



Québec Report

**THE INSTITUTIONAL
FRAMEWORK OF
SUSTAINABLE DEVELOPMENT
AND THE EMERGENCE OF A
GREEN ECONOMY IN QUÉBEC**

Presented at the
United Nations Conference
on Sustainable Development
in Rio de Janeiro, Brazil, June 20-22, 2012



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on Sustainable Development

Québec    

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A Message from the Premier of Québec

Twenty years ago, at the United Nations Conference on Environment and Development (also known as the “Earth Summit”), Québec officially adopted sustainable development as its path to the future. Indeed, during this meeting, Québec chose to recognize the principles stated in the Rio Declaration and the objectives described in the Agenda 21 comprehensive plan of action.

By 2003, we had committed ourselves to developing a sustainable development framework. This took shape in 2006, with the passage of the Sustainable Development Act, which provided a firm legal basis for moving forward. The government’s Sustainable Development Strategy now serves as a master plan, shaping the implementation of this framework and defining the terms of all actions taken by Québec public authorities. It includes a long-term vision that will make it possible for current and future generations to benefit from development under equitable conditions.

Implementation is well under way. More than 130 government ministries and agencies have been mobilized to move forward with the Strategy, while Québec society

as a whole is also being encouraged to follow in the sustainable development footsteps of the government.

The growth of the green economy in a sustainable development context represents another considerable—but meaningful—challenge, providing an opportunity to develop strategic sectors of our economy while respecting the environment and seeing to improving the wellbeing of the population. Moreover, several large-scale government measures are already in motion, contributing to the development of the green economy in Québec and leading to the emergence of numerous initiatives in our society.

The 2012 United Nations Conference on Sustainable Development will make it possible for governments to exchange information on sustainable development governance and what is needed to accelerate the transition to the green economy. It is in this perspective that the Government of Québec presents this report, which describes the institutional framework it uses, the principal actions that are being implemented and the leading measures being employed to support the development of the green economy. In addition to facilitating the sharing of information with other governments, this report will shape our ideas on these issues, as we move forward.

It is with no small amount of pride that the Government of Québec will bring the tangible results of its sustainable development commitments to the June 2012 Rio Conference.

Jean Charest



A Word from the Minister

The institutional framework for the sustainable development of Québec began in 1991, with the creation of the interdepartmental committee on sustainable development. It was strengthened in 2004, when the Québec sustainable development plan was adopted. Since 2006, the Sustainable Development Act has provided a firm legal foundation for the government's Sustainable Development Strategy. The involvement of more than 130 government ministries and bodies in the implementation and follow-up of sustainable development action plans bears witness to the size of the measures that are under way, aimed at gradually changing the way government operates.

The Rio+20 conference provides all governments with an excellent opportunity to exchange information on the measures needed to support the transition to a green economy. This sea change aims at improving human wellbeing and ensuring social equity, while significantly reducing risks to the environment and resource shortages. In Québec, numerous broad-based government actions and measures currently enable this type of development. They involve many societal initiatives in an effort to support selected industries through the development of strategic sectors, and are based on sustainable development environmental and social values.

As minister responsible for coordinating the implementation of the government's approach to the sustainable development of Québec, I am pleased to share this synthesis report on the institutional framework of Sustainable Development and the principal actions that are moving us towards a green economy. Various branches of government have contributed to making this report possible. There is no doubt that this reference document, besides enabling information to be shared with other governments, will feed our reflections on issues that relate to the two topics of the Rio+20 conference, i.e., the green economy in the context of sustainable development poverty eradication; and the institutional framework of Sustainable Development.

A handwritten signature in black ink, appearing to read 'Pierre Arcand'.

Pierre Arcand

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List of acronyms and abbreviations

BAPE	Bureau d'audiences publiques sur l'environnement
BCDD	Bureau de coordination du développement durable
CIDD	Comité interministériel du développement durable
Extranet DD	Sustainable Development Extranet
Government	Government of Québec
Act	Sustainable Development Act of Québec
MDDEP	Ministère du Développement durable, de l'Environnement et des Parcs
Strategy	Government Sustainable Development Strategy



1

THE GOVERNMENT OF QUÉBEC'S SUSTAINABLE DEVELOPMENT INSTITUTIONAL FRAMEWORK

The Government of Québec's sustainable development institutional framework

Executive summary

At the 1992 United Nations Conference on Environment and Development (also known as the 1992 Rio Summit), Québec turned to sustainable development as its path to the future. Since 2006, the Government of Québec's sustainable development approach has had a legal basis, and the Sustainable Development Strategy provides a framework for the government to both define its objectives and specify the ways and means it will use to attain them.

More than 130 Government of Québec ministries and other bodies are involved in implementing this strategy. By making use of the institutional framework, the government intends to continue to rise to the challenge of ensuring synergy and coherency of the actions it takes to achieve significant results, while respecting social, environmental and economic concerns. This approach is in line with the recommendations made by international institutions and, in particular, with the 27 principles of the 1992 Rio Declaration on Environment and Development and the 2002 Johannesburg World Summit on Sustainable Development Plan of Implementation.

In our constantly evolving world, the Government of Québec's mechanisms for assessing and revising its approach both support innovation and enable adaptation to societal changes over time.

This approach, which is both participatory and transparent in nature, aims to enrich the steps that are taken to these ends, providing a credible basis for action and creating a domino effect that is aimed at inspiring Québec society as a whole.

The massive mobilization of government ministries and other bodies in the implementation of the government strategy makes it clear that the approach is already operational and is predictive of positive results of the efforts that aim to achieve the objectives.

The Government of Québec's path to sustainable development is based on a long-term vision, one that should make it possible for both current and future generations to benefit from equitable development conditions.

1.1 Emergence of the Québec institutional Framework

In 1991, a year before the United Nations Conference on Environment and Development (also called the Rio Summit), the Government of Québec (government) created an interdepartmental committee on sustainable development, also known as the CIDD. This structure provides a forum for exchanging information and promoting sustainable development. It fosters dialogue among government ministries and other bodies and the harmonization of their sustainable development initiatives.

At the conclusion of the 1992 Rio Summit, the Government of Québec embarked on the Agenda 21 comprehensive plan of action, as promised by the participants in that event, and, in 1997, published an assessment report.

Québec shares the objectives of the 2002 Johannesburg World Summit on Sustainable Development Plan of Implementation, which reiterates the commitments made in Rio in 1992 and clarifies the path towards sustainable development, to which governments recommitted. The sustainable development approach has been a priority for the government since that moment.

1.2 Legislative and strategic elements

In November 2004, the government began a major restructuring of its approach to sustainable development. It prepared a preliminary draft of the Sustainable Development Act and published Québec's Sustainable Development Plan Consultation Document, which established a sustainable development roadmap. Each project was submitted to a vast public consultation that expressed the government's focus on participation and transparency in its approach to sustainable development.

1.2.1 The Sustainable Development Act: the nature of the project and the roles and responsibilities of actors

Adopted unanimously by the National Assembly in the spring of 2006, the Sustainable Development Act empowered Québec to legislate on this matter. The Sustainable Development Act (L.R.Q., c.D-8.1.1) applies to all Government of Québec ministries and other bodies.

In addition, the Act established accountability mechanisms and the position of Sustainable Development Commissioner, a position that reports to the Auditor General of Québec. As guarantor of government transparency and accountability, the Sustainable Development Commissioner submits annual reports to the National Assembly on the application of the Sustainable Development Act by various government bodies, with respect to their specific responsibilities.

The Sustainable Development Act applies only to ministries and other government bodies. However, Section 4 provides that "The Government may determine as of what dates, according to what timetable and, if applicable, with what modifications one or more provisions of this Act [...]" also apply to municipal bodies and to health and social services and educational institutions.

The Sustainable Development Act

- Aims at establishing “a new management framework within the Administration, to ensure that powers and responsibilities are exercised in the pursuit of sustainable development.”
- Defines sustainable development for Québec, stressing long-term action and the inextricable nature of the various dimensions of sustainable development.
- Sets 16 principles (see Appendix II) that unify the three dimensions of sustainable development and on which ministries and other public bodies must rely when accomplishing structuring mandates.
- Defines the responsibilities of government entities, mandating the ministère du Développement durable, de l'Environnement et des Parcs (MDDEP) to coordinate government sustainable development efforts and foster respect for the principles of sustainable development within the Administration and by society as a whole, particularly as applied to the environment (L.R.Q., c.D-8.1.1).

1.2.2 The Government Sustainable Development Strategy

The Government Sustainable Development Strategy 2008-2013 forms the basis for government's sustainable development initiative framework, outlining objectives and the means required to achieve them. Through the Strategy, Québec confirmed its commitment to the objectives adopted at the Johannesburg World Summit on Sustainable Development (Johannesburg Summit) in 2002.

In Québec, the Sustainable Development Strategy was the subject of an on-line public consultation in 2007 and reviewed by a parliamentary committee. Citizens participated by submitting 185 briefs and opinions. The parliamentary committee heard presentations from 31 groups representing a variety of perspectives within Québec society. The Strategy was adopted in December 2007 and came into effect on January 1, 2008.

The Government Sustainable Development Strategy

Addresses three fundamental issues:

1. Knowledge development
2. Promotion of responsible action
3. Fostering commitment

Targets 9 directions and 29 objectives. Three of the nine directions are prioritized:

- Inform, raise awareness, educate, innovate (Direction 1)
- Produce and consume responsibly (Direction 3)
- Practice integrated, sustainable land use and development (Direction 6).

Each of the three priority directions involves a mandatory activity that ministries and other government bodies are required to contribute to through common actions.

THE GOVERNMENT'S APPROACH TO SUSTAINABLE DEVELOPMENT		
A legislative FRAMEWORK	The Sustainable Development Act	
	Definition	Sustainable development means development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is based on a long-term approach which takes into account the inextricable nature of the environmental, social and economic dimensions of development.
	Principles of sustainable development	Defined in the Act (see Appendix II)
An IMPLEMENTATION FRAMEWORK	The government's Sustainable Development Strategy	
	Vision	A society in which the citizens' quality of life is and remains a reality. A responsible, innovative society able to excel in all of its achievements. A society based on harmony between economic vitality, environmental quality and social equity. A society inspired by a State whose spirited and enlivened leadership leads it to reach this vision.
	Issues	<ul style="list-style-type: none">• Develop knowledge• Promote responsible action• Foster commitment
	9 strategic directions and 19 areas of intervention	
	29 objectives	
An IMPLEMENTATION MECHANISM	Action plans of the public service's departments and agencies	
MONITORING MEASURES	<ul style="list-style-type: none">• Sustainable development indicators• Annual reports• Sustainable Development Commissioner	

1.2.3 Government of Québec Action Plans in its departments and agencies

The institutional architecture of the government's approach to the sustainable development of Québec gives a central role to government bodies. Indeed, their actions can ensure that the objectives of the Strategy are met. The Sustainable Development Act enjoins them to prepare sustainable development action plans that include actions they envisage in order to contribute to the realization of the Strategy, as well as targets set and indicators of the measures they will take to monitor results. By the spring of 2009, more than 130 government organizations had adopted sustainable development action plans covering the time frame of the Strategy.

1.2.4 The principles of sustainable development

The 16 principles of sustainable development described in the Sustainable Development Act represent the core of the changes sought by the approach. Stemming from the 27 principles of the 1992 Rio Declaration on Environment and Development, they address the social, environmental and economic aspects of the question.

