Québec’s journey toward energy transition
Québec’s journey toward energy transition
A few milestones


2006
Climate Change Action Plan (2006-2012)

2011

2013
Climate Change Action Plan (2013-2020)

2015
Cap-and-Trade System

2016

Energy Policy (2030)
Consumption by energy source

**2013**
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- **ELECTRICITY**: 37.1%
- **NATURAL GAS**: 13.7%
- **PETROLEUM PRODUCTS**: 0.5%
- **COAL**: 1.1%
- **BIOFUEL**: 0.4%
- **BIOMASS**: 1.5%

*more than 99% of electricity is from renewable sources*

**2030**
1763 PJ

- **Hydroelectricity**: 45.1%
- **Wind**: 15.7%
- **Petroleum products**: 1.1%
- **Biomass**: 0.3%
- **Petroleum**: 0.4%
- **Coal**: 0.6%

**2015**
727 PJ

- **Hydroelectricity**: 94.3%
- **Wind**: 30.1%
Consumption by area of activity

**2013**
- Residential: 34.0%
- Agriculture: 2.2%
- Tertiary: 13.1%
- Industrial: 19.9%
- Transportation: 30.9%

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**2030**
- Residential: 37.8%
- Agriculture: 2.0%
- Tertiary: 14.9%
- Industrial: 25.1%
- Transportation: 20.2%

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The 2030 Energy policy

- 15% Enhance energy efficiency
- 25% Increase renewable energy production
- 50% Increase bioenergy production

- 40% Reduce the consumption of petroleum
- Eliminate the use of thermal coal

Creation of Transition énergétique Québec
Transition énergétique Québec

Crown corporation created to orchestrate Quebec’s energy transition

Mission:

• **Support, encourage** and **promote** energy transition, innovation and efficiency

• **Coordinate** the implementation of all actions required to meet the targets set out by the Government of Québec
The energy transition, innovation and efficiency master plan
Consuming better and more responsibly

Innovate green
Support innovation in terms of energy and reduced GHG emissions in Québec

Move green
Influence the movement of people and the transportation of goods

Work green
Influence the energy consumption choices of business and government

Live green
Influence the energy consumption of households and communities

2018-2023
Master plan 1

2023-2028
Master plan 2

2028-2033
Master plan 3

Targets 2030

2030 ENERGY POLICY

Financial assistance and technical support
Public establishments

A leading Québec
An open Québec
An enlightened Québec
An example-setting Québec

The cornerstones of Québec’s energy transition are supported by four pillars
The Master Plan targets

1 % per year energy efficiency average

5 % petroleum global consumption in comparison to 2013
Quebec’s energy transition Master Plan

Objective:

Integrate all energy transition, innovation and efficiency measures and programs into a comprehensive action plan.

• Includes all governmental and utilities measures

• Result of an extensive public consultation
  – Sector diagnostics
  – Online consultation platform (consultation.teq.gouv.qc.ca)
  – Thematic workshops
  – More than 100 memoirs
Process findings

1) Ambitious targets leads to the need to revisit, question and optimize the historical approaches

2) Data collection and compilation is a challenge

3) Data availability and analysis tools are required to
   • Follow the target’s achievement
   • Establish the impact of specific policies or approaches
   • Identify the most effective measures

We need to continue improving our knowledge base
Work ahead

Statistics

• Collect statistical data on energy and produce sectoral portraits
• Establish a harmonized accountability methodology for energy transition and GHG reduction interventions
• Promote and contribute to the transparency in the energy field through the Open Data Government initiative

Analysis

• Develop tools and capacity for modeling energy demand and GHG emissions
• Undertake the environmental impact (life cycle) analysis of different energy sectors
• Conduct an analysis of the socio-economic impacts of the energy transition, including the impacts on the workforce
RLS Energy Network: Roadmap

Monitoring report
• Regional energy systems face common challenges
• Cooperation is a mean to address region-specific challenges

Next steps
• Developing a vision
• Establishing a roadmap
• Implementing report on results
Supporting the transition

Potential collaboration avenues

1) Data gathering and sharing
   – Efficient ways to gather data
   – Open database
   – Transparency

2) Guiding decision makers
   – Identifying key indicators
   – Policy efficiency analysis tools

3) Reporting results
   – Robust and credible data
   – Increase buy-in by all stakeholders
Thank you