INDICATORS

- State of readiness of the analysis grid
- % of projects on the approved program that the analysis grid has been applied to
- Number of advisability studies completed compared to the number of projects for which an advisability study is required
 in accordance with the analysis grid
- Number of environmental assessments completed compared to the number of projects for which an environmental
 assessments is required in accordance with the analysis grid

TARGETS

- Design of the analysis grid by 2009-2010
- Application of the analysis grid to 100% of projects beginning in 2010-2011
- Completion of advisability studies for 80% of projects in 2010-2011, 90% of projects in 2011-2012, and 100% of projects in 2012-2013
- Completion of environmental assessments for 80% of projects in 2010-2011, 90% of projects in 2011-2012, and 100% of projects in 2012-2013

ACTION 3.1.2 Continue to integrate sustainable development principles when drafting or revising standards, the document *Cahier des charges et devis généraux*, and specifications

INDICATOR

Progress in terms of updating the standardization process

TARGET

100% of the process updated by 2011

SECTOR OF ACTIVITY: Managing the transportation network

OBJECTIVE 3.2 Ensure the durability of infrastructures by improving their current condition

ACTION 3.2.1 Continue to implement the 2007-2022 plan to upgrade the road network in order to improve the quality of road structures

PRIORITY ACTION

INDICATORS

- % of structures within the highway system in good condition (54.5% in 2007-2008)
- % of MTQ bridges within the municipal road network in good condition (43.0% in 2007-2008)

TARGETS

- 58.2% of structures within the highway system in good condition in 2009-2010, 61.6% in 2010-2011, and 65.0% in 2011-2012
- 41.1% of MTQ bridges within the municipal road network in good condition in 2009-2010, 43.5% in 2010-2011, and 45.3% in 2011-2012

ACTION 3.2.2 Continue to implement the 2007-2022 plan to upgrade the road network in order to improve the condition of pavement

PRIORITY ACTION

INDICATOR

 % of pavement within the highway system in good condition: strategic road network providing support for trade (82.1% in 2008-2009); roads other than the strategic road network providing support for trade (62.0% in 2008-2009); the MTQ network as a whole (67.7% in 2008-2009)

TARGETS

- 83.0% of the strategic road network providing support for trade in good condition in 2009-2010, 83.5% in 2010-2011, and 84.0% in 2011-2012
- 64.0% of roads other than roads within the strategic road network providing support for trade in good condition in 2009-2010, 66.0% in 2010-2011, and 68.0% in 2011-2012
- 69.0% of MTQ network as a whole in good condition in 2009-2010, 70.0% in 2010-2011, and 72.0 % in 2011-2012

OBJECTIVE: 3.3 Promote the use of transportation infrastructures with a reduced impact on the environment

ACTION: 3.3.1 Aim for reduction at source, re-use, recycling and the recovery of residual materials before disposal

PRIORITY ACTION

INDICATORS

- Degree of completion (preparation and publication) of indicators and targets
- % of hot mix asphalt containing reclaimed asphalt pavement
- % of recycled aggregates used for road infrastructures
- % of recycled aggregates used for pavement structure
- % of steel wood bridges replaced by another type of bridge on an annual basis (without pressure treated lumber)
- Amount of scrap metal recycled on an annual basis by the Ministère (in metric tonnes)

- Establishment of one or more indicators and targets by 2011
- 25% in 2013 8% in 2013 10% in 2013 25% in 2013
- Amount of scrap metal recycled by the Ministère (in metric tonnes)

SECTOR OF ACTIVITY: Managing the transportation network

ACTION 3.3.2 Coordinate the preparation and implementation by the MTQ of a Québec strategy respecting the environmental management of road salt

INDICATOR

• % of annual targets in the departmental plan met

TARGET

• The 14 regional divisions will meet 100% of the annual targets in the departmental plan by 2013

ACTION 3.3.3 Finalize and implement the departmental directive respecting roadway lighting

INDICATORS

- % of the lighting handbook (Manuel d'éclairage) completed (drafted and published)
- % of the inventory of lighting systems completed

TARGETS

- 100% of the lighting handbook (Manuel d'éclairage) will be completed by the end of 2009
- 100% of the inventory will be completed by the end of 2010

ACTION 3.3.4 Help draft and implement the 2009-2014 Québec strategy on biological diversity

INDICATOR

Number of actions implemented in which the MTQ takes part

TARGET

Total number of actions in which the MTQ takes part between now and 2013

OBJECTIVE 3.4 Adapt transportation infrastructures and activities to the impacts of climate change

ACTION 3.4.1 Improve knowledge concerning the impact of climate change on infrastructures, and prepare strategies and adaptation measures for sectors that the MTQ designates as priority sectors

INDICATORS

- % of research reports produced on each target theme
- Number of adaptation strategies defined for each target theme
- Number of adaptation measures defined for each target theme

- 100% of research reports will be published by 2013
- Total number of adaptation strategies defined for each target theme by 2013
- Total number of adaptation measures defined for each target theme by 2013