In order to achieve a higher level of integration of sustainable development in their spheres of action, government departments and other bodies must take across-the-board account of the principles and the framework in their various actions, especially as this relates to developing laws, policies, strategies, programmes and large-scale action plans as well as to activities that are ancillary to their sustainable development action plans.

This obligation requires, in line with each principle, assessing action taken so as to maximize positive effects and reduce negative effects, thereby fostering coherency of intra-organizational action as the process leads various bodies to higher levels of assessment cooperation, in order to align their actions more efficiently.

1.2.5 Québec's Agenda 21 For culture

Adopted in 2011 by the Government of Québec, Agenda 21 for culture is a framework of reference that establishes objectives that will enable Québec to make culture a major cross-sectional component of sustainable development, one that is anchored in its social, economic and environmental dimensions.

The adoption of this instrument by the Government of Québec reflects its undertakings that stem from its approval of the Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005, which requires that "Parties shall endeavour to integrate culture in their development policies at all levels for the creation of conditions conducive to sustainable development and, within this framework, foster aspects relating to the protection and promotion of the diversity of cultural expressions" (Article 13).

The implementation of Agenda 21 for culture includes a mandatory cultural component of all actualization of the government's Sustainable Development Strategy. The Agenda 21 for culture approach to development focusses on the significant role played by culture in the sustainable development of Québec society.

Agenda 21 

Culture
aujourd'hui
demain

agenda21c.gouv.qc.ca



1.3 The implementation process

To carry out its mandate of coordinating the government's sustainable development approach in the public administration, the MDDEP created the position of Assistant Deputy Minister of Sustainable Development, as well as a sustainable development coordination office, known as the BCDD, which takes action in a number of areas, including:

- The promotion of sustainable development within the public administration and throughout society
- The implementation of the Strategy both within the MDDEP and in the other government bodies
- Assessment and reporting mechanisms not within the purview of the Sustainable Development Commissioner

As soon as the Sustainable Development Act was adopted, the MDDEP began its efforts to promote and support coherency in actions taken by government bodies relating to the Strategy. It designed a series of coordination measures centered on strengthening the capacities of ministries and other government bodies to incorporate the principles of sustainable development into their spheres of activity, and on establishing a common culture. This approach initially saw the BCDD guiding ministries and other government bodies through the process of drafting and adopting their respective sustainable development action plans.

Clearly, the main areas of intervention advanced by the MDDEP under the aegis of the interdepartmental committee on sustainable development targeted the creation of a vast awareness and training program for public employees, the design of coaching tools to be used by ministries and other government bodies to implement the Strategy and the creation of interdepartmental structures for exchanging information and sharing experience.

1.3.1 A network of sustainable development officers in government ministries and bodies

A network of advisers (sustainable development officers) with a presence in each ministry and government body helps advance the implementation of the government's approach to sustainable development. The advisers energize the process by ensuring that information circulates in their place of work, thus connecting their organization with the government's approach to sustainable development. They are essential for ensuring coherency and for coordinating government action.

1.3.2 Staff training and awareness

Training and awareness are part of the Strategy's three "priority directions." To implement this, the interdepartmental committee adopted a training and awareness sustainable development plan, meant to support ministries and other government bodies as they move forward with efforts to translate the sustainable development approach into action.

Moreover, the BCDD organizes shared practices activities between ministries and other government bodies. The exchange of information relates to the successes, constraints and solutions found to overcome the latter, as well as to the instruments that are put in place to support harmonization of knowledge and coherency in the government's approach to sustainable development.

1.3.3 Coaching Tools

Guides

The development of specialized coaching tools is required by Section 11 of the Sustainable Development Act, which specifies that the first version of the Strategy must address "the development of tools or models for the design, determination and analysis of projects in terms of sustainable development, among other things to take into account all the principles of sustainable development or to implement approaches related to those principles, in particular concerning the life cycle of products and services."

The following tools have been designed by the MDDEP and tested and made available to ministries and other government bodies:

- Guide d'élaboration d'un Plan d'action de développement durable (guide to preparing a sustainable development action plan)
- Guide pour la prise en compte des principes de développement durable (guide to taking the principles of sustainable development into account)
- Guide pour un financement responsable (guide to responsible funding)
- Cadre de gestion environnementale « type » (sample environmental management framework)
- Guide sur l'organisation d'événements écoresponsables et ses aide-mémoire (guide to organizing ecoresponsible events and briefing papers)

The Sustainable Development Extranet

The Sustainable Development Extranet (Extranet DD) is a Web platform, established and managed by the BCDD, which is aimed at facilitating the dissemination and sharing of sustainable development information, experience and expertise among ministries and other government bodies. Presentations made at training and awareness sessions and information sharing activities, as well as CIDD documents and tools developed by the MDDEP and other ministries and government bodies, are posted on the Extranet DD, which is used for networking people involved in sustainable development measures within their respective organizations.

1.3.4 Dialogue structures and interdepartmental exchange of information

Under the auspices of the CIDD, the following dialog and coaching round tables were set up and are coordinated by the MDDEP and its government partners :

- Table d'accompagnement-conseil des organismes municipaux (coaching for municipal bodies)
- Table d'accompagnement-conseil des entreprises privées (coaching for the private sector)
- Table d'accompagnement du réseau de l'éducation (coaching for the education network)
- Comité national de développement durable du réseau de la santé et des services sociaux (national sustainable development committee for the health and social services network)
- Table de concertation sur les indicateurs de développement durable (dialogue table on sustainable development indicators)
- Table de concertation gouvernementale sur les pratiques d'acquisition écoresponsable (government dialogue table on ecoresponsible procurement practices)
- Table d'interaction du Forum des gestionnaires en ressources matérielles (FGRM-BCDD) (interaction table for the forum of material resources managers)
- Table de concertation gouvernementale sur les objectifs environnementaux nationaux (government dialog table on national environmental objectives)



- Table de concertation sur les systèmes de gestion environnementale (dialogue table on environmental management systems)
- Groupe de travail sur la gestion des événements écoresponsables (working group on managing ecoresponsible events)

These dialogue entities, where information is shared and exchanged, enable ministries and other government bodies to mutually enrich the practices they use to implement the Strategy and to coach their external partners, encouraging them to initiate their own sustainable development steps. These mechanisms are essential to the ongoing process of joint partner learning and for building initiatives. Thanks to the initial impetus provided by the Sustainable Development Act and the Strategy, the government's approach can now be seen as the outcome of stakeholder commitment and participation. Their innovations, the ways and means they define for applying sustainable development in their respective spheres, their mutual actions that extend to the entire public administration via the CIDD and other round tables and committees in which they take part, are more likely to generate successful approaches, for the simple reason that they will have had a hand in developing them.

1.3.5 Societal anchoring

Québec uses a variety of ways to ensure that society participates in the decision-making process in implementing its approach to sustainable development.

Stakeholders

The implementation of the government's sustainable development approach has benefited from the openness and sensitivity of Québec society to sustainable development questions.

Although the head of government is ultimately accountable for the approach to sustainable development, consultation and coordination with external partners are vital for ensuring the success of both the development and the implementation of the Strategy. It is through these exchanges that the approach can radiate throughout society. By developing tools for implementing the Strategy, the government not only sought to promote sharing of experience among ministries and other government bodies, but also, it aimed to establish anchor points that Québec society could relate to as a whole. The dialogue mechanisms (round tables and committees) made

it possible to create a process of exchange and sharing that included municipalities, the private sector and the health and social services and education networks. The process led to a higher level of understanding and supported the deployment of sustainable development throughout Québec.

In its Priority Direction 6, the Strategy envisages a coaching process for the main actors involved in local and regional dynamics.

These individuals are major actors in the dynamics of the societal sustainable development approach to land use and planning. However, inasmuch as the sustainable development approach involves across-the-board action on its social, environmental and economic dimensions, an ever-greater integrated approach is called for, based not just on the accumulation of joint practices in areas such as employment, natural resources and economic efficiency, but rather as part of an overall action plan or sustainable development policy, and incorporated into commonly used tools such as strategic planning. Well-known models are sometimes referenced, such as local Agenda 21 plans, Brundtland green schools, the Global Reporting Initiative, Smart Growth, ISO26000, etc.

The government took on the role of fostering these sustainable development initiatives as much as possible, based on its own capabilities, and encouraged these actors to commit to sustainable development. Awareness and training strategies, pilot projects and guides have all been used by various ministries and government bodies for this type of clientele, in ways that support national sustainable development coherency through joint training related to projects that are well-anchored in society.

Many organizations invest both time and money in measures that are in line with the objectives of the government's Sustainable Development Strategy and with the principles of sustainable development. For example, the *Stratégie pour assurer l'occupation et la vitalité des territoires* (land occupancy and vitality)¹ was designed in the spirit of the Sustainable Development Act and the Government Strategy.

1 Ministère des Affaires municipales, des Régions et de l'Occupation du territoire (2011). *Nos territoires : Y habiter et en vivre!*, www.mamrot.gouv.qc.ca/pub/occupation_territoire/strategie_occupation.pdf.

Bureau d'audiences publiques sur l'environnement (office of public hearings on the environment)

Since 1978, Québec has used the Bureau d'audiences publiques sur l'environnement, or BAPE², as a mechanism for consulting the public and informing it about environmental issues and projects. The Minister of Sustainable Development, Environment and Parks is responsible for this body. The BAPE holds public hearings, during which citizens can intervene in the project authorization process and express their points of view. It also issues publicly available reports on its hearings and investigations.

Since the adoption of the Sustainable Development Act and the Strategy, the BAPE systematically takes the 16 principles of sustainable development into account in its administration processes and its analyses of projects submitted for consideration. The BAPE thus fosters the growth of a culture of sustainable development above and beyond the government apparatus, while ensuring coherency with the government's approach.



2 www.bape.gouv.qc.ca/sections/documentation/Rap_annuel_2010-2011.pdf

1.4 Assessment and reporting mechanisms

Envisaged by the Sustainable Development Act and framed by the Strategy, the assessment and reporting mechanisms respect the spirit of Paragraph 163 of the Johannesburg Plan of Implementation, which requires that “All countries should strengthen governmental institutions, including by providing necessary infrastructure and by promoting transparency, accountability [...]”.

1.4.1 Québec’s system of sustainable development indicators

Section 12 of the Sustainable Development Act provides as follows : “Not later than one year after the end of the year in which the strategy is adopted, the Minister of Sustainable Development, Environment and Parks submits to the Government for adoption a first list of sustainable development indicators designed to monitor and measure progress in Québec in the area of sustainable development³.” In 2009, the government prepared the “first list of sustainable development indicators,” which was subjected to public consultation in a parliamentary committee. This list is part of a three-level system of indicators.

Level 1 indicators : Sustainable development Indicators that measure the sustainable development progress of Québec society

Level 1 indicators are capital-based, as recommended by the Working Group on Statistics for Sustainable Development⁴ in its report entitled *Measuring Sustainable Development*⁵. Capital can be seen as “stocks of wealth” that are available to society. According to this approach, society collectively owns a stock of wealth (its capital), which is necessary for the wellbeing of its members. Such stocks constitute a long-term legacy for future generations and provide reserves of resources that make it possible for current generations to ensure their own wellbeing. This approach should make it possible to understand and follow variations in five categories of capital that Québec society holds over time: human capital, social

capital, produced capital, financial capital and natural capital (see Appendix III).

After a public consultation held by parliamentary committee, the First list of sustainable development indicators designed to monitor and measure progress in Québec in the area of sustainable development was adopted in December 2009. This list comprises a total of 20 indicators that cover the five categories of capital.

