



HOUSE OF COMMONS  
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CANADA

# **THE FUTURE OF CANADA'S OIL AND GAS SECTOR: INNOVATION, SUSTAINABLE SOLUTIONS AND ECONOMIC OPPORTUNITIES**

## **Report of the Standing Committee on Natural Resources**

**James Maloney  
Chair**

**SEPTEMBER 2016**

**42<sup>nd</sup> PARLIAMENT, 1<sup>st</sup> SESSION**

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# **THE STANDING COMMITTEE ON NATURAL RESOURCES**

has the honour to present its

## **SECOND REPORT**

Pursuant to its mandate under Standing Order 108(2), the Committee has studied The Future of Canada's Oil and Gas, Mining and Nuclear Sectors: Innovation, Sustainable Solutions and Economic Opportunities and has agreed to report the following:





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On 24 February 2016, the Committee unanimously passed a motion to explore the future of Canada's oil and gas sector, with a focus on innovation, sustainable solutions and economic opportunities. Over the course of seven meetings, the Committee heard from 33 witnesses who highlighted a number of existing and emerging trends that are driving change in the sector. The Committee is pleased to present its report.

## INTRODUCTION

The oil and gas sector is important for the Canadian economy. According to a government witness, it represents close to 8% of gross domestic product (GDP), \$137 billion in annual exports, and about 200,000 direct jobs across the country.<sup>1</sup> Canada has the 3<sup>rd</sup> largest oil reserves in the world, and produces nearly 5% of global crude oil and 5% of global natural gas, making it the world's 4<sup>th</sup> and 5<sup>th</sup> largest producer of each respectively.<sup>2</sup> In 2014, Canada's daily production rate of crude oil averaged about 4.3 million barrels per day (bbl/day), while natural gas averaged about 444 million cubic metres per day.<sup>3</sup>

Canada is a net exporter of crude oil and natural gas, with 97% of oil exports and 100% of natural gas exports going to the United States (the remaining exports go mainly to Europe and South America). In 2014, crude oil exports represented \$70 billion of the country's \$85 billion net energy export revenues, while natural gas exports accounted for \$11 billion of the total revenues.<sup>4</sup> The vast majority of these exports were delivered via pipeline, which is another generator of wealth. For example, pipeline operations in 2015 added \$11.5 billion to Canada's GDP and sustained an estimated 34,000 full-time-equivalent jobs.<sup>5</sup> Currently, only oil resources can be shipped by tanker from marine terminals, because Canada does not yet have the infrastructure required to export liquefied natural gas (LNG) overseas.

Both employment incomes and labour productivity are considered relatively high in the oil and gas sector. According to the witness from Unifor, natural gas distribution jobs enjoy a 50% premium over the average Canadian industrial wage, while jobs in oil and gas extraction earn double that average.<sup>6</sup> A witness from the Canadian Chamber of Commerce estimated labour productivity for oil and gas extraction at \$1.36 million in value added per job per year, which is 15 times higher than the national average for all sectors.<sup>7</sup>

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1 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 9 March 2016 (Frank Des Rosiers, Assistant Deputy Minister, Innovation and Energy Technology).

2 National Energy Board, [Canada's Energy Future 2016](#), May 2016.

3 *Ibid.*

4 National Energy Board, [Canadian Energy Overview 2014 – Energy Briefing Note](#), 2014.

5 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 2 May 2016 (Chris Bloomer, President and Chief Executive Officer, Canadian Energy Pipeline Association).

6 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 16 May 2016 (Jordan Brennan, Economist, Research Department, Unifor).

7 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 2 May 2016 (Katrina Marsh, Director, Natural Resource and Environmental Policy, Canadian Chamber of Commerce).

Aside from two new growth projects in the oil sands worth about \$15 billion of investment, no new large oil sands developments are expected to take place in the foreseeable future—one reason being that the industry requires a crude oil price of at least US\$50/bbl for a project to make economic sense.<sup>8</sup> Other proposed large projects are in various stages of assessment at present, including oil and gas pipelines to the East and West coasts from Alberta, as well as a number of plants and ports that could serve B.C.'s anticipated LNG industry.

## **KEY DRIVERS: CHALLENGES AND OPPORTUNITIES**

The following sections outline the main factors, based on the witnesses' testimony, that are contributing to the uncertainty of the oil and gas sector's short-, medium-, and long-term future. The arguments are presented according to four themes: 1) Economic drivers, 2) Social drivers, 3) Environmental drivers, and 4) Technology drivers.

### **A. Economic Drivers**

#### **1. Oil and Gas Prices**

The period between 2011 and 2014 was one of relative stability and record high crude oil prices at above US\$100/bbl; the rapid decline in oil prices to under US\$50/bbl in less than a year has had a dramatic impact on the Canadian oil and gas industry.<sup>9</sup> Investment slowed down, many affected companies and governments saw their revenue decline, and producers in Canada's oil sands, operating in a high-cost production environment, had to cut costs, decommission equipment, lay off workers, and delay or cancel planned investments. The direct and indirect job losses across Canada are estimated at over 40,000 and 100,000 respectively.<sup>10</sup>

According to the witness from Suncor Energy, low oil and gas prices have put the immediate focus of the industry on survival. He explained that "new investment will depend on project economics, of which price is the single biggest factor."<sup>11</sup> In that respect, the Committee heard that oil prices need to be between US\$50 and \$70/bbl to justify investing in new extraction projects (in the oil sands sector, some projects were considered unprofitable at prices as high as US\$92/bbl).<sup>12</sup> While fluctuations in oil prices remain uncertain, Professor Moore thinks future prices are unlikely to exceed \$60/bbl.<sup>13</sup>

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8 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 16 May 2016 (Steve Reynish, Executive Vice-President, Strategy and Corporate Development, Suncor Energy).

9 National Energy Board, [Canada's Energy Future 2016](#), May 2016.

10 RNNR, [Evidence](#), 16 May 2016 (Reynish).

11 RNNR, [Evidence](#), 16 May 2016 (Reynish).

12 RNNR, [Evidence](#), 2 May 2016 (Marsh).

13 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 9 May 2016 (Michal Moore, Professor, School of Public Policy, University of Calgary, as an individual).

## 2. Production Costs

As a high-cost operating environment, Canada's oil sands have faced particular challenges during the oil price downturn. The Committee heard that some oil sands developments have the highest cost of production in the world, and that the high cost of production and operations are a risk to the industry's competitiveness, particularly when costs associated with environmental and climate performance are factored in. For example, input costs, such as labour and electricity, are an expense factor that affects project economics.<sup>14</sup>

In some cases, high exploration and development costs make it difficult for companies to attract capital if too much risk is perceived in pursuing new opportunities.<sup>15</sup> For example, promising reservoirs, such as the tight oil deposits in the Northwest Territories, are still considered "high-risk frontiers" that are difficult to access; they require not just hard infrastructure like roads, but also soft infrastructure to support communities of workers. Investors are likely to avoid these expenses until the "resource can be proven or de-risked."<sup>16</sup>

## 3. Export Capacity

Some witnesses argued that the future growth of the upstream oil and gas industry depends on the capacity to deliver products to international markets, whether by pipeline, rail, truck, or tanker. There was general agreement that pipelines are the preferred mode of land-based transportation, due to their relatively low transportation costs and improved environmental performance compared to other modes, namely rail. The witness from the Canadian Association of Petroleum Producers (CAPP) emphasized how Canada's landlocked upstream oil and gas producers would continue to sell their products at a discount, unless the industry develops the infrastructure needed to enable them to access new markets overseas.<sup>17</sup>

There are a number of proposed pipelines from the Alberta oil sands to export markets that have sought approval in the past few years. As pointed out by the witness from the Canadian Energy Pipeline Association (CEPA), several pipelines, including the Line 9 and initial Keystone pipelines, went through the NEB's regulatory process and were built over the past 10 years.<sup>18</sup> Meanwhile, public concern has been growing with respect to pipelines, according to Professor Gattinger, partly due to unresolved policy considerations

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14 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 2 May 2016 (Byng Giraud, Vice-President, Corporate Affairs and Country Manager – Canada, Woodfibre LNG).

15 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 9 May 2016 (André Plourde, Full Professor and Dean, Faculty of Public Affairs, Carleton University, as an individual).

16 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 13 April 2016 (Alex Ferguson, Vice-President, Policy and Performance, Canadian Association of Petroleum Producers).

