Energy Data in Canada: Perspectives and Issues in Quebec

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Plan

- Use of data in government activities
- Data issues
- Status
- Possible solutions





Mission of the ministère de l'Énergie et des Ressources naturelles (MERN)

- Among others, ensure the integrated development of natural resources with a view to achieve sustainable development and management
- Support, stimulate and promote energy transition, efficiency and innovation, and ensure their integrated stewardship
- Develop and implement energy transition, efficiency and innovation programs
- Prepare reports and benchmarking studies on energy, and advise the government on standards and other elements that may influence energy consumption, and propose appropriate changes





Mission of the ministère de l'Énergie et des Ressources naturelles (MERN)

Implications in terms of data

- Need for knowledge and high expectations with respect to disclosing and simplifying information
- Accountable for identifying (anticipating) Quebec's future energy needs





Use of data in government activities

- Develop policies, programs and action plans (2030 Energy Policy, Master Plan)
 - Example: Sectoral consultation documents
- Identify, monitor and evaluate energy and GHG emission targets
- Monitor markets, indicators, trends and impacts on businesses and consumers
- Provide various analyses and responses to information requests





Data issues

Dissemination capacity in Quebec

- Publication on the MERN website
- Reduced coverage because of access constraints
- Delays in disseminating information
 - Lag in the dissemination of public energy data
 - Additional data processing owing to confidentiality
- Organizational changes over the last few years
- Limited resources and expertise





Data issues

Availability

- Incomplete data on the MERN's business areas (e.g., bioenergy: biofuel, biomass)
- Limited modelling capacities because of the level of detail required and the quality of data available
- Lack of information on energy system components: equipment, buildings, vehicles, technologies, etc.
- Importance of data for comparison with other jurisdictions





Data issues

Confidentiality and access to Quebec department and agency data

- Administrative data
- Balance between public interest and protection of personal information
- Legal framework: a new act and bill are under review
 - Bill 95 (assented): Amends the governance of information resources of public bodies and government enterprises
 - Bill 64: Modernizes the legislative provisions for protection of personal information





Data issues Priority needs

- Bioenergy (firewood in residential and commercial/institutional sectors)
- Industrial energy consumption by subsector
- Freight transportation (vehicle characteristics, tonnage, distance, etc.)
- New segments: solar, hydrogen, etc.
- Regional energy data





Status

New context: Energy innovation and transition sector

- Combined efforts to collect and disseminate energy data
- Automation of updates from a new database (in progress)
- Frequent publication of priority statistics for Quebec (consumption, production and price)





Status

Data collection

- Draft Regulation respecting the integration of low-carbon-intensity content into gasoline and diesel fuel—to be enacted in late 2021
- 2024: First round of biofuel data collection





Status

Modelling work

- Replace MÉDÉE (Energy Demand Evaluation Model) with LEAP (Low Emission Analysis Platform) for Quebec
- Sharing and collaboration on modelling with different organizations





Possible solutions

- Partnerships and collaboration between stakeholders (departments and agencies at different levels
 of government, municipalities, energy distributors, universities, associations, etc.)
- Propose a new approach or balance between sharing information and protecting privacy within the context of energy transition
- Broaden key data collection authorities in Quebec
- Develop new surveys:
 - Quebec: Expertise of the Institut de la statistique du Québec
- Improve the flexibility of data sharing agreements: management of agreements and data use type





https://transitionenergetique.gouv.qc.ca/en/