Level 2 indicators: Monitoring the government’s Sustainable Development Strategy

A total of 87 Level 2 indicators serve to measure the level reached or progress made with respect to the 29 objectives of the Strategy. Nearly half of these indicators relate to the three priority directions of the Strategy.

Level 3 indicators: Monitoring the sustainable development actions of ministries and other government bodies

Ministries and government bodies are required to use Level 3 indicators to monitor actions laid out in their respective sustainable development action plans. Nearly 1,600 indicators were listed in the action plans that have been made public by various ministries and government bodies so far. Each ministry or organization is responsible for developing and monitoring the indicators used in its action plan.

3 The Sustainable Development Act (Article 12)

4 Group of Nations Economic Commission for Europe, Organization for Economic Cooperation and Development and Eurostat

5 United Nations (2008), *Measuring Sustainable Development*, www.oecd.org/dataoecd/30/20/41414440.pdf

Sustainable development action plan indicators (1557)	Strategy monitoring indicators (87)	Capital-based sustainable development indicators (20)
Ministries and other government bodies	The Government Strategy	Society
Annual management or activity reports prepared by ministries and other government bodies	Periodic reports on the implementation of the Strategy 2013 report to the Québec National Assembly	Progress report on sustainable development in Québec Periodic reports (starting in 2013)

1.4.2 Institutional responsibilities

Reporting represents a challenge for the government, its ministries and other bodies, the MDDEP itself and the Sustainable Development Commissioner, who reports to the Auditor General of Québec. The Sustainable Development Act organizes these responsibilities in the following way :

The government : Adopts the Strategy and indicators.

The Premier : Tables the Strategy and its amendments and reports on the implementation of the Sustainable Development Act to the National Assembly.

The MDDEP :

- Coordinates the development and renewal of the Strategy, as well as amendments made to it and sustainable development indicators
- Prepares and submits a report to the government on the implementation of the Strategy at five-year intervals
- Reports to the government on the application of the Sustainable Development Act in 2013, and thereafter, every ten years

Each government department, agency and enterprise in the Administration :

- Develops and makes public an action plan, which lays out specific objectives that comply with the Strategy and which are meant to contribute to its progressive implementation, as well as activities or interventions that are envisaged for this purpose, directly or in collaboration with one or more of society's stakeholders
- Provides the MDDEP with the information it needs for developing, amending or reporting on the implementation of the Sustainable Development Strategy, including indicators and/or other monitoring and reporting mechanisms
- Under a separate section of its annual report, mention the objectives it had set in keeping with those of the strategy, in order to contribute to sustainable development and the progressive implementation of the strategy or, if applicable, the reasons why no specific objective was identified for the year given the content of the strategy adopted; the various activities or interventions aimed at achieving those objectives which it successfully carried out or failed to carry out during the year, the degree to which target results were achieved, the sustainable development indicators and other monitoring mechanisms or means used; and if applicable, the measures taken following comments or recommendations by the Sustainable Development Commissioner.

The Sustainable Development Commissioner (reporting to the Auditor General of Québec) :

At least annually, prepares a report containing observations and recommendations with respect to the application of the Sustainable Development Act; results of audits and investigations in the area of sustainable development; comments about the principles, the procedures and other means employed by the Administration in the area of sustainable development within the meaning of the Sustainable Development Act, as well as by other organizations and institutions that are subject to the Act. This report must be included in the annual or special report submitted to the National Assembly.

Institut de la statistique du Québec:

Collects, produces and disseminates statistical data that is necessary for the preparation and monitoring of the Government Sustainable Development Strategy, including information needed for sustainable development indicators and for the preparation of reports that are stipulated in the Sustainable Development Act (D-8.1.1).

1.5 Convergence with international frames of reference

Québec took part in the great majority of the foundational international events that have marked the evolution of sustainable development since the first Earth Summit was held in 1972. More recently, the elements of the sustainable development approach that were selected and adopted by the Government of Québec dovetail with the Johannesburg Plan of Implementation that was adopted at the time of the 2002 Johannesburg World Summit on Sustainable Development, among which are the following :

- A coherent and coordinated sustainable development approach within the Public administration through the creation of the institutions and mechanisms required to develop, coordinate and implement the government's sustainable development approach and to apply the Sustainable Development Act
- The development, implementation and evaluation of the Strategy. The Johannesburg Plan of Implementation invited governments to set up national sustainable development strategies, a process that requires permanent training programs
- Adoption of the Sustainable Development Act
- Transparency in decision-making, by requiring the government to report to the National Assembly, and requiring the Sustainable Development Commissioner to submit annual public reports to the same body
- Citizen participation in the decision-making process through sustainable development consultations organized by the MDDEP, and, with regard to other sectors, by the BAPE
- The creation of sustainable development coordination structures that encourage stakeholder participation, through the creation of a sustainable development directorate and the BCDD, in order to ensure interdepartmental coordination of the approach to sustainable development; the role of the CIDD as a structure that promotes information exchange on sustainable development and fosters dialog between government ministries and other bodies and the harmonization of their sustainable development actions. The coaching round tables and stakeholder information exchange committees are in line with the same perspective on societal coherency

The foregoing foster the coherency and integration of economic, social and environmental policies as well as monitoring, accountability, participation and strengthening of national and local capabilities at every level. They also contribute to improving and strengthening the institutional framework of sustainable development as affirmed in the Secretary-General's Report on Objectives and Themes of the United Nations Conference to the RIO + 20 preparatory committee (A/CONF.216/PC/7).

In addition, from an operational point of view, the government's Sustainable Development Strategy follows the spirit of the principles espoused by the Organisation for Economic Co-operation and Development, to which sustainable development strategies must adhere. These essential principles include a long term vision, integration of the three dimensions of sustainable development, a commitment at the highest levels of government, the search for a political consensus, a participatory approach and taking the planning of the use of existing resources into account.

The Strategy also reflects the approach recommended by the Organisation internationale de la Francophonie in its document, *Stratégie nationale de développement durable - Guide d'élaboration d'une SNDD*. Among the points of convergence are the institutional and legal framework, defining priority directions tied to objectives and deadlines, preparing action plans and setting up monitoring and assessment mechanisms.

The Government of Québec's sustainable development approach thus complies with the principal international frames of reference for sustainable development. This is a relevant criterion for establishing comparisons with, and models based on, other national approaches. Since Québec wants to ensure that its actions are convergent with the main international trends, it plays an active role in various international entities, sharing its experience and contributing to the international institutional sustainable development framework. This is notably the case with respect to the Organisation internationale de la Francophonie and the Network of Regional Governments for Sustainable Development.

1.6 Lessons that can be learned from the sustainable development approach

It is still early days with respect to the lessons that can be learned from the implementation of the Québec approach to sustainable development. As envisaged by the Sustainable Development Act, the effective assessment will take place 2015. Still, the experience of the last three years makes it possible to gain perspective on the main challenges and to arrive at some conclusions.

It is already clear that government organizations are working on this. The commitments made in sustainable development action plans demonstrate that the movement is well under way within the public administration. For example, various ministries and government bodies have adopted and publicly announced their sustainable development action plans, which together include nearly 1,200 action points and 1,600 indicators.

1.6.1 Challenges

Putting the sustainable development approach in place throughout the apparatus of state requires overcoming a number of challenges that are related as much to government coordination as to operational implementation within ministries and other government bodies. Coordination and implementation are the two preferred ways of integrating sustainable development into the daily workflow of the various government ministries and other bodies. Although a certain level of constraint is necessary, it is largely preferable to choose the path of sustainable development awareness, demonstration and training to ensure that government employees "buy into" the concept. And yet, the large-scale challenges are many, and include the following :

- Promoting the Strategy within ministries and other government bodies and making them aware of the importance of implementing it, not for the purposes of accountability, but rather for its benefits to the organization itself
- Establishing a culture of sharing and interdepartmental dialogue that fosters motivation, mutual learning and innovation

- Growing and harmonizing knowledge of the Sustainable Development Act and the Strategy among a significant number of organizations (more than 130 ministries and other government bodies) that together employ nearly 130,000 people
- Encouraging ministries and other government bodies to familiarize themselves with the use of the coaching tools placed at their disposal (guides, environmental management templates, data sheets, etc.)
- Coordinating the accountability process by ensuring coherency in assessing sustainable development objectives and action plans, with particular reference to the objectives of the Strategy
- Ensuring that the sustainable development approach evolves to embrace challenges that emerge over time (for example, steps are being taken currently to integrate culture into the Strategy in more tangible ways)

In addition, the implementation of various challenges is handled more efficiently at the ministerial level, for example:

- Energizing managers and staff with respect to the development and implementation of sustainable development action plans
- Promoting the cross-sectional aspect of the approach, so that it is not perceived as just one more file to be added to the pile, but rather as a sea change in the way things are done that requires commitment on everyone's part. As stated in Section 1 of the Sustainable Development Act, this is a "new management framework within the Administration to ensure that powers and responsibilities are exercised in the pursuit of sustainable development."
- Systematic understanding, interpreting and taking account of the 16 principles of sustainable development in departmental activities.

The greater challenge is to inspire the organizations of civil society to base their own actions on the government's approach to sustainable development.

It is also essential that leaders of the government's approach maintain their efforts at harmonizing practices with the steps taken by municipal bodies, educational and health and social services institutions, private enterprise and individual citizens. These actors often have a wealth of sustainable development experience and are able to offer knowledgeable suggestions and serve as resources for the sustainable development approach, helping to make it a true societal project, one that is respectful of society's values and aspirations.

1.6.2 Lessons to be learned

At this stage of development, lessons can be learned that can guide us through to the end of the Strategy's period of application and serve to support the work to be done, such as :

- The importance of being able to count on the government's sustainable development approach being rooted in a solid foundation that is itself based on the Sustainable Development Act
- The shared conceptual framework, provided by the 16 principles of sustainable development set out in the Sustainable Development Act, which constitutes a common marker for ministries and other government bodies, making it possible to constrain the restrictive vision of sustainable development—which is traditionally associated only with the environment. Indeed, whenever an action is distinctly identified as a sustainable development activity, it is necessary to demonstrate that the 16 principles of sustainable development have been taken into account
- The strengthening of employee capability through appropriate training and the use of tools remains a necessity if we are to foster the autonomy and the sustainable accountability of ministries and other government bodies in implementing the Sustainable Development Act and the Strategy. In the absence of sufficient appropriate knowledge, some ministries and other government bodies could hire external consultants to fill the gaps
- Staff participation and adherence should never be seen as a sure thing. Maintaining sustainable development training and awareness activities remains essential, especially when staff turnover is considered
- Activities that promote sharing information and knowledge among ministries and other government bodies can be seen as catalysts in the process of implementing the sustainable development approach, by enabling an emulation effect among individuals and organizations.

1.7 Conclusion

The Québec public administration is determined to implement the government's approach to sustainable development. The experience of three last years demonstrates this determination and shows that the approach is already under way in government departments and other bodies. The pace needs to be maintained in order to ensure that the culture of sustainable development continues to take root within the various organizations based on the new management framework that stems from the Sustainable Development Act. Training, awareness and experience-sharing activities support the acquisition of knowledge and the establishment of a common culture of sustainable development, while the utilisation and development of tools are meant to ensure the coherency of actions taken and in so doing, and, ensure that the objectives of the Strategy are achieved.

Seen from the perspective of continuous improvement, this is an evolutionary approach during which adjustments are made on the basis of lessons learned from acquired experience and commonality of training.

The institutional framework for the sustainable development of Québec is an interesting case study that is worth sharing with other governments in the context of the Rio+20 United Nations Conference on Sustainable Development.