SECTOR OF ACTIVITY: Managing the transportation network

GUIDELINE 4. Safety: Ensure the safety of the users of transportation infrastructures and nearby residents

OBJECTIVE 4.1 Ensure the safety of road users

ACTION 4.1.1 Publish and implement the 2009-2012 Departmental Road Safety Action Plan (Road infrastructure component)

PRIORITY ACTION

INDICATOR

- % of road safety investments from a total of \$3 billion (\$1 billion a year for three years)
- % of sites with potential for improvement that have been addressed from a total of 60 sites (20 sites a year for three years)
- % of combined measures for specific regional issues that were successfully implemented vs. measures successfully implemented as a whole

TARGET

- 100% of planned investments under the Departmental Road Safety Action Plan will be completed
- 100% of identified sites with potential for improvement under the Departmental Road Safety Action Plan will be addressed
- 100% of measures identified for specific regional issues under the Departmental Road Safety Action Plan will be implemented

ACTION 4.1.2 Implement the action plan respecting the management of large game animals

INDICATORS

- · Degree of completion of a management guide on road accidents caused by large game animals
- % of priority accident zones in which mitigation measures have been applied

TARGETS

- The guide will be completed and approved by the relevant authorities by 2011
- Mitigation measures will be applied in 100% of priority accident zones by 2013

ACTION 4.1.3 Complete the installation of Centre intégré de gestion de la circulation de Québec (city of Québec integrated traffic management centre)

INDICATOR

% of the city of Québec integrated traffic management centre completed

TARGET

100% completed by 2010

ACTION: 4.1.4 Establish a safety management system in certified airports that are within the jurisdiction of the MTQ

INDICATOR

 Degree of completion of the safety management system in the 27 airports and aerodromes that are within the jurisdiction of the MTQ

TARGET

100% of phase I completed in 2009, 100% of phase 2 completed in 2010, 100% of phase 3 completed in 2011, and 100% of phase 4 completed in 2012

OBJECTIVE 4.2 Reduce harmful effects for the users of transportation infrastructures and nearby residents

ACTION 4.2.1 Revise and implement the road noise policy

INDICATORS

- Annual % of projects including sensitive zones studied in detail in connection with noise levels
- % of acoustic monitoring carried out in zones where an acoustic survey has predicted a zero, low or significant impact

- 100% of projects will be checked for sound by 2013
- 100% of the surveys required during the first three years of the project will be completed within four years

SECTOR OF ACTIVITY: Governance

GUIDELINE 5. Ecoresponsible management: Produce and consume responsibly

OBJECTIVE 5.1 Optimize the taking into account of sustainable development and the environment in the management of products, services and activities

ACTION 5.1.1 Implement measures and activities that contribute to attaining the objectives of the policy respecting ecoresponsible government in particular an environmental management system

PRIORITY ACTION AND ESSENTIAL ACTIVITY IN THE GOVERNMENT STRATEGY

INDICATORS

- Degree of implementation of the MTQ's environmental management system
- Degree of implementation of measures or activities that contribute to provincial environmental management objectives
- Degree of implementation of ecoresponsible purchasing practices

TARGETS

- Adoption of the environmental management system by 2011
- Number of measures or activities implemented that make a direct contribution to the achievement of provincial environmental management objectives
- Number of ecoresponsible purchasing practices introduced

GUIDELINE 6. Information, awareness, education and innovation: Publicize the principles and applications of sustainable development in the transportation sector

OBJECTIVE 6.1 Raise awareness and train personnel with respect to the principles and applications of sustainable development in the transportation sector

ACTION 6.1.1 Introduce activities that contribute to the implementation of the government's awareness and training plan for public administration personnel

PRIORITY ACTION AND ESSENTIAL ACTIVITY IN THE GOVERNMENT STRATEGY

INDICATORS

- % of personnel reached by sustainable development awareness-raising activities
- % of personnel who were reached and who have acquired sufficient knowledge of the sustainable development process to
 apply it in the context of their routine activities

TARGETS

- 80% of personnel reached by 2011
- 50% of personnel who are reached will have acquired sufficient knowledge of the sustainable development process by 2013
 to apply it in the context of their routine activities

OBJECTIVE 6.2 Promote sustainable development guidelines and actions in the transportation sector among the general public

ACTION 6.2.1 Implement awareness-raising activities in order to publicize sustainable development in the transportation sector

INDICATOR

% of activities contained in the departmental plan for outside communications completed

TARGET

40% of the activities will be completed by 2009-2011, 70% by 2011-2012, and 100% by 2012-2013

SECTOR OF ACTIVITY: Governance

OBJECTIVE 6.3 Stimulate research and innovation in the area of sustainable development

ACTION 6.3.1 Draft and implement a departmental framework in order to prioritize research and innovation that focus on sustainable development, among other things

PRIORITY ACTION

INDICATOR

• Number of research projects with a strong sustainable development component launched during the year as compared to the total number of projects launched under the annual research program

TARGET

Strong sustainable development component in 50% of all projects launched each year

