
Québec
Know-how at it's best
Québec

Message from the Québec Minister of Transport and Minister responsible for the Mauricie region

I am immensely pleased to be associated, on behalf of the Government of Québec, with the 23rd World Road Congress, held on the theme "The choice for sustainable development".

This Congress features a strong Québec presence, assured by specialists and experts who undoubtedly will present Québec's vast expertise in roads and sustainable transportation.

This expertise will be particularly emphasized at the Québec Pavillion, the result of close collaboration among the Ministère des Transports, the Ministère des Relations internationales and the Ministère du Développement économique, de l'Innovation et de l'Exportation. It brings together 16 exhibitors, including companies, associations specializing in transportation and government agencies. These exhibitors at the very first Québec Pavillion at the World Road Congress will show off Québec's know-how to the entire world. I invite you to visit it!

This Convention is also a golden opportunity to mark the centennial of the World Road Association (PIARC). For 100 years, this international association of 111 governments has been a forum for exchange and sharing, contributing to a significant improvement in the mobility and quality of life of millions of people. Québec is proud to be part of this association since 1973, as a member government, and considers it a duty to share the vast expertise in transportation that its territory and climate have led it to develop.

I take this opportunity to remind you that the next meeting of the PIARC will be in Québec City, from February 8 to 11, 2010, for the 13th International Winter Road Congress. I personally invite you to this event, which undoubtedly will allow you to appreciate the charms of Québec's capital, the warmth of its people and the beauty of its winter.

Julie Boulet

Message of the First Delegate for Canada-Québec

The World Road Congress is an essential gathering of members of the international road community. It enables all of its participants to enrich their knowledge and share the fruit of their experiences with others. The Québec Pavillion, developed on the theme "Québec: Know-how at its best", pursues these objectives and I am proud to invite you to visit it.

The 2007 edition of the World Road Congress is special because it coincides with the centennial of the founding of the World Road Association (PIARC). To mark this anniversary, a historical exhibition on the achievements of this international forum, is being presented to us. Québec is one of the 15 member governments which have collaborated on this exhibition, which is not to be missed.

The Québec representation in the PIARC's decision-making bodies and technical committees is tangible proof of Québec's commitment to contribute to this organization's mission. Québec's high-profile presence at this 23rd World Road Congress is the reflection of this commitment. The Québec delegation in Paris includes representatives of many companies and public bodies, as well as experts and specialists who have come here to participate actively in the exceptional dynamics inspired by the PIARC.

I warmly invite you to exchange ideas with them and thus pursue the convivial tradition which has animated the PIARC for the past 100 years.

Have a good Congress!

Anne-Marie Leclerc, Eng., M. Eng.

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Québec: a vast territory

Opening into the Atlantic. Québec is a majestic gateway to the North American continent. Form the U.S. border to the Arctic, its area of about 1.7 million square kilometres is four times the size of Japan and three times that of France.

An urban society

Most of the 7,598,000 Quebecers live in urban settings on the shores of the St. Lawrence. The biggest agglomerations are Montréal (3,635,700 inhabitants) and Québec City (717,600 inhabitants).

Less than 1,000 km separates the inhabited part of Québec's territory from the major urban and industrial centres of the Northeastern United States, representing a potential pool of over 100 million consumers.

Although Québec is a pluralistic society, about 80% of its population is French-speaking and 8% English-speaking. It includes ten Amerindian nations and one Inuit nation.

An economy attuned to a global rhythm

In 2006, with a GDP of over US$230.6 billion, Québec ranked 25th among the OECD industrialized countries and 20th in terms of GDP per capita (US$30,143).

In 2006, exports to the United States, Québec's number one trading partner, generated a trade surplus of $31.8 billion. Exports to the United Kingdom, Germany, France and the Netherland increased to a value of $5.4 billion, up 32.2% over the previous year.

Between 1998 and 2006, the transportation equipment, electrical and electronic products, primary metal process, lumber and paper industries increased the value of their international exports by 19.7% to $42.8 billion, representing nearly 58% of Québec's non-Canadian exports.

Transportation equipment ranked second among international exports ($11.7 billion).

The importance of its hydroelectric production assures Québec of great energy independence and confirms its positioning as one of the world's most competitive jurisdictions in terms of energy costs. Since 96% of its electricity comes from hydraulic sources, Québec emits less CO_2 per capita than its Canadian and North American neighbours.

A rich and recognized culture

Québec's economic dynamism is only equalled by its cultural dynamism. In a society open to the world, artistic currents intersect and give birth to a unique culture.

Many Québec artists and creative talents have acquired an international reputation. We need only think of playwright, director and filmmaker Robert Lepage, the Cirque du Soleil, writer and playwright Michel Tremblay and, of course, singer Céline Dion. And there's still plenty more to be heard about Québec artists!

A road network based on an intermodal approach

Québec's 135,000 km road network integrates it into the vast North American economy. However, the territory's topography and immensity, associated with a harsh climate and the constantly increasing number of vehicles, make its management and maintenance more complex.

Between 1995 and 2006, the number of vehicles increased by 25% from 3,800,000 to 4,732,000 (including 3.9 million pleasure vehicles).

The automobile is used in 93.3% of intercity trips and 85% of urban trips.

In 2004, Québec nonetheless ranked 1st in Canada for the number of trips (per capita) by public transit.

In 2006, total trade (exports and imports) increased by nearly 4.1% and 8.4% compared to 2000. In 2005, goods carried by road accounted for 62% of the value of trade with the United States, and 27.1% with Mexico.

Management

The Ministère des Transports du Québec (MTQ) operates and manages the highway system, consisting of 30,000 km of road infrastructure and 4,680 structures. It also assures economic and technical supervision of the road transportation industry.

The municipalities manage the local road network, 105,000 km of local roads and streets. They are also responsible for public transit and adapted transportation services. They receive technical and financial support from the MTQ to maintain and improve their network, for repair of bridges and other structures.

Highway system managed by the Ministère des Transports du Québec

Autoroutes	5,140 km
Provincial highways	10,210 km
Regional highways	5,860 km
Collector highways	7,910 km
Access to resources	1,436 km
TOTAL	30,556 km

Construction of most of this network dates back to the 1960s and 1970s.

Conservation, maintenance

The long periods of deep frost followed by the spring thaw and the 10% to 40% increase in the total loads permitted accelerate deterioration of an aging highway system. Each year, the Ministère des Transports must allocated over one billion Canadian dollars to its conservation and maintenance. Winter maintenance of its highway system alone costs the MTQ over $180 million per year.

Intermodal transportation and sustainable development

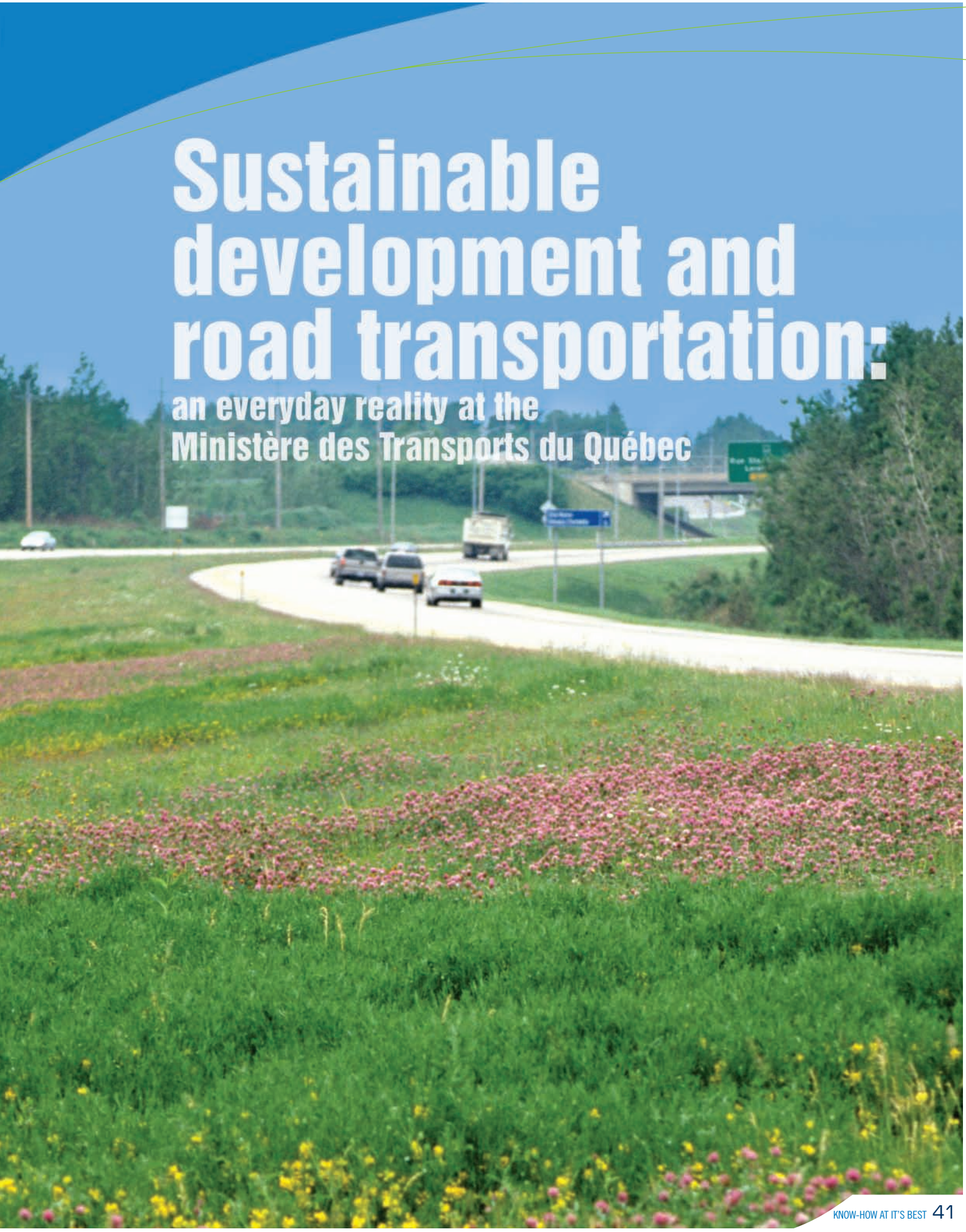
The Québec road network is part of an overall transportation infrastructure composed of:

- a 6,655 km railway system;
- an 1,800 km marine transportation system, including 21 commercial ports;,
- an airport network of 91 public airports including Dorval International Airport in Montréal and Jean-Lesage International Airport in Québec City.

A leading participant in drafting the recent Sustainable Development Act, the Ministère des Transports du Québec has set up a modal integration assistance program for shippers. The objective is integration and optimum use of freight transportation modes and systems. Businesses are enthusiastic. The results: reduction of the number of vehicles on the roads and GHG emissions, improvement of energy efficiency and road safety. In short, sustainable development at its best!

Sustainable development and road transportation:

an everyday reality at the Ministère des Transports du Québec



In 1992, the Ministère des Transports du Québec had already adopted an environment policy based on the concept of sustainable development. Since then it has ensured that its products, services and activities fit into this perspective. The results obtained, whether in the environmental, economic or social fields, augur well...

The Government of Québec, aware of the inseparability of the environmental, social and economic aspects of development activities, promulgated the Sustainable Development Act in 2006. It thus showed its will to take action because the Act requires the adoption of a government sustainable development strategy, the preparation and publication of sustainable development action plan for the departments and agencies of the public administration, and annual reporting. In short, Québec adopted a legislative tool that reflects its concern for saving the planet.

The Ministère des Transports du Québec

A mission

Ensure the mobility of people and goods throughout Québec on safe, efficient transportation systems that contribute to the sustainable development of Québec.

Challenges

Consolidate the existing networks to improve user safety and ensure the permanence of transportation infrastructure.

Optimize transportation systems to meet the challenges of serving regions and markets and urban mobility in a context of sustainable development of transportation.

A Department that listens

Collaboration, consultation and concerted action are at the core of the activities of the Ministère des Transports du Québec. Thus, before completing any major road redevelopment project, it consults the population, organizations, groups and merchants concerned. Its projects are improved by their suggestions. This listening applies not only for special projects but for various social concerns related to the “road universe”.

Some examples

It is deplorable that over 7,000 accidents each year involve large wildlife. A collision with a white-tailed dear, a caribou or a bear usually only results in property damage. But a collision with a moose – there are about 1,500 of these per year – can result in severe, even fatal injuries.

For example, during reconstruction of Highway 175 in the Laurentides Wildlife Reserve, linking Québec City and the Saguenay region, to reduce accidents involving large wildlife and improve the safety of road users, while maintaining biological corridors to allow movement of wildlife, the MTQ:

- built a large wildlife crossing on an autoroute;
- built a 50 km metal fence with crossings under the roadway;
- installed appropriate signage in zones at risk.

Moreover, knowing that aquatic settings are especially sensitive to human interference, it assured management of drainage water independently of natural drainage in a portion of the project (transition by catchment basins).

The MTQ does not act alone. Collaboration with partners from the public, parapublic and private sectors, whether for direct actions or awareness campaigns, has shown the effectiveness of concerted action.

Better integration of the road into its setting

For over 25 years, the MTQ has performed a great many environmental assessments and biophysical and human environmental impact studies of its road projects. Over time, it has developed various mitigation measures which allow better integration of these interventions into their setting. It has done the same for maintenance of its road network.

Maintenance of roadside ditches is a good example of this approach. Cleaning by digging to improve evacuation of water and road drainage can generate environmental impacts, with medium and long-term effects contributing to the rapid degradation of lakes and watercourses. The MTQ has found an effective way to counter these undesirable effects and reduce the sediment volume and pollutant load (of agricultural or other origin) flowing into water bodies.

It has standardized the "bottom third method", which consists of reducing ditch digging to the strict minimum and using nature as an ally. There are many advantages:

- decrease in erosion of the ditch talus and sedimentation, resulting in greater stability;
- harmonization of the road corridor with the agriforest landscape;
- reduction of the cost per kilometre of cleaned ditches;
- 30% to 60% decrease in the volume of muck.

ECOLOGICAL VEGETATION MANAGEMENT — Traditional vegetation control methods often result in a boring landscape, deteriorate the ecosystems and are very expensive. The MTQ's new approach eliminates mowing, except on the first two metres from the pavement, and thus allows local plant life to flourish. When necessary, cyclical cutting will control the development of trees. In 2005-2006, 80% of autoroute approaches were given a facelift.

Other examples related to maintenance are also part of this perspective of sound environmental management. Thus, the MTQ uses:

- recyclable materials – construction and demolition rubble, used tires – a practice which is also a source of technical innovations. For example, placement of used tires to form a compressible core in the fill above the culverts makes it possible to design structures offering better culvert stress distribution, thus increasing their longevity;
- lead chromate-free alkyd paint for its marking work;
- deicing salt on a rational and optimal basis for its winter maintenance operations.

It thus contributes to protection of the environment, while reducing the costs related to purchasing and transport of new materials.

Fighting GHGs requires energy performance by all modes of transportation

In 2003, Québec showed the best greenhouse gas (GHG) emission balance per capita in Canada[1]. This excellent performance is largely attributable to the fact that over 97% of the electrical energy produced in Québec is of hydroelectric or wind origin.

Nonetheless, road transportation alone causes 85.9% of transportation sector emissions and 32.1% of total GHG emissions.

The MTQ's struggle to reduce GHG emissions depends on programs and actions geared to energy efficiency, development and use of public and alternative transit, development of intermodal transportation, support for technological innovation, and raising the awareness of its partners and the population.

In addition to supporting several projects, particularly in the vehicle and replacement fuel sectors, the MTQ has implemented a series of short, medium and long-term measures aimed at:

- automobile transportation: improvement of automobile performance, car pooling, adoption of more sustainable behaviour by drivers;
- public transit: improvement of infrastructure and various incentives;
- transport of goods: compulsory inspections of heavy vehicles to verify their energy efficiency, coastal and inland shipping, transfer to rail and perfecting of technologies intended to improve energy performance, including refrigeration by truck.

1. Québec: 12.1 tonnes of CO_2 equivalent (t CO_2 eq.), Canada: 23.4 t CO_2 eq., Alberta: 23.4 t CO_2 eq. (MDDEP, 2006b).

LANDSCAPE PRESERVATION — The extension of a major traffic artery – Boulevard Robert-Bourassa – in the centre of one of the last urban forests in Québec City would have created a major break in visual and functional continuity. The MTQ applied several mitigation measures, including:

- shoreline stabilization with indigenous species;
- planting of surfaces affected by the work;
- development of wildlife crossings and special layouts to assure the functionality of the existing biological corridors;
- construction of a tunnel structure to ensure a safe crossing for pedestrians and cyclists;
- construction of many retention basins, including some in wildlife habitats;
- special attention to structures to assure their visual integration.

