

## Plan Nord

The goal of the Plan Nord is to develop Québec's North over the next 25 years. The plan includes initiatives to ensure collaboration with local and aboriginal communities throughout the territory covered by the Plan, as well as with various actors who are involved in the sustainable development of the North. The Plan Nord will be rolled out in five successive five-year plans, to take account of socio-economic and environmental evolution.

The territory covered by the Plan Nord extends to all of Québec north of 49<sup>th</sup> parallel, north of the St. Lawrence River and north of the Gulf of St. Lawrence. It includes nearly 1.2 million square kilometers and constitutes 72% of the total area of Québec. More than 120,000 live in 63 communities: Inuit, Cree and Naskapi communities sharing the territory with residents of the Lac Saint-Jean, James Bay and North Shore regions. The Plan Nord seeks to be an exemplary sustainable development project. It is founded on an inclusive, respectful approach to communities of inhabitants and is the result of a unique form of partnership between the government, the private sector and affected populations, one that is advantageous for all Quebecers. The four major objectives of the Plan Nord are as follows:

- **Ensure the well-being and development of local and aboriginal communities** by improving their living conditions. The Plan Nord includes action in the fields of education, labour, housing, health and culture.
- **Achieve the immense economic potential of the Québec North** by ensuring the sustainable development of its energy, mining, forest and wildlife resources, as well as in the fields of tourism and biofood production. By its sheer scale, the extent of its repercussions and the abundance of knowledge and number of suppliers that will be required, the Plan Nord will benefit all of Québec's regions and all sectors of the economy.
- **Make the North accessible** by developing a comprehensive integrated vision for transportation and communication on this territory. Investors will become partners in opening access to the North through innovative agreements for the construction and maintenance of the infrastructures needed for their development projects.
- **Protect the environment** by ensuring that as projects move forward, they comply with the principles of sustainable development and environmental regulations. Moreover, the government has made a commitment to dedicating 50% of the territory of the Plan Nord to environmental protection, safeguarding biodiversity and various types of non-industrial development by 2035. The network of protected areas will be developed, and cover at least 20% of this territory by 2020. An ecological approach to land planning will also begin in 2013.

Achieving these goals will require a broad-based program for the acquisition of knowledge about this territory. The government also intends to create bridges between research centres located in Québec and abroad, promoters and decision-makers.

### 1. Results to date with respect to objectives

The Plan Nord and its first action plan (2011-2016) were announced in 2011. The materialization of this 25-year vision is nascent. The government is currently in the process of implementing 121 initiatives that are described in the action plan.

### 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

The Plan Nord is ambitious. It will require substantial investment. However, implementing it will of necessity fall within the government's comprehensive financial oversight framework, i.e., the plan for returning to a balanced budget and reducing the debt load. The government's new Plan Nord Fund has established an innovative, direct link between economic activity generated by the Plan Nord and the resources to be invested to develop infrastructures and improve services provided to inhabitants. This fund will be financed by tax revenue from new mining and infrastructure projects, as well as by contributions from Hydro-Québec, which will make an additional contribution of 10 M\$ CAD per year to fund social projects.

Moreover, the forthcoming Société du Plan Nord will act as a dedicated coordinating body, overseeing the concerted implementation of Plan Nord projects. The government has tabled a draft bill to this effect, which is currently being studied by the National Assembly. The new public corporation will be accountable to the citizenry and guarantee a vision for the current and future development of the North that is both cross-sectional and all-encompassing.

The Plan Nord will involve public and private investments of more than 80 B\$ CAD, create or consolidate an average of 20,000 jobs each year and generate some 14 B\$ CAD in income for the government and for Québec society as a whole. The planned investments will also have a substantial positive impact on GDP (162 B\$ CAD).

The Government of Québec anticipates investments and program expenditures of some 2.1 B\$ CAD in order to implement the 2011-2016 Action Plan. These include:

- 1.2 B\$ CAD for infrastructure, of which 821 M\$ CAD will be spent on transport and 370 M\$ CAD on social needs (housing, education, culture and parks and protected areas)
- 382 M\$ CAD for social measures in the areas of housing, health and education
- 52 M\$ CAD for attracting foreign investment and managing the Société du Plan Nord, and 500 M\$ CAD in capital funding for Investissement Québec, to be used to take equity positions in future projects

In its 2012-2013 budget, the government also announced 165 M\$ CAD in additional public investments over the five next years. One hundred twenty million dollars will be used to construct infrastructures to enable local communities to deal with development stemming from the Plan Nord, and 45 M\$ CAD will be granted for new societal and community job and knowledge acquisition measures.

**The Ministry designated to coordinate the measure:** The ministère des Ressources naturelles et de la Faune has been mandated to coordinate the Plan Nord based on a multi-component, interdepartmental approach.

**The following governmental and non-governmental stakeholders are all Plan Nord partners:** Secrétariat aux affaires autochtones; ministère du Développement durable, de l'Environnement et des Parcs; ministère des Affaires municipales, des Régions et de l'Occupation du territoire; ministère de l'Agriculture, des Pêcheries et de l'Alimentation; ministère de la Culture, des Communications et de la Condition féminine; ministère du Développement économique, de l'Innovation et de l'Exportation; ministère de l'Éducation, du Loisir et du Sport; ministère de l'Emploi et de la Solidarité sociale; ministère des Relations internationales; ministère de la Santé et des Services sociaux; ministère du Tourisme; ministère des Transports; ministère de la Justice; Société d'habitation du Québec, Hydro-Québec and Investissement Québec.

