

Québec Appendix

Current status

Population

8,214,700 (2014)

GDP

\$331,231 M CAD (2013)

Country

Canada

GHG emissions

78.0 Mt CO₂ eq. = 9.6 t per capita (2012)

Introduction

Québec is the second most populated Canadian province and the largest in terms of territory – nearly three times the size of France. Located in Eastern Canada, it is the only province with a francophone majority.

Québec has the lowest per capita greenhouse gas (GHG) emissions in Canada – half the Canadian average – and one of the lowest in North America. In 2012, nearly all (99 %) of Québec's electricity production and nearly half of its energy consumption came from renewable sources.

Québec is involved in a large number of international alliances and organizations that promote innovative and ambitious ideas and actions to contribute to the fight against climate change. Its commitments include:

Carbon markets and carbon pricing

- Co-chair, along with the Netherlands, of the International Carbon Action Partnership (ICAP), which promotes cap-and-trade systems worldwide
- Technical partner of the World Bank's Partnership for Market Readiness (PMR) that connects, among others, the U.S.A. and a number of European countries with developing and emerging countries like China and Mexico, who are looking to implement carbon market mechanisms in their jurisdictions
- Member of the World Bank's Carbon Pricing Leadership Coalition, which aims at promoting carbon pricing and the use of carbon market mechanisms and is composed of 17 government partners, including Québec

Subnational governments

- Co-chair (2012-2016), along with the Basque Country and South Australia, of the Climate Group's States & Regions Alliance, which promotes the green economy
- Member in the Compact of States and Regions, which provides an accounting platform for GHG emission reduction commitments taken by states and regions and information updates on their progress

- Active member of the Network of Regional Governments for Sustainable Development (nrg4SD) and participation in the Steering Committee, along with Catalonia, São Paulo, Wales and Brittany

Specific actions and commitments

GHG reduction objectives

As early as 1992, Québec declared itself bound by the United Nations Framework Convention on Climate Change (UNFCCC) and adopted a reduction target of 6% below 1990 levels by 2012, followed in 2009 by a target of 20% below 1990 levels by 2020. In order to reach these objectives, Québec has launched two Climate Change Action Plans, the first for 2006-2012 and the second, for 2013-2020. Québec exceeded its 2012 target to reach 8% below 1990 levels, which shows it is on the right track.

In November 2015, Québec announced its intention to contribute further to international mitigation efforts with a new reduction target of 37.5% below 1990 levels by 2030. It has also adopted a long-term vision by signing the Global climate leadership Memorandum of Understanding (Under 2 MOU), thus pledging to reduce its GHG emissions by 80-95% by 2050, as the Intergovernmental Panel on Climate Change advocates for industrialized states.

Carbon market/carbon pricing

Québec became a forerunner in North America when, in 2007, it put a price on carbon through a system of levies on fossil fuels and combustibles. It followed up by implementing a cap-and-trade system of GHG emission allowances in 2013, which it linked to California's system in 2014, under the Western Climate Initiative. This created the biggest carbon market in North America and the first to be designed and operated by subnational governments of different countries. As of 2015, this cap-and trade system covers around 85% of Québec GHG emissions.

The Government of Québec decided to use all the income drawn from the fossil fuel levies and the carbon market to finance the 2006-2012 and 2013-2020 Climate Change Action Plans. Private citizens, companies, municipalities and government bodies have access to these funds to help them reduce their energy consumption, innovate to improve their energy efficiency, and adapt to climate change. Between 2006 and 2020, some 4.5 billion dollars will have been invested in Québec's economy through the measures set out in these action plans.

Clean electricity

If Québec has one of North America's smallest carbon footprints, it is mainly due to its impressive renewable energy production.

In the course of the last decade, the Government of Québec continued the development of its hydro power capacities, which it initiated in the 1950s, bringing total production to more than 36,000 megawatts (MW). Wind farms have also grown significantly. It is estimated that, by the end of 2017, Québec's wind energy capacities will reach nearly 4,000 MW. Important investments have also been made to increase the use of residual forest biomass and to reduce the use of fossil fuels in the industry.

Thanks to the investments it made over the years, Québec has a significant quantity of green energy at its disposal, energy it can use to reduce its own GHG emissions, or to help its neighbours reduce their own. This is a non-negligible asset to increase its energy security in the context of the global fight against climate change.

Green energy is also a powerful agent of economic development all across Québec, as it provides thousands of direct and indirect jobs and supports the economic growth of businesses, municipalities and First-Nations communities.

Energy efficiency

For more than 15 years, Québec has made significant investments in energy efficiency and has helped companies convert to greener energy sources. Under the Québec Energy Strategy 2006-2015, energy distributors and the Government of Québec invested more than 1.4 billion dollars to generate recurring energy savings in the order of 41.7 million gigajoules (GJ).

Sustainable mobility

The Government of Québec invested nearly \$800 M between 2006 and 2014 to support mass transit. As for the electrification of transportation, the government's goal is to have 100,000 electric vehicles on Québec roads by 2020. To accomplish this, a budget of 420 million dollars has been allocated to a 2015-2020 action plan. In enabling the replacement of petroleum in transportation by locally-produced, low-cost renewable energy, the electrification of transportation has a promising future in Québec.

Québec also participates as founder in the International Zero-Emission Vehicle Alliance (ZEV Alliance) that aims at accelerating the worldwide deployment of zero GHG emission vehicles. What is more, through their Memorandum of Agreement on Climate Change, Québec and Ontario have joined hands to increase the number of zero-emission vehicles on their roads, which are the busiest in Canada.

Adaptation

Over the past 15 years, Québec has developed cutting-edge expertise in climate modelling, in assessing climate change impacts, and in designing adaptation solutions. This expertise has grown immensely thanks to the Ouranos Consortium, a leading research organisation created in 2001 with the continuous support of the Government of Québec, and also through research activities conducted in a range of organizations, government departments, research centres, as well as the private sector. Québec now has regional climate scenarios at its disposal, which are used to forecast more accurately how climate change could affect the province. This information is crucial to Québec's mitigation and adaptation efforts.

This valuable expertise is increasingly being used, both within Québec and abroad, by companies and municipalities seeking to reduce costs related to climate change. As an example, the five biggest cities in Québec are using this expertise to develop climate change adaptation plans.

Measures coming soon

The Government of Québec is currently preparing a new 2016-2025 energy policy. This updated policy will strengthen Québec's leadership with regards to renewable energy, energy efficiency, and innovation. It will also contribute to the growth of a strong and sustainable economy that is less dependent on fossil fuels.