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2 THE DEVELOPMENT OF A GREEN ECONOMY IN QUÉBEC



The green economy in the context of the sustainable development of Québec

Executive summary

Numerous challenges we face, including environmental protection, the fight against climate change and the intelligent management of natural resources and residual materials, require us to innovate by rethinking the ways our societies produce and consume. The transition towards a green economy can be seized on as an opportunity to support the development of certain strategic sectors of the economy and to create jobs, but especially as an opportunity to better align the economy along the environmental and social principles of sustainable development. The driving force of this transition needs to be concern for improving human wellbeing. This report first proposes a definition of this concept based on the one suggested by the United Nations Environment Programme (UNEP) and its application in the Québec context.

Several large-scale government measures (laws, regulations, policies, strategies, programs, action plans and activities) are moving the development of the green economy in Québec forward, bringing with them the emergence of a wide variety of initiatives throughout our society. The principal measures taken by the Government of Québec are presented briefly, and illustrate the means used to foster this movement. Some of these measures are described more fully in descriptive sheets that comprise Part 3 of this report.

Many government actions and initiatives relate to the strategic sectors of Québec's economy, such as energy, forest and natural resource management, agri-food and manufacturing, and are based on essential vectors of development like infrastructure and buildings, transport, residual materials management, research and development and land and resource planning.

A great number of the paths for action chosen by the Government of Québec are aimed at enhancing the protection of resources (soil, water and air), preserving biodiversity and, especially, fighting climate change by reducing greenhouse gas emissions.

Taken as a whole, these measures contribute to the collective enrichment of the population and, in this sense, fall within the framework of the green economy that seeks to improve human wellbeing and social equity while significantly reducing environmental dangers and the depletion of resources.

2.1 The development of a green economy in Québec

The objectives of the Rio+20 Conference are to renew political commitment to sustainable development, evaluate progress made and the time still needed with respect to the implementation of the commitments made at the Rio de Janeiro and Johannesburg summits, and to define the ways and means of rising to meet emergent challenges.

In its Keeping Track of Our Changing Environment: From Rio to Rio+20 (2011) report, the United Nations Environment Program (UNEP) describes the environmental, social and economic changes that have taken place since 1992. The report concludes that pressures exerted on the environment by economic activity are engendering the risk of exhausting non-renewable natural resources and causing air, water and soil pollution, with attendant repercussions on the climate and acceleration of the impoverishment of biological diversity. This affects human health and the wellbeing of the population. These environmental problems in turn exert pressure on the economic system and can require, in the long run, costly investments. Moreover, the development of emerging countries and their concomitant population growth and wish to raise consumption to ever-higher levels accentuates these pressures. Lastly, much iniquity remains both in the North and the South with respect to wealth distribution, which places large numbers of people in a precarious situation.

The current economic model generates major environmental and social problems. The efforts that are needed to overcome these problems also provide an opportunity to innovate by rethinking the ways societies produce and consume. This is the context in which the green economy attracts interest as a tool for sustainable development.

As a concept that sits astride the crossroads of the environment and the economy, the green economy aims to reduce environmental damage caused by modes of production and consumption. Far from replacing the concept of sustainable development, the green economy can be a doorway to incorporate sustainable development issues into the economic model and, more precisely, corporate business strategies.

In this sense, large numbers of government and civil society representatives agree that it is important to situate the green economy within the sustainable development umbrella, so that the measures taken can contribute to strengthening the fabric of society, increasing the vitality of the land and reducing inequality. The driving force in the transition to a green economy must be concern for improving the wellbeing of the population and workers.

Elements of a definition of the green economy

An economy that contributes to sustainable development by improving human wellbeing and social equity, while significantly reducing environmental risks and the depletion of resources⁶

More precisely, the green economy can be described as one that is low in carbon emissions and frugal in its management of resources. It is founded on the recognition of the importance of natural capital as a factor of collective wealth. The green economy protects and sustains biological diversity, recognizing the economic and social value of the environment and that the conservation of air, water, soil and forest resources provides inestimable services that meet fundamental human needs and ensure economic prosperity. Lastly, the green economy is socially responsible and facilitates social inclusion by pursuing goals of equity and solidarity.

The green economy focuses on innovation, technological development, green goods and services and, more precisely, on the growth of sectors of the economy such as renewable energy. The transition towards this model can be seen as a way of stimulating economic activity and job creation by developing new products and processes and reaching new markets.

6 Adapted from: Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication – A Synthesis for Policy Makers. United Nations Environment Program, 2011.

Principal sectors and endeavours associated with the development with the green economy

- Fighting climate change and adapting to it; reducing air pollution
- Energy efficiency and renewable energy
- Ecodesign of goods and services and ecoefficiency of the production process
- Sustainable management of residual materials
- Green buildings
- Zero carbon transport and sustainable mobility
- Sustainable agriculture and fisheries
- Conservation and sustainable management of biodiversity, water, forest and soil
- Sustainable tourism
- Green training and employment
- Ecological accounting tools and green financial mechanisms

While some areas are considered as priorities due to their strong growth potential, economic activity in its entirety is the focus here, and through a domino effect, it is hoped that green technologies and new business models will displace older ones and that innovative goods and services can also be marketed through traditional channels.

The activities of social enterprises that result from the mobilization of local and regional government bodies and which are often associated with the social economy, could certainly contribute to the development of the green economy and the strengthening of the social fabric by contributing to improving environmental protection.

Lastly, it is worthwhile remembering that there is no single approach to transitioning to a green economy. Each region or country has its own environmental balance sheet, economic and social fabric and unique institutional framework. Still, in each case, rising to this challenge requires mobilizing the majority of society's actors: companies, citizens, consumers, researchers and decision-makers.

2.2 The green economy in Québec

Québec has many assets that can be used to build a green economy, among which are a modern economy that is diversified and open to the world, a skilled labour force, well-supported innovation processes and tools that foster the sustainable development of companies.

For example, the ministère du Développement économique, de l'Innovation et de l'Exportation estimated in 2004 that the environment and green technology industry had revenues of 3.5 B\$ CAD, exports of 298 M\$ CAD and had created 34,300 jobs. Moreover, Québec can count on its world-scale engineering firms and a well-developed public research and development infrastructure.

Based on its knowledge of these powerful assets, Québec has initiated many policies, strategies and action plans aimed at fostering the development of green sectors by supporting research and development and by promoting green private or public investment through awareness and training programs for various client groups within society. In so doing, Québec has invested in achieving the objectives that were set at the 1992 Rio Summit, and in particular, those that are defined in the following documents:

- Statement of Principles for the Sustainable Management of Forests
- Convention on Biological Diversity
- United Nations Framework Convention on Climate Change

Some of the measures that have been put in place incorporate means to fight poverty. Over the years, the Government of Québec has also encouraged the exchange of technology and expertise with other countries. However, much remains to be achieved in these areas. One of the main challenges faced by Québec is how to create conditions that are favorable to the establishment of an entrepreneurial culture centered on sustainable development.

The discussions that will take place at the Rio+20 Conference need to clarify the means for intervening to facilitate the transition to this economic model. The meeting is an opportunity to exchange information on best practices in efforts to reach this goal. It is in this perspective that, with this report, the Government of Québec presents the principal paths of action that are used in Québec to foster sustainable development and, more precisely, the emergence of a green economy.



Photo : Rock Thérioux, Ministère des Ressources naturelles et de la Faune

2.2.1 The green economy and the government's approach to sustainable development in Québec

Far from being perceived as a constraint that burdens the economy, environmental protection needs to be seen as an opportunity for business, growth and employment. Public authorities have a central role to play in fostering this movement and managing the transition. In Québec, the Sustainable Development Act is the basis for this shift.

The approach adopted by the government emphasizes commitment and synergy of action by supporting the incorporation of the principles and the challenges of sustainable development into its decision-making processes and into new laws, policies, strategies and government programs. In so doing, it positions the environment as cross-sectional within the public Administration.

The Québec approach also engenders favorable conditions by promoting the values of sustainable development to individual citizens throughout Québec and to its partners and the clientele served by the public Administration.

The principles of sustainable development: a decision-making tool that fosters the transition to a green economy

Used as a decision-making tool, these principles (see the definitions in Appendix II) lead ministries and other government bodies to consider environmental, economic and social challenges in their actions.

This approach contributes to the achievement of one of the objectives of the United Nations Millennium Declaration: incorporating the precepts of sustainable development into government policies and programs in order to reverse the trend of depleting environmental resources. It supports incorporating concerns relating to equity and social solidarity during the development of measures in the particular field that is the green economy.

The principles of sustainable development are as follows:

- Environmental protection
- Safeguarding biodiversity
- Respecting ecosystem support capacity
- Economic efficiency
- Responsible production and consumption
- Internalization of costs
- Polluter pays
- Access to knowledge
- Participation and commitment
- Subsidiarity
- Partnership and intergovernmental co-operation
- Health and quality of life
- Social equity and solidarity
- Prevention
- Precaution
- Protection of cultural heritage

These principles are inspired by the 27 principles of the Rio Declaration (1992) and follow a major public consultation in Québec.

2.2.2 Government Sustainable Development Strategy 2008-2013: an across-the-board program for intervention within the Québec public Administration

The Government Sustainable Development Strategy 2008-2013 defines common objectives for all of its ministries and other bodies. Many of the objectives of this strategy help the transition to a green economy, and as a consequence, the entire public Administration of Québec benefits. This approach has made it possible to elicit initiatives in various sectors that are not directly associated with the green economy.

Examples of objectives of the Government Sustainable Development Strategy that contribute to the development of a green economy

- Support research and new practices and technologies that contribute to sustainable development
- Introduce environmental management measures and an ecoresponsible procurement policy throughout all government ministries and other bodies
- Reduce the amounts of energy, natural resources and materials used to produce and market goods and services
- Increase the share of renewable energies that have less impact on the environment in Québec's energy balance sheet
- Make ecoconditionality and social responsibility more widespread in public assistance programs and cause financial institutions to include them in their programs
- Provide consumers with benchmarks for making enlightened and responsible consumption choices and support certification of products and services as needed
- Support the use of fiscal and non-fiscal economic incentives to define the production and consumption of products and services from the perspective of sustainable development
- Use ecologically and socially responsible measures to increase productivity and job quality
- Protect and sustain the natural heritage and the value of natural resources while respecting ecosystem support capacity
- Intensify co-operation on integrated sustainable development projects with national and international partners

In accordance with their respective missions, government ministries and other bodies have included measures contributing to the development of new products or new business models in their sustainable development action plans. Among these measures is a coaching and advisory round table for the private sector. Chaired by the ministère du Développement économique, de l'Innovation et de l'Exportation and the minis-

tère du Développement durable, de l'Environnement et des Parcs, this round table is mandated to assist Québec companies move forward on the path to sustainable development. The government bodies that sit at the table combine their resources, expertise and networks to help achieve this goal⁷.

7 For more about this Government of Québec initiative, go to www2.gouv.qc.ca/entreprises/portail/quebec/developpementdurable?lang=fr&d=developpementSustainable&e=2944718307.

2.2.3 Indicators to support the measurement of sustainable development in Québec and assess the state of its natural capital

Québec has a system of sustainable development indicators at its disposal. The approach that was selected, based on passing on capital to future generations, aims at measuring the sustainable nature of development in Québec.

The sustainable development indicators reflect the effects of human activities and government policies and strategies on five types of capital: human, social, produced, financial and natural. Natural capital corresponds to natural resources, the soil and ecosystems. Six dimensions were selected for monitoring purposes: biodiversity, agricultural and sugar maple lands under cultivation, forests, ground water and the quality of the air and the climate.

