
SUCCESSFULLY BRING ABOUT QUÉBEC'S ENERGY TRANSITION

IGUA Spring Conference

May 16, 2018, 1:30 p.m. to 2:15 p.m.

The 2030 Energy Policy

A unifying vision

- Make Québec by the year 2030 a North American leader in the realms of renewable energy and energy efficiency
- Build a new, strong, low-carbon economy
- Put consumers at the forefront of initiatives

Targets of *The 2030 Energy Policy*

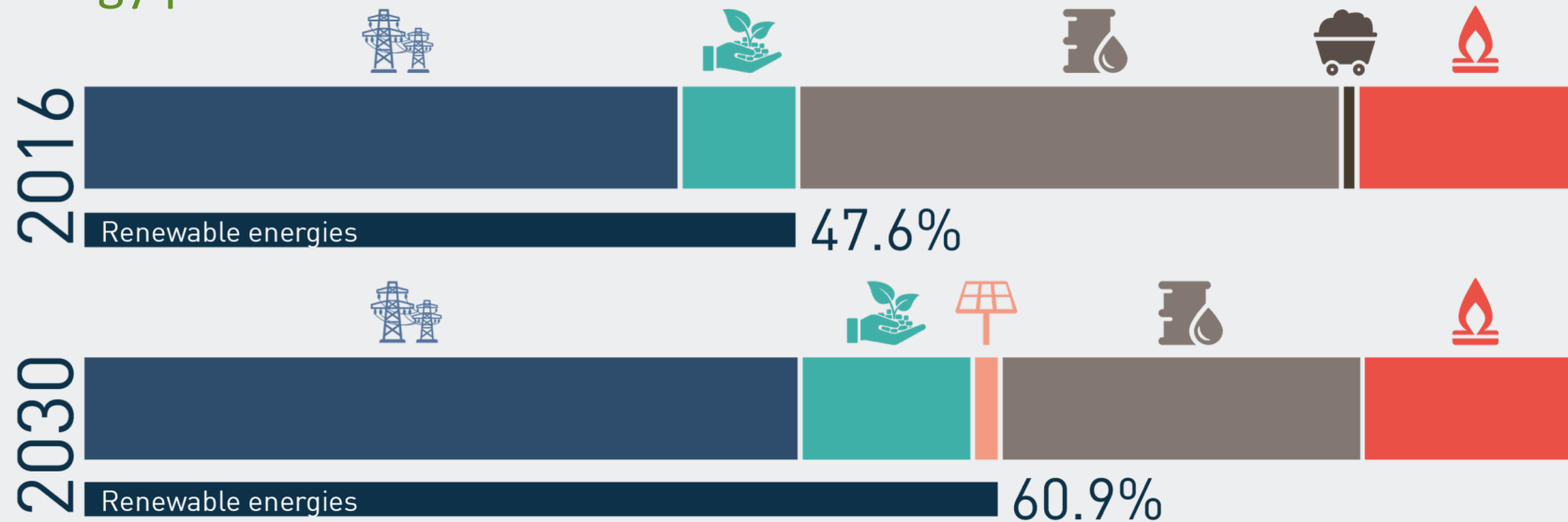
15% energy efficiency

25% share of renewable energies

50% bioenergy production

40% petroleum products consumed

Eliminate the use of thermal coal



Electricity



Biomass



Decentralized energies
(such as geothermal and solar energy)



