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THE CROSS-CANADA BENEFITS OF THE OIL AND GAS INDUSTRY

Report of the Standing Committee on Natural Resources

**Leon Benoit
Chair**

JUNE 2014

41st PARLIAMENT, SECOND SESSION

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THE STANDING COMMITTEE ON NATURAL RESOURCES

has the honour to present its

SEVENTH REPORT

Pursuant to its mandate under Standing Order 108(2), the Committee has studied the cross-Canada benefits of the oil and gas industry and has agreed to report the following:

TABLE OF CONTENTS

THE CROSS-CANADA BENEFITS OF THE OIL AND GAS INDUSTRY.....	1
EXECUTIVE SUMMARY.....	3
BACKGROUND	5
PART I – ENVIRONMENTAL BENEFITS OF THE OIL AND GAS INDUSTRY	9
A. Benefits to Air Quality.....	10
B. Benefits to Forestry	11
C. Benefits to Water Quality.....	11
D. Environmental Benefits from Innovation.....	11
PART II – SOCIO-ECONOMIC BENEFITS OF THE OIL AND GAS INDUSTRY.....	15
A. Nation-Wide Benefits of the Oil and Gas Industry	15
1. Benefits to Gross Domestic Product and Jobs	15
2. Benefits through Government Revenues.....	19
B. Benefits of the Oil and Gas Industry at the Regional and Municipal Levels.....	20
1. Benefits to Western Canada.....	21
2. Benefits to Eastern Canada.....	23
3. Benefits to Atlantic Canada	24
4. Benefits to Aboriginal Economic Development.....	27
PART III – CROSS INDUSTRY BENEFITS OF THE OIL AND GAS INDUSTRY	29
A. Benefits to the Manufacturing Industry	29
B. Benefits to the Construction Industry.....	30
C. Benefits to the Steel Industry.....	30
D. Benefits to Other Industries.....	31
PART IV – INNOVATION BENEFITS OF THE OIL AND GAS INDUSTRY	33
A. Research and Development	33
PART V – FUTURE OPPORTUNITIES IN THE OIL AND GAS INDUSTRY.....	37
A. Opportunities in Oil and Gas Market Access and Diversification.....	37
1. Future Benefits of Timely Market Access	37
2. Future Benefits of Energy Infrastructure.....	38
B. Opportunities in Adding Value to Oil and Gas Products	41

C. Opportunities in Developing the Oil and Gas Resources Found in Other Canadian Regions	42
1. Future Benefits to Quebec.....	42
2. Future Benefits to New Brunswick.....	43
3. Future Benefits to the Yukon	44
CONCLUSION	45
APPENDIX A.....	47
APPENDIX B: LIST OF WITNESSES	49
APPENDIX C: LIST OF BRIEFS	53
REQUEST FOR GOVERNMENT RESPONSE.....	55
DISSENTING OPINION OF THE NEW DEMOCRATIC PARTY OF CANADA.....	57
DISSENTING REPORT OF THE LIBERAL PARTY OF CANADA.....	63

THE CROSS-CANADA BENEFITS OF THE OIL AND GAS INDUSTRY

We benefit from petroleum products in general in our daily lives to an extent that we don't even realize.... Canadians benefit from this from the moment they wake up in the morning to the moment they go to bed, and even when they sleep, when they're keeping their houses warm through the type of winter that we've had.

*[Pierre Desrochers, Associate Professor,
University of Toronto, as an individual]*

Energy touches every aspect of our lives. It heats our homes, fuels our transportation, and provides access to services within our communities and also outside of them. It creates the materials for the consumer goods, and gets them to us. It supports health and education programs and systems, and is a major contributor to our high standard of living.

*[Heather Kennedy, Vice-President, Government Relations,
Suncor Energy]*

Canada has both an opportunity and an imperative to diversify energy markets in order to continue reaping the key economic benefits that we enjoy today ... [but it] needs to act quickly.

*[Jay Khosla, Assistant Deputy Minister,
Natural Resources Canada]*

EXECUTIVE SUMMARY

Canada's prosperity highly depends on the responsible development of the nation's abundant oil and gas resources. It is one of the largest sectors that contributes significantly to the growth of the Canadian economy, and it directly benefits Canadians from coast, to coast, to coast.

