Minister Ministre of Natural Resources des Ressources naturelles

Ottawa, Canada K1A 0E4

DEC 1 7 2018

Mr. James Maloney, M.P. Chair Standing Committee on Natural Resources House of Commons Ottawa, Ontario K1A 0A6

Dear Mr. Maloney:

I am pleased to respond, on behalf of the Government of Canada, to the recommendations made in the Standing Committee report entitled *Rethinking Canada's Energy Information System: Collaborative Models in a Data-Driven Economy*, released on October 4, 2018.

The Government values the important work of the Committee, has considered its findings, and agrees with its recommendations. To this end, the Government is taking concrete steps to address these recommendations.

The Government agrees that a one-stop shop would help address limitations of the current system, and it plans to develop an energy information website that will provide coordinated access to Statistics Canada's energy data, integrate key information products from federal partners, and link to resources from provinces and territories over time.

Noting that there are key gaps in energy information, the Government agrees that new data is required. A number of incremental improvements to energy data related to the low-carbon transition are being pursued, building on previous budget investments to support clean growth policies; the Clean Technology Data Strategy; a whole-of-government data strategy to improve how the federal government collects, uses and shares data; and the modernization of Statistics Canada.

The Government acknowledges that standardization across providers is a crucial step towards more trusted, complete, and internally consistent energy information. There is already some coordination in Canada through the federal-provincial-territorial Committee on Economic Statistics. The Government also plans to engage provinces and territories in the coming year through existing fora to bolster collaboration on energy information.



The enclosed Government Response discusses the importance and complexity of the energy information system and outlines our government's current work to address the Committee's recommendations.

On behalf of the Government of Canada, I would like to thank the members of the Standing Committee and its staff for their work in preparing this report, as well as the numerous witnesses who shared their invaluable insights into the state of Canada's energy information system. This is certainly not the end of this conversation, and I look forward to working with you further on this issue.

Yours sincerely,

Amarjeet Sohi, P.C., M.P.

A. Sohi

Enclosure: (1)

GOVERNMENT OF CANADA RESPONSE TO THE 10TH REPORT OF THE HOUSE OF COMMONS STANDING COMMITTEE ON NATURAL RESOURCES, ENTITLED: RETHINKING CANADA'S ENERGY INFORMATION SYSTEM: COLLABORATIVE MODELS IN A DATA-DRIVEN ECONOMY

Introduction

The Government of Canada welcomes the tenth report of the Standing Committee on Natural Resources entitled *Rethinking Canada's Energy Information System: Collaborative Models in a Data-Driven Economy.* The Government would like to thank the Committee members for their efforts in assessing Canada's energy information system and highlighting the range of issues that stem from the complex, patchwork framework for the many organizations who collect energy data across the country. The Government would also like to thank the witnesses who provided expert testimony and shared their perspectives on the status of energy information in Canada.

As a global energy leader, Canada requires strong energy information. Canada's current energy information system, which guides decision-making on energy issues, is the joint contribution of several organizations. Each has its own mandate and each contributes in a unique way to the collection, analysis, and dissemination of energy information.

- Within the Government of Canada, there are four departments or agencies, each involved in collecting energy information: Statistics Canada is the leading provider of national and regional energy statistics; the National Energy Board produces forecasts of energy supply and demand; Environment and Climate Change Canada monitors emissions and models the impacts of environmental policies on the energy sector; and Natural Resources Canada shares facts and information in support of the responsible development and use of energy resources.
- Reflecting their control over many aspects of energy resources, provincial and territorial governments are also vital providers of energy information, with multiple key providers – government departments, regulators, and utilities – in each jurisdiction.
- There are also numerous other contributors, including industry associations, Indigenous
 organizations, academic institutions, think tanks, and international organizations that
 provide a range of unique data, analysis, and forecasts.

THE GOVERNMENT OF CANADA'S ROLE IN ENERGY INFORMATION

Statistics Canada is mandated to collect, compile, analyse, and publish a wide range of statistics on the commercial, industrial, financial, social, and economic activities of Canadians.