17 *Ibid.*

18 RNNR, [Evidence](#), 2 May 2016 (Bloomer).

related to climate change, Indigenous reconciliation, and the assessment of the cumulative impacts of infrastructure development projects.<sup>19</sup>

#### 4. Future Demand

Witnesses were divided on whether future demand for Canada's oil and gas products would increase or decrease, especially in the long-term. While some witnesses argued that oil and gas will continue to be an important part of the global energy mix in the medium- and long-terms, others argued that, in the near-term, slowing economic growth in Asia<sup>20</sup> – a primary market for Canada's LNG export aspirations – and the decrease in US demand for oil and gas would likely lower demand for Canada's oil and gas resources.<sup>21</sup>

#### 5. Investment

The Committee heard that, barring commodity price increases, investment in Canada's oil and gas sector will likely continue to decline. The witness from CAPP projects that Canada's oil sector will experience an estimated 62% drop in capital investment from 2014 levels through 2016, a decrease of approximately \$50 billion.<sup>22</sup> In terms of exploration, that figure translates to 3,500 new wells being drilled through 2016 (down from 10,000 in 2014).<sup>23</sup>

Other factors that affect investment decisions include market access, transportation infrastructure, carbon liability, environmental and climate regulations, Indigenous rights, and public trust. The CAPP representative told the Committee that Canadian firms seeking investment, over the last few years, needed to "spend a lot of their time now selling the merits of Canada, not just selling the merits of their project."<sup>24</sup>

Some witnesses suggested that investment challenges tend to have a more detrimental impact on smaller and newer firms with less access to financial resources.<sup>25</sup> Others warned that declining investments could affect the health of the secondary and tertiary industries that provide goods and services for the oil and gas sector.<sup>26</sup>

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19 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 16 May 2016 (Monica Gattinger, Professor, Chair, Positive Energy, Director, Institute for Science and Policy, University of Ottawa, as an individual).

20 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 4 May 2016 (Ed Whittingham, Executive Director).

21 RNNR, [Evidence](#), 9 May 2016 (Moore).

22 RNNR, [Evidence](#), 13 April 2016 (Ferguson).

23 *Ibid.*

24 RNNR, [Evidence](#), 13 April 2016 (Ferguson).

25 RNNR, [Evidence](#), 9 May 2016 (Plourde; Moore).

26 RNNR, [Evidence](#), 13 April 2016 (Ferguson); RNNR, [Evidence](#), 16 May 2016 (Reynish).

## 6. Competition

The Committee heard that some oil- and gas-producing countries enjoy certain competitive advantages over Canada—for example, more strategic geographic access to markets, better export infrastructure, or lower operational costs. For example, new production technologies that have unlocked previously inaccessible natural gas resources in the United States (namely, hydraulic fracturing) have changed the Canada-U.S. trade balance for natural gas products.<sup>27</sup> Furthermore, the opportunity for Canadian firms to secure LNG contracts with trading partners in Asia could be jeopardized if other countries manage to develop the required export infrastructure before Canada does. The witness from Woodfibre LNG stated the following:

“The Americans, who were our customers in the past, are now our competitors. They were able to sell gas out of Louisiana, the south-east, and the Gulf of Mexico at very low rates. [...] With our economics we have an advantage because of distance. We're closer to the Asian markets but our economics are very critical.”<sup>28</sup>

Professor Elgie emphasized that environmental performance has become a major concern for the competitiveness of Canada's oil and gas industries, stating that we “have to move from seeing environmental performance as a threat to competitiveness to an opportunity for competitiveness.”<sup>29</sup> Similarly, the representative from NRCan stated the following: “We understand that we need to move the yardstick significantly in terms of environmental performance and cost to keep the industry running, not just for the short-term environment we're in, but also to make sure we're competitive in the long haul.”<sup>30</sup> On the other hand, the witness from the Canadian Chamber of Commerce warned that certain environmental policies, namely carbon pricing, could undermine Canada's competitiveness—she stated that “[...] unless it's aligned with trading partners, the price of carbon can cause a lack of competitiveness.”<sup>31</sup>

### B. Social Drivers

The Committee heard that the future of Canada's oil and gas industries is intertwined with how society perceives them. Of great concern are Indigenous inclusion and public support for resource development projects.

Governments have a legal duty to consult and, where appropriate, accommodate Indigenous peoples, which makes Indigenous engagement a critical driver of success for many projects. The witness from the Indigenous Health Alliance stated that in 2013, Indigenous peoples “had already won more than 150 court cases across the Canadian resource sector,” a number that has likely grown since. He added that, in asserting

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27 RNNR, [Evidence](#), 2 May 2016 (Giraud).

28 *Ibid.*

29 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 9 May 2016 (Stewart Elgie, Professor, Faculty of Law, University of Ottawa, Associate Director, Institute of the Environment, as an individual).

30 RNNR, [Evidence](#), 9 March 2016 (Des Rosiers).

31 RNNR, [Evidence](#), 2 May 2016 (Marsh).

Indigenous treaty rights to land and resources, “the duty to consult and accommodate impacts the outcome of resource development in a very real way. Indigenous peoples do not provide a social licence to resource projects; they provide a literal licence.”<sup>32</sup>

Individuals and communities that perceive their interests to be affected by proposed developments have a variety of ways of influencing project outcomes. Some witnesses underlined that in recent years, the politics of energy have become more controversial as public concern over broader resource development issues have increasingly become part of regulatory approval processes.<sup>33</sup> Professor Gattinger described a number of trends that have led to diminished public support for energy projects, including: the “writ large” decline of public trust in public and private institutions, and of deference to authority and expertise; a desire for greater public involvement in decision-making; a rise of “anti-corporate” or “anti-fossil fuel” values, and preference for smaller-scale, locally-owned projects; and, a decline in risk tolerance, as well as trust in the capacity of governments and industry to mitigate or manage risk.<sup>34</sup>

### C. Environmental Drivers

Many witnesses highlighted environmental concerns, including water pollution, disturbances to natural species and ecosystems, and the greenhouse gas (GHG) emissions of oil and gas operations and products as acute and ongoing challenges for the industry’s reputation and competitiveness. For example, Professor Elgie argued that the perceived “poor environmental reputation” of Canada’s oil and gas industry is a major barrier to pipeline approvals in the country, with economic costs in the range of \$10 to \$15 billion each year, “which is way more than anyone will pay under any carbon-pricing scenario in the near future.”<sup>35</sup>

According to some witnesses, however, concerns over climate change are likely to have the greatest impact on the future of the oil and gas industries. For example, the Committee heard that, given the higher-than-average GHG-emission levels of oil sands operations, access to new markets would lead to more oil and gas production, which could hinder Canada’s ability to reduce domestic GHG emissions. Some witnesses told the Committee that unless new technologies can drastically lower the carbon footprint of oil sands operations, it is unlikely that Canada will be able to reduce domestic emissions according to its international commitments.<sup>36</sup> Decarbonisation efforts are expected to have a bigger impact on Canadian regions with higher-emission industries, such as the oil sands in western Canada.<sup>37</sup>

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32 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 16 May 2016 (Alika Lafontaine, Project Chair, Indigenous Health Alliance).

33 RNNR, [Evidence](#), 16 May 2016 (Gattinger); RNNR, [Evidence](#), 9 May 2016 (Elgie).

34 RNNR, [Evidence](#), 16 May 2016 (Gattinger).

35 RNNR, [Evidence](#), 9 May 2016 (Elgie).

36 RNNR, [Evidence](#), 9 March 2016 (Des Rosiers); RNNR, [Evidence](#), 9 May 2016 (Plourde); RNNR, [Evidence](#), 21 March 2016 (Wicklum).

37 RNNR, [Evidence](#), 16 May 2016 (Brennan).



## D. Technology Drivers

Technology and process improvements that reduce the economic and environmental cost of oil and gas operations are needed to ensure that these industries remain globally competitive. Some witnesses highlighted the potential of technologies that could be applied directly to resource extraction, while others discussed technologies that could shift dependence on petroleum products. As new technologies enable new business models and new services, consumer behaviour is likely to shift so that existing patterns and relationships with and within the energy system are upended.

## THE WAY FORWARD: INNOVATION, SUSTAINABLE SOLUTIONS AND ECONOMIC OPPORTUNITIES

In the following sections, the Committee highlights five themes, based on evidence from the witnesses, addressing important considerations for the viability and competitiveness of Canada's oil and gas industry: 1) Fostering investment and trade opportunities; 2) Promoting a new era of Indigenous engagement and public trust; 3) Putting a price on carbon; 4) Investing in technological innovation; and 5) Establishing the right policy framework.