The Plan Nord was conceived as a tightly-knit partnership with representatives of the territory's local and aboriginal communities and various industries that have an interest in developing the Québec North, and will be implemented as such.

To learn more about the Plan Nord: [www.plannord.gouv.qc.ca/english/index.asp](http://www.plannord.gouv.qc.ca/english/index.asp).

# Electric Vehicles 2011-2020 Action Plan – Running on Green Power!

The Québec Electric Vehicles 2011-2020 Action Plan is addressed to motorists, managers of vehicle fleets, municipalities, public transit authorities and industry. Among the plan's main measures, 50 M\$ CAD has been allocated to a programme of rebates for the purchase of electric vehicles with a ceiling of \$8,000 per vehicle and a maximum grant of \$1,000 for home charging terminals. In all, the plan has a budget of 250 M\$ CAD.

The plan dovetails with the Government of the Québec's **2006-2012 Climate Change Action Plan**. It was developed to be coherent with the **Québec Energy Strategy 2006-2015** and the **Québec Public Transit Policy 2007-2011**. It has three main objectives:

- Reduce greenhouse gas (GHG) emissions in Québec's transport industry
- Benefit from industrial development opportunities provided by an emerging sector
- Reduce Québec's dependence on oil through the electrification of the transport sector

To reach these goals, the plan is being rolled out in four areas: 1) Support for electric vehicle users; 2) Establishing the recharge infrastructure required by electric vehicles; 3) Increasing the use of electricity in public transit; and 4) Developing the electric vehicle industry.

In particular, the Québec Electric Vehicles 2011-2020 Action Plan aims at accelerating the use of electric motor vehicles in Québec. Contrary to motor vehicles powered by combustion engines, electric vehicles are very efficient in their use of energy and emit little or no GHG. Moreover, 97% of all energy generated in Québec comes from clean and renewable sources, and our distribution network can accommodate the recharging needs of at least one million electric vehicles. Québec is in fact the most advantageous place in North America for using electric vehicles.

## 1. Results to date with respect to objectives

Major electric vehicle demonstration projects have been launched since the Québec Electric Vehicles 2011-2020 Action Plan was unveiled in the spring of 2011. The shared vehicle use Communauto enterprise, which is among the biggest companies of its kind in the world, will soon have 50 electric vehicles in its fleet. Moreover, the nine public transit corporations of Québec, which operate in nine cities with more than 100,000 residents are currently testing electric busses.

As a complement to this, the first network of public quick-charge terminals in Canada will be deployed in 2012, with 120 terminals being installed in Montréal and Québec City. Lastly, two industrial projects with a total value of 250 M\$ CAD are under way in the electric vehicle batteries sector.



## 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

In the area of individual transport, the forthcoming steps will mainly relate to monitoring targets and the evolution of the electric vehicle market. Reducing the cost of batteries and improving the range of electric vehicles are determinant to enabling this new technology to go beyond niche market status and achieve widespread use.

In regards to public transit, busses powered by diesel engines need to be replaced by hybrid busses. The latter will be eventually replaced by electric busses when the latter provide comparable performance and their purchase becomes financially realistic. The government approach to the electrification of public transit will be specified in the forthcoming policy on sustainable mobility, currently in development by the Government of the Québec, which will succeed the current public transit policy

**The ministry responsible for this measure** is the ministère des Ressources naturelles et de la Faune.

**Government partners:** the ministère du Développement durable, de l'Environnement et des Parcs, ministère du Développement économique, de l'Innovation et de l'Exportation, ministère des Transports du Québec and Hydro-Québec.

To learn more about the Electric Vehicles 2011-2020 Action Plan – Running on Green Power!: [www.vehiculeselectriques.gouv.qc.ca/english/pdf/action-plan.pdf](http://www.vehiculeselectriques.gouv.qc.ca/english/pdf/action-plan.pdf).

# The Western Climate Initiative Inc. greenhouse gas cap and trade system

Québec joined the Western Climate Initiative (WCI) in 2008. At that time, the WCI was an organization of the American States and Canadian provinces seeking a common approach to fight climate change, mainly through the design and implementation of a North American regional greenhouse gas (GHG) emission cap and trade system (System). Today, four of the five WCI partners (California, British Columbia, Ontario and Québec) are actively involved in developing and implementing the System, while the fifth Manitoba maintains its interest in participating without, however, playing an active role in the discussions.

## 1. Results to date with respect to objectives

In 2009, the National Assembly of Québec unanimously adopted the Act to amend the Environment Quality Act and other legislative measures that dealt with climate change. The Act empowers the Government of Québec to proceed with the regulatory implementation of the cap and trade system in conjunction with its WCI partners. Still in 2009, the WCI took a major first step by unveiling the guiding principles of the future regional system. Less than one year later, it published a program explaining in detail how the system would work.

In 2011, Québec and its partners created the not-for-profit WCI Inc., whose mission is to facilitate the joint management and operation of the individual systems of its founding members: California, Québec and British Columbia. Present at this body's incorporation, Ontario planned to officially join in 2012. At the end of 2011, the Government of Québec adopted a regulation governing the System.