Within the framework of the transition to a green economy, Québec is considering the possibility of establishing new indicators. Finally, the government will continue to reflect on how “ecosystem accounting” can be used to measure and monitor changes in natural capital. To that end, in 2011, the Institut de la statistique du Québec published a document on ecosystem accounting entitled *Comptes des écosystèmes : cadre conceptuel et exemples d'application* that reported on the state of our knowledge on ecosystem accounting.



2.3 Paths For action and initiatives that contribute to the transition to a green economy in Québec

The following sub-sections present the principal paths for action used by the Government of Québec to support the development and adoption of green economic practices in selected strategic sectors.

Many of these sectors are fundamental to the economy of Québec, including forest management, energy, agriculture and the agri-food and manufacturing sectors. All offer development opportunities for Québec and, through the use of vectors of innovation such as infrastructure and buildings, transport, residual materials management, research and development, land planning and resource utilisation, they are essential to the transition to a green economy.

The social economy, and activities engaged in by social enterprises that result from collective community mobilization, when they contribute to environmental protection, undoubtedly contribute to the development of the green economy.

However, change cannot succeed unless the economy also shifts gears in the areas of finance, investment and new product marketing.

Finally, the gradual transformation of these sectors must lead to the sustainable management of natural resources and the preservation of biodiversity, and be based on a firm will to fight climate change while contributing to the wellbeing and wealth of the population.

The section which follows does not present an exhaustive picture of the action that has been taken in this area, but rather an overview of the tools that the Government of Québec uses to support the growth of the green economy within the framework of sustainable development.

2.3.1 Strengthening and applying legislation that supports the development of the green economy

The Government of Québec already applies a number of laws that contribute to the growth of the green economy, while others are being amended to follow suit. The following are examples of these laws and regulations:

- The **Sustainable Forest Development Act** (2010) profoundly changes forestry in Québec, making the ministère des Ressources naturelles et de la Faune responsible for the sustainable development and management of forests in lands in the domain of the State. The new forest policy is aimed at establishing ecosystem-based development practices, in order to ensure the sustainability of this heritage. The Act supports integrated management of the land and its resources, and sets out provisions that are specific to the aboriginal communities. By the end of 2010, approximately 28.7 million hectares of managed Québec forests (76% of total public and private productive forest areas) were certified by at least one of the three systems of forest certification: CSA, FSC or SFI.

For more on Québec's sustainable forest management, see the fact sheet at the end of this report.

- Since 2011, the Government of Québec had added a new **ecoconditionality requirement to its main agricultural support programs**. To qualify under these programs, farm operators must submit annual regulatory phosphorous reports that show that land under cultivation corresponds to the total required surface area used spreading mineral fertilizers or organic manure.
- The **Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection** (2009) confirms the legal status of water as a collective resource. Water is central to the social and economic development of Québec. This law provides Québec with the legislative tools it needs to express the ecological, patrimonial, cultural and economic value of water. The Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection contains various provisions that prohibit water being diverted from the Great Lakes and St. Lawrence River watershed, enforces prudent management of water withdrawal within the confines of the basin and provides for improved acquisition of knowledge on groundwater in Québec.



Photo : Rock Thérioux, Ministère des Ressources naturelles et de la Faune

- In 2008, Québec became a member of the Western Climate Initiative (WCI), a grouping of North American governments that work together on **implementing an operational GHG cap-and-trade system for selected heavy industrial emitters**. In 2009, the National Assembly adopted a law empowering the government to set up a carbon market. In 2011, the Cabinet adopted a regulation to enable Québec to join the WCI carbon market by January 1, 2012. The implementation of this system will help Québec reach its 2020 target for GHG emission reductions, which is 20% below the 1990 level.

For more on Québec's cap-and-trade GHG initiatives, see the fact sheet at the end of this report.

- The **Act Respecting Contracting by Public Bodies**, revised in 2008, now provides public sector purchasers with the possibility of incorporating sustainable development and environment specifications into their RFPs, while ensuring that public contracts are open to all. Considering the total value of Québec public contracts, the amended law is a lever that can influence the evolution of modes of production and help to ensure that products, goods and services provided are more environment-friendly, more ethical and innovative with regard to their social and economic aspects. The new version of the law constitutes a contribution by Québec to the Marrakech Process on sustainable consumption and production.

- **Règlement sur la récupération et la valorisation de produits par les entreprises** (2009) applies a broader approach to producer responsibility. It is intended to reduce the volumes of residual materials sent for disposal by making companies accountable for the recovery and reclamation of their products. This supports the evolution towards product design that is more environment-friendly. The Regulation provides for companies that produce or distribute lamps that contain mercury, batteries and electronic products to be responsible for their residual materials at the end of their useful life, and defines expected results and eventual financial penalties when objectives are not reached. This new regulation will henceforth oversee all applications of broader producer responsibility in Québec.

2.3.2 Establishing and implementing policies, strategies and action plans that are instrumental to the green economy

A variety of oversight measures contribute to the development of the green economy in Québec. Some of these measures (policies, strategies and action plans) were established to enhance the synergy of interventions by actors in the public and private sectors in related fields. The following are the principal action paths used in Québec, as well as a selection of current initiatives:

Adoption of policies, strategies and action plans

- The **Plan Nord**⁸, one of the largest economic, social and environmental development projects in Québec history, will be rolled out over the next 25 years. The project is unique due its size and our will to establish a balance between development projects and conservation of the natural and cultural heritage here, based on an inclusive process. Northern communities have been closely involved in developing the Plan Nord, and the government wants them to be present throughout all phases of its implementation. The first Plan Nord Action Plan runs from



Photo : David Rouault

2011 to 2016. Total investment over five years in planned to rise to some 1,625 M\$ CAD. The action plan includes infrastructure investments of about 1,200 M\$ CAD in the areas of transport, housing, health, education and culture, as well as for creating of parks and protected areas, plus expenditures of 382 M\$ CAD for primarily social measures for housing and health services and to reduce the cost of transport and education. The development of the North and the improvement of the quality of life of its inhabitants are closely linked. In addition, a budgetary envelope of 500 M\$ CAD will enable the government to take equity positions in projects and ensure that all of society benefits from the development of Québec's northern riches.

For more about the Plan Nord, see the fact sheet at the end of this report.

- The **Québec Strategy for Drinking Water Conservation** (2011) is instrumental to the emergence of the green economy. It 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. The Strategy also applies the principle of ecoconditionality to grants.

For more on the Québec Strategy for Drinking Water Conservation, see the fact sheet at the end of this report.

- The **Québec Residual Materials Management Policy** (2011) affirms as its fundamental objective, that the "main goal is for end waste to be the only residual material sent for disposal in Québec". By means of its 2011-2015 action plan, the policy aims to: 1) reduce the quantity of residual materials sent for disposal; 2) increase recycling of various materials; 3) improve management of construction residues. The ways and means envisaged to achieve these goals are diverse and run from grant programs to the adoption of laws and regulations.

For more on the Québec Residual Materials Management Policy, see the fact sheet at the end of this report.

- The **2006-2012 Climate Change Action Plan** aims to reduce greenhouse gas emissions (GHG) to 6% below 1990 levels by 2012. The total budget of this action plan, 1.55 B\$ CAD, funds 26 measures. The next action plan will run from 2013 to 2020. It aims at reaching the ambitious target of reducing GHG emissions to 20% below 1990 levels by 2020.

For more on the Climate Change Action Plan, see the fact sheet at the end of this report.

The concept of synergy enters into government strategic documents

- In the **energy production** sector, Québec has invested in renewable energy sources for many decades. Indeed, more than 97% of the electricity produced in Québec is renewable, mainly hydroelectric. Based on its enviable situation, **Québec will continue to make hydroelectricity** the centrepiece of its energy strategy, with a production target of 4,500 MW by 2015 and 3,000 additional MW envisaged in the Plan Nord by 2035; **wind turbine energy** will also play its part, with a target of 4,000 MW of electricity on stream by 2015. In addition, Québec has taken various measures in support of **bioenergy** production and to improve its environmental performance, including tax credits for the production of ethanol and cellulose ethanol. Québec also inaugurated a programme for purchasing electricity from cogeneration power stations that use residual forest biomass. Finally, the government will invest 7 M\$ CAD in operational solar energy pilot projects. These projects provide a technological window on evolving knowledge about solar energy production in the commercial, institutional and industrial sectors. These objectives, which stem from the **Québec Energy Strategy 2006-2015**, help achieve the greenhouse gas emission reduction target set out in the **2006-2012 Climate Change Action Plan**.

- In 2006, the Government of Québec unveiled the **Québec Public Transit Policy–Better Choices for Citizens**. With this policy, the government aims at increasing the use of public transit throughout Québec, both in urban and rural settings. More precisely, the government has set as its target, an increase of 8% in public transit traffic by 2012. Four means were implemented to reach this goal: 1) The role of municipalities as primary public transit authorities was confirmed; 2) Improvements were made to the offering and the quality of services provided to users; 3) Infrastructures were upgraded and equipment added; 4) Alternatives to automobile transport were provided. By implementing these means, the public transit service offering has so far increased by 21%, exceeding the initial objective of 16%. This policy, and the 2006-2012 Climate Change Action Plan, share the objective of reducing greenhouse gas emissions in Québec, providing another example of synergy between two strategic documents.

For more on the Québec Public Transit Policy, see the fact sheet at the end of this report.



Photo : Ministère des Transports

Québec disposed of 6.7 million metric tons of residual materials in 2006, mainly by landfilling. Biogas produced by the anaerobic (no oxygen) decomposition of organic matter is a major contributor of methane, which is a greenhouse gas considered 21 times more detrimental to the environment than carbon dioxide, due to its contribution to the greenhouse effect. The Government of Québec's **Programme Biogaz** provides funding for capturing biogas produced at landfill sites in order to reduce greenhouse gas emissions and develop their energy potential. In addition, the **Program for processing organic matter using biomethane and composting** offers financial support to municipalities and the private sector that covers the installation of infrastructures for processing organic matter by either these two processes. The program aims to reduce both greenhouse gas emissions and the quantity of organic matter sent for disposal. These programs are another example of the use of synergy to achieve common goals.

2.3.3 The development of channels that contribute to the green economy, in particular through support for research and development

Innovation, technological development and goods and services designed to reduce their impact on the environment are among the means employed in Québec to transition to a green economy. Québec also supports networking, the transfer of expertise and new product marketing in a variety of ways.

Help for creating green industries and technologies and developing collaborative mechanisms

- In its **Development Strategy for Quebec's Environmental and Green Technology Industry** (2008), Québec budgeted nearly 237.5 M\$ CAD to support the development and use of green technologies. More precisely, this funding will be used to: 1) Support industrial research projects and initiatives; 2) Help disseminate information on current green technology-related university research projects; 3) Support projects that organize demonstration green technology events; and 4) Improve environmental certification mechanisms and implement measures to facilitate demonstration projects. The strategy also envisages measures to energize and unite various industry associations and research support organizations in order to achieve these goals.

For more on the Development Strategy for Quebec's Environmental and Green Technology Industry, see the fact sheet at the end of this report.

- The **Accord** (Action concertée de coopération régionale de développement) niche program for cooperative regional development is an important contributor to networking and to developing green industries in Québec's regions. Business people within a single industry can avail themselves of it to launch projects that are predicated on increased productivity, innovation and exports. Accord projects are proven contributors to matching industry and research. Accord niche programmes exist all over Québec. More specifically, **sustainable development, environment, energy, transportation and information technologies niche programs** target the implementation of green economic practices.