### A. Fostering Investment and Trade Opportunities

As mentioned previously, foreign direct investment in the oil and gas sector is driven by a number of factors, such as production cost, environmental performance, the availability of human resources with relevant expertise, and Canada's overall reputation as a place to invest (or, the "Canadian brand"). Furthermore, new export opportunities could be generated by producing and exporting new products, or by accessing new markets.

Some witnesses argued that the oil and gas sector would benefit from producing and exporting more value-added products, such as fertilizers, petrochemicals, refined fuels and plastics.<sup>38</sup> These products have a higher market value than less refined resources (e.g., bitumen), and their production is likely to create and sustain stable, high-paying jobs in Canada. For example, the representative from Unifor argued that every time the industry expands its export capacity of unrefined, unprocessed energy resources, "we are exporting good jobs."<sup>39</sup> The witness from CAPP suggested that there may be an "optimal pathway" to create an investment environment that would promote more value-added production from Canada's oil and gas resources.<sup>40</sup>

The Committee also heard that the growth and competitiveness of Canada's oil and gas sector would benefit from the industry's capacity to deliver products to new markets, which, in some cases, may require the construction of new infrastructure (e.g., pipelines to connect landlocked resources to tidewater, or export facilities to ship LNG overseas).

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38 RNNR, *Evidence*, 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 30 May 2016 (Gil McGowan, President, Alberta Federation of Labour); RNNR, *Evidence*, 16 May 2016 (Reynish; Brennan).

39 RNNR, *Evidence*, 16 May 2016 (Brennan).

40 RNNR, *Evidence*, 13 April 2016 (Ferguson).

Many witnesses emphasized that the federal government has a leadership role to play in achieving this objective. Whether it is making the case to the public for why new infrastructure is needed and is in the public interest, making choices on infrastructure approvals that are in the best interest of Canadians, or setting in place a policy and regulatory framework that the public can trust and that industry can count on, federal leadership is considered critical by many witnesses.<sup>41</sup>

According to the witness from the Canadian Chamber of Commerce, new export capacity would address the supply bottlenecks that currently lead Canadian producers to accept discounted sales prices for their products.<sup>42</sup> Furthermore, Professor Moore argued that the lack of LNG export capacity is making Canada miss out on economic opportunities—for example:

Following the earthquake and the damage to the nuclear facilities in Japan, the demand for LNG shipped in to support the electricity industry climbed astronomically [...] Price increased, and it was very attractive for us to consider investing in that market. Now the nuclear facilities are beginning to come back online and the demand and the margins have collapsed quite a bit [...] You arrange contracts ahead of time and you satisfy them over 20 to 25 years. If someone gets in ahead of you and scoops the contracts, you don't get back into the line again for a long period of time.<sup>43</sup>

The witness from the Canadian Gas Association also discussed domestic opportunities to develop new natural gas markets, particularly in remote and northern communities that are not served by the current distribution network. He told the Committee that, in northern regions, at least 23 power generation and 58 industrial customers could convert to LNG by 2025.<sup>44</sup>

Professor Michal Moore argued that the government should play a leadership role in identifying the rights of way for anticipated (or strategic) energy projects such as pipelines, wires, railways, storage facilities and marine ports of exit. He recommended that the government address any indigenous issues, land ownership disputes, and cross-border considerations well in advance in order to improve the prospects of these strategic projects.<sup>45</sup>

## **B. Promoting a New Era of Indigenous Engagement and Public Trust**

Including indigenous communities in the decision making process has been essential to the success of many development projects. For example, the witness from Woodfibre LNG explained that, despite the risk it entailed for both parties, his company's voluntary environmental assessment with the Squamish First Nation ultimately earned the company an environmental certificate that will allow the project to proceed, should the

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41 RNNR, [Evidence](#), 2 May 2016 (Marsh; Dachis); RNNR, [Evidence](#), 9 May 2016 (Moore; Elgie; Plourde); RNNR, [Evidence](#), 13 April 2016 (Ferguson); RNNR, [Evidence](#), 16 May 2016 (Reynish; Brennan).

42 RNNR, [Evidence](#), 2 May 2016 (Marsh).

43 RNNR, [Evidence](#), 9 May 2016 (Moore).

44 RNNR, [Evidence](#), 4 May 2016 (Egan).

45 RNNR, [Evidence](#), 9 May 2016 (Moore).

developers meet the agreed upon conditions.<sup>46</sup> He stressed the importance of respecting the cultural elements of indigenous sites, preventing certain activities they object to, and involving them in the management of environmental plans and technology choices.<sup>47</sup>

The witness from the Mackenzie Valley Environmental Impact Review Board also emphasized the importance of including different types of community members, as opposed to only leadership. He stated that including aboriginal decision-makers from the region “reduces or eliminates cross-cultural barriers during the actual proceedings and builds public confidence in the system as a whole.”<sup>48</sup> On the other hand, the witness from the Canadian Standards Association pointed out that some smaller organizations like his own may not be able to afford the expenses involved in bringing indigenous representatives from Northern Canada to regions of the country where their committees and meetings usually take place, nor the resources required to provide information in indigenous languages.<sup>49</sup>

The witness from the Indigenous Health Alliance criticized the National Energy Board (NEB) in particular for not engaging indigenous peoples early enough in their regulatory approval processes. He recommended the following measures to improve indigenous community engagement:

- **Early engagement of indigenous communities in the NEB process**—by involving indigenous communities in “the problems, solutions and implementation strategies of any resource development project at the earliest reasonable opportunity;”
- **Acknowledging the multidimensional nature of resource development issues**—by recognizing that resource development projects involve broader considerations related to education, health, economic development, the environment, etc. He stated that a consultation process that does not acknowledge and address these issues clearly will ultimately fail to address the real problems;
- **Including community leadership, namely elders, in the decision-making process**—by recognizing elders as a stakeholder group that should be directly involved in setting the project agenda;
- **Acknowledging that indigenous peoples are reasonable and pragmatic about resource development**—they are likely to support approval processes that respect their community-based needs;

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46 RNNR, [Evidence](#), 2 May 2016 (Giraud).

47 *Ibid.*

48 RNNR, [Evidence](#), 4 May 2016 (Cliffe-Phillips).

49 RNNR, [Evidence](#), 13 April 2016 (MacDougall).

- **Involving communication and consultation experts**—ones that could accurately interpret and convey community concerns to governments and project developers; and
- **Recognizing indigenous peoples as a “third level of government” in Canada**—which is how they are functionally recognized by the court system.<sup>50</sup>

### C. Pricing Carbon

The Committee heard a wide range of opinions that were, for the most part, supportive of carbon pricing mechanisms. Furthermore, there was general support of the federal government addressing climate policy gaps and taking a leadership role on the climate file. The Suncor representative noted that, ideally, provincial and federal governments should align their approaches,<sup>51</sup> while another argued against a preeminent role for the federal government in establishing a national carbon pricing system, stating that the federal government should play a role “limited to facilitating interprovincial linkages between carbon pricing regimes.”<sup>52</sup>

On balance, the witnesses expressed preference for carbon taxation versus cap-and-trade systems—for example, Professor Moore argued that carbon taxes provide markets with clearer and more transparent price signals, and are less likely to be affected by policy or legislative changes post-implementation.<sup>53</sup> Furthermore, the Committee heard that carbon pricing could advance a number of government and industry objectives by achieving the following outcomes:

- aligning the objectives of the oil and gas sector with Canada’s GHG emission targets—according to Professor Plourde, “the sustainability of Canada’s conventional energy industries depends on our ability to reconcile their continued operations with Canada’s climate policy objectives,”<sup>54</sup>
- contributing to Canada’s climate change mitigation efforts by guiding production and consumption decisions towards less carbon-intensive goods and services, and by creating demand for lower-emission technologies and innovation opportunities—as Professor Elgie put it, “if you don’t have a price, you don’t have a demand for clean innovation,”<sup>55</sup>

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50 RNNR, [Evidence](#), 16 May 2016 (Lafontaine).

51 RNNR, [Evidence](#), 16 May 2016 (Reynish).

52 RNNR, [Evidence](#), 2 May 2016 (Dachis).

53 RNNR, [Evidence](#), 9 May 2016 (Moore).

54 RNNR, [Evidence](#), 9 May 2016 (Plourde).

55 RNNR, [Evidence](#), 9 May 2016 (Elgie).

- encouraging market-based approaches to support less-carbon-intensive technologies and innovations, with potential cost savings on government subsidies;<sup>56</sup> and
- providing a means of accounting for the economic, social and environmental impacts of the oil and gas sector's GHG emissions.