Petroleum products



Coal



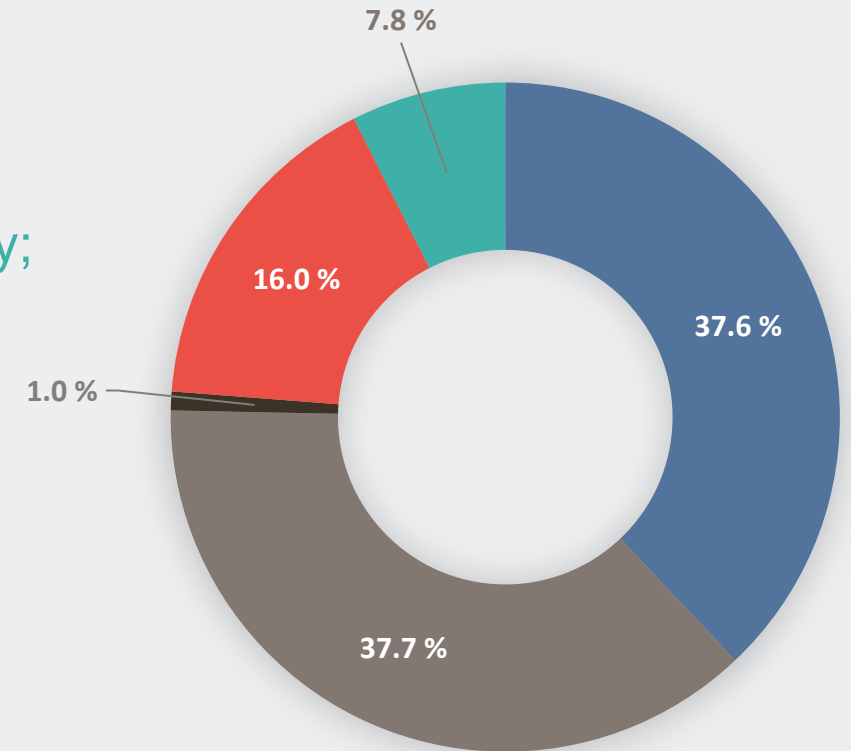
Natural gas

The Québec context

In 2015, Québec's total energy consumption broke down as follows:

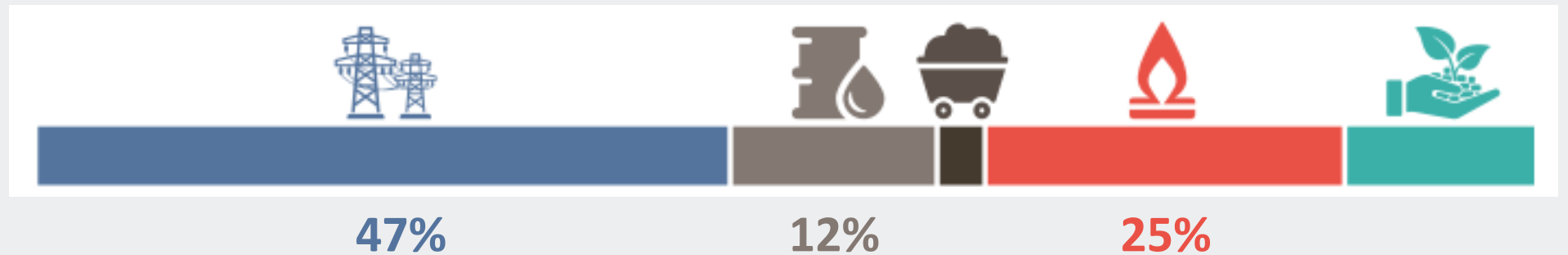
- 179.8 billion kilowatt-hours (kWh) of electricity;
- 17.6 billion litres of petroleum products;
- 7.1 billion m³ of natural gas;
- 3.0 million tonnes of oil equivalent (toe) of bioenergy;
- 0.5 million tonnes of coal.

All told, this represents 40.7 Mtoe of energy.