Photo : Hydro-Québec



- The **Electric Vehicles 2011-2020 Action Plan** has a budget of 50 M\$ CAD and covers the purchase or lease of electric, rechargeable hybrid, non-rechargeable hybrid and low-speed electric vehicles, as well as the installation of home recharging terminals. Up to 10 M\$ CAD has been set aside for large-scale projects for the acquisition of electric vehicles by municipalities and the private sector. Support for a public recharging infrastructure and major investments in the electrification of public transit are also planned. Finally, the government intends to invest 55 M\$ CAD to elicit private sector investments in the range of 500 M\$ CAD in the electric vehicle industry to create and consolidate between 1,500 and 5,000 direct and indirect jobs. The objective of the government is for 25% of new light vehicles sold in Québec in 2020 to be powered by electricity.

For more on the Electric Vehicles 2011-2020 Action Plan, see the fact sheet at the end of this report.

- The **2010-2013 Québec Research and Innovation Strategy** (QRIS) proposes energizing partnerships between the government and industry leaders, decision-makers, small and medium-size companies, research centres, universities and reclamation organizations and technology transfer organizations. This approach supports the economic spinoffs that stem from research and contributes to the creation and the development of green economy industries in Québec. Projects include the demonstration of innovative concepts, the implementation of new processes and practices and the use of new products and services. Eco-friendly aircraft, electric busses, ecological information and communication technologies and forest bio refining are all examples of projects carried out under the Québec Research and Innovation Strategy.
- The **Centre de recherche industrielle du Québec** (CRIQ) is a public body dedicated to the development of expertise in manufacturing, environmental, information and standardization technologies. The CRIQ contributes to the competitiveness of Québec industry sectors by supporting corporate innovation. In its 2008-2013 sustainable development action plan, the CRIQ committed to **incorporating the notion of “life cycle” into its process of developing new products for its customers**, with an objective of having 80% of CRIQ projects incorporating this notion by 2013.



- In addition to the development of new technology, **sustainable tourism** is one of the ways chosen by Québec to transition to a green economy. Tourism plays a major role in the economic vitality of many of Québec's regions. Consequently, the **Société des établissements de plein air du Québec** (Sépaq), which operates 49 establishments across three different networks (parks, wildlife and tourism), manages and improves public lands and tourist facilities by ensuring their accessibility, development and protection. In 1999, this public corporation was mandated to manage provincial parks (now called "national parks") south of the 50th parallel. During the last two decades, the corporation's sources of revenue have become more diverse, leading to reinvestments in the management of the natural and cultural heritage. Since 1999, revenues from the national parks network alone have risen from 14 M\$ CAD to more than 50 M\$ CAD and more than 100 M\$ CAD have been invested. Annual Sépaq economic spinoffs in 16 administrative regions of Québec exceed 500 M\$ CAD. The Parcs Québec network meets all international standards defined by the International Union for Conservation of Nature and contributes to the development of the sustainable tourism sector.



Photo : Steve Deschênes, Parc national du Mont-Tremblant, SEPAQ

2.3.4 Assistance For public and private green investments

Investment, whether by environmental funds or through government financial assistance programmes, is a lever that encourages applicants to innovate. Investment helps develop new products, new knowledge and practices that are more environment-friendly. Among the principal means employed by Québec green its economy are the following initiatives:

Development assistance for the Québec environmental and green technology industry

- The **Development strategy for Quebec's environmental and green technology industry** (2008) supports the development of companies in this sector through investments of 37 M\$ CAD in companies that are active in the environment and green technology sector, using a risk capital fund of around 100 M\$ CAD. The strategy also aims at making the financial milieu aware of the inherent features and potential of this sector as a way of facilitating access to financing for these companies.

Measures to support the adoption of environment-friendly business practices

- The Government Sustainable Development Strategy 2008-2013 **uses the structuring effect of government funding programmes to encourage applicants to invest in an ecoresponsible manner**. Since 2008, various ministries and other public bodies have created or revised funding programs or investment policies to include environmental and social considerations, above and beyond economic criteria.
- The **Caisse de dépôt et placement du Québec** manages mainly institutional funds provided by Québec public and private retirement and insurance plans. It invests its depositors' assets in financial markets in Québec, in Canada and across the world. The Caisse also tries to use its investment muscle as a way to influence corporate environmental, social responsibility and governance practices. It also adheres to the Carbon Disclosure Project and the Water Disclosure Project and encourages the companies in its portfolio to publish data on greenhouse gas emissions and water use. It also incorporates environmental, social and governance criteria into its stock market investment analysis and decision-making process.



Photo : Éric Labonté, Ministère de l'Agriculture, des Pêcheries et de l'Alimentation

- **Investissement Québec** is a government organization that provides financing products that complement those offered by financial institutions. It created an environmental funding program in 2010, called **Financement écologique**. This program is aimed at assisting companies with environment-friendly projects through financing in the form of loan guarantees or direct loans to acquire fixed assets, expand working capital and cover qualification, quantification or compensatory carbon credit certification expenditures.
- In the **agricultural sector**, the government seeks to support the adoption of best practices through **programs like PRIME-VERT**, which aims at reducing greenhouse gases emitted by farms by offering financial incentives to adopt green technologies (e.g., airtight roofs for capturing and processing biogas, geothermal heating and cooling, biomethane projects, etc.). Reducing agricultural pollution is another important component of this program. The organic farming niche market is also promoted by Québec. Three current funding programs target converting non-organic agriculture to organic farming, projects that support marketing organic products and the use of new technology, expertise and improved knowledge of organic farming techniques.
- The **Sustainable development of freshwater aquaculture in Québec strategy** aims at improving the environmental performance of fish farms, with an objective of reducing fish farm phosphorus discharge by 40%. While participation is voluntary, fish farmers in the program benefit from technical and financial support for preparing and implementing their action plans.
- Through its **Assistance Program for Improving Energy Efficiency in Road, Rail and Marine Transportation**, the government provides funding to transportation companies and organizations to support the use of energy-efficient equipment and technology in freight transport, which will reduce greenhouse gas emissions. The program also funds research and pilot projects that show potential for reducing greenhouse gas emissions.

For more on the PRIME-VERT program, see the fact sheet at the end of this report.

Tariffing and duties to reduce the use of resources and polluting practices

- In 2006, the Government of Québec launched its **Green Fund**, which is managed by the ministère du Développement durable, de l'Environnement et des Parcs. The Green Fund is an economic instrument intended to support proactive sustainable development measures, more particularly with respect to the environment. **Sums collected as water, residual materials and hydrocarbon charges** are paid to the Green Fund. Among other aims, the Green Fund supports measures described in the 2006-2012 Climate Change Action Plan and the Québec Residual Materials Management Policy 2011–2015, as well as those pertaining to the sustainable management of water resources.
- Since 1999, the Government of Québec has added an **environmental charge of \$3 to the purchase price of new motor vehicle tires**. This charge funds the Programme québécois de gestion intégrée des pneus hors d'usage 2009-2012 and is also used to empty scrap tire warehouses in Québec.
- Since 2010, the government has been empowered to raise the **gasoline tax** within the Montreal and Québec City metropolitan areas by 1.5 cents/litre. Revenues generated are to be invested in improvements to public transit infrastructures. Metropolitan Montreal decided to avail itself of this instrument, and in consequence, since the spring of 2010, the additional 1.5 cents per litre of gasoline of petrol is collected throughout the metropolitan area and invested in public transit.

Support for the creation of decision-making tools based on life cycle analysis

- In 2010, the Government of Québec awarded a 1.5 M\$ CAD grant to the Centre interuniversitaire de recherche sur l'analyse du cycle de vie des produits, procédés et services (CIRAIG) to create a **data bank for enabling life cycle analysis of Québec products, technologies and services**. This new tool will enhance the descriptive and quantitative ecological portrait of Québec products, technologies and services.
- In the field of residual materials management, the government will spend **3.5 M\$ CAD between 2011 and 2015 on studies that use the life cycle approach to improve knowledge in this industry**.

Development of new markets and stimulation of demand for green technologies, goods and services

The **Development Strategy for Quebec's Environmental and Green Technology Industry** (2008) aims at promoting green technologies developed in Québec by distributing cost-benefit information to municipalities, agricultural companies and individual producers. Local public and private markets play a significant role in the development of the environmental and green technology industry. These markets can also be used as technology showcases to help companies improve their expertise, increase production and become more competitive in overseas markets. In the long term, 0.6 M\$ CAD will be invested to reach this objective.

- The 2010-2011 budget of the Government of Québec envisages a public investment of 24 M\$ CAD to support the **marketing of products that display their carbon footprint**. The carbon footprint refers to total greenhouse gas emissions produced during the life cycle of a product, from design to disposal. This investment led to a pilot project in 2012 for the preparation and certification of carbon assessments for a wide range of Québec products. The pilot project will make recommendations as to the optimal way to establish a recognized system of carbon footprint certification in Québec in order to stimulate demand for new green goods and green services and provide certified products with access to new markets.
- Given their size, public contracts are a lever that can be used to influence the evolution of modes of production and contribute the development of goods and services that are more environment-friendly and innovative from the economic and social points of view. The **Politique administrative pour un gouvernement écoresponsable** (2009) expressed the exemplary will of the Government of Québec with respect to ecoresponsible consumption. It aimed at introducing the notions of the **life cycle of goods and the services, total cost of ownership, energy efficiency and the 3R-RD waste management hierarchy**⁹ into the procurement process used by public bodies. It also aimed at the acquisition of **environmentally designed goods and services**, i.e. produced in ways that reduce their environmental impact throughout the life cycle. The policy covers goods and services of all kinds, but particularly targets government-organized events, information technologies, vehicle purchase and lease, buildings intended for public activities (restoration, development and management) and construction projects.

To this end, the Government of Québec continually invests in its building inventory to improve energy efficiency and environmental management. One hundred nine Société Immobilière du Québec (SIQ) buildings are certified BOMA BEST¹⁰ at various levels. In 2013, the SIQ expects to have certified its 114 office type buildings over 1 000m².



The Sûreté du Québec headquarters building for Laval, Laurentides and Lanaudière is certified BOMA BEST Level 4 and LEED Gold.

⁹ 3R-RD: reduction, reuse, recycling, reclamation and disposal, including by means of biological treatment and/or land farming. Other forms of waste and energy reclamation and disposal are required to follow this residual materials management hierarchy.

¹⁰ BOMA BEST (Building Environmental Standards) is a program of environmental building certification managed by BOMA (Building Owners and Managers Association). In Québec, the program is administered by l'Association des propriétaires et administrateurs d'immeubles BOMA Québec. BOMA BEST is aimed at promoting best shared practices throughout the commercial and institutional real estate management industry. BEST includes four levels of certification based on assessment of a building's environmental performance, using criteria such as energy efficiency, water management, recovery and recycling, preventive maintenance and tenant awareness programs.