Despite its importance to the Canadian economy and future prosperity, the oil and gas industry has been facing increased scrutiny from various domestic and international groups. To expand the information available to Canadians, the House of Commons Standing Committee on Natural Resources (hereafter "the Committee") undertook a study to examine the cross-country benefits of developing Canada's oil and gas resources, and seek direct evidence of how the oil and gas industry contributes to the well-being of Canadians. During the course of the study, Jay Khosla, Assistant Deputy Minister at Natural Resources Canada, told the Committee that the socio-economic benefits from the oil and gas industry are universally positive.¹ Other witnesses confirmed that it supports tens of thousands of local communities and businesses across Canada, regional economies and multiple Canadian industries, such as manufacturing, construction, and steel.² Janet Annesley, Vice-President at the Canadian Association of Petroleum Producers, informed the Committee that the oil and gas industry creates more than 550,000 direct and indirect jobs for Canadians. Witnesses also testified that it provides governments with revenue that pays for the country's health care, community infrastructure and education.³

Furthermore, the development of the oil and gas industry generates various environmental benefits, including improved air quality, water quality, and reforestation. Many of these improvements are achieved through world-class innovation and clean technologies developed and supported by the industry. The Committee also learned that Canada's oil and gas industry is a global leader in innovation and expertise related to resource extraction, and that it enables thousands of Canadian entrepreneurs to take an idea and turn it into a business.

1 House of Commons Standing Committee on Natural Resources (RNNR), [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla, Assistant Deputy Minister, Energy Sector, Natural Resources Canada).

2 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Mel Norton, Mayor, City of Saint John); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Barbara Pike, Chief Executive Officer, Maritimes Energy Association); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (Bryan McCrea, Chief Executive Officer, 3twenty Modular).

3 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley, Vice-President, Communications, Canadian Association of Petroleum Producers); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny, President and Chief Executive Officer, Canadian Energy Pipeline Association); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper, Mayor, Northern Rockies Regional Municipality).

Throughout the study, witnesses urged the government to strongly support further development of Canada's oil and gas resources, and agreed that timely access to new export markets is crucial for Canada's continued growth and its ability to compete with other countries. Mr. Khosla noted that "Canada has both an opportunity and an imperative to diversify energy markets in order to continue reaping the key economic benefits that we enjoy today ... [but it] needs to act quickly."⁴ Finally, the Committee heard that the federal government has modernized its regulatory system, with the aim of developing natural resources projects in a timely way, and that it is implementing a world-class safety regime to show Canadians and the world that Canada can do so, all the while maintaining the highest environmental and public safety standards.

4 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla).

BACKGROUND

Canada is the world's sixth largest producer of natural gas, and is home to the world's third largest oil reserve.⁵ Heather Kennedy, Vice-President of Government Relations at Suncor Energy, told the Committee that "Canada is in an enviable position when it comes to oil and gas," and that "our abundance of fossil fuels has positioned us as a global marketplace, providing a unique opportunity to develop the reserve base over the long term."⁶

The oil and gas industry accounted for 21.5% of the total Canadian capital expenditure in 2013.⁷ Janet Annesley, Vice-President of Communications at the Canadian Association of Petroleum Producers, reported that industry's overall annual revenues at approximately \$110 billion⁸ can be primarily attributed to the development of unconventional oil and gas, which, according to Sarah Dobson from the Pembina Institute, has grown at "an annualized rate of 8.4%."⁹ Ms. Annesley reported that, as a sector, "the upstream oil and gas industry is today, Canada's single largest private investor, forecast to inject some \$68 billion into Canada's economy this year, and that capital provides direct and indirect employment for more than 550,000 Canadians and countless others sectors that do business from Main Street, Saskatchewan, to Bay Street, Ontario."¹⁰

Several witnesses suggested that an estimated 30% to 50% of Canada's oil and gas industry is Canadian-owned.¹¹ Among the industry's domestic ownership sources, Canadian public pension funds were characterized as an important shareholder.¹²

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- 5 House of Commons Standing Committee on Natural Resources (RNNR), [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla, Assistant Deputy Minister, Energy Sector, Natural Resources Canada). According to Natural Resources Canada, Canada has 173 billion barrels of proven oil reserves, and up to 315 billion barrels of ultimately recoverable oil reserves.
 - 6 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Heather Kennedy, Vice-President, Government Relations, Business Services, Suncor Energy Inc