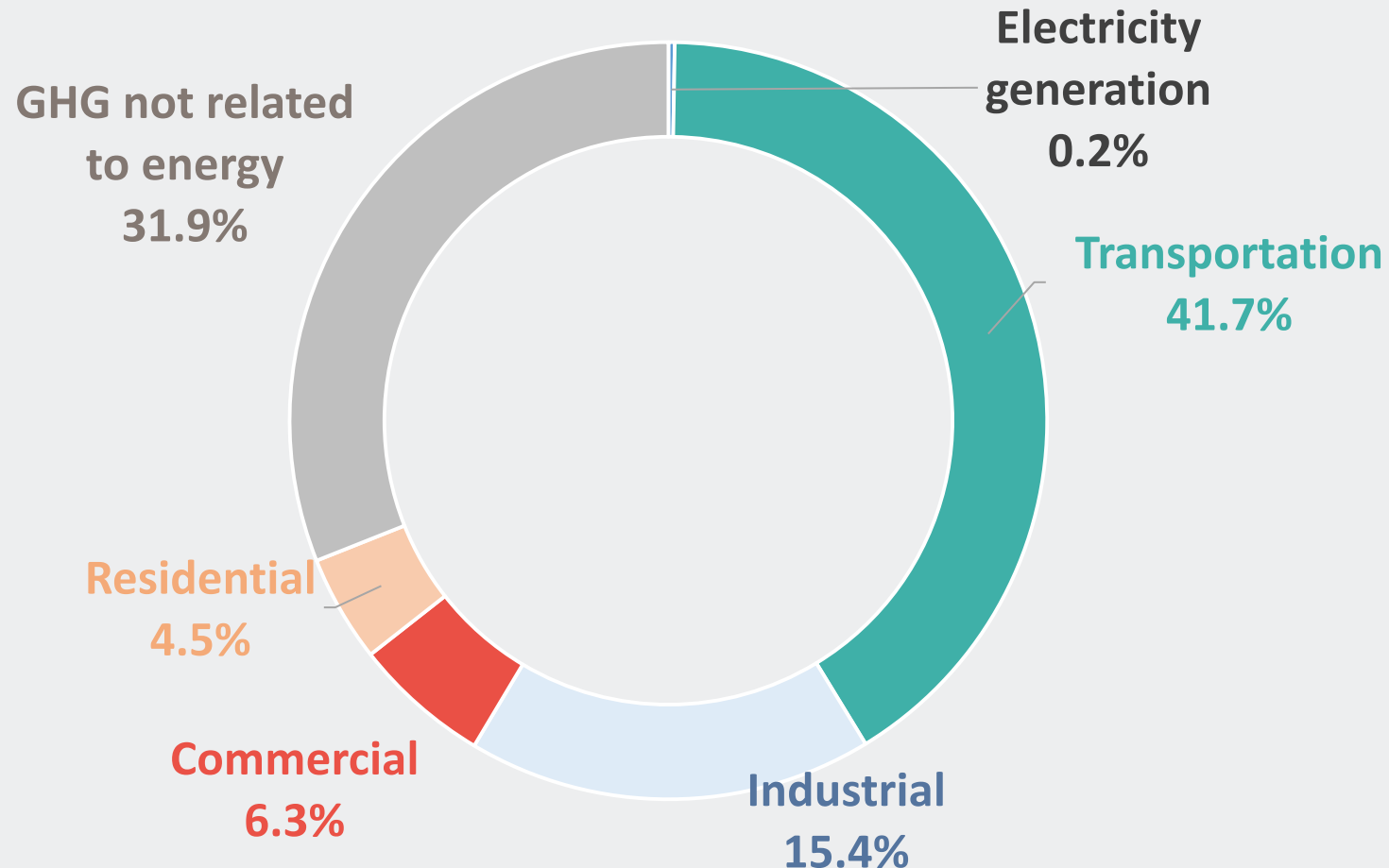
The industrial sector

In 2015, the industrial sector accounted for the biggest proportion of energy consumption (38.3% of the total).



The industrial sector

The industrial sector is the most energy-intensive in the economy and ranks second after transportation for energy-related GHG emissions (2015).



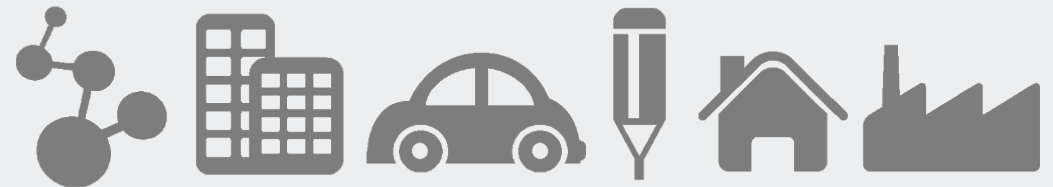
What is Transition énergétique Québec?

Mission

- **Support** and **promote** the transition, innovation and energy efficiency
- **Produce** master plans and **coordinate** the implementation of the entire array of programs and measures necessary to attain the energy targets that the government has defined in *The 2030 Energy Policy*

Funding sources

- The Fonds de transition énergétique
- The Green Fund
- The shares of energy distributors
- Other sources



Why a master plan?