On the other hand, the witness from the Canadian Chamber of Commerce pointed out that, unless aligned with trading partners, carbon pricing could undermine the competitiveness of Canadian industries—for example, by leading to “carbon leakage,” whereby high GHG-emitting industries relocate to jurisdictions with less stringent rules.<sup>57</sup> Furthermore, some witnesses were concerned with how different countries account for GHG emission reductions in a global system of national carbon accounts. For example, if a country reduces its GHG emissions using lower-emission products and technologies that were imported from another country, which country should receive the carbon credit?

Professor Michal Moore argued that Canada, the United States and Mexico could benefit from a harmonized regional framework for carbon accounting and credit transfer practices.<sup>58</sup> Similarly, the witness representing Suncor Energy said the government should coordinate domestic GHG emission reporting to avoid “double counting.”<sup>59</sup>

While the Committee did not receive many assessments of the potential impacts of different carbon prices on the industry's economic and environmental performance, Professors Plourde and Elgie predict that a global price of \$80 to \$100 per tonne could be enough to generate change (e.g., foster “real breakthrough technologies.”)<sup>60</sup> Some witnesses were divided on how governments should spend their carbon revenues: some think they should be returned, at least partially, to businesses and consumers (e.g., through tax rebates),<sup>61</sup> while others think they should be used to fund Canada's transition to a low-carbon economy (e.g., by investing in lower-emission technologies and innovations).<sup>62</sup>

Ultimately, the Committee heard that carbon pricing may be necessary but not sufficient to achieve Canada's GHG emission targets, or foster enough transformative technologies to reduce the carbon footprint of the oil and gas sector. Other policies and initiatives may be needed to achieve these objectives.

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56 RNNR, [Evidence](#), 2 May 2016 (Dachis).

57 RNNR, [Evidence](#), 2 May 2016 (Marsh).

58 RNNR, [Evidence](#), 9 May 2016 (Moore).

59 RNNR, [Evidence](#), 16 May 2016 (Reynish).

60 RNNR, [Evidence](#), 9 May 2016 (Elgie; Plourde).

61 RNNR, [Evidence](#), 2 May 2016 (Marsh).

62 RNNR, [Evidence](#), 16 May 2016 (Reynish).

## D. Investing in Technological Innovation

Many witnesses reiterated that technological innovation is essential to maintaining the competitiveness of Canada's oil and gas sector.<sup>63</sup> The following areas of innovation were highlighted (among others):

- extraction technologies using solvents, which have the potential to eliminate the use of water in resource extraction, and to reduce GHG emissions in the order of 50% and the capital cost requirements to develop the resource by about 30%;<sup>64</sup>
- direct contact steam generation technology, which has the potential to reduce GHG emissions for in situ oil production by 70% to 80%, and the production cost per barrel by \$2 to \$8;<sup>65</sup>
- autonomous and automated mining, which can be applied to oil sands operations for improved performance, economics, and safety;<sup>66</sup>
- natural gas technologies (e.g., renewable natural gas, power-to-gas and micro-combined heat and power technologies) that aim to enhance the environmental performance and effectiveness of the natural gas industry;<sup>67</sup>
- pipeline leak detection research and technologies (e.g., GPS positioning, electronic supervisory control and data acquisition, known as SCADA, and various R&D initiatives), which aim to improve pipeline monitoring and operation by allowing operators to detect cracks, dents and other events/anomalies throughout the pipeline;<sup>68</sup>
- lower-emission products and innovations, including: the use of renewable energy as a power source for the extraction sectors,<sup>69</sup> hydrocarbon-based building products that could provide a lower-carbon-intensity substitute to cement,<sup>70</sup> improvements in vehicle fuel efficiency, as well as innovations in urban planning and transportation;<sup>71</sup> and,

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63 RNNR, [Evidence](#), 2 May 2016 (Marsh).

64 RNNR, [Evidence](#), 9 March 2016 (Des Rosiers).

65 *Ibid.*

66 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 13 April 2016 (Jeffrey Walker, Program Manager, Natural Resources, Canadian Standards Association).

67 RNNR, [Evidence](#), 4 May 2016 (Egan).

68 RNNR, [Evidence](#), 2 May 2016 (Bloomer).

69 RNNR, [Evidence](#), 9 March 2016 (Des Rosiers).

70 RNNR, [Evidence](#), 9 May 2016 (Moore).

71 RNNR, [Evidence](#), 4 May 2016 (Whittingham).



- other potential technologies that could reimagine carbon (dioxide) as a valuable resource as opposed to a pollutant.<sup>72</sup>

While some of these technologies are already in use or nearing commercialization, many, especially the more transformative ones, could take more than a decade to become available for deployment.<sup>73</sup> According to the witness from COSIA, there is about a 10-year time horizon from ideation to commercial deployment in the oil and gas sector.<sup>74</sup>

Despite the various sources of funding that target technology innovation, many witnesses highlighted the importance of continued government support, especially for R&D initiatives, to sustain technological innovation in the oil and gas sector. Professor Elgie stated that “all innovation requires government support,” pointing out that there is “virtually no major technology in the last century that hasn’t had some major government investment at some stage [...], including the oil sands, which received tens of billions of dollars in initial support to unlock the technologies that made them viable.”<sup>75</sup> Similarly, Professor André Plourde said there is “a clear economic case” for government support for R&D initiatives, which could be delivered in the form of financial support for private sector research, government-sponsored research, or research undertaken by the government directly.<sup>76</sup> The representative from CEPA also highlighted the contribution of R&D to improvements in the quality, safety and environmental performance of pipelines, stating that the importance of R&D “cannot be overstated.”<sup>77</sup>

In addition to financial and R&D support, the Committee heard that the government could foster a culture of innovation in the oil and gas sector by:

- **Ensuring regulatory flexibility**—Various witnesses stressed the need to ensure regulatory flexibility (or adaptability) in order to facilitate technology adoption, or to allow certain innovative solutions to move forward.<sup>78</sup> The witness from COSIA used Alberta as an example of a province where the regulator is “amenable to keeping a high standard of environmental performance, but is willing, in one-off and controlled and prescribed examples, to allow the companies to test technology that may not have been permitted under a previous regulatory regime.”<sup>79</sup>
- **Funding a diverse mix of technologies**—the witness from COSIA cautioned against “putting all our eggs in one basket,” recommending that

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72 RNNR, [Evidence](#), 1<sup>st</sup> Session, 42<sup>nd</sup> Parliament, 21 March 2016 (Dan Wicklum, Chief Executive, Canadian Oil Sands Innovation Alliance).

73 RNNR, [Evidence](#), 9 March 2016 (Des Rosiers).

74 RNNR, [Evidence](#), 21 March 2016 (Wicklum).

75 RNNR, [Evidence](#), 9 May 2016 (Elgie).

76 RNNR, [Evidence](#), 9 May 2016 (Plourde).

77 RNNR, [Evidence](#), 2 May 2016 (Bloomer).

78 RNNR, [Evidence](#), 16 May 2016 (Reynish); RNNR, [Evidence](#), 9 May 2016 (Elgie).

79 RNNR, [Evidence](#), 21 March 2016 (Wicklum).

investments follow a “portfolio approach” by targeting a variety of projects of different sizes, costs and risk factors.<sup>80</sup>

- **Letting industry decide on technologies worth pursuing**—Professors Plourde and Elgie advised governments not to favour certain technologies over others, but let industry decide which technologies are worth pursuing.
- **Enhancing the market value of lower-emission technologies**—Professor Elgie explained that environmental objectives often do not have enough of a market value: “You can’t go to the supermarket and buy low carbon. You can’t buy clean air.” He argued that these “externalities” (as referred to by economists) are accounted for mostly by government policy, making it essential for governments to “step in and play some role of supplementing investment, particularly in those early stages where private capital [...] never does.”<sup>81</sup>
- **Creating an expectation of increasingly stringent environmental regulations**—which, according to Professor Elgie, is likely to encourage industry to make longer-term investments in clean technologies.<sup>82</sup>
- **Prioritizing Canada-specific technologies and innovations**—Some witnesses pointed out ways for the government to promote Canadian-born innovations more specifically; for example, by prioritizing Canada-specific issues that other countries will not address (e.g., oil sands development).<sup>83</sup>
- **Connecting inventors with industry**—Professor Elgie stressed the need for governments to connect inventions and technologies with the companies that could use them.<sup>84</sup>
- **Partnering with international R&D organizations**—Some witnesses pointed out opportunities for Canada to collaborate with international R&D initiatives. For example, Dr. Moore informed the Committee that the United States has 11 national energy labs that are currently seeking research opportunities to develop new technologies.<sup>85</sup>
- **Considering the potential role of standards in advancing new innovations**—The witness from the Canadian Standards Association highlighted the potential role that standards play in the commercialization and mainstreaming of new innovations. He explained that standards could

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80 RNNR, [Evidence](#), 21 March 2016 (Wicklum).