## 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

The System will be implemented progressively, with 2012 being a year of transition enabling actors to familiarize themselves with the workings of the System that, for the moment, will operate only in Québec and California. Discussions are under way with California to harmonize regulations, and a joint recognition agreement is expected to be signed, enabling inter-jurisdictional connectivity. Ontario, British Columbia and Manitoba are still planning to join what will already be North America's biggest carbon market, within the next few years.

No reductions or GHG emission caps will be required in 2012. The only regulatory requirement that will be in effect relates to registration of companies in the electricity and industrial sectors whose annual GHG emissions are equal to or greater than 25 kilotons of equivalent CO<sub>2</sub>. These companies will be subject to regulatory compliance with the System starting on January 1, 2013, at which time the System will be fully operational. Although the majority of GHG emission units will be distributed free of charge starting on January 1, 2013 in a step aimed at mitigating the effects of competition of the major emitters, the latter, as well as any other actors that wish to be part of the System, will be able to participate in an auction during the second half of 2012 and, subsequently, buy and sell GHG emission rights on the market.



Starting in 2015, the System will extend to the transport and construction industries, as well as to small and medium-size companies, by covering fossil fuels and combustibles used in these sectors. At that point, operators of companies that import or distribute fuels and combustibles in Québec whose combustion results in annual GHG emissions equal to or greater than the 25-kiloton of equivalent CO<sub>2</sub> threshold, will be subject to the System.

The Western Climate Initiative Inc. greenhouse gas emission cap and trade system involves three compliance periods. The first will exceptionally last for two years, from January 1, 2013 to December 31, 2014. The other compliance periods will each last three years.

**Ministries responsible for this measure:** ministère du Développement durable, de l'Environnement et des Parcs, ministère des Finances, ministère du Développement économique, de l'Innovation et de l'Exportation, ministère des Ressources naturelles et de la Faune, ministère des Transports, ministère de l'Agriculture, des Pêcheries et de l'Alimentation and Conseil du trésor.

**Government and non-government partners:** the system was designed with input from industries that will be mainly affected. In Québec, this largely meant pulp and paper and aluminum mills, oil refineries and the metallurgy, mining and chemical industries, as well as calcium hydroxide (lime) producers. Although Québec gets almost all of its electricity from clean and renewable sources (hydroelectricity and wind farms, for example), which emit little GHG, this sector was also called upon to contribute.

Emitters subject to the System have thus been made aware of the need to reduce their carbon footprint and contribute to reaching the reduction target of 20% below 1990 levels that Québec set for itself for 2020. The System is a major component of the Government of Québec's 2013-2020 Climate Change Action Plan.

Even if the federal governments of Canada and the U.S.A. have chosen not to avail themselves of this market mechanism to decrease GHG emissions in their respective jurisdictions, this joint initiative by California and Québec clearly demonstrates that sub-national governments can demonstrate great leadership in the fight against climate change.

To learn more about the Western Climate Initiative Inc. greenhouse gas emission cap and trade system: [www.mddep.gouv.qc.ca/changements/carbone/Systeme-plaFonnement-droits-GES.htm](http://www.mddep.gouv.qc.ca/changements/carbone/Systeme-plaFonnement-droits-GES.htm) (in French only).

## The Québec Residual Materials Management Policy – Aligning the Economy and the Environment

The Québec Residual Materials Management Policy aims at creating a waste-free society based on the reclamation of its residual materials through intelligent management. In addition to the principles of sustainable development, the Policy is based on 3R-RD (reduction, reuse, recycling, reclamation, and disposal). Its fundamental goal is to ensure that end waste is the only residual material sent for disposal in Québec. To achieve this goal, the Policy prescribes measures to address three major residual materials management issues:

- End the squandering of resources
- Contribute to reaching the objectives of the 2013-2020 Climate Change Action Plan and the Québec Energy Strategy 2006-2015
- Make all actors involved in residual materials management accountable for their actions

The Policy is accompanied by a 2011-2015 Action Plan comprised of 40 actions that aim to:

- Reduce the quantity of residual materials sent for disposal to 700 kilograms per capita, for a decrease of 110 kilograms per capita compared to 2008.
- Recycle 70% of paper, cardboard, plastic, glass, and metal waste.
- Recycle 60% of organic putrescible waste.
- Recycle or reclaim 80% of concrete, brick, and asphalt waste.
- Sort at the source or send 70% of building construction, renovation, and demolition waste to a sorting center.

In all, between 2011 and 2015, more than 700 M\$ CAD will be invested in the Québec residual materials management industry by the government, municipalities and the private sector.

### 1. Results to date with respect to objectives

In order to achieve these goals, the government took measures to:

- Develop a strategy to ban organic matter being sent for disposal
- Ensure corporate compensation for the cost of selective collection, which in Québec is assumed by municipalities
- Apply the Extended Producer Responsibility (EPR) principle, in particular to oil, paint, electronic products, batteries and mercury lamps, which need to be recovered and reclaimed by their producers at the end of their useful life.



Moreover, various financial assistance programs have been set up, including a program for processing organic matter by bimechanization and composting. This program provides municipalities and the private sector with funding to install infrastructures for treating organic matter using the above techniques. The program aims to both reduce greenhouse gas emissions and the volume of organic matter sent for disposal. Some 650 M\$ CAD in investments are expected as a result of this program. Moreover, a 20 M\$ CAD program to support technology and process innovation and market development fosters the installation, modernization and expansion of residual materials processing plants and the development of markets for recovered materials, in order to support their recycling and reclamation.