Other measures directly concern the public sector and provide, in particular, for changing the purchasing policy to give preference to energy performance of equipment and facilities. Because it has a duty to set an example, the MTQ intends:

- to improve energy efficiency in its public buildings by 2010;
- to reduce its vehicles' fuel consumption;
- to develop a program designed to reduce GHG emissions caused by its employees' trips to work.

Road transportation geared to mobility and intermodality

Globalization has favoured the growth and diversification of trade. The economic growth – transportation systems development equation requires businesses to show great flexibility geared to mobility. Yet most Québec autoroutes and structures date from the 60s and 70s. According to the dictates of sustainable development, this is no longer a time for construction but for conservation and improvement.

Concerned about increasing the efficiency of the key international and interregional corridors, the MTQ and its partners have carried out major improvement projects on the strategic network in support of foreign trade. They have also strengthened cooperation with the neighbouring administrations.

In 2005, according to the International Roughness Index (IRI), which measures driving comfort, 77.5% of the strategic network in support of foreign trade and 62.1% of the Québec network were in good condition.

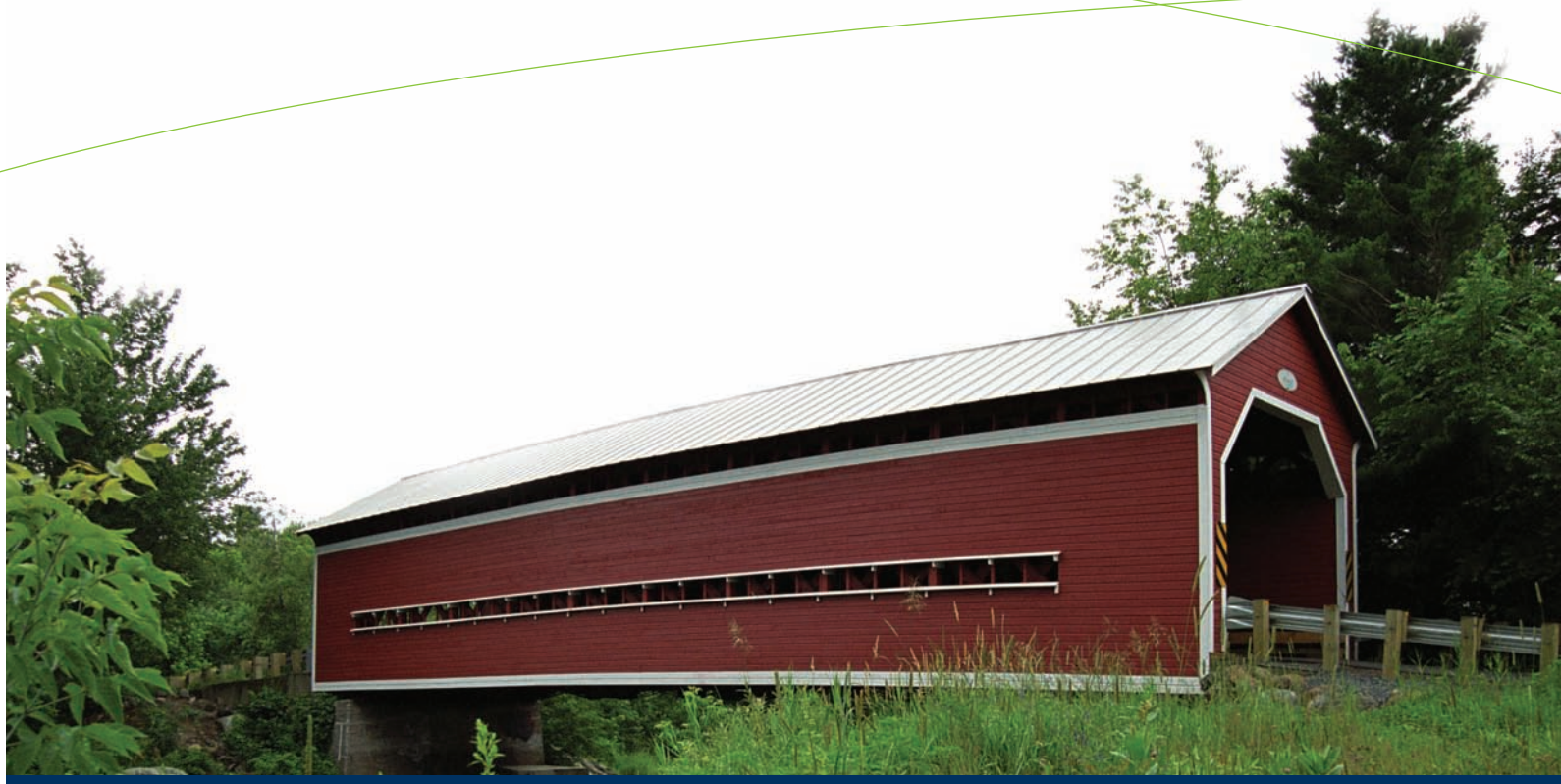
Moreover, the MTQ will allocate $21 million to its modal integration assistance program by 2010-2011. The greatest part of this sum (80%) will go to rail and marine infrastructure, and to pilot projects to foster:

- integration and more rational use of transportation modes and systems;
- maintenance and development of an adequate and competitive infrastructure network meeting the shippers' needs;
- short-term development of marine and rail transportation activities;
- promotion of the rail and marine modes.

Under this program, industry initiatives eloquently show the potential economic, environmental and social advantages of integration of transportation modes.

Since 2005, two companies have turned to marine transportation, carrying part of their production by barge or ship. In this way, they remove over 30,000 trucks from traffic each year, reducing GHG emissions by 39,000 tonnes. In addition, their projects contribute to improve traffic flow and thus road safety.

Investments of nearly $20 million have stimulated the demand for rail transportation, so much so that in 2003 about 13,600 additional railway cars were in operation in Québec.



SUPPORTING CULTURAL HERITAGE — Out of about 1,000 covered bridges built in the last century up to 1958, only 91 are left. The threat of demolition of these picturesque witnesses of a bygone era has revived public interest in their preservation. The MTQ has therefore undertaken to inspect them, evaluate their tourist interest and enable municipalities to ensure their maintenance.

Technological innovation in full swing

Over the past few years, many problems related to road transportation have been resolved through technological innovations. And the best is probably yet to come…

This is why the MTQ financially supports various research centres and universities for projects including design and evaluation of electric and hybrid vehicles, biofuels, energy efficiency and reduction of vehicle fuel consumption.

Of course, there are intelligent transportation systems (ITS), to which most of the world's road administrations are turning. Rightly so, because by favouring traffic flow, ensuring faster emergency response and facilitating the movement of people and goods, they represent major gains for the environment and road safety.

In addition to this combination of strategies and tools, there are the traffic management centres already in service in several urban agglomerations, particularly Montréal and Québec City. The MTQ has also created Inforoutière, a single point of access for road information. It is collaborating in setting up an optimal itinerary and route planning system, "511", which will help reduce fuel consumption, improve traffic flow and facilitate response.

Finally, the MTQ is organizing or providing its support to the organization of symposiums, congresses, workshops and conferences on the development of new technologies in a sustainable development perspective.

Public transit to the rescue of the environment and road safety

Over the past 30 years, the number of deaths on Québec roads dropped from 2,209 in 1973, to 647 in 2004. However, since 2005, there has been an increase, with 704 losses of life that year and 717 losses of life in 2006.

Since it is difficult to reduce the number of accidents, the partners concerned by road safety have banded together around the Table québécoise de la sécurité routière (Québec road safety task force), a permanent forum for exchanges and discussions created in December 2005 on the initiative of the Ministère des Transports du Québec. Together, they look for new methods to improve the road safety record and make recommendations to the Minister of Transport. These recommendations include a new road safety policy.

The partners are unanimous: increased reliance on public transit, car pooling and intermodality and various actions to counter speeding could help improve the road safety record by decreasing the number of vehicles on the roads, while reducing GHG emissions.

In a sustainable development context, the issue is both environmental (reduction of pollution and GHG emissions), social (equity, accessibility, safety) and economic (reduction of the costs associated with road congestion). Thus, to increase the use of public transit throughout Québec, the Québec Policy Respecting Public Transit was launched in June 2006.

The Québec Policy Respecting Public Transit

One objective

Increase mass transit ridership by 8% by 2012.

Four means

- Equitable delegation of the efforts required of each stakeholder.
- Improvement of services to the population.
- Modernization and development of infrastructures and equipment.
- Support other alternatives to the automobile.

Five components

- Public transit
- Mass transit in rural areas and intraregional intercity transportation
- Adaptation of taxis and intercity buses to people with disabilities
- Walking and bicycling
- Energy efficiency

In addition to concentrating its efforts on integrated planning of transportation, the MTQ invests an average of $350 million each year in public transit projects. Over the next three years the government will inject $1.5 billion in this sector. Among the tax measures recently announced are:

- a 200% deduction for the price of a public transit pass which businesses provide to their employees and non-taxation of this benefit for employees;
- a tax credit for public transit users;
- reimbursement of the diesel fuel tax for public transit organizations so that they can improve their services.

Several programs and measures have made it possible to support public transit and encourage alternatives to the automobile. Here are a few of them:

- the Government assistance program for public transit in rural areas; 35 projects benefited from this assistance in 2004-2005;
- the Government assistance program for adapted transportation (paratransit): in 2003, 65,000 people with disabilities had access to this type of transportation;
- a database on the MTQ's website encourage motorists to car pool;
- the 1995 Bicycle Policy; as of October 31, 2006, the network had a total of over 6,789 km of bikeways, including 3,748 on the Route verte circuit. The Route verte, a Québec-wide 4,349 km bicycle route, will be inaugurated in August 2007 and will be the biggest bicycle network in North America.

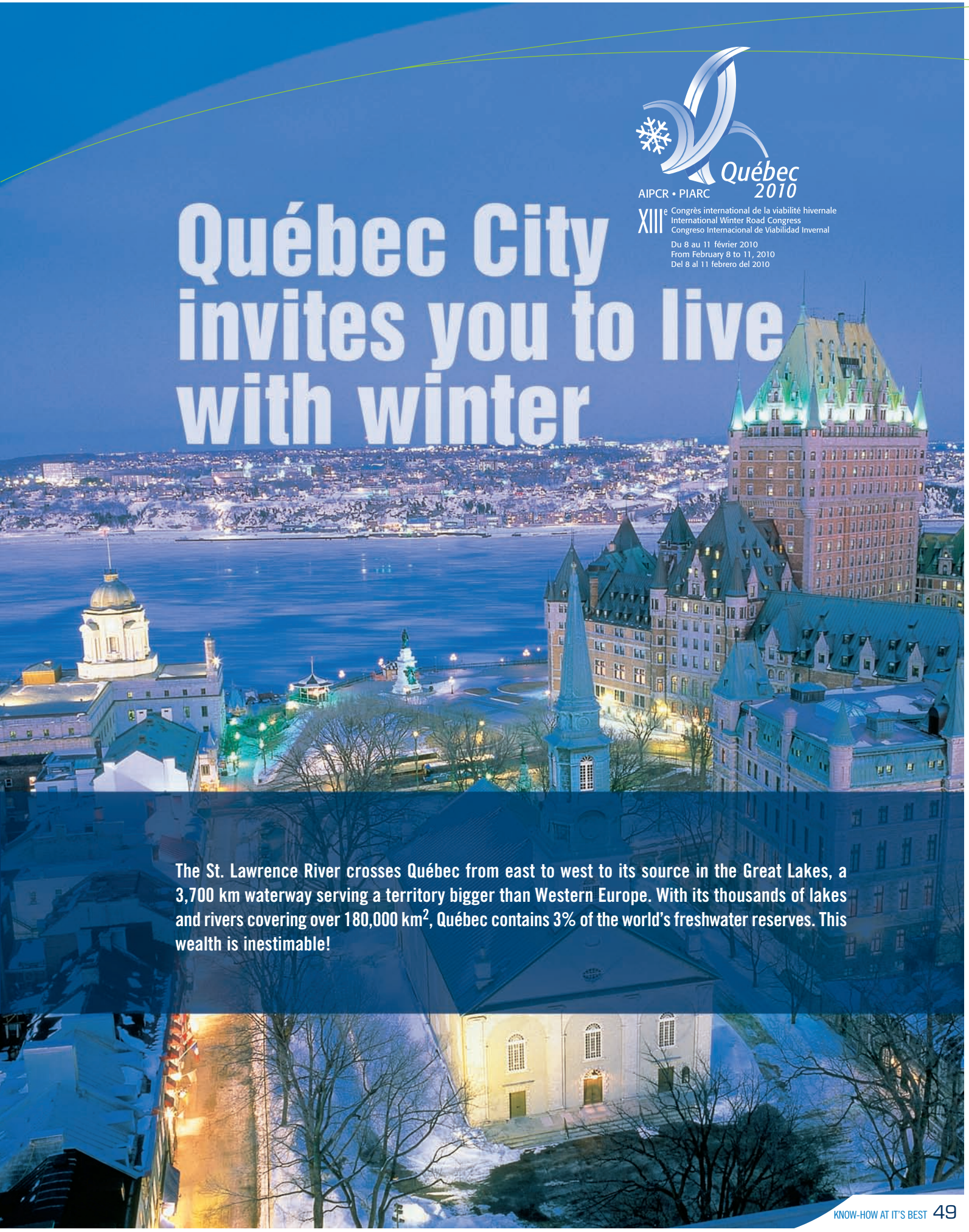
This is apart from the many other measures aimed at improvement of services, modernization and development of infrastructure and equipment.

A strengthening and continuing approach

The Ministère des Transports du Québec wants to go even farther in considering the environment and sustainable development and is contributing actively to the Government of Québec's sustainable development approach.

Québec society is already benefiting from the positive environmental, economic and social spinoffs of its many initiatives.

THE "MODE" OF THE FUTURE? — Despite strong competition from the automobile, trips by public transit increased by 8% in Québec in five years.



Québec 2010

AIPCR • PIARC

XIII[e] Congrès international de la viabilité hivernale
International Winter Road Congress
Congreso Internacional de Viabilidad Invernal

Du 8 au 11 février 2010
From February 8 to 11, 2010
Del 8 al 11 febrero del 2010

Québec City invites you to live with winter

The St. Lawrence River crosses Québec from east to west to its source in the Great Lakes, a 3,700 km waterway serving a territory bigger than Western Europe. With its thousands of lakes and rivers covering over 180,000 km^2, Québec contains 3% of the world's freshwater reserves. This wealth is inestimable!

Dominating the St. Lawrence River, Québec City, with its "Old Europe" charm, attracts over four million visitors a year. A modern city with North American comfort, it is renowned for its quality of life and gourmet dining.

The Convention Centre, where we will meet, is located across from the Parliament Buildings and just a few steps from the gates of North America's only fortified city, Old Québec, designated as a World Heritage Site by UNESCO in 1985.

A knowledge centre in the forefront of research

Several regular flights connect Québec City to major financial and commercial centres, such as New York, Boston, Detroit, Chicago, Cleveland, Toronto and Montréal.

Institutions of higher learning, research and technology transfer centres, and research teams associated with Université Laval have made their mark in cutting edge sectors: agri-food, biomass, forestry, information technology, fibre optics and laser.

Winter maintenance online

Québec City receives three metres of snowfall each year and it's cold: the lowest average temperature in February is -16 °C (1 °F). In short, these conditions are conducive to the design of materials, techniques and equipment to ensure the sustainability and safety of our vast road network.

It is also the ideal city to meet researchers and experts who, at conferences and workshops, will discuss subjects such as winter maintenance in a sustainable development context; new technologies such as intelligent transportation systems or road weather systems; use of GPS; road safety; road design and construction materials and techniques; and specialized winter maintenance equipment.

Technical visits will take you from theory to practice. In particular, we will introduce you to the Centre de services de Québec, the service centre responsible for road network maintenance and operation, waste snow storage facilities or a geothermal snow melter, where an efficient, economic and safety waste snow disposal technique is applied.

The tradeshow participants will present the newest developments in snow removal equipment, including the "North American behemoths". We have also found an original way to display technological innovation: a (friendly) competition in which the contenders will show off their skills operating snow removal equipment.

Come experience winter with us!

Fifteen years after the XXth World Road Congress, which was held in Montréal in 1995, Quebecers invite you to their capital, Québec City, for the first International Winter Road Congress to be held in North America.

If Mother Nature cooperates, you will experience the excitement of a major snowstorm. There's nothing better than reality to prove the efficiency of our snow removal system.

Of course, we will offer you a wide range of social, sports and cultural activities, because Québec is a city where people celebrate and enjoy great food!

In 2006, the Québec City Convention Centre was crowned best in the world from the International Convention Centre Association.

XIII International Winter Road Congress
700 Boulevard René-Lévesque Est, 27th floor
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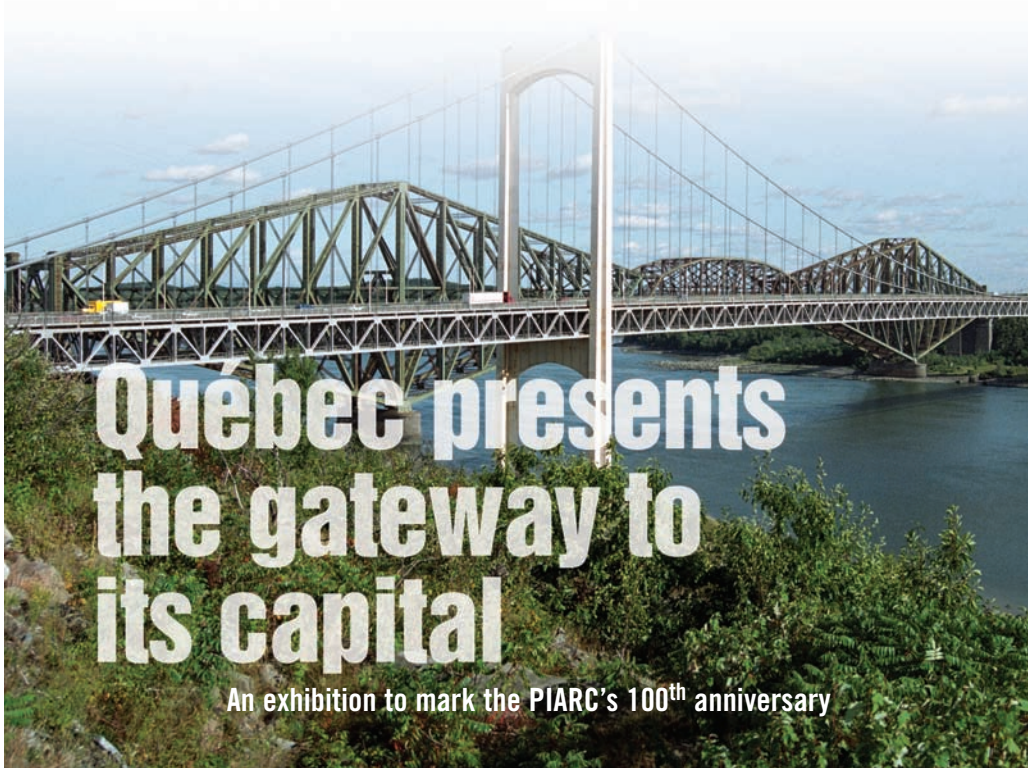
To mark the PIARC's undeniable contribution to international cooperation, France is organizing an exhibition on the recent history of roads around the world. Québec is one of the fifteen participating in this exhibition, each using words and images to tell about the evolution of a road site or road section attesting to the agility of its designers in adapting to physical, social and environmental imperatives.



Québec presents the gateway to its capital

An exhibition to mark the PIARC's 100th anniversary

Through four key periods — 1908, the interwar period, 1970 and 2007 — the exhibitors set out the gradual rise of concerns related to sustainable development, the theme of the Congress.

Two bridges, a rail link and road links

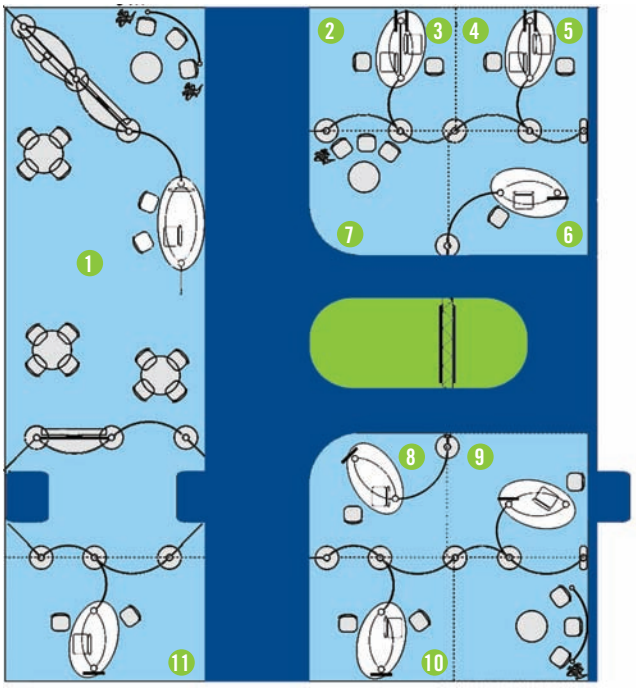
Québec presents the gateway to its capital, Québec City, located on the north shore of the St. Lawrence River. In the mid-19th century, long winters and the interruption of navigation jeopardized its socioeconomic growth, The solution was a bridge, which in addition to connecting to the rail and road networks on both shores, would become the hub of their future expansion.

A major road and highway connection was added to the Québec Bridge (1917) and the Pierre-Laporte Bridge (1970) to link Québec to the rest of Canada and the United States. By improving transport of people and goods, they constitute the socioeconomic development hub of a vast region which today serves nearly a million people.

The 21st century will be geared to complementarity of the modes which reigned in turn over the previous century: marine, rail and road. The future is intermodal.

The exhibition, a fascinating trip around the world, illustrates the diversity of the risks, approaches and techniques. The initiatives of the fifteen exhibitors will reveal universal trends or fundamental differences. This is an exhibition you can't afford to miss…

Plan of the Québec Pavillion



Exhibitors

Government of Québec	1
Robert Hydraulique Inc.	2
J.A. Larue Inc.	3
Special Vehicle and Transportation Equipment Manufacturers' Association (AMETVS)	4
CDWare Technologies Inc.	4
Association québécoise du transport et des routes (AQTR)	5
Vehicule fleet managers	
CGER	6
Hydro-Québec	7
R.P.M. TECH inc.	8
Ville de Montréal	9
Québec engineering firms (Sponsored by the Association des ingénieurs-conseils du Québec) Axor, Cima+, Dessau-Soprin Inc., Genivar, S.M. Group International Inc., Tecsult Inc.	10
Société de l'assurance automobile du Québec	11

Québec Pavillion partners

Private partners

- BENCO MFG Industries Inc.
- Groupe STAVIBEL inc.
- Tenco Machinery (CDN) Ltd.

Institutional partners

- Agence métropolitaine de transport
- PIARC Québec Committee
- Ministère des Transports du Québec
- Ministère du Développement économique, de l'Innovation et de l'Exportation du Québec
- Ministère des Relations internationales du Québec

Transports Québec

The focal point of Québec expertise

In Québec, the government plays a leading role in the area of roads and transportation, but does far more than simply pass laws and enforce them. In fact, the Ministère des Transports du Québec (MTQ) ranks among the leaders in the industry in terms of equipment, materials, innovative processes, infrastructure operation, and transportation systems. Its Laboratoire des chaussées (pavement laboratory) has played an important role in the development of this reputation, which reaches beyond the borders of Québec.

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The Laboratoire des chaussées (pavement laboratory)

Experts in road engineering, pavement materials, geotechnology, soil geology, and industrial research work in the lab and in the field to develop innovative techniques, technologies, and materials.

They employ leading-edge pavement assessment equipment and vehicles, as well as various devices for classifying skid resistance and assessment surveys.

They sometimes collaborate with universities and transportation industry partners on certain projects, and participate in meetings, joint research projects, and technical exchanges with road authorities in various jurisdictions, especially the United States and France (Laboratoire Central des Ponts et Chaussées).

By mastering road science, the experts at the pavement laboratory help to improve the safety and comfort of users and preserve Québec's road heritage.

Its partners

The Ministère des Transports du Québec works closely with other public agencies, municipal officials, passenger and freight transportation associations, shippers, major roadwork contractors, researchers, and police forces.

Partnerships with private companies to build, rehabilitate, and operate transportation infrastructures are also becoming more common. This provides Québec companies with valuable know-how, which they can subsequently export.

International recognition

The MTQ has represented the Québec government within the World Road Association for 30 years. It is also a member of the Northeast Association of State Transportation Officials (NASTO), which is comprised of transportation department officials from the American and Canadian Northeast.

The MTQ created the Centre québécois de transfert des technologies des transports (CQTTT - Québec's road technology transfer centre), which occupies a strategic position in the World Interchange Network. The CQTTT's mission is to publicize research and experimental findings and present the know-how of the MTQ and its partners.

LARUE

Industrial snowblower manufacturer

A tried and true solution!

J.A. Larue inc.
680, rue Lenoir
Québec (Québec) G1X 3W3
CANADA

Telephone: 418-658-3003
Fax: 418-658-6799
Email: jalarue@jalarue.com
www.jalarue.com

With over 30 years of snow removal experience, J.A. Larue manufactures industrial snowblowers. Today its products, sold under the LARUE brand, are used by municipalities, airports and contractors in many countries.

A variety of products, simple designs, reliability and easy handling, a customer focus, and a dynamic staff: these are the keys to LARUE's success over the years.

Because we listen to our customers, we know how to design the products you're looking for!

RH

The aerial ladder of the future

For more information, contact Robert Desrosiers, President, or Annick Sauvé, Business Development, at the following address:

Robert Hydraulique Inc.
345 A, rue Marion
Le Gardeur (Québec) J5Z 4W8
CANADA

Telephone: 450-582-8701, extension 222 (Robert Desrosiers) or 223 (Annick Sauvé)
Fax: 450-582-8702
Email: rdes@rhaerials.com or annick@rhaerials.com
www.rhaerials.com

You can select from among eight models ranging in working height from 10.67 to 15.24 metres, as well as choose between insulated and uninsulated equipment. The robustness of our aerial ladders ensures that they last:

- They require very little maintenance.
- They are light enough to fit on small vehicles.
- The hoist ring has a minimum capacity of 250 kg in any position.
- Their design allows for much more work space inside the vehicle and a higher load capacity.

Established in 1991, we have been making aerial ladders since 1998. Our company's growing reputation is based on innovation, reliability, efficiency and its respect for the environment, thanks to its electric motor.

We are looking for business partners.

AMETVS

The business network that goes all out to improve competitiveness!

The Québec land transportation equipment industry includes over 1,200 companies, which generate 7.2 billion Canadian dollars in annual revenue. Established in 2000, the AMETVS has over 325 member manufacturing companies in this sector and the mandate to support the industry's development.

Québec expertise is now recognized worldwide, particularly in the utility vehicle and snow removal equipment sectors, in response to climate-related constraints and the vastness of Québec's territory.

The Special Vehicle and Transportation Equipment Manufacturers' Association is the ideal gateway for any business looking for solutions adapted to its needs in transportation and road maintenance.

The following websites can be consulted for more information: www.ametvs.com, www.transportail.net, www.stri.ca

Special Vehicle and Transportation Equipment Manufacturers' Association (AMETVS)

Maison de l'industrie
1512, rue Michaud
Drummondville (Québec) J2C 7V3
CANADA

Telephone: 819-472-4494
Fax: 819-472-6520
Email: info@ametvs.com
www.ametvs.com

TECHNOLOGIES CDWARE

CDWare Technologies Inc.

CDWare Technologies Inc. specializes in the data gathering sectors for geomatics, road engineering and transportation. The company offers solutions such as Multi-Carnet CE, a specialized data capture software for on-site readings and implementation in the engineering and legal surveying fields. This software is compatible with all surveying instruments. Similarly, AQHP is a control and monitoring software for managing roadwork quality and reviewing professional fees and vehicle fleet management solutions by telemetry.

CDWare Technologies Inc.
Michel Rodrigue, President
Head Office
2424, rue King Ouest, Suite 120
Sherbrooke (Québec) J1J 2E8
CANADA

Telephone: 819-348-1127, extension 105
Fax: 819-348-1129
Email: michel.rodrigue@cdware.net
www.cdware.net

Public vehicule fleet manager

Centre de gestion de l'équipement roulant
Québec

Centre de gestion de l'équipement roulant (CGER)

Centre de gestion de l'équipement roulant (CGER)
1650, rue Louis-Jetté
Québec (Québec) G1S 2W3
CANADA

Telephone: 418-643-5430
Fax: 418-528-5582
Email: cger@mtq.gouv.qc.ca
www.cger.mtq.gouv.qc.ca

Over 10 years serving the public sector

The Centre de gestion de l'équipement roulant (CGER) is an agency of the Ministère des Transports du Québec that specializes in public vehicle and equipment fleet management. It was founded in 1997 to implement results-oriented management and quality client service with a view to becoming financially self-sufficient and soundly managing public property.

As a public fleet manager, the CGER has gained extensive expertise in the research, design, maintenance and repair of specialized equipment. The CGER manages an inventory of some 7,500 vehicles and machines and a network of 61 mechanical shops distributed throughout Québec.

Tangible results:

- Improved quality of service for clients.
- Integration of the concept of a vehicle's economic life cycle into government fleet management.
- Resource optimization.
- Lower costs for acquisition, maintenance and repair of public vehicles.
- Use of vehicles running on less polluting fuels.
- Demonstration of public sector efficiency in serving the people.

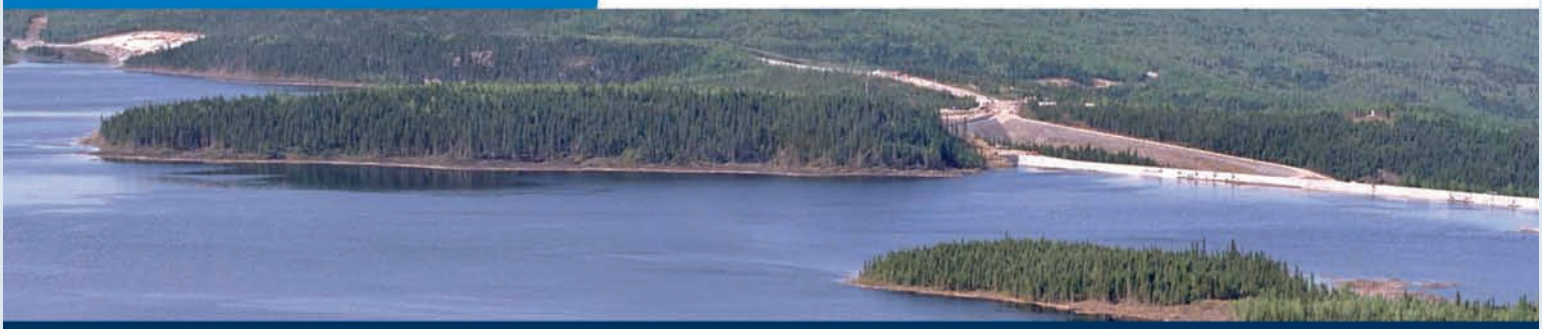
Going GREEN

Due to the fast pace of technological change in the automobile and heavy equipment industry, the CGER's challenge is to stay on top of new developments in this field. Concerned about the environment, the CGER thus assures integration into its fleet of environmental value-added technological innovations and equipment, designed to reduce fuel consumption. This helps achieve the Québec government's sustainable development objectives.

By these concrete actions, the CGER contributes to the reduction of greenhouse gas emissions and moves its fleet of GREEN public vehicles into a more environmentally-friendly dimension.

Utility vehicule fleet manager

Hydro Québec



Reducing GHG emissions… a plus for the environment

Hydro-Québec
Mr. Richard Toupin
Director – Transportation Services
855, rue Sainte-Catherine Est, 4e étage
Montréal (Québec) H2L 4P5
CANADA

Telephone: 514-840-5588
Fax: 514-840-4191
Email: toupin.richard@hydro.qc.ca
www.hydroquebec.com

Hydro-Québec generates, transmits and distributes electricity. A public utility with the Government of Québec as its only shareholder, it essentially exploits renewable energy, especially hydroelectricity, while supporting development of the wind energy sector.

Its power system, the biggest in Canada in terms of generation, transmission and distribution, covers a territory of over 1.7 million km^2. To ensure customer service and the movement of its personnel within this vast territory, the company has its own vehicle fleet.

This is the biggest fleet in Québec and one of the most impressive in Canada.

In 2005, in line with its commitment to the environment and energy efficiency, Hydro-Québec adopted a program to improve its fleet's environmental performance, with the objective of reducing greenhouse gas (GHG) emissions by 5% by 2010.

This program includes projects such as:

- Encouraging employees to adopt driving habits that reduces GHG emissions:
  - Reduce speed
  - Avoid idling the engine
  - Reduce loads
- Choosing vehicles with lower fuel consumption.
- Integrating hybrid vehicles into its fleet.
- Testing Cleanova II electric vehicles in Montréal.
- Use of power units (e.g., batteries) to operate equipment on specialty vehicles.

Aerial ladder truck (10 wheels)

Ford Escape Hybrid

Association québécoise du transport et des routes AQTR

AU CŒUR DES TRANSPORTS

Training to improve safety on the roads | Interactive, innovative training and practical applications | Winter maintenance training

Association québécoise du transport et des routes (AQTR)

Association québécoise du transport et des routes (AQTR)
1255, rue University, bureau 200
Montréal (Québec) H3B 3B2
CANADA

Telephone: 514-523-6444
Fax: 514-523-2666
Email: info@aqtr.qc.ca
www.aqtr.qc.ca

The AQTR's mission is to mobilize the transportation community to promote the exchange of knowledge. On the strength of its members' expertise, it seeks to be Québec's transportation forum par excellence.

Its organizational structure is based on the involvement of its members, which ensures that it is always in a position to represent the concerns of the industry. Every year, the AQTR organizes approximately 20 events, produces technical documents and publishes the magazines *Routes & Transports* and *Neige* on transportation issues to facilitate the sharing of information on technical and technological advances. To contribute to its influence, the AQTR oversees the work performed by PIARC-Québec, the Québec committee of the World Road Association.

With its *transFORM* training centre, it seeks recognition as THE solution in continuing education in this world-class field. The centre's mission is to design, develop and deliver training in professional transportation practices. This centre is aiming at recognition as leading international specialist in this field. Adapted to the industry's realities, the training designed by *transFORM* is interactive and innovative, with practical applications. It has also been developed jointly with technical experts who know and clearly understand the needs, based on a participatory pedagogical method that ensures better knowledge transfer.

Since the Québec government has decreed 2007 as *Road Safety Year, transFORM* wants to support this initiative by offering several kinds of training aimed at improving safety on the roads. This training includes:

- Overview of road safety (based on the *PIARC Road Safety Manual*);
- Road infrastructure analysis tools (based on the *PIARC Road Safety Manual*);
- Defensive driving instruction;
- Four-season defensive driving;
- Introduction to municipal traffic management.

Several other training sessions concerning safety, roadwork signage, winter maintenance and other transportation issues are also offered.

Our training concept can be adapted to your reality, regardless of whether the training will be held.

Choose the ultra-efficient TM36R to improve your productivity.

RPM TECH

TOR TRUCK CORPORATION

A company with a worldwide reputation

R.P.M. TECH is the North American leader in the design, manufacturing, distribution and export of snow removal equipment for roads, airport runways and railways. The company also produces TOR TRUCK vehicles used for concrete pumps, cranes, man-lift, drilling and forestry, among other purposes.

From tracked vehicle to four-wheel drive in less than four hours!

R.P.M. TECH inc.
184 Route 138
Cap-Santé (Québec) G0A 1L0
CANADA

Telephone: 418-285-1811
Fax: 418-285-4289
Email: info@grouperpmtech.com
www.grouperpmtech.com

R.P.M. TECH is proud to present two new products:

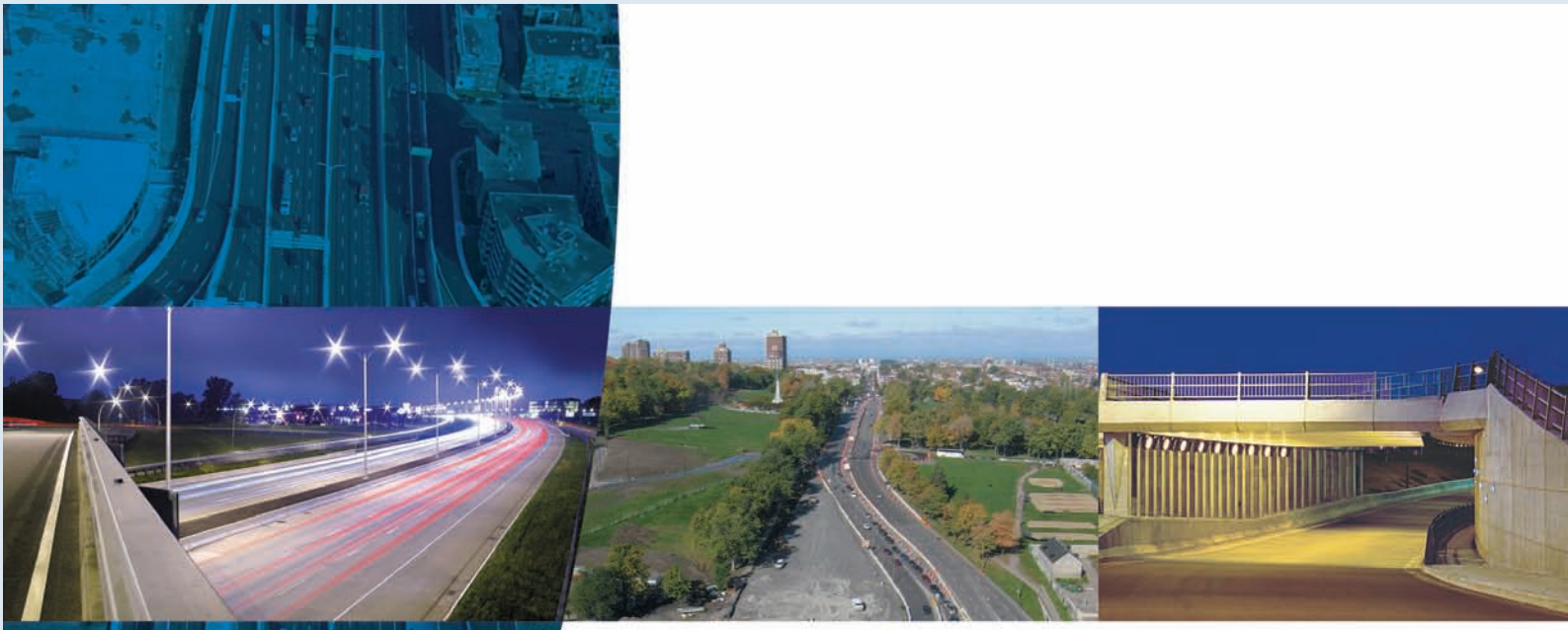
Caméléon

The Caméléon is a new tracked compact vehicle, convertible into an articulated four-wheel drive vehicle in less than four hours. The vehicle is propelled by a 93 to 104 kW (125 to 140 HP) Perkins engine and equipped with front and rear hydraulic outlets offering a power takeoff of up to 92 kW (123 HP). It reaches speeds of 60 km/h (37 mph) in travel mode and 30 km/h (19 mph) in work mode. The aluminium cab's innovative design offers excellent visibility and includes: joystick, tilt-and-telescoping steering wheel, indicator dials, CD player, AM/FM radio. Its cab is the only one on the market offering ROPS and FOPS safety certifications. The Caméléon is compatible with all standard accessories on the market.

TM36R

The R.P.M. TECH TM36R special construction service vehicle is equipped with a 914 mm (36 in) snow cutter-blower and a 1016 mm (40 in) ejection turbine. It offers a 287 to 336 kW (385 to 450 HP) Diesel Caterpillar engine, a 600 L (158.5 gal) tank and 3,000 metric tonnes per hour of snow loading capacity and can reach a speed of 60 km/h (37 mph). It has been designed with emergency stop buttons on each side of the vehicle and a mechanism that prevents the snow cutter-blower from engaging in travel mode. The spacious panoramic cab with its 360° visibility is controlled by a multiplexing system that offers options such as a camera system activated automatically in backup mode or a motion detector.

With R.P.M. TECH, you benefit from professional support that only experience can bring.



Association of Consulting Engineers of Québec
1440, rue Sainte-Catherine Ouest
Montréal (Québec) H3G 1R8
CANADA

Telephone: 514-871-0589
www.aicq.qc.ca

AXOR has carried out engineering-construction projects for more than 35 years.

AXOR offers its clients an integrated approach which makes it possible to reduce project costs and shorten work schedules.

Public organizations as well as private enterprises view AXOR as a true partner whose strengths enable them to take advantage of overall comprehensive solutions tailored to their own technical and financial objectives.

AXOR has built a cohesive team of highly skilled, dynamic and creative professionnals and technicians who have the successful completion of many turnkey projects to their credit.

AXOR
François Lussier, Eng.
Vice-President, Transportation, Management and Construction
1950, rue Sherbrooke Ouest
Montréal (Québec) H3H 1E7
CANADA

Telephone: 514-846-4000
Fax: 514-846-4020
www.axor.com

CIMA+ ranks among the major North American firms thanks to the quality of our services, our achievements in traditional and cutting-edge sectors, and our local and international strategic alliances. At present, CIMA+ employs over 1,000 people in Québec and abroad.

Since the 1960s, CIMA+ has earned an enviable reputation in the transportation field by constructing a variety of complex and large-scale transportation infrastructures. Our interventions favour environmental protection and sustainable development.

CIMA+
François Plourde, Eng.
Vice-President, Transportation
3400, boul. du Souvenir, bureau 600
Laval (Québec) H7V 3Z2
CANADA

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Email: françois.plourde@cima.ca
www.cima.ca

Association des ingénieurs-conseils du Québec

Québec engineering firms

Nearly a hundred firms, which account for more than 90% of the consulting engineering work done in Québec, are members of the Association of Consulting Engineers of Québec. Through its expertise in the main sectors of the economy, the Québec consulting engineering industry generates an annual turnover of more than CAN$ 3 billion. Quebec ranks first among the 10 Canadian provinces in terms of exported consulting engineering services. Indeed, 50% of the total income from foreign sources reported by all Canadian firms, are attributable to Quebec-based companies.

The transportation sector makes up nearly 10% (2005 statistics) of Québec's consulting engineering business activity. Firms have developed diversified expertise in a wide range of sectors, particularly roads and highways, bridges and civil engineering structures, airports and maritime facilities, traffic, signage and safety, and intelligent transportation systems (ITS).

DESSAU SOPRIN
Ingénierie et construction

Dessau-Soprin Inc.
Jacques Fortin, M. Sc.
Senior Vice-President – Transportation
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Laval (Québec) H7S 2E4
CANADA

Telephone: 514-281-1010
Fax: 450-668-8832
Email: info@dessausoprin.com
www.dessausoprin.com

Active on three continents in the transportation, building, energy, telecommunications, environment and sustainable development fields, Dessau-Soprin was recently recognized for the fourth time as one of "Canada's 50 Best Managed Companies" by Deloitte, CIBC Commercial and Corporate, the Queen's School of Business in Toronto and various Canadian media.

Offering one-stop service in engineering-construction, Dessau-Soprin, which has 2,600 permanent employees, celebrates its 50th anniversary this year.

GENIVAR

GENIVAR
Pierre-André Dugas, Eng.
Vice-President, Transportation
5858, chemin de la Côte-des-Neiges
4th floor
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Email: Pierre.andre.dugas@genivar.com
www.genivar.com

GENIVAR is a leading Canadian engineering firm offering a full range of services through all execution phases of a project including planning, design, construction and maintenance. Founded nearly 50 years ago, GENIVAR is a public company with over 1,800 employees across Canada and abroad. We serve public and private sector clients and operate in the transportation, urban infrastructure, building, industrial, environment and power markets.

SMi
LE GROUPE S.M. INTERNATIONAL INC.

S.M. Group International Inc.
Nathalie Gelencser
Vice-President, Business Development
75, rue Queen, bureau 5200
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CANADA

Telephone: 514-982-6001
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Email: infosm@groupesm.com
www.groupesm.com

"Providing decision-makers with safe and sustainable solutions to assure the best quality to assure a better quality of life for communities and the integrity of our heritage"

S.M. Group International Inc. (SMI) is an engineering, design, integration and technological and scientific applications firm, recognized worldwide for its sciences, its solutions and its turnkey projects. Over the past 35 years, SMI has stood out for its multidisciplinary expertise in the planning, design, implementation and management of infrastructures, road networks, reserved public transit lanes, park and green space networks, and aerial and underground utilities.

TECSULT

Tecsult Inc.
Pierre Asselin, Eng.
Vice-President - Infrastructure,
Transportation and Urban Engineering
2001, rue University, 12th floor
Montréal (Québec) H3A 2A6
CANADA

Telephone: 514-287-8500
Fax: 514-282-2808
www.tecsult.com

Tecsult Inc. is a major Canadian engineering firm with the mission of offering engineering services while integrating several additional fields. Founded in 1961, the firm has 1,100 employees. Since its creation, it has made a name for itself on the national and international scenes. Through Tecsult International Limited, the firm is active in over 45 countries, generating nearly 35% of its business overseas.

A leader in the transportation infrastructure field, Tecsult is characterized by the multidisciplinarity of its services, offering its clients optimal solutions in a sustainable development context: road engineering, structures, environment, geotechnical, economics, traffic and planning, as well intelligent transportation systems.

Montréal

Montréal's economic heart: its downtown.

Active transportation: for a better quality of life!

Montréal: an integrated and used public transit system

Montréal

Ville de Montréal
Direction des transports
801, rue Brennan, 6th floor
Montréal (Québec) H3C 0G4

Telephone: 514-872-3777
Fax: 514-872-8130
www.ville.montreal.qc.ca

Founded on May 17, 1642 by Paul de Chomedey de Maisonneuve, Montréal today is Québec's metropolis. Some 365 years later, Montréal is a democratic, equitable and inclusive city with a spirit of solidarity, a metropolis of creation and innovation, open to the world. A city that is a pleasant place to live, while respecting sustainable development principles.

The concept of sustainable development and transportation has been part of the Montréal reality for several years. Montréal already has its own vision in this area – to assure the needs of all Montrealers for mobility by making this city a pleasant place to live and a prosperous economic hub that respects its environment. Through its Urban Plan, its First Strategic Development Plan and, ultimately, its Transportation Plan, Montréal is showing its leadership in preserving the environment and development of its infrastructure.

Montréal's future primarily depends on efficient transportation systems, which can meet the requirements and needs of an entire population. Through the application of its Transportation Plan, priority is now given to pedestrians, cyclists and various mass transit modes. This long-term plan is therefore based on measurable objectives and includes the priority interventions.

The Transportation Plan thus becomes the viable alternative to use of the automobile. Montréal will be able to help meet the Kyoto objectives, considerably improve the quality of life of its citizens and support its economic development.

Through all its efforts in implementing a sustainable transportation system, Montréal henceforth can be confirmed in its role as a human, green, safe, livable city that now is showing its commitment to healthy transportation habits.

Réinventer Montréal

Société de l'assurance automobile Québec

Société de l'assurance automobile du Québec
Case postale 19600, Terminus
333, boul. Jean Lesage
Québec (Québec) G1K 8J6
CANADA

Telephone: 418-643-7620
www.saaq.gouv.qc.ca

Since 1978, the Société de l'assurance automobile du Québec (SAAQ) has protected and insured all Quebecers against the risks related to use of the road. Its integrated management model is unique in the world, covering prevention, control, compensation and rehabilitation. It thus takes parallel action on road safety and automobile insurance covering bodily injury.

Compensation and rehabilitation of victims of road accidents

Québec's public automobile insurance system compensates the victims of road accidents in the event of bodily injury. It covers all 7.5 million Quebecers, whether the accident occurs in Québec or elsewhere in the world.

- Every year, the SAAQ receives more than 34,000 compensation claims.
- Since 1978, it has paid out an estimated $13 billion to 849,000 road accident victims.

Prevention and promotion of road safety

Between 1978 and 2006, the number of Québec road fatalities fell 59% from 1,765 to 717. This improvement was especially noticeable between 1978 and 2001, when the number of deaths fell from 1,765 to 610 (-65%). However, between 2001 and 2006, this number rose by 18%.

After more than two decades of improvement, largely attributable to the numerous prevention campaigns introduced by the SAAQ, which has become a leader in road safety with the cooperation of partners, the road accident toll nonetheless began rising again in 2002. Since then, the number of deaths and injuries on Québec roads has shown a worrying upward trend.

By officially declaring 2007 Road Safety Year, the government wants to ensure that improvement of the road safety record becomes an issue for Québec society. The SAAQ, the Ministère des Transports du Québec, the police departments and other partners will be stepping up their road safety efforts.

Management of the right of access to the road network

As the main administrator of the Highway Safety Code, the SAAQ manages the right of access to the road network and collects the related fees on the government's behalf. To respond to the needs of the 4.8 million Québec driver's license holders, the SAAQ has set up a network of 151 service outlets.

Each year, it receives 8 million telephone calls and carries out some 17.5 million different transactions.

Monitoring and inspection of carriers of goods and people.

Since 1991, the SAAQ has been responsible for monitoring and inspecting carriers of goods and people. Through Contrôle routier Québec, it enforces the laws and regulations governing the industry, both on the road and on business premises.

Sécurité routière 2007