81 RNNR, [Evidence](#), 9 May 2016 (Elgie).

82 *Ibid.*

83 RNNR, [Evidence](#), 9 May 2016 (Plourde).

84 RNNR, [Evidence](#), 9 May 2016 (Elgie).

85 RNNR, [Evidence](#), 9 May 2016 (Moore).



be initiated to achieve a variety of specific objectives, such as to open new markets, foster new innovations, or facilitate regulatory compliance.<sup>86</sup>

## **E. Establishing the Right Policy Framework**

In January 2016, the Government of Canada introduced interim measures requiring the National Energy Board, among other things, to undertake deeper consultations with Indigenous peoples and to assess the upstream greenhouse gas emissions associated with specific projects. The government also extended the review timeline for projects to accommodate these changes. Some witnesses were critical of the effectiveness of lengthier consultations to improve public confidence in the approval process for energy projects,<sup>87</sup> some argued that the interim measures are too broad, requiring the consideration of factors that may fall outside federal jurisdiction,<sup>88</sup> and some thought the measures to be in line with the climate policy commitments of some provinces like Alberta and British Columbia.<sup>89</sup>

Overall, the witnesses' testimony suggests that "rigorous" and "thorough" approval processes are considered favourable, provided they have clear and predictable objectives, as well as timelines that are sensitive to business and investment decisions.<sup>90</sup> The witness from Suncor Energy advised against unexpected approval delays that could create uncertainties that put investments at risk, especially given the long planning horizon of many resource development projects.<sup>91</sup> Furthermore, some witnesses urged the government to take measures, where possible, to lower the cost and improve the efficiency and flexibility of existing regulations.<sup>92</sup> For example, Professor Plourde advocated for "principled flexibility," which is about understanding and retaining the goals of the regulatory system, while designing regulations and approval processes with the awareness that changes in the operating environment are inevitable.<sup>93</sup> It was noted that it is important that the approval process be consistent, predictable, and carry the confidence of Canadians.

Some witnesses disagreed on the scope of criteria that should be examined during regulatory approval processes. While some argued that approval processes should have broader social and cultural criteria, and should assess the cumulative impacts of the

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86 RNNR, [Evidence](#), 13 April 2016 (Walker).

87 RNNR, [Evidence](#), 2 May 2016 (Marsh).

88 RNNR, [Evidence](#), 2 May 2016 (Dachis); RNNR, [Evidence](#), 16 May 2016 (Reynish).

89 RNNR, [Evidence](#), 13 April 2016 (Ferguson).

90 RNNR, [Evidence](#), 16 May 2016 (Reynish); RNNR, [Evidence](#), 2 May 2016 (Giraud).

91 RNNR, [Evidence](#), 16 May 2016 (Reynish).

92 RNNR, [Evidence](#), 9 May 2016 (Elgie; Plourde).

93 RNNR, [Evidence](#), 9 May 2016 (Plourde).

portfolio of proposed projects,<sup>94</sup> one witness thought they should have a narrower scope with fewer criteria, and should evaluate only the impacts of the project in question.<sup>95</sup>

Professor Moore expressed the need for a national energy strategy that aligns the interests of the federal, provincial and territorial governments, and would guide future policies and investment decisions in a more predictable regulatory environment.<sup>96</sup> While Professor Gattinger was hopeful that recent intergovernmental efforts could lead to a Canadian energy strategy,<sup>97</sup> Professor Moore was more sceptical, referring to them as “a series of moving agreements and some policy fixes between provinces or parties, which don't have a long tenure.”<sup>98</sup>

Finally, Professor Moore called for measures to improve national energy data, for example, through the creation of a national energy data organization to provide “dispassionate, accurate, and dependable energy information.”<sup>99</sup>

## RECOMMENDATIONS

Based on the evidence presented in the previous sections, the Committee recommends the following:

- 1. The Committee recommends that the Government of Canada continue to promote the benefits of investing in Canada's Natural Resources sectors, including oil and gas, which shall include the continued encouragement of innovation, research and development.**
- 2. The Committee recommends that the Government of Canada work in collaboration with industry and the indigenous, provincial, territorial, and municipal governments to develop the supporting infrastructure needed to create a favourable environment for natural resource development and transportation, and to deliver oil and gas products to strategic domestic and international markets.**
- 3. The Committee recommends that the Government of Canada work to encourage the early engagement of indigenous peoples in resource development decisions, in full compliance with existing treaty and indigenous rights to land and resources. Furthermore, the Committee recommends that the government ensure that consultation processes consider the multidimensional impacts of resource development projects**

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94 RNNR, [Evidence](#), 16 May 2016 (Gattinger; Lafontaine); RNNR, [Evidence](#), 4 May 2016 (Cliffe-Phillips).

95 RNNR, [Evidence](#), 2 May 2016 (Dachis).

96 RNNR, [Evidence](#), 9 May 2016 (Moore).

97 RNNR, [Evidence](#), 16 May 2016 (Gattinger).

98 RNNR, [Evidence](#), 9 May 2016 (Moore).

99 RNNR, [Evidence](#), 9 May 2016 (Moore).

on indigenous peoples, including issues concerning education, health, economic development, infrastructure and the environment.

4. The Committee recommends that the Government of Canada address the broader issue of public trust in the energy sector, by fostering more transparency and public engagement in resource development decisions, and recognizing Canada's strong environmental regulations and the work of the national regulators.
5. The Committee recommends that the Government of Canada continue to work on a National Energy Strategy in collaboration with indigenous, provincial, territorial and international partners to ensure that carbon accounting standards and credit transfer practices are considerate of neighbouring jurisdictions, and that all carbon accounting standards are transparent and science-based.
6. The Committee recommends that the Government of Canada, through Natural Resources Canada, enhance opportunities to connect inventors, researchers and entrepreneurs with the segments of the oil and gas industry that are most applicable to their areas of expertise.
7. The Committee recommends that the Government of Canada encourage collaboration through clusters and councils among governments, industry, academia, and international experts, with the aim of maximizing the innovative potential of Canada's oil and gas sector.
8. The Committee recommends that the Government of Canada encourage Canadian companies and entrepreneurs to become global leaders in their respective innovations and/or technologies.
9. The Committee recommends that the Government of Canada continue to strengthen our North American Energy Strategy and intergovernmental cooperation on energy policies by taking into account federal, provincial, territorial and indigenous interests, and take measures to improve the quality and availability of national energy data.



# APPENDIX A

## LIST OF WITNESSES

Organizations and Individuals	Date	Meeting
<b>Department of Natural Resources</b> Frank Des Rosiers, Assistant Deputy Minister Innovation and Energy Technology Terence Hubbard, Director General Petroleum Resources Branch, Energy Sector  Nicole McDonald, Acting Director General CanmetENERGY Devon	2016/03/09	4
<b>Canada's Oil Sands Innovation Alliance</b> Dan Wicklum, Chief Executive	2016/03/21	5
<b>Canadian Association of Petroleum Producers</b> Alex Ferguson, Vice-President Policy and Performance	2016/04/13	7
<b>Canadian Standards Association</b> Michael Leering, Program Manager Environment and Climate Change  Kevin MacDougall, Director Energy and Utilities  Jeffrey Walker, Program Manager Natural Resources		
<b>Canadian Chamber of Commerce</b> Katrina Marsh, Director Natural Resource and Environmental Policy	2016/04/20	8
<b>Mackenzie Valley Environmental Impact Review Board</b> Mark Cliffe-Phillips, Executive Director Brett Wheler, Senior Environmental Assessment Policy Advisor		
<b>National Energy Board</b> Jim Fox, Vice-president Integrated Energy Information and Analysis  Shelley Milutinovic, Chief Economist		
<b>C.D. Howe Institute</b> Benjamin Dachis, Senior Policy Analyst	2016/05/02	9
<b>Canadian Chamber of Commerce</b> Katrina Marsh, Director Natural Resource and Environmental Policy		
<b>Canadian Energy Pipeline Association</b> Chris J. Bloomer, President and Chief Executive Officer		