- Provides statistics on the production, transformation, distribution, and use of energy, including through its flagship Report on Energy Supply and Demand.
- Produces general economic statistics for the energy and clean technology sectors (e.g., jobs, GDP, productivity, investment, imports/exports).
- Facilitates access to detailed energy microdata.

Natural Resources Canada works to enhance the responsible development and use of Canada's natural resources and the competitiveness of Canada's natural resources products.

- Maintains the National Energy Use Database to support energy efficiency programming.
- Publishes the Energy Fact Book, an authoritative source of facts on energy-related topics.
- Prepares Canada's submissions to the International Energy Agency for use in global databases and reports.

The **National Energy Board** regulates pipelines, power lines, energy development and trade in the Canadian public interest, considering economic, environmental, and social factors.

- Collects/disseminates energy trade and pipeline data to support its regulatory functions.
- Provides annual national and regional Energy Outlooks forecasting Canadian energy supply and demand under alternative scenarios.
- Publishes weekly Market Snapshots and other analyses of key energy issues.

Environment and Climate Change Canada is the lead federal department for environmental monitoring, environmental policy and regulatory development, and enforcement of environmental laws.

- Conducts impact analyses of major environmental policies that affect the energy sector.
- Produces Canada's National Greenhouse Gas Inventory and Greenhouse Gas Emissions
 Projections.
- Collects/reports facility-level emissions via the *Greenhouse Gas Reporting Program* and the *National Pollutant Release Inventory.*
- Prepares Canada's Biennial Report on Climate Change submission to the United Nations.

The Committee's report highlights the limitations of Canada's complex, decentralized, patchwork approach to energy information. It finds that:

- Canada's decentralized energy data, while abundant, can be difficult to navigate, interpret and verify, especially for non-experts;
- Data measurement, definitions, policy tools and reporting standards vary among
 Canadian jurisdictions and information providers, leading to inconsistencies that limit the

- coherency and usability of some national data and can create confusion as to which sources are official or correct;
- Canadian energy data are generally reported 12 to 18 months after the end of the year; some are reported up to five years behind. These time lags are considered too long for a fast-paced economy with ever growing demand for real-time information;
- Researchers are sometimes unable to access the source files of national energy analyses due to rules of proprietary and/or confidentiality; and,
- Some Canadian energy information is incomplete or lacking.

The Committee report also finds that "Canada would benefit from a one stop shop for energy information where Canadians, industry, and policy makers could access detailed regional and national energy information that is accurate, timely, transparent, comprehensive, user-friendly, internally-consistent, free of charge, responsive to the needs of different sectors, and independent of political influence." Given the range of data providers and users of energy information in Canada, the Committee identifies collaboration with provincial and territorial governments, industry, academia, civil society, and Indigenous governments as key to the successful reform of the existing system. While acknowledging that "reforming Canada's energy information system is not a greenfield operation", the Committee underscored that the issue requires substantial additional attention given the "rapid evolutions in the energy sector, as well as the complex dynamics of data supply and demand in the digital age".

The Committee's recommendations align with the conclusions of many national discussions between levels of government, stakeholders, and experts on energy, the environment, and the economy. The issue was discussed with provinces, territories, and Indigenous groups in the development of the Pan-Canadian Framework on Clean Growth and Climate Change. Similarly, energy information and its role in transparent decision-making was considered during the Generation Energy dialogue, which saw the engagement of over 380,000 Canadians. Finally, expert tables such as the Generation Energy Council and the National Energy Board Modernization Expert Review Panel examined the issue in-depth. Through each initiative, similar diagnoses and prescriptions were developed, including the need to fill key data gaps, standardize energy definitions and measurements across reporting organizations, and establish a central repository of energy information.

The Government of Canada has made a number of targeted improvements to energy information, with an emphasis on filling gaps in information needed to guide the transition to a low carbon energy future. For example, supported by investments in data through Budgets 2016 and 2017, Canada recently became the first country to measure the economic, social, and environmental impacts of clean technologies and clean energy in a national accounting framework. The resulting data will support Canada's drive to capture market share in a rapidly growing global market for clean technologies.

Given the complexity of the current energy information system, pursuant to the Committee's recommendations, the Government is proceeding with an incremental and collaborative approach toward a fully coordinated energy information system. Such an approach will allow Government to monitor and assess progress against its objectives.