2.3.5 Implementation of awareness and information measures

Awareness, information and training are fundamental tools that can change behaviour. Similarly, as promotion and networking are vital to the dissemination of new technology and innovative practices, Québec implements a variety of ways and means to green its economy in this field. Here are some examples of current initiatives:

Communication of information on adopting environment-friendly practices

- The ministère des Affaires municipales, des Régions et de l'Occupation du territoire publishes guides to good land planning practices and sustainable development. Six titles have so far appeared in this French-language series: **La biodiversité et l'urbanisation**, **La vision stratégique du développement**, **Le bâtiment durable**, **La gestion durable des eaux de pluie (sustainable storm-water management)**, **L'aménagement et l'écomobilité** et **L'urbanisme durable : enjeux, pratiques et outils d'intervention**. These guides, intended for use by municipal and regional bodies, provide information on a variety of solutions to sustainable development problems.
- With its new **Residual Materials Management Policy** (2011), the Government of Québec has committed to making companies aware of the importance of reduction at source and respect for the hierarchy of residual materials management.
- The ministère des Ressources naturelles et de la Faune and its partners in energy distribution (Hydro-Québec, Gaz Métro and Gazifère) are involved in **improving how energy is used in Québec**. Between 2007 and 2011, thanks to promotion and various programs in energy efficiency, 440 projects were funded, with total investments exceeding 115 M\$ CAD. The programs and services offered are addressed as much to private citizens as to companies, industries, institutions and organizations. The goal is to promote energy efficiency, encourage the development of new technology and contribute to reaching targets set in **Using energy to build the Québec of tomorrow – Québec Energy Strategy 2006-2015**.

Promotion of new business opportunities related to the green economy

- The **AMERICANA International Environmental Technology Trade Show and Conference**, held in Québec every 2 years, welcomes more than 8,000 participants from across the world. The conference includes an international forum that twins companies—one of AMERICANA's most interesting features—which makes it possible to optimize meetings and business networking opportunities.

Ecological labelling

- **Carbon footprint certification on product labelling** is currently the focus of a pilot project in Québec (see section 2.3.4). Once it emerges into the broader marketplace, this project could include a wide range of products and become an important awareness tool for both consumers and manufacturers. This type of labelling, similar to that used to certify products derived from sustainable management forestry practices, enables companies and consumers to be better informed about the consequences of their choices.

Support for voluntary awareness initiatives

- **Agro-environmental advisory clubs**, partly financed by the Government of Québec, are voluntary associations of agricultural producers whose purpose is to support the adoption of environment-friendly practices. More than 8,500 companies are members of the 80 clubs in this network, which benefit from advice provided by more than 300 experts in the agro-environmental field. These clubs stress ways of 1) improving fertilizer management; 2) smart pesticide management, including reducing use; 3) adopting soil conservation production practices; 4) managing and protecting waterways; 5) abating greenhouse gas generation and 6) improving biodiversity.

- The Government of Québec also encourages **voluntary awareness initiatives** on topics related to the green economy. As an illustration, in 2011, a \$40,000 grant was awarded to a Québec organization for its **Ça chauffe en GES!** (GHG turns up the heat) awareness program. The grant was used to carry out awareness and educational activities in elementary schools. The program aims at informing students about greenhouse gases and their influence on climate change, and encourages them to take concrete steps to reduce GHG emitted by their own families.
- The **Government of Québec's Residual Materials Management Policy** counts on social and community organizations to implement educational projects and public awareness campaigns aimed at reduction at source and re-use. One million dollars has been earmarked for funding these projects between 2011 and 2015.

2.3.6 Support For training to Facilitate the transition to green jobs

Life cycle analysis, eco-design, eco-efficiency and green economy concepts bring new ways of thinking, know-how and practices with them, all of which need to be taught. Québec has implemented a variety of ways to take action here on greening its economy. Some examples:

Support and development of "Green skills" facilitates the adoption of best practices through targeted training

- The Government of Québec offers training to companies, experts and consultants in order to develop their green skills. For example, it has provided **training on the carbon market and eco-design**¹¹ for several years. Moreover, the growth of **Enviroclubs**¹² has made it possible to provide managers of small and medium-sized enterprises with information on the advantages of eco-efficiency¹³.
- In 2011, the Bureau de la normalisation du Québec (BNQ), ministère du Développement économique, de l'Innovation et de l'Exportation and their partners launched the **Guide BNQ 9700-021, Développement durable – Guide pour l'application des principes dans la gestion des entreprises et autres organisations** and the **BNQ 21000 pilot project**. The guide aims at making it easier to incorporate sustainable development notions into business strategies and management practices. For its part, the **BNQ 21000 pilot project** aims at testing and improving existing methods and tools. Groups of companies in a variety of branches of industry, including tourism and mines, are currently evaluating their practices with respect to 21 issues and drawing up sustainable development action plans. The new tools for business that emerge from this process will be made available to all Québec entrepreneurs in 2012.

11 Training sessions teach ways of incorporating environmental design criteria in products.

12 An Enviroclub is an association of ten enterprises in a single region or activity sector that can access expertise and take advantage of financing to build a factory using advice and coaching provided by a specialized consultant and/or realize an eco-efficiency or pollution prevention project that reduces the costs of production.

13 Eco-efficiency is a management strategy that seeks to make more, with less. In practical terms, this means the following three major goals: increasing the value of the product or service, optimizing the use of resources and reducing environmental impact. Each one of these goals can lead to cost savings.

Green jobs programs

- Québec educational programs have been modified to meet the needs of training for green jobs. For example, some institutions offer technical study programs in the specialized field of wind turbine maintenance and training in the field of clean, renewable energy. Québec also has a network of **college technology transfer centres** (CCTT). CCTT centres are used for training and research in technology and maintain close relationships with industry. They provide research and development services, technical support and training and contribute to innovative technology project development and the development and dissemination of new technology. This network includes the **Techno centre éolien**, **Centre de transfert technologique en écologie industrielle**, **Centre d'étude en responsabilité sociale et écocitoyenneté** and **Centre d'initiation à la recherche et d'aide au développement durable**, and provides students with training for green jobs.
- Founded in 1990, the **CFER network of reclamation training centres** offers an alternative educational formula for problem students who seek to obtain a diploma. The CFER is a business-oriented school that supports the development of autonomous, committed and productive citizens and workers. Training focusses on the environment and the development of student skills in reclamation and recycling. The ministère de l'Éducation, du Loisir et du Sport du Québec recognizes this program by awarding a certificate in business practices and reclamation to students who successfully complete the three-year training program.
- At the professional level, **several Québec universities** now include courses on sustainable development in their bachelor and master degree business administration programs or offer **social and environmental corporate responsibility profiles**.

2.3.7 Technology and expertises information exchange and sharing

The development of the green economy on a worldwide scale requires information exchange and sharing technology, expertise and know-how among governments and nations, both to help developing countries and support the development and marketing of new technologies in Québec and elsewhere in the world. Here some of Québec's current initiatives in this area :

Completing joint projects and international solidarity initiatives

- Québec participates in the **Down to Earth: Territorial Approach to Climate Change (TACC)** initiative run by the **United Nations Development Program (UNDP)**. This initiative is aimed at establishing partnerships between developed countries, areas or provinces and developing countries in order to establish strategies for reducing greenhouse gas emissions and adapting to the impact of climate change. Thanks to this program, Québec has now formed partnership with the Canelones, Montevideo and San José regions of Uruguay, and the Bogotá-Cundinamarca region in Colombia.
- Québec funds a project run by **Burkina Faso's Centre d'étude et de coopération internationale (CECI)**, whose aim is to **produce carbon-neutral Shea butter**. The project is set up to use adapted technology to produce Shea butter, and improves the management of natural resources, organic residues, and wastewater through the use of renewable energy. Training equipment operators and optimizing the ergonomics of the production process are central to this project, which targets reducing the arduousness of work and improving efficiency while preserving the environment. The project has been running since 2010.

Expertise and green technology transfer outside Québec

- In 2009, Québec joined the **Climate Group's EV20 policy initiative**, which brings together leaders from 20 cities, Heads of State, vehicle manufacturers, owners of vehicle fleets and investors in the **electric vehicle industry**. The objective of the initiative is to accelerate the development of this market. In 2010, EV20 members agreed to combine their efforts to ensure that the market share of electric vehicles reaches 20% of total new vehicle sales by 2020. In Québec, this target, set in the **2011-2020 Action Plan for Electric Vehicles**, is 25%. Québec has agreed to chair a forum of experts for exchanging views on public policies in regard to electric vehicles and on identifying best practices in this field (EV20 Policy Initiative).



- Top-to-bottom support throughout the chain of innovation helps companies to develop both in Québec and abroad. A **green technology demonstration program** enables companies to showcase or demonstrate innovative technology to customers located outside Québec. This is a significant step for many companies as they seek to enter overseas markets. The program, managed by the ministère du Développement économique, de l'Innovation et de l'Exportation, is essentially aimed at supporting the development and marketing of technologies that can limit and correct impact on water, air and soil quality, such as resolving issues related to the management of residual materials.

- As the largest producer of hydroelectricity in the world, **Hydro-Québec (H-Q)** shares its expertise in Canada and internationally. In 2010, H-Q was active in **IEA WIND Task 25**, an International Energy Agency research working group on the design and operation of networks capable of transporting significant quantities of wind energy. H-Q also hosted major international scientific and technical meetings in the fields of energy storage and robotics. The public corporation is also involved in national and international organizations such as the Canadian Hydropower Association, the International Hydropower Association, the World Energy Council, e8 and the International Council on Large Electric Systems. Finally, it shares its know-how in training and co-operation projects in a number of emerging countries in the Francophonie.

Strengthening the capabilities of developing countries by implementing new collaborative mechanisms and participating in existing information exchange structures

The Government of Québec, through its ministère des Relations internationales, seeks to: 1) Increase cooperation in the area of sustainable development in international organizations, regional groupings and various other associations; 2) Design public diplomacy tools and support research to support the growth of sustainable partnerships; 3) Give preferential treatment to developing countries when signing social security agreements; 4) Take account of the principles of sustainable development in the creation and management of programs and projects in the field of international solidarity; and 5) Support initiatives aimed at equipping developing countries with government and community structures that are favorable to sustainable development.

2.3.8 The gradual incorporation of poverty eradication and social equity into measures aimed at developing the green economy

During the Rio+20 Conference, Heads of State and government representatives will need to reflect on the green economy as a way to eradicate poverty. This crucial and complex issue will be the subject of discussions during the meeting.

Québec has already taken a number of decisions with respect to incorporating various means aimed at eradicating poverty and supporting social equity into government measures associated with the green economy. Here some of Québec's current initiatives in these areas :

Including social rehabilitation and poverty eradication measures into government tools

- In Québec, the residual materials management sector includes **social rehabilitation and poverty eradication measures**. For example, some recycling centres hire socially disadvantaged people, helping them to return to the job market and ensuring improved living conditions. By means of its **Residual Materials Management Policy** (2011), the Government of Québec intends to employ social enterprises that are specialized in the management of residual materials and, in particular, those focused on re-employment, and will continue to fund them¹⁴.

- For much of the population, **public transit has a vital social function**. It may be their only way to get to work or to health care and educational institutions or take part in recreational activities. Above and beyond the needs of urban public transit, a variety of programs exist that target special needs in regard to mobility. The **Programme d'aide gouvernementale au transport collectif régional** offers funding for regional county municipalities and regional conferences of elected officials to enable them to improve the offering of public transit in smaller communities. Two other programs are aimed at **ensuring the mobility of the handicapped in the areas of paratransit** (funding for municipal authorities that offer adapted transportation services) and at **adapting taxis and inter-city busses** (subsidies for modifying taxis, buses, minibuses and even bus terminals to accommodate wheel chairs).



14 From 2011 to 2015, 10 M\$ CAD is to go to a programme especially meant for social enterprises that target unemployment reduction and reemployment.