<b>Organizations and Individuals</b>	<b>Date</b>	<b>Meeting</b>
<b>Woodfibre LNG Ltd</b> Byng Giraud, Vice-President Corporate Affairs and Country Manager - Canada	2016/05/02	9
<b>Canadian Gas Association</b> Timothy M. Egan, President and Chief Executive Officer	2016/05/04	10
<b>Mackenzie Valley Environmental Impact Review Board</b> Mark Cliffe-Phillips, Executive Director		
<b>Pembina Institute</b> Edward Whittingham, Executive Director		
<b>As an individual</b> Stewart Elgie, Professor, Faculty of Law, University of Ottawa Associate Director, Institute of the Environment Michal Moore, Professor School of Public Policy, University of Calgary André Plourde, Full Professor and Dean Faculty of Public Affairs, Carleton University Monica Gattinger, Professor, Chair, Positive Energy Director, Institute for Science, Society and Policy, University of Ottawa	2016/05/09	11
<b>Indigenous Health Alliance</b> Alika Lafontaine, Project Chair		
<b>Suncor Energy Inc.</b> Steve Reynish, Executive Vice-President Strategy and Corporate Development		
<b>Sustainable Development Technology Canada</b> Chris Boivin, Vice-President Investment		
<b>Unifor</b> Jordan Brennan, Economist Research Department		
<b>Alberta Federation of Labour</b> Gil McGowan, President	2016/05/30	13
<b>In Situ Oil Sands Alliance</b> Patricia Nelson, Vice Chair Richard Sendall, Chairperson Senior Vice president of MEG Energy Corp.		
<b>National Energy Board</b> Jim Fox, Vice-president Integrated Energy Information and Analysis Shelley Milutinovic, Chief Economist		

## APPENDIX B LIST OF BRIEFS

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### Organizations and Individuals

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Assembly of First Nations





## REQUEST FOR GOVERNMENT RESPONSE

Pursuant to Standing Order 109, the Committee requests that the government table a comprehensive response to this Report.

A copy of the relevant Minutes of Proceedings ([Meetings Nos. 4, 5, 7, 8, 9, 10, 11, 12, 13, 15, 17, 18 and 19](#)) is tabled.

Respectfully submitted,

James Maloney  
Chair



## **More Stability, Clarity and Consistency is Necessary from the Government for Growth, Investment and Competitiveness in the Oil and Gas Sector**

### **House of Commons Standing Committee on Natural Resources: Dissenting Report**

This dissenting report reflects the views of the following Members of Parliament who served on the Standing Committee on Natural Resources (the “Committee”): John Barlow (Co-Vice Chair of the Committee, Foothills), Candice Bergen (Portage-Lisgar), and Shannon Stubbs (Lakeland).

#### **Background**

On February 24, 2016 the Committee undertook a study titled “*The Future of Canada’s Oil and Gas, Mining and Nuclear Sectors: Innovation, Sustainable Solutions and Economic Opportunities*.” The Committee divided the study in three parts: oil and gas, mining and nuclear. Over the course of seven meetings, the Committee heard from 33 witnesses who highlighted a number of existing and emerging trends that are driving change in the sector, in addition to a variety of challenges that must be addressed in order for Canada’s oil and gas sector to remain competitive.

#### **Reasons for a Dissenting Report**

The Committee studied the future of Canada’s Oil and Gas Sector. In the opinion of the members from the Official Opposition the resulting report brought forward by the government failed to adequately represent the testimony presented by witnesses at committee on a number of critical issues related to the study. There were areas of testimony and important subjects relating to Canada’s oil and gas industry that deserve more focus than reflected. This dissenting report seeks to provide further clarity and accuracy on these issues while providing the Government of Canada additional recommendations to ensure the strength and long term sustainability of Canada’s oil and gas sector.

Four critical areas, not highlighted in the study include:

- a) The fact that it is not necessary to include upstream greenhouse gas emissions in pipeline projects because it is provincial jurisdiction. This is an inconsistency in comparison to other sectors as it is not required of any other Canadian industry;
- b) The Government of Canada has created great uncertainty in the industry through unnecessary project delays and the duplicative five principles of the new transitional assessment process, which have a negative impact on investment;
- c) Canada has a world-leading regulatory regime and an internationally renowned track record of environmentally and socially responsible oil and gas development;
- d) The United States is not only our best customer, but is also Canada’s biggest competitor. This highlights the critical need for strategic infrastructure to ensure new and diverse markets for Canadian oil and gas.

Taken together, we as Members of Parliament on the Committee, therefore, feel that it is our duty to our constituents, to Canadians, to the oil and gas stakeholders and workers, and to the witnesses, to respectfully present this dissenting report.

### **Committee's Report Fails to Adequately Address Uncertainty in the Oil and Gas Sector caused by the Government**

The Committee's report failed to sufficiently address the concerns brought forward by many witnesses regarding the uncertainty that the Government of Canada has created in the oil and gas sector with the five interim principles for their new assessment process for natural resources infrastructure projects. One witness pointed to regulatory uncertainty as a reason for investment decline, he said, "we keep changing the rules, we keep changing the method, and we create additional time frames that weren't anticipated at the beginning, and investors get scared."<sup>1</sup> Another witness stated "there is a degree of uncertainty, and I think over the course of time in the near term here we'll see what that leads to, what the process is,"<sup>2</sup> and another said "we've scratched our heads a little bit..." and he spoke of the interim process as being "a bit up in the air".<sup>3</sup> Another witness stated, "The key role for government ... are to set a policy environment that provides clear signals across all sectors of the economy, that reduces uncertainty; provides clear incentives for the broad directions we want to work."<sup>4</sup> Also, a witness outlined the importance of time limits on assessments, "I think that environmental assessment should not be used as a delaying tactic. Sometimes it is used in this way. I like some of the things the previous government brought in, by putting time limits on environmental assessments. I think there needs to be flexibility."<sup>5</sup>

Unfortunately, the Committee's report failed to accurately reflect the reality of the uncertainty facing the sector caused by and exacerbated by the current government.

### **Committee Report Fails to Recognize Canada's World Leading Regulatory Framework and Record of Strong Environmental Stewardship**

The Committee heard from witnesses who spoke contrary to the government's narrative which is predicated on the assumption that the current regulatory framework is broken and it needs to be changed to restore the public confidence and trust of Canadians. One witness said that Canada's standards "are the best in the world in our mind."<sup>6</sup>

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<sup>1</sup> Byng Giraud, Woodfibre LNG, May 2, 2016

<sup>2</sup> Chris Bloomer, CEPA, May 2, 2016

<sup>3</sup> Alex Ferguson, CAPP, April 13, 2016

<sup>4</sup> Andre Plourde, Carleton University, May 9, 2016

<sup>5</sup> Stewart Elgie, University of Ottawa, May 9, 2016

<sup>6</sup> Kevin MacDougall, Canadian Standards Association, April 13, 2016

Another witness stated that, “the safety record of the pipeline industry in Canada is very good, compared to other pipeline systems around the world, and we believe that transporting oil by pipeline is a better alternative than by rail.”<sup>7</sup> Another witness reinforced the excellent standards of Canada’s regulatory framework when he said, “Canada also has world-leading environmental regulations. Of the top oil reserve holders, only Canada is covered by world-class, stringent environmental regulations and oversight. It is the only major oil-producing jurisdiction with comprehensive greenhouse gas regulations. As the world demand continues to grow, Canada’s environmentally and socially responsible production will be an important source of supply; the world needs more Canadian energy.”<sup>8</sup>

Though the government has tried to present the current regulatory framework as having significant and insurmountable problems, the Committee heard from a witness who said they “don’t fundamentally believe that the environmental assessment processes run by the federal and provincial governments are broken.”<sup>9</sup> Through Canada’s strong regulatory framework and the excellent work of the National Energy Board, one witness testified “I’d say that over the past 10 years, under NEB auspices, several pipelines have been built. Certainly the Line 9 pipeline was approved under the NEB process. The Access pipeline and the initial Keystone pipeline were built. There is a list of pipelines that went through the regulatory process under the NEB, that went through consultation, that went through environmental review, and that were built.”<sup>10</sup> This testimony speaks to the quality of Canada’s regulatory framework, Canada’s strong environmental stewardship, and emphasizes the fact that there were pipelines built in the last 10 years under the former government.