To structure the entire array of initiatives of Transition énergétique Québec, government departments and bodies, energy distributors, and so on

- Better coordinate initiatives
- Attain objectives and targets

The master plan indicates the means to attain the government's targets

The 2018-2023 targets



1% annual average energy efficiency



5% total consumption: of oil in relation to 2013

The 2018-2023 Master Plan

Elaborated jointly by Transition énergétique Québec and its partners following an extensive public consultation

- Individuals
- Energy distributors
- Government departments and bodies
- Municipalities
- Stakeholders' steering committee

The master plan reveals the government's concern for coherence by consolidating all facets of the Québec energy transition.

The challenges raised by the IGUA

The IGUA submitted a brief during the consultations conducted last fall. Among its recommendations:

- recognize the global nature of trade in commodities
- invest in the decarbonization of heavy industry in Québec
- protect industries exposed to trade from exogenous competition
- prevent leakage and exports of emissions
- adopt exemplary behaviour by applying a public services procurement policy that emphasizes low-carbon products

Transition
énergétique
Québec has
listened to you and
drawn inspiration
from your
recommendations
in the elaboration of
its master plan.
[omit]

The key directions of the *2018-2023 Master Plan*

The master plan reflects the recommendations:

- **recognize energy efficiency as a priority energy source**
- **reduce Québec's dependence on petroleum products**
- **strongly support energy-related innovation**
- **develop the full potential of renewable energies**
- **bolster governance and broaden government accountability**
- **support economic development**

Existing Transition énergétique Québec programs



Residential

- Novoclimat
- Rénoclimat
- Heating with Green Power
- Éconologis



Commercial, institutional, municipal and industrial

- **ÉcoPerformance**
- Residual Forest Biomass Program
- **Technoclimat**



Individuals, businesses, organizations and municipalities

- The Drive Electric Program
- Plugged In at Work

Transition énergétique Québec programs encourage energy efficiency.

ÉcoPerformance - Implementation

Objectives of the program

- Financially support projects devoted to energy efficiency, GHG emission reduction or conversion to forms of energy with lower GHG emissions

Financial assistance

- Up to \$5 million per application or \$10 million annually per site

ÉcoPerformance - Implementation

Example of a project funded

- Kruger Brompton S.E.C.
 - First project: Heat recovery from effluent
 - 9 657.6-tonne annual reduction in GHG
 - 5 111 675-m³ annual reduction in natural gas consumption
 - Cost: \$4.9 million
 - Financial assistance: \$3 380 156
- Second project: Reduction in hot water and energy consumption of papermaking machines
 - 8 717.6-tonne annual reduction in GHG
 - 4 614 161-m³ annual reduction in natural gas consumption
 - Cost: \$4.95 million
 - Financial assistance: \$3 487 050

Technoclimat

Objectives

- Support energy-related innovation and GHG emission reduction in Québec
- Facilitate testing in Québec of energy efficiency technologies, renewable energies, bioenergy and GHG emission reduction

Financial assistance

- Up to \$3 million or \$5 million for a transportation electrification project that is deemed strategic

Technoclimat

Number of projects funded

- Terix-Envirogaz
 - Project: A technological demonstration conducted in the Rivière-du-Loup region that consists in purifying and refining biogas to produce liquefied biomethane for the transportation and industry sectors
 - Cost: \$3 million
 - Financial assistance: \$1.3 million
- Centre de valorisation de Crabtree
 - Project: A technological demonstration that seeks to introduce, test and study the use of compressed natural gas (CNG) to operate heavy trucks
 - Cost: \$500 000
 - Financial assistance: \$250 000

Aside from the programs...

Tools exist to help improve the performance of processes

- Multivariate analysis of data
- Integration of processes

Training is available to learn to use the tools

- Delivered by Canmet énergie Varennes
- Jointly funded by the federal government and Transition énergétique Québec

Transition énergétique Québec is seeking...

to enhance its service offer

- to optimize programs
- partnerships

to become the energy transition gateway for all clienteles

- an online and telephone information portal

to offer guidance to the business clientele

- provide technical expertise in the realms of energy efficiency and the energy transition

Conclusion

Transition énergétique Québec wishes to pursue its close collaboration with all of its partners.

We are launching a challenge.

- **Think** outside the box.
- Tell us about **your** innovative solutions.
- Let's work **together** to carry them out.
- Let's channel our energies. Together, let's **give concrete expression to** Québec's energy transition.



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Social media



YouTube

Thank you for
our
presence. [omit]