- The 2008 **Plan d'action gouvernemental en entrepreneuriat collectif** confirms the government's will to optimize the economy's impact by providing local and regional actors with the means for energizing their communities and meeting the needs of residents through collective enterprise. The action plan included overall investments of 16.7 M\$ CAD for 22 measures, among which was a study that sought to identify ways of increasing the contribution made by social enterprises to the fight against poverty and the development of social inclusion. As a consequence of the study, the government adopted a series of **initiatives to increase government purchases from social enterprises** in 2011. This particular plan is being used by government departments and municipal authorities. Supporting social enterprise by means of procurement policies is one way of strengthening local development and social enterprises that operate in the environmental sector.

Measures to abate price increases on selected products for the underprivileged

- As the main government body responsible for housing in Québec territory, the actions of the **Société d'habitation du Québec** (SHQ) contribute to improving the standard of living of the citizenry by providing housing that is appropriate to people's resources and needs. SHQ programs give priority focus to **low-income households**. The SHQ works to **improve the energy efficiency of its buildings** in order to abate the environmental impact of its activities and increase the quality of life of householders. Technical improvements are combined with efforts to make occupants aware of optimal behavior. This is all the more important, given that modest income households spend an increasing share of income on energy. The SHQ also pursues goals related to **reducing water consumption** and **improving residual materials management** in its inventory of social and community housing. Through these initiatives, the SHQ contributes to the growing awareness of environmental and social challenges among its partners who are involved in the construction, restoration and operation of its real estate inventory.

2.4 Conclusion

Québec has already embarked on the road to a green economy through the application of the Sustainable Development Act and the Governmental Strategy, which encourage ministries and other government bodies to adopt sustainable development. This is part of a long-term vision that looks to harmonizing economic vitality, environmental quality and social equity.

Far from replacing the concept of sustainable development, the green economy is, for Québec society, a way of including the challenges of sustainable development into the actions it takes. Strongly centered on innovation, technological development and the production of environment-friendly goods and services, the transition to the green economy can be seen as a way to stimulate economic activity in various industries and create jobs through the design and production of new goods and processes in established and new markets.

Many broad government measures and actions (laws, regulations, policies, strategies, action plans and programs) are working in tandem right now, contributing to the development of the green economy in Québec. A large number of them contribute to the development of strategic sectors of the Québec economy, such as energy, forest and natural resource management, agri-foods and manufacturing, using development vectors such as infrastructure and buildings, transport, residual materials management, research and development and land and resource planning.

The Government of Québec also acts to enhance the protection of resources like soil, water and air, preserve biodiversity and, especially, fight climate change by reducing greenhouse gas emissions. Together, they contribute to the collective enrichment of the population.

The intensification of the shift to the green economy can thus be seen as an appropriate way of developing the Québec economy and a new way of advancing sustainable development research.

Discussions will take place at the Rio+20 Conference on the relationship between the development of the green economy and the eradication of poverty. The conclusions of this conference will continue to feed into Québec's reflections on this subject and help guide its future actions in this vital area.

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Appendix I **Laws, regulations, policies, strategies, action plans and programs that contribute to the green economy**

Laws and regulations:

- Act Respecting the Preservation of Agricultural Land and Agricultural Activities
- Environment Quality Act
- Sustainable Development Act
- Loi sur l'aménagement durable du territoire et de l'urbanisme
- Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection
- Act Respecting Contracting by Public Bodies
- Sustainable Forest Development Act
- Loi sur l'efficacité et l'innovation énergétique
- Loi sur la protection d'espèces animales ou végétales sauvages et la réglementation de leur commerce international et interprovincial
- Act Respecting the Conservation and Development of Wildlife
- Règlement sur la récupération et la valorisation des produits par les entreprises
- Regulation respecting the charges payable for the disposal of residual materials
- Regulation respecting the annual duty payable to the Green Fund
- Regulation respecting a cap-and-trade system for greenhouse gas emission allowances
- Clean Air Regulation
- Regulation respecting wood-burning appliances
- Regulation respecting halocarbons

Policies:

- Québec Residual Materials Management Policy
- Québec Public Transit Policy
- Québec Water Policy
- Politique administrative pour un gouvernement écoresponsable

Strategies:

- Government Sustainable Development Strategy 2008-2013
- Development strategy for Quebec's environmental and green technology industry
- Québec Research and Innovation Strategy - 2010-2013
- Québec Energy Strategy 2006-2015
- Québec Strategy for Drinking Water Conservation
- Wood use strategy for construction in Québec

Action plans:

- 2006-2012 Climate Change Action Plan
- 2013-2020 Climate Change Action Plan
- 2011-2020 Action Plan for Electric Vehicles
- Toward the Valorisation of Forest Biomass Action Plan
- Action plan to support the Québec manufacturing sector

Programs:

- Improving Energy Efficiency in Road, Rail and Marine Transportation - Marine and Rail Component
- Programme d'aide aux immobilisations en transport en commun de la Société de financement des infrastructures locales du Québec (public transit)
- Programme d'aide gouvernementale au transport collectif des personnes (public transit)
- Programme d'appui à l'innovation – Soutien à l'innovation technologique dans les entreprises (technological innovation in enterprises)
- Programme de démonstration de technologies vertes (green technology demonstration)
- Programme de soutien aux projets économiques – Développement de produits (product development)
- Heavy oil consumption reduction program
- Support for the manufacturing sector
- Programme d'aide à l'utilisation de la biomasse forestière pour le chauffage (heating with forest biomass)
- Programme d'optimisation en réfrigération (optimizing refrigeration)

- Novoclimat (Construction and renovation)
- Rénoclimat
- Programme d'aide à l'implantation de mesures efficaces dans les bâtiments (energy efficiency in buildings)
- Energy innovation assistance program
- Écomobile
- Éconologis (environment-friendly housing)
- Technoclimat
- Action-Climat
- Biogaz
- Climat municipalités (municipal climate change adaptation)
- Programme de traitement de matières organiques par biométhanisation et compostage (biomethane and composting treatment of organic matter)
- Programme d'aide à la mise en valeur des forêts privées (private forest development)
- Programme d'attribution de biomasse forestière (forest biomass)
- Programme d'investissements sylvicoles (forest investments)
- Programme de création d'emplois en forêt (jobs in forestry)
- Programme de maintien de l'accessibilité aux terres du domaine de l'État à vocations faunique et multiresource (access to lands in the domain of the State used for wildlife and multi-resource purposes)
- Programme de mise en valeur des ressources du milieu forestier (development of forest resources)
- Programme de participation régionale à la mise en valeur des forêts (regional participation in forestry development)
- Programme de soutien pour l'ensemencement des lacs et des cours d'eau 2012-2013 (restocking lakes and watercourses)
- Prime-vert
- Programme d'appui à la conversion à l'agriculture biologique (converting to organic farming)
- Programme d'appui à la mise en marché des produits biologiques (marketing support for organic products)
- INNOVBIO
- Programme d'aide gouvernementale à l'amélioration des services en transport en commun (improvements to public transit)
- Programme d'aide gouvernementale au transport collectif régional (regional public transit)
- Programme de subventions à l'adaptation des taxis et des autocars interurbains pour le transport des personnes se déplaçant en fauteuil roulant (adapting taxis and inter-city busses for wheelchair passengers)
- Programme d'aide gouvernementale aux modes de transport alternatifs à l'automobile (alternative forms of transport)
- Programme d'aide gouvernementale à l'amélioration de l'efficacité énergétique dans le transport routier des personnes (energy efficiency improvement in passenger highway transport)
- Programme d'aide visant la réduction ou l'évitement des émissions de gaz à effet de serre par l'implantation de projets intermodaux dans le transport des marchandises (intermodal transport of goods to reduce or avoid greenhouse gas emissions)
- Programme d'aide gouvernementale à l'amélioration de l'efficacité énergétique dans le transport des marchandises (energy efficiency in freight transport)
- Programme d'attribution des terres du domaine de l'État pour l'implantation d'éoliennes (wind farms on lands in the domain of the State)

Other tools:

- Cap-and-trade system of the Western Climate Initiative
- Plan Nord

Appendix II The 16 Sustainable Development Principles of the Sustainable Development Act

Definitions

Health and quality of life: People, human health and improved quality of life are at the centre of sustainable development concerns. People are entitled to a healthy and productive life in harmony with nature;

Social equity and solidarity: Development must be undertaken in a spirit of intra- and inter-generational equity and social ethics and solidarity;

Environmental protection: To achieve sustainable development, environmental protection must constitute an integral part of the development process;

Economic efficiency: The economy of Québec and its regions must be effective, geared toward innovation and economic prosperity that is conducive to social progress and environment-friendly;

Participation and commitment: The participation and commitment of citizens and citizens' groups are needed to define a concerted vision of development and to ensure its environmental, social and economic sustainability;

Access to knowledge: Measures favourable to education, access to information and research must be encouraged in order to stimulate innovation, raise awareness and ensure effective participation of the public in the implementation of sustainable development;

Subsidiarity: Powers and responsibilities must be delegated to the appropriate level of authority. Decision-making centres should be adequately distributed and as close as possible to the citizens and communities concerned;

Inter-governmental partnership and cooperation: Governments must collaborate to ensure that development is sustainable from an environmental, social and economic standpoint. The external impact of actions in a given territory must be taken into consideration;

Prevention: In the presence of a known risk, preventive, mitigating and corrective actions must be taken, with priority given to actions at the source;

Precaution: When there are threats of serious or irreversible damage, lack of full scientific certainty must not be used as a reason for postponing the adoption of effective measures to prevent environmental degradation;

Protection of cultural heritage: The cultural heritage, made up of property, sites, landscapes, traditions and knowledge, reflects the identity of a society. It passes on the values of a society from generation to generation, and the preservation of this heritage fosters the sustainability of development. Cultural heritage components must be identified, protected and enhanced, taking their intrinsic rarity and fragility into account;

Biodiversity preservation: Biological diversity offers incalculable advantages and must be preserved for the benefit of present and future generations. The protection of species, ecosystems and the natural processes that maintain life is essential if quality of human life is to be maintained;

Respect for ecosystem support capacity: Human activities must be respectful of the support capacity of ecosystems and ensure the longevity of ecosystems;

Responsible production and consumption: Production and consumption patterns must be changed in order to make production and consumption more viable and more socially and environmentally responsible, in particular through an ecoefficient approach that avoids waste and optimizes the use of resources;

Polluter pays: Those who generate pollution or whose actions otherwise degrade the environment must bear their share of the cost of measures to prevent, reduce, control and mitigate environmental damage;

Internalization of costs: The value of goods and services must reflect all the costs they generate for society during their whole life cycle, from their design to their final consumption and their disposal.

(Source: Sustainable Development Act, L.R.Q., c.D-8.1.1)

Appendix III Initial list of sustainable development indicators

CAPITAL	DIMENSION	INDICATOR
Human	Active population	Activity ratio
	Healthy population	Job quality
	Educated population	Life expectancy (without disability)
		Higher average level of diplomas
Social	Feeling of belongingness	High level of social support
	Civic participation	Time devoted to organizational activities
	Fairness	Income distribution
	Cultural development	Excess family income
		Originates in cultural and communications sectors of the economy
Products	Infrastructure and machines	Net fixed assets
	Buildings	Value of real estate stock
Financial	Household assets	Net household assets
	Government of Québec assets	Government financial assets
Natural	Biodiversity	Size of protected area network
	Agricultural and sugar maple cultivation lands	Size of the agricultural zone
	Forests	Forest ecosystem status
	Groundwater	Water quality at the mouths of principal southern watersheds
	Air quality	Annual percentage of smog free days
		Annual air quality index
	Climate	Annual average temperature trend

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