As we have seen, numerous pipelines have been approved and constructed under the current regulatory framework while consistently maintaining the excellent safety and environmental standards that Canadians demand and deserve. (See tables 1&2 pg. 7-8)

The Committee report as presented falls short of providing a genuine account of the witness testimony which expressed the quality of Canada’s regulatory framework, and our outstanding and respected record of environmental stewardship.

### **Committee Report Fails to Address the Critical Need for Strategic Energy Infrastructure to Remain Competitive in the Global Market**

The Committee heard from witnesses who explained the need for investment in energy infrastructure. One witness said “as long as the world needs oil and gas to fuel our cars and power our plants, we need to support the competitiveness of Canada’s industry. For our network, this means building export infrastructure, both pipelines and LNG facilities. Stopping pipelines in Canada does not speed up the development of alternatives to oil,

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<sup>7</sup> Jim Fox, NEB, May 30, 2016

<sup>8</sup> Richard Sendall, MEG Energy, May 30, 2016

<sup>9</sup> Katrina Marsh, Canadian Chamber of Commerce, May 2, 2016

<sup>10</sup> Chris Bloomer, CEPA, May 2, 2016

and it doesn't slow growing oil demand in emerging economies, which is where most of the growth in energy demand will come from in the future. China and India need petroleum, but they don't much care if it comes from Canada or somewhere else. As investment in the oil sector moves away from Canada, greenhouse gas from oil production just moves with it, likely to jurisdictions with fewer environmental safeguards.”<sup>11</sup> The testimony reflected both the need for investing in energy infrastructure and the strength of Canada’s environmental record. Regarding the growing market for oil and gas another witness said “transportation infrastructure is required to meet these growing energy needs, and pipelines remain the safest and most efficient and the lowest greenhouse gas-intensive way of moving energy over long distances.”<sup>12</sup> From an economic perspective, one witness expressed that “the lack of export infrastructure means that Canadian crude is often, but not always, trading at a deeper discount which, when you're already kind of hurting for prices, is an additional burden to the industry.”<sup>13</sup>

The Committee report did not reflect the witness testimony that clearly stated the significant demand for Canadian oil and gas, and the subsequent need for strategic energy infrastructure in order to support long term Canadian competitiveness in the energy sector.

### **Committee Report Fails to Present the Impacts of a Carbon Tax on the Canadian Oil and Gas Sector**

Canadian governments already collect \$17 billion dollars annually from the oil and gas industry to fund essential government programs and services. The economies of resource-rich provinces do not need an added tax at a time when commodity prices are low, the energy sector is experiencing an historic downturn, and businesses and citizens are already struggling. Because of Canada’s strong record of environmental stewardship, one witness explained that “Canada contributes less than 2% of the world’s greenhouse gas emissions, and CEPA members who operate Canada’s transmission pipelines are responsible for a negligible part of those emissions.”<sup>14</sup> The Committee heard from one witness who provided testimony regarding a carbon tax and said “unless it's aligned with trading partners, the price of carbon can cause a lack of competitiveness. This should be of concern to people concerned about the climate as well as people concerned about the economy, because if you're simply moving business to other jurisdictions, you're not actually reducing overall carbon emissions. The ideal would be carbon pricing that's North American or even worldwide, which would prevent those kinds of competitive leakages.”<sup>15</sup>

The Committee report, as presented, demonstrates the testimony in favour of a carbon tax but failed to provide the testimony which spoke of the adverse effects a carbon tax

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<sup>11</sup> Katrina Marsh, Canadian Chamber of Commerce, May 2, 2016

<sup>12</sup> Chris Bloomer, CEPA, May 2, 2016

<sup>13</sup> Katrina Marsh, Canadian Chamber of Commerce, May 2, 2016

<sup>14</sup> Chris Bloomer, CEPA, May 2, 2016

<sup>15</sup> Katrina Marsh, Canadian Chamber of Commerce, May 2, 2016

would have on industry and consumers if Canada implements a carbon tax independently, not aligned with our North American trading partners. This testimony placed Canadian competitiveness in the global energy market at the forefront of the discussion of implementing a carbon tax and proposed a framework that would seek to minimize externalities to the oil and gas sector.

## **Conclusion**

We strongly encourage the Government to consider the full testimony of witnesses heard during the study titled *“The Future of Canada’s Oil and Gas, Mining and Nuclear Sectors: Innovation, Sustainable Solutions and Economic Opportunities.”* Outlined in this dissenting report are four critical issues that the government will need to address in order to ensure that Canada remains competitive in the global oil and gas market. We encourage a collaborative approach from the government encompassing the points highlighted in this dissenting report. The government must ensure certainty in the sector not only among potential investors, but also project proponents and workers who rely on the industry for their livelihoods. The government must recognize its role in instilling public confidence in our world-leading regulatory framework and our strong record of environmental stewardship. We also encourage the government to support strategic energy infrastructure. The Government should consider any and all impacts a carbon tax would have on a variety of factors, including Canadian competitiveness. Further to these points, below are five recommendations we implore the government to consider when developing policy regarding the future of the oil and gas sector.

## **Recommendations**

- 1. We strongly encourage the Government of Canada to establish and make publically available strict, clear criteria and a fixed timeline for their assessment and consultation processes for major projects. The timely approval of new energy infrastructure projects would not only reduce Canada’s reliance on foreign oil, but would also allow responsible, world-renowned and respected Canadian oil and gas to reach broader international markets.**
- 2. We strongly encourage the Government of Canada to show confidence in our national regulators by allowing them to make evidence-based decisions independent of government politicization and unnecessary, duplicative interim principles.**
- 3. We strongly encourage the Government of Canada to publicly and unequivocally support strategic energy infrastructure approved by the national regulators after extensive and thorough evidence-based processes to ensure Canada’s competitiveness in the global energy market.**

- 4. We strongly encourage the Government of Canada to recognize and to promote Canada's world-leading regulatory framework and environmental standards and stewardship by instilling rather than eroding public confidence in our national regulators and Canada's energy developers.**
- 5. We strongly encourage the government not to impose any additional tax or regulation on the oil and gas sector or the Canadian consumer that our continental trading partners and competitors do not have. This includes measuring the upstream greenhouse gas emissions from pipelines, as laid out in the five interim principles, given pipelines do not contribute to these emissions in any material way and upstream emissions fall under provincial jurisdiction. Any national carbon pricing initiatives should undergo a thorough economic assessment to ensure balance between economic growth and environmental stewardship and responsibility.**

Respectfully submitted,

John Barlow, M.P.  
Foothills

Hon. Candice Bergen, M.P., P.C  
Portage-Lisgar

Shannon Stubbs, M.P.  
Lakeland



## Completed Major Pipeline Reviews Since 2006

Table 1: Oil Pipelines

Pipeline	Proponent	Province	Import/Export/ Domestic	Length of new Pipeline	Type of review	NEB Decision	Project Status
Alida to Cromer Oil Pipeline Capacity Expansion	Enbridge Pipelines	SK, MB	Domestic	60 km	NEB Screening	2007-05-24	In Operation
TMX-Anchor Oil Pipeline Loop	Terasen Pipelines (Trans Mountain) Inc.	AB, BC	Expansion of existing oil pipeline (export and domestic)	158 km	NEB Screening	2007-06-21	In Operation
Cochin Oil Pipeline	Kinder Morgan	ON, SK, AB	Import		NEB Review	2007-12-06	In Operation
Keystone Oil Pipeline	TransCanada	AB, SK, MB	Export	373 km	NEB Screening	2008-09-16	In Operation
Alberta Clipper Oil Pipeline Expansion (Line 67)	Enbridge	AB, SK, MB	Export	1,070 km	NEB Screening	2009-07-14	In Operation
Keystone XL Oil Pipeline	TransCanada	AB, SK	Export	529 km	NEB Screening	2010-03-19	Not under construction
Bakken Oil Pipeline	Enbridge Bakken Pipeline Company Inc.	MB, SK	Import	123 km	NEB Screening	2012-01-09	In Operation
Line 9B Oil Pipeline Reversal	Enbridge Inc.	ON	Domestic – reversal and expansion of an existing oil pipeline	0 km	NEB Review (no federal EA required)	2012-03-06	In Operation
Edmonton to Hardisty Oil Pipeline	Enbridge Pipelines Inc.	AB	Domestic	181 km	NEB Review	2014-04-19	In Operation
Northern Gateway Oil Pipeline	Enbridge Inc.	AB, BC	Export	1150 km	CEAA/NEB Review Panel	2014-06-17	Not under construction

Table 2: Gas Pipelines

Pipeline	Proponent	Province	Project Type	Length of new Pipeline	Type of review	NEB Decision	Project Status
Brunswick Natural Gas Pipeline	Emera Brunswick Pipeline Ltd.	NB	Export	145 km	NEB Review Panel	2007-05-17	In Operation
Deep Panuke Offshore Natural Gas Pipeline	Encana	NS	Domestic and Export	175 km	Canada-Nova Scotia Offshore Petroleum Board Comprehensive Study	2007-09-05	In Operation
South Peace Natural Gas Pipeline	Westcoast Energy	BC	Domestic	95 km	Screening	2009-02-05	In Operation
Groundbirch Natural Gas Pipeline	NOVA Gas Transmission Ltd.	BC, AB	Domestic	77 km	NEB Screening	2010-03-04	In Operation

Mackenzie Natural Gas Pipeline	Various	NWT	Domestic	1300 km	Joint Review Panel	2011-03-10	Not under construction
Horn River Natural Gas Pipeline	NOVA Gas Transmission Ltd.	BC	Domestic	72 km	NEB Screening	2011-02-09	In Operation
Vantage Ethane Pipeline	Vantage Pipeline Canada Inc.	AB, SK	Import	578 km	NEB Screening	2012-03-08	In Operation
Northwest Mainline Natural Gas Pipeline	NOVA Gas Transmissions Ltd.	BC, AB	Domestic	111 km	NEB Screening	2014-05-17	In Operation
Leismer – Kettle River Crossover Natural Gas Pipeline	Nova Gas Transmission Ltd.	AB	Domestic	77 km	NEB Screening	2012-09-20	In operation
Northwest Mainline Komie North Natural Gas Pipeline Expansion	Nova Gas Transmission Ltd.	AB, BC	Domestic	130 km	NEB Review	2013-04-19	Not under Construction
Wolverine River Lateral Loop (Carmon Creek Section) Natural Gas Pipeline	NOVA Gas Transmission Ltd.	AB	Domestic	61 km	NEB Review	2015-06-01	Not under construction
North Montney Natural Gas Pipeline	TransCanada	BC	Domestic	305 km	NEB Review	2015-06-11	Not under construction

Table 3: Other Pipelines

Pipeline	Proponent	Province	Import/Export/ Domestic	Length of new Pipeline	Type of review	NEB Decision	Project Status
Southern Lights Diluents Pipeline	Enbridge	AB, SK, MB	Import	300 km	Screening	2008-11-08	In Operation

## Supplementary Opinion of the New Democratic Party

The oil and gas sector continues to face significant challenges due to low commodity prices, with many hard working Canadians from coast to coast to coast being adversely affected. New Democrats recognize this challenge and have faithfully worked in this study to ensure the long-term sustainability of our resource sector and the well-being of those who work in it.

We have approached our work during this study with some guiding principles in mind that we believe are important to the future of our energy sector and natural resource development. Sustainability is crucial which includes ensuring the application of the polluter-pay principle so that costs are not left to future generations. Partnership is required to make sure that communities, provinces and Indigenous peoples all benefit from resource development and that we create value-added, well paid jobs here in Canada. Long-term prosperity must be our goal in leveraging our natural resource wealth to invest in modern, clean energy technology to keep Canada on the cutting edge of energy development and ensure affordable energy rates into the future.

Testimony from the majority of witnesses, representing diverse backgrounds, agreed that oil and gas will continue to be a part of our energy mix for the short and medium term as we transition to increased investment in renewable sources of energy. As a result, it is important that we address the challenges facing the sector in order to improve environmental performance and ensure benefits for Canadians.

Professor Stewart Elgie compared the state of the oil and gas sector in Canada today to that of the forestry sector in the 1990s. He noted that changes to environmental practices and processes within the forestry sector helped to improve the price companies received for their product, not simply greater access to market. This comparison holds potentially useful lessons for the oil and gas sector to ensure the viability of the industry in Canada.

The Committee heard clearly that the oil and gas sector is seeking increased market access for Canadian products and that companies place significant importance on new pipeline capacity to tidewater. It is also clear that new pipelines cannot be built without proper consultation and social license, and that market access depends on more than just physical transportation infrastructure. Public opposition to pipeline construction and trade measures like the European Fuel Quality Directive highlight the need to restore public trust in the regulatory review process and to improve environmental protection and innovation within the sector. Witnesses put forward compelling testimony that underlined to the committee that we must face the challenges of the high production costs and the environmental footprint of oil sands projects head-on to ensure the health and prosperity of the industry in Canada. Testimony from various witnesses highlighted important new developments in the management of environmental impacts and the work of groups like COSIA, where industry itself is recognizing these challenges and working towards solutions. We welcome their initiatives but also note that we need greater federal leadership to support technological advances, enforce environmental standards, and address water, climate and other environmental impacts. Improving the environmental performance of the oil and gas sector has the potential to improve its market access and the value of our exports.

We believe that innovation in the oil and gas sector is needed not only with respect to technology, but also in how projects are developed, assessed, consulted upon and ultimately approved or rejected. We believe it is essential that the lack of public confidence in the current environmental assessment process be addressed by permanent, meaningful changes to the National Energy Board process as soon as possible. New Democrats believe that the proposed interim measures introduced by the government

are inadequate to address the results of a decade of Conservative dismantling of our environmental protection regime. We share the concern expressed by witness Professor Monica Gattinger that if the process goes ahead without the existing gaps being meaningfully addressed, the end result will further erode public confidence in the entire assessment regime.

We are disappointed that the majority committee report fails to recommend a speedy review of the NEB process as this had been a clear electoral commitment of the new government. We are disappointed that the newly announced review panel process contains no timeline for actual legislative changes leaving the Conservatives inadequate process in place and creating uncertainty for all stakeholders. We recommend that the government move faster to make the necessary permanent changes to the NEB assessment process to restore public confidence and ensure that it is fair, neutral, science based and designed to meaningfully engage communities.

The Government must also act quickly to honour its obligations to a Nation to Nation relationship with Indigenous peoples including proper consultation and accommodation on all energy projects and the protection of Indigenous rights. During testimony, industry representatives were clear about the importance of fixing the consultation process sooner rather than later. The Government of Canada, as representative of the Crown, is responsible for these duties and while proponents of projects should be a part of this process, we believe these responsibilities should not be devolved to proponents to fulfill, as was too often the case under the former Conservative government. The Government must take a much larger, hands-on role in creating the environment in which meaningful consultation can take place. The Government has made many commitments to Indigenous Peoples and we believe that now is the time to start meaningfully fulfilling them.

One of the new government's key commitments to a new relationship with Indigenous peoples is the implementation of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). New Democrats believe that the UNDRIP should be fully implemented as soon as possible. We believe it does provide a path forward and are concerned that the majority committee report makes no mention of the UNDRIP. We therefore recommend that the Government support Bill C-262 and work with the mover of the bill, Mr. Saganash, to start the process of the proper implementation of the UNDRIP as soon as possible.

In the course of this study, we have been disappointed by the lack of focus on or inclusion of clean, renewable energy sources. We feel that the exclusion of other forms of energy from the scope of the study does not help committee members to fully appreciate the energy sector at this moment, nor does it help us fully appreciate its future potential. We did hear during testimony that many energy companies are investing significantly in these energy sources, as they see the value and potential in them. It is therefore particularly disappointing that the committee did not see fit to include them within the scope of this study. Regardless, we do recommend that the government look at ways to increase investment in clean energy development and in the clean tech sector, and continue to increase that investment in the years to come.

During testimony before the committee, Gil McGowan, President of the Alberta Federation of Labour stated "we should prioritize value-added development, because these kinds of investments not only create jobs directly in upgrading, refining, and petrochemicals but also create other jobs". We agree with Mr. McGowan's statement, as building this value-added capacity here at home will be beneficial to the long-term viability of the industry. We especially believe this to be true in regards to the petrochemical industry, as it creates jobs that are not as subject to the volatility of global oil prices and

creates products from petroleum based fuels that will be needed even following a transition in our energy generation.

Canada has significant natural resources which, if managed properly and sustainably, can be an important driver for our economy. We must ensure that these resources are managed in the best interests of all Canadians with a focus on protecting the environment, ensuring meaningful consultation with affected communities and Indigenous peoples, and maximizing economic benefits. We believe tackling these challenges has the potential to not only allow Canadian producers to fetch a better price in the market, but will better ensure the viability and success of the oil and gas sector to the benefit of all Canadians.