As a first step toward a more coordinated energy information system, the Government of Canada is working to establish a website that will provide a single-point-of-access to federal energy information. This user-friendly website will simplify access to Statistics Canada's energy-environment-economy data, integrate key information products from other federal providers (e.g., energy outlooks, emissions forecasts, basic facts on the energy sector and its relation to the environment and the economy), and include links to provincial and territorial resources.

Second, to initiate progress toward a more collaborative approach to energy information, the Government of Canada is engaging provinces, territories, and Indigenous organizations through the Energy and Mines Ministers' Conference (EMMC) to bolster collaboration to improve energy information. Through this ongoing forum, partners will identify areas of potential collaboration, including in the area of common energy definitions, measurements and reporting standards.

Third, with respect to the Committee's recommendation for a one-stop shop for energy information, the experience gained in the initial steps outlined above will allow the Government to take stock of progress made towards a coordinated energy information system and evaluate options for moving forward.

With these goals in mind, the Government of Canada has responded below to the three recommendations of the Committee's report.

Response to the Committee's recommendations

Recommendation #1: The Committee recommends that the Government of Canada designate a "one-stop shop" for detailed regional and national energy information that is accurate, timely, transparent, comprehensive, user-friendly, internally-consistent, free of charge, responsive to the needs of different sectors, and independent of political influence. To this end, the committee recommends that the government work with industry, civil society, research institutions, Indigenous governments and communities, and provincial/territorial governments to:

 a) assess the feasibility of housing the proposed information provider within an existing federal organization versus creating an entirely new Canadian energy information agency;

- ensure that the proposed energy information provider is politically independent and has sufficient legislative power to collect, validate, analyse and distribute energy data under competitive timelines;
- c) establish sufficient safeguards to protect the sensitivity and/or confidentiality of energy data reported by the public, private companies and other organizations; and
- d) incorporate best practices from international counterparts, where appropriate.

Government Response to Recommendation #1: The Government of Canada discussed the current energy information system with experts through Generation Energy, NEB Modernization Expert Panel, and the Resources of the Future and Clean Technology Economic Strategy Tables. While the current system generates a wide range of data, information is scattered across various providers. Experts agrees that designating a 'one-stop shop' for Canadian energy information would help address well-known limitations of Canada's relatively decentralized system.

As a first step, the Government of Canada is working to streamline access to energy information provided by federal departments and agencies. This includes the launch of an energy information website that is an early step toward a 'one-stop shop'. The website provides a single point of access to Statistics Canada's integrated energy-environment-economy data and raises the profile of key existing information products from other federal providers (e.g., Energy Fact Book, Canada's Energy Future, and Canada's Greenhouse Gas Emissions Projections). It will include links to resources from provincial-territorial partners. The website could be incrementally expanded over time to integrate additional data and information from partners.

This builds on recent success the Government of Canada has had in bringing coherence to Canada-US-Mexico energy data through *North American Cooperation on Energy Information* (NACEI). A trilateral MOU signed in 2014 and subsequently expanded in 2016 created the institutional framework for sharing information among countries. This has resulted in consistent definitions and measures of energy imports and exports, complete maps of North American energy infrastructure and resources for investment and planning purposes, and integrated outlooks for energy production and trade for each country reflecting the interconnectedness of the North American energy markets. NACEI has helped improve accessibility and quality of energy information across the continent by bringing a variety of information into a trilateral portal (NACEI.org).

Recommendation #2: The committee recommends that the Government of Canada work with industry, research institutions, Indigenous governments and communities, and provincial/territorial governments to identify gaps in Canadian energy information, and to mitigate these gaps by providing financial, legal and/or administrative support to relevant data collectors, as needed.

Government Response to Recommendation #2: The Government of Canada agrees that collaboration is required to ensure that the country's energy information system continues to provide relevant data and analysis amid a changing energy landscape. It has sought guidance on evolving data needs to support the low-carbon transition in a number of contexts, including during unprecedented engagement with Canadians about Canada's energy future through Generation Energy.