Québec also supports social enterprises that are active in the sustainable development and environmental sectors. The goal of these social purpose enterprises is to produce and offer goods and services that meet the needs of their communities. The government supports their activities in the residual materials management sector with a social economy and community mobilization program that has a budget of 11 M\$ CAD. Of this amount, 10 M\$ CAD is reserved for social enterprises and for groups involved in training and employment reinsertion, while 1 M\$ CAD is set aside for community information, awareness and education projects that encourage reduction, reuse and recycling (3R).

## 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

Among the more structuring measures to be taken by the Government of the Québec will be the installation of organic matter treatment plants. This will make it possible to inject more than 650 M\$ CAD in investments into the economy, which will benefit the green economy through the development of a new industrial sector in Québec. Increased recycling rates and the application of the EPR principle to many other products will also stimulate this development.

**Ministry responsible for this measure:** ministère du Développement durable, de l'Environnement et des Parcs.

**Government partner:** RECYC-QUÉBEC.

To learn more about the Québec Residual Materials Management Policy: [www.mddep.gouv.qc.ca/matieres/pgmr/presentation\\_en.pdf](http://www.mddep.gouv.qc.ca/matieres/pgmr/presentation_en.pdf).



## The “Prime-vert” (Green Bonus) Program for Québec Farms

The Prime-vert program provides technical assistance and funding to Québec farms to support their regulatory compliance and implement good agro-environmental practices. In addition to funding, Prime-vert's sustained action aims at changing practices through farmer awareness and training programs and by implementing new farm technology. As the second-largest transfer program at the ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec (MAPAQ), Prime-vert has an annual budget of around 50 M\$ CAD.

The program has nine components and more than 40 assistance measures that relate to manure management, improving water quality, safeguarding biodiversity, reducing point source and nonpoint source pollution, optimizing fertilization and soil conservation, rationalizing pesticide use and reducing greenhouse gas emissions.

The challenge faced by the MAPAQ and the Québec agricultural sector is to evolve from a system of farming natural resources to a system that preserves the goods and the services provided by ecosystems while meeting the basic food needs of the population. The environmental gains arising from this change will benefit all of society.

### 1. Results to date with respect to objectives

One of the important achievements of the Prime-vert program consists of agro-environmental advisory clubs. These advisory clubs are voluntary associations of farmers that are mandated to encourage the adoption of environment-friendly farm practices. The program funds these clubs by investing up to 11 M\$ CAD each year.

In addition, some 15 M\$ CAD are invested annually in farm-based action to improve water quality and inhibit cyanobacteria. Since 2005, Prime-vert has funded 55 watershed-based integrated farm water management projects. These projects meet the objectives of the Québec Water Policy and the preferred, watershed-based method of integrated water management.

Prime-vert also supports the adoption of soil conservation practices such as direct sowing and minimum tillage. These practices are aimed at inhibiting erosion, compaction and the loss of organic matter and biological activity. They lead to greater soil resilience to extreme climate events. Supported by 4.5 M\$ CAD in funding between 2002 and 2010, more than 2,300 farm operators were able to introduce these practices on some 85,017 ha, which is approximately 10% of Québec land under annual cultivation.



## 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

The new Prime-vert program, based on a vision for Québec's bio-food future, comes into effect in 2013. Until the new plan begins, the Livre vert pour une politique bioalimentaire (bio-food green Policy Paper) targets avenues to enable bio-food producers to reduce their ecological footprint and stand out in the marketplace using a green brand image.

These avenues are:

- Improved overall farm management and proactive environmental management
- Establishment of ecological modes of production that foster soil conservation and biodiversity
- Ecoefficiency of processes, particularly aimed at reducing greenhouse gas emissions and adapting to climate change
- Increased efforts to mitigate the risks related to pesticide use and promote integrated crop protection management, in line with the government's Stratégie phytosanitaire québécoise en agriculture 2011-2021 to hamper the spread of pests and disease
- Increased funding for fertilization trials to ensure the sustainability of recommendations
- Continuing to invest to improve water quality in agricultural environments.

**Ministry responsible for this measure:** ministère de l'Agriculture, des Pêcheries et de l'Alimentation.

**Government and non-government partners:** Agriculture and Agri-Food Canada (Growing Forward) and the Government of Québec Green Fund.

To learn more about Prime-vert: [www.mapaq.gouv.qc.ca/SiteCollectionDocuments/Formulaires/PrimeVert.pdf](http://www.mapaq.gouv.qc.ca/SiteCollectionDocuments/Formulaires/PrimeVert.pdf) (in French only).

## The Sustainable Forest Management Strategy

Forests have, remain and will always be an omnipresent force in Québec. They are of great significance to its citizens, who see in them both a collective heritage that provides a diversity of products and services, and a recreational and spiritual resource that supports their wellbeing and is never distant.

The Sustainable Forest Management Strategy is the centrepiece Québec's new forestry regime. It presents the Government of Québec's vision for developing this resource wealth and reaching the objective of sustainable forest management. It is also a tangible way of contributing to achieving the sustainable development objectives set out in the Government Sustainable Development Strategy 2008-2013.