Building on the *Pan-Canadian Framework on Clean Growth and Climate Change*, the provincial and territorial *Canadian Energy Strategy*, the purpose of the *Generation Energy* dialogue was to engage Canadians in the development of a collective long-term vision for Canada's low carbon energy future. Over 380,000 Canadian stakeholders participated through workshops, webinars, and online engagement. The dialogue culminated in a two-day forum that brought together 670 energy stakeholders, academics, government officials, Indigenous peoples, and youth to debate core themes that emerged throughout the dialogue. This exercise highlighted data gaps and the need for timely, objective, and credible energy data, particularly to support decision-making related to four main carbon-reduction pathways: reducing energy consumption; switching to cleaner power; using more renewable fuels; and producing cleaner oil and gas.

With the results of this dialogue in mind, the Government of Canada has a number of initiatives underway that will make progress toward addressing some of the most pressing gaps in data required to guide the move toward a more inclusive and low carbon energy future.

For example, Statistics Canada is upgrading data collection in a number of areas to better understand changes in Canada's energy sector. This includes addressing data gaps related to renewable energy, biofuels, refined petroleum products and diversity in the sector, including the participation of women and Indigenous peoples. Efforts are also underway to provide more detailed data, including at the provincial and territorial level. In an effort to support the dialogue on the low-carbon transition, the flagship report Canada's Energy Futures is now produced on an annual basis, along with interactive visualizations to show how Canada's energy future differs according to alternative potential scenarios.

These initiatives build on recent success the Government of Canada has had in addressing key data gaps related to the low-carbon transition and the fast-growing market for clean technologies and clean energy. For example, through Budget 2016, Environment and Climate Change Canada received funding to bolster the evidence base and actions supporting the Government's climate change objectives, including in the areas of science, data reporting, and policy. Similarly, through Budgets 2016 and 2017, the Government made investments in clean technology data, including to establish a Clean Technology Data Strategy. Lastly, through Budget 2018, the Government committed to developing a whole-of-government data strategy to improve how the federal government collects, uses and shares data. It will be supported by

the expertise of a renewed and modernized Statistics Canada. The Government is also exploring further options, including through legislation, to ensure Statistics Canada can respond to data needs of the 21st century.

Going forward, the Government of Canada also has plans to engage provinces, territories, Indigenous organizations, and external experts to identify and prioritize further gaps in data related to the low-carbon transition.

Recommendation #3: The committee recommends that the federal government work with industry, civil society, research institutions, Indigenous governments and communities, and provincial/territorial governments to standardize energy definitions, measurements and reporting standards across Canadian jurisdictions and reporting organizations, and to ensure that these standards are consistent with international norms and best practices.

Government Response to Recommendation #3: Common energy definitions, measurements, and reporting standards would help to bring greater coherence to energy information and to facilitate integration of data from various providers. This is an important step toward providing Canadians with more trusted, complete, and internally consistent energy information.

Canada already has a forum to coordinate and improve economic statistics among federal, provincial and territorial partners. Members of the *Committee on Economic Statistics* adhere to core principles underlying a national statistical system, including maintaining political neutrality, safeguarding confidentiality, and using sound statistical practices. Members meet every year to coordinate their activities through a Memorandum of Understanding.

As a complement to the work of the *Committee on Economic Statistics* and as a next step toward increased collaboration on energy statistics, the Government of Canada is engaging provinces, territories, and Indigenous organizations through the Energy and Mines Ministers' Conference (EMMC). The annual EMMC is a venue through which federal, provincial, territorial, and Indigenous leaders have previously recognized the need to bolster collaboration to improve energy information. Through this forum, partners will identify areas of potential collaboration, including in the area of common energy definitions, measurements and reporting standards.

Internationally, Statistics Canada participates in various international fora, including the *UN Conference of European Statisticians*, the *Oslo Group on Energy Statistics*, and the *International Energy Agency* to establish best practices on energy definitions, measurements, and reporting standards.

These collaborative efforts support continuous improvements to Canada's national statistics and their international comparability.

Conclusion

More coherent energy information has potential to benefit all Canadians by improving public understanding of complex energy issues, enabling informed investments by industry and consumers, and supporting sound policy in the move toward a low carbon energy future. The Government of Canada supports the Committee's recommendations. Recently completed, ongoing, and planned initiatives will take concrete steps towards achieving them.