The Sustainable Forest Management Strategy (Strategy) includes 145 actions that cover the social, environmental and economic dimensions of forest management. As steward of Québec's forests, the ministère des Ressources naturelles et de la Faune du Québec (Ministry) is responsible for the Strategy and its implementation. The challenges described in the Strategy reflect the Ministry's sustainable forest management action priorities, and in particular:

- Increasing regional participation in forest management by making known the interests and values of regional actors and ensuring their participation in the development of the Ministry's integrated forest management plans
- Practicing sustainable forestry in order to maintain biodiversity and ensure ecosystem viability through an ecosystemic development approach
- Rendering the forestry sector more productive and diversifying the economic spinoffs generated by timber, recreational tourism and non-wood products
- Encouraging innovation and competitiveness in companies that operate in the forestry and wood transformation sectors
- Contributing to the fight against climate change

### 1. Results to date with respect to objectives

The Strategy is planned to be adopted in 2012, with results being assessed and released to the public on a five-year basis, as required by Section 224 of the Sustainable Forest Development Act (L.R.Q., A-18.1).

### 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

The forest provides a wide variety of resources, such as timber, wildlife, landscapes and non-wood products. It is where the thousands of people who harvest timber and are involved in forest management work. The forest provides jobs for the outfitters who organize hunting and fishing trips and for factory workers who transform timber. It earns revenue for the government and for private owners alike. It is a source of food and medicine. It provides habitats for wildlife and plants, purifies the air and water and contributes to the fight against climate change. The forest is also a place for recreation, relaxation and spirituality, where people come to appreciate the beauty of nature and to be inspired by it.

The Ministry is thus revisiting its approach to silviculture to ensure that it simultaneously meets a number of development and conservation goals. Over the next few years, the Strategy will contribute to the transition to a greener economic model by providing direction to:

- The preparation of integrated forestry management plans and calculation of forest potential
- The development of knowledge and skills of researchers and workers in this sector and the improvement of their working conditions
- The use of new technology and the development of products with strong added value in the wood processing sector
- The use of wood in new economic niche sectors such as multi-family dwellings and non-residential construction, the production of bioenergy and the development of biorefining products
- The development of recreational tourism companies (outdoors activities, wildlife observation and harvesting), eco-tourism and non-wood forest products (maple syrup, mushrooms, berries, essential oils, etc.)

**Ministry responsible for this measure:** ministère des Ressources naturelles et de la Faune (Forêt Québec).

**Government and non-government partners:** various ministries, including Agriculture, des Pêcheries et de l'Alimentation and Développement durable, de l'Environnement et des Parcs. The Strategy is also being subjected to a consultation by the general public and aboriginal communities.

To learn more about the Sustainable Forest Management Strategy: <http://consultation-adf.mrnf.gouv.qc.ca/pdf/SADF-proposition.pdf> (in French only).

# A Development Strategy for Québec's Environmental and Green Technology Industry - For a Green and Prosperous Québec

Québec adopted measures over the last few years that enable it to be well-positioned in the environmental and green technology sector. The Development strategy for Québec's environmental and green technology industry is among these measures. It aims to support innovation in this industry and provide it with international reach. The strategy combines economic development with national environmental objectives. It is founded on five action areas that include total investments of 282 M\$ CAD over 6 years.

Through its strategy, the government invites industry and research, development and technology transfer centres, financial circles, educational and training institutions, associations and support groups alike to mobilize to build a greener Québec economy based on sustainable economic and social development.

## 1. Results to date with respect to objectives

Here are the main results achieved in each of the five action areas of the Development strategy for Québec's environmental and green technology industry to date:

- **Support corporate development.** The government invested 25 M\$ CAD in the Cycle Capital risk fund, which is dedicated to developing clean technologies. The investment made it possible to mobilize other subscribers, whose contributions raised the available level of investment capital to support companies active in this field of endeavour to 80.4 M\$ CAD. The government also invested 16.5 M\$ CAD in the Cycle-C3E start-up fund for clean technology companies that are just beginning operations.
- **Support the development of green technology.** The government invested 20 M\$ CAD over 3 years in research and development projects aimed at greenhouse gas reduction and sequestration in Québec. It also initiated the Technoclimat program that funds the demonstration of technology aimed at reducing greenhouse gas (110 M\$ CAD), as well as a green technology demonstration program (PDTV, with a budget of 12 M\$ CAD). The PDTV funds the demonstration of technologies in the areas of water, air, soil and residual materials. Together, the PDTV and Technoclimat programs supported 41 company projects to the tune of 47 M\$ CAD in funding for projects, whose total value was 120 M\$ CAD.
- **Make use of local markets.** The government promotes the benefits of green technology developed within Québec to municipalities and the private sector. This commitment led to the creation of the MATTÉUS software package, which is a decision-making tool that enables municipalities to determine which type of residual materials processing offers the most advantages from the economic and environmental perspective, in any given context.



- **Foster internationalization.** The Development strategy for Québec's environmental and green technology industry aims at increasing the presence of Québec companies in foreign markets by networking them with international clients. This is why the government supports the AMERICANA International Environmental Technology Trade Show and Conference. Through its size and reach, this show provides a framework for the exchange of technical, scientific and business information that is related to the major challenges of sustainable development. The government also encourages participation by Québec companies in the carbon market and in the Kyoto Protocol's clean development mechanism through training and coaching, so that they can position themselves in an expanding market.
- **Support industry mobilization.** In order to support stakeholder mobilization in the environmental and clean technology industry, the government helped create the Écotech Québec clean technology cluster. Although it has been in operation for only two years, Écotech Québec has proven its capacity to unite industry stakeholders and implement complementary original types of action. In order to improve the business context of this industry's players, six areas were given priority: 1) Reach; 2) Financing; 3) Regulatory and fiscal framework; 4) Innovation; 5) Marketing; and 6) Human capital. Écotech Québec helps to position Québec as a clean technology pole of excellence in North America.

## 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

The Government of Québec intends to renew its assistance to companies that develop green technology by providing supporting at the product demonstration stage, but also during the marketing stage, through investment support for technologies that have been successfully demonstrated.

Available funding has been fully invested and proven its worth. Now, the government wishes to reinvest in the clean technology Cycle Capital risk fund (100 M\$ CAD).

Additionally, the government intends to continue to promote Québec environmental and green technology companies to municipalities. Following the MATTÉUS model, a new decision-making tool will be designed to promote the rehabilitation contaminated soil in urban environments by quantifying the short-term, average and long-term benefits of soil rehabilitation, notably by calculating return on investment due to the increased value of decontaminated lots.

Finally, training on the carbon market is being revised to adapt it to the new Québec legal context. On January 1, 2012, the Western Climate Initiative carbon market began to function in Québec.

**Ministry responsible for this measure:** ministère du Développement économique, de l'Innovation et de l'Exportation.

**Government partners:** ministère du Développement durable, de l'Environnement et des Parcs, le ministère des Ressources naturelles et de la Faune and Investissement Québec.

To learn more about the Development Strategy For Québec's Environmental and Green Technology Industry – For a Green and Prosperous Québec, see the Strategies section of the following Web page: [www.mdeie.gouv.qc.ca/ministere/english/about-us](http://www.mdeie.gouv.qc.ca/ministere/english/about-us).

## The Québec Public Transit Policy – Better Choices for Citizens

The Québec Public Transit Policy aimed at increasing ridership throughout Québec, both in urban and rural settings, with a target of 8% more users by 2012. This would enable public transit to increase its share of total passenger transportation, all modes combined.

The Policy employs four means to reach its objectives: 1) Have everyone do their fair share; 2) Improve the services available to the public; 3) Modernize and develop infrastructures and equipment; and 4) Support further alternatives to the automobile. The policy includes seven funding programs, of which five contribute to the achieving the objectives of the 2006-2012 Climate Change Action Plan.

By aiming for a growth in public transit traffic, the policy fulfills important social, environmental and economic functions. For many people, public transit may be their only way to get to work or to health care and educational institutions or take part in recreational activities. It is an excellent way of combatting road congestion and abating greenhouse gas emissions, since by reducing automobile traffic, public transit decreases polluting emissions from fuel combustion, with attendant benefits for public health through less air pollution.

Moreover, investments in public transportation are economic development tools that have major spinoffs in Québec. For employers, access to public transit is often a factor that determines their choice of office or plant location. Well-developed public transit networks improve the quality of life of employees and broaden the geographic scope of the labour pool.

### 1. Results to date with respect to objectives

By the end of the five years of implementation of the policy, the total value of funds invested in public transit by the Government of Québec will reach nearly 4.8 B\$ CAD. A 580 M\$ CAD contribution to public transit funding from the Government of Canada is additional to this amount.

To date, the Programme d'aide gouvernementale à l'amélioration des services en transport en commun (public transit improvement funding) has provided some 441.5 M\$ CAD to 30 public transit bodies throughout Québec for their five-year service improvement plans. The program's goal was to increase the service offering by 16% and ridership by 8%, by 2011. Results are encouraging. Between 2006 and 2010, the service offering increased by 21%, while ridership went up by 7%. Once the 2011 report has been compiled, it is expected that the service offering will have risen by 25% compared to 2006, while ridership will have increased by 12%, exceeding the original objectives.

The Programme d'aide gouvernementale au transport collectif régional (regional transit support) has enabled 68 regional county municipalities and 7 regional conferences of elected officials to take advantage of funding opportunities to improve public transit in rural settings and prepare better passenger transport plans in their areas.

Investments of 8.6 M\$ CAD made through the Programme de subventions à l'adaptation des taxis et des autocars interurbains pour le transport des personnes se déplaçant en fauteuil roulant (adapted wheel-chair passenger transport) has led to 353 taxis, 47 buses and minibuses and 5 terminals being modified to accommodate wheel chairs.



The Programme d'aide gouvernementale à l'amélioration de l'efficacité énergétique dans le transport routier des personnes (energy efficiency in highway passenger transport) enabled investments of 16.9 M\$ CAD for the purchase of 43 hybrid taxis and 10 hybrid or electric buses. Moreover, 955 public passenger vehicles are now equipped with energy efficiency technology.

Investments of 22.7 M\$ CAD made through the Programme d'aide gouvernementale aux modes de transport alternatifs à l'automobile (alternatives to automobile) funded employer programs to address mobility issues or reduce the environmental impact of travel by their employees in 39 companies. The same program also funded the operations of seven travel management centres and active mobility plans in nine cities.

Finally, the Programme d'aide aux immobilisations en transport en commun de la Société de financement des infrastructures locales du Québec (investments in public transit assets, run by the Société de financement des infrastructures locales du Québec) and Programme d'aide gouvernementale au transport collectif des personnes (public transit support program) made it possible to finance repairs to the Montréal subway (Métro) system, add new bus lanes and improve the "train de l'Est" infrastructure.

## 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

The five funding programs included in the Policy are aligned with the 2006-2012 Climate Change Action Plan, and were renewed until December 31, 2012 even if the policy has formally expired. In addition to being extended, the Programme d'aide gouvernementale à l'amélioration des services en transport en commun and the Programme d'aide gouvernementale à l'amélioration de l'efficacité énergétique dans le transport routier des personnes have been enhanced.

In addition, during the Association du transport urbain du Québec's October 2011 convention, the Minister of Transport announced that a new public transit policy was being prepared, which would address the issue of land passenger transport in its entirety, be more ambitious than the previous policy and make a greater contribution to the development of a green economy.

**Ministry responsible for this measure:** ministère des Transports du Québec.

**Government (ministries and other bodies) and non-government partners:** municipalities, public transit authorities and users, motorists, employers, Government of Canada and Metropolitan Montréal.

To learn more about the Québec Public Transit Policy: [www.mtq.gouv.qc.ca/portal/page/portal/grand\\_public\\_en/transport\\_collectif/politique\\_quebecoise\\_transport\\_collectif](http://www.mtq.gouv.qc.ca/portal/page/portal/grand_public_en/transport_collectif/politique_quebecoise_transport_collectif).



## Québec Strategy for Drinking Water Conservation

The Québec Strategy for Drinking Water Conservation aims to reduce per capita water use by 20% and lower the amount of drinking water lost due to aqueduct leaks by 2017 to at most 20% of total distributed volume. To this end, the government will provide municipalities with the tools they need to arrive at clear and precise profiles of water use within their jurisdictions, compared to recognized standards. The government will also:

- Revise the Québec Construction Code to prohibit the installation of water overconsumption accessories and equipment
- Add ecoconditionality clauses to infrastructure funding programs and make financial aid available for municipalities seeking to adopt drinking water conservation measures
- Continue its drinking water conservation policies in government buildings
- Inform consumers that they can be ecoresponsible by choosing products that have WaterSense labels

In supporting measurements to reduce drinking water consumption and make consumers aware of the value of this resource, the Québec Strategy for Drinking Water Conservation falls within the perspective of sustainable development. Measures defined to achieve these goals are founded on the principles of prevention, responsible production and consumption and social equity and solidarity. They foster consumer accountability that will help ensure that this collective resource is available for future generations.

### 1. Results to date with respect to objectives

The government has so far:

- Trained municipal authorities to assist them in implementing their drinking water conservation strategies
- Produced a template for municipal regulations on the use of drinking water as well as a simple form to measure achieved results
- Facilitated the process of data collection on municipal water consumption
- Concluded a partnership agreement for the WaterSense labelling program, designed by the United States Environmental Protection Agency, which applies to equipment that on average consumes 20% less water

Other projects are under way, for example:

- A water education program in collaboration with the ministère de l'Éducation, du Loisir et du Sport du Québec. This program is meant for ten year-old grade five elementary school pupils. A first version of the program will be published at the end of 2012
- A water conservation policy, in collaboration with ministries that own government buildings.

Above and beyond measures taken to support the accountability of municipal authorities and consumers, the Québec Strategy for Drinking Water Conservation seeks to increase research and to establish poles of expertise on this subject. To this end, the ministère des Affaires municipales, des Régions et de l'Occupation du territoire du Québec prepares technical documents on municipal drinking water conservation. It also makes available the most current knowledge on the subject and translates the American Water Works Association handbooks on effective water management. Moreover, as a member of the Water Stewardship Council, the ministry takes note of what transpires elsewhere and shares its own results.

In order to ensure synergy in its actions, the measures set out in the Québec Strategy for Drinking Water Conservation were developed with input by actors within the government itself, municipalities and groups that work in this field, based on a collaborative approach. In order to take account of municipal realities in the implementation of this strategy, a monitoring committee was formed with Québec municipal associations.

## 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

Over the next few years, the government will strengthen its information and knowledge acquisition strategy for consumers, focussing on:

- Continuing its partnership with the the réseau Environnement for the Programme d'économie d'eau potable (PEEP), which runs summer campaigns for municipalities to help make their residents aware of the importance of conserving drinking water. Since 2009, the réseau Environnement also runs "Journée compte-gouttes" (one drop at a time) events under PEEP auspices, which encourage municipalities and residents to take concrete steps to conserve drinking water
- Carrying out consumption profile studies in 50 government buildings and producing a guidebook that all public bodies can use to reduce their consumption of water. This work will be performed in the perspective of the exemplary role of the State
- In the field of environmental data acquisition, the government will produce and distribute annual monitoring reports on its drinking water conservation strategy

**Ministry responsible for this measure:** ministère des Affaires municipales, des Régions et de l'Occupation du territoire.

**Government (ministries and other bodies) and non-government partners:** ministère de l'Agriculture, des Pêcheries et de l'Alimentation; ministère de la Santé et des Services sociaux; ministère de l'Éducation, du Loisir et du Sport; ministère du Développement durable, de l'Environnement et des Parcs; ministère du Développement économique, de l'Innovation et de l'Exportation; Régie du bâtiment du Québec; Société immobilière du Québec; Fédération québécoise des municipalités; Union des municipalités du Québec; Ville de Montréal; Ville de Québec; Association des ingénieurs municipaux du Québec; Centre des technologies de l'eau; Centre d'expertise et de recherche en infrastructures urbaines; Conseil patronal de l'environnement du Québec; Corporation des maîtres mécaniciens en tuyauterie du Québec; Fédération interdisciplinaire de l'horticulture ornementale du Québec and réseau Environnement.

To learn more about the Québec Strategy for Drinking Water Conservation: [www.mamrot.gouv.qc.ca/pub/grands\\_dossiers/strategie\\_eau/strategie\\_eau\\_potable.pdf](http://www.mamrot.gouv.qc.ca/pub/grands_dossiers/strategie_eau/strategie_eau_potable.pdf) (in French only).

## The 2013–2020 Climate Change Action Plan

Aware of the need to join the global fight against climate change, and acting on the recommendations of experts in the field, the Québec government adopted an integrated and coherent approach to combatting climate change in 2006. The 2006–2012 Climate Change Action Plan aimed to cut greenhouse gas (GHG) emissions to 6% below 1990 levels by 2012. To get there Québec adopted strategies and implemented policies on energy, mass transit, green technology, residual materials management, and electric vehicles.

The 2006–2012 Climate Change Action Plan (CCAP) aims to lower GHG emissions and implement other measures necessary to help Québec adapt to the reality of climate change in the province. To meet targets, the CCAP sets out 26 measures in key sectors like energy, transportation, municipal affairs, industry, construction, residual materials management, agriculture, healthcare, public security, the environment, natural resources, land use planning, and provincial government management.

### 1. Results to date with respect to objectives

This action plan will be largely funded through a royalty on gas and fossil fuels. The royalty generates over \$200 million per year, which is reinvested in the Green Fund for a total budget of close to \$1.6 billion CAD. The Green Fund has so far financed over 4,000 completed projects, many designed to promote mass-market implementation of clean technologies in Québec; over 500 other projects are currently under evaluation by various Québec government ministries.

#### Québec's 2009 GHG emissions

In 2009 Québec's GHG emissions were 81.8 megatons (Mt) of CO<sub>2</sub> equivalent (CO<sub>2</sub>e)—2.5% below 1990 levels. Québec had the lowest per capita emissions of any Canadian province—10.4 tons CO<sub>2</sub>e—approximately one half of the Canadian per capita average of 20.6 tons CO<sub>2</sub>e. Though Québec accounts for nearly 20% of Canada's GDP, Québec's total GHG emissions came in at only 11.9% of the national total. This strong record can be ascribed to the Québec government's actions to cut GHG emissions and to the decision made over thirty years ago to invest in a clean, renewable energy source: hydroelectricity. Today 97% of Québec's electricity comes from renewable sources.

### 2. Forthcoming steps in the implementation of measures and prospects for development of the green economy

#### Québec's 2020 GHG reduction target

Québec is on track to reach its 2012 target, and has no intention of slowing down. In November 2009 Québec set the most ambitious GHG target in all North America—a 20% reduction of 1990 levels by 2020. The target was determined through a public consultation process led by Québec parliamentarians. Of several options on the table, the government selected the one with the highest targeted reduction.



Meeting the new target will unquestionably be a great challenge. But the Québec government firmly believes that the target is also an opportunity—for job creation, technological innovation, knowledge advancement, and new market development. Major planned investments will not only stimulate Québec's economy while reducing GHG emissions, but also help certain contracting sectors of the economy to repurpose themselves as part of emerging next-generation industries. In short, our investment will help Québec make the necessary shift toward a green economy, which will in turn improve the quality of life and health of all Quebecers.

### **The 2013–2020 Climate Change Action Plan**

June 2012 saw the release of Québec's new action plan on climate change for 2013–2020. One focus of the plan is cutting fossil fuel use in every sector of the economy including industry, construction, and especially transportation, the top source of GHG emissions in the province at 43.5% of the total. A GHG emissions cap-and-trade system is a cornerstone of the plan. To implement the system and set up the first North American carbon market, Québec joined the Western Climate Initiative. The cap and trade system will take effect in 2013 in the industrial and electricity production sectors, with gas and fossil fuel distribution and transport to be added in 2015. Putting a price tag on emissions will send major GHG emitters (25 Kt CO<sub>2</sub>e and up) a clear signal that it is time to improve carbon performance by investing in energy efficiency and making use of low-GHG technologies and energy sources. Revenues from periodic emissions rights auctions held under the cap and trade system will be invested in the Québec government's Green Fund and pay for the measures in the 2013–2020 Climate Change Action Plan. By the end of the plan's term in 2020 a total of \$2.5 billion CAD will have been invested.

Adapting Québec society to the realities of climate change is a key component of the 2013–2020 Climate Change Action Plan. The measures in the plan are part of the government's 2013–2020 climate change strategy, released concurrently with the action plan. The strategy identifies the government's main focuses and priorities in addressing the risks climate change poses to Québec, while the action plan consists of concrete measures to make Québec more resilient in the face of these changes.

**Ministry responsible for the measure:** ministère du Développement durable, de l'Environnement et des Parcs

**Québec Government Partners:** A host of government ministries and agencies are involved including ministère de l'Agriculture, des Pêcheries et de l'Alimentation, ministère du Développement économique, de l'Innovation et de l'Exportation, ministère des Ressources naturelles et de la Faune, ministère de la Santé et des Services sociaux, Ministère de la Sécurité publique, ministère des Transports and Régie du bâtiment du Québec.

**To learn more about the Climate Change Action Plan:**  
[www.QuebecVert2020.gouv.qc.ca](http://www.QuebecVert2020.gouv.qc.ca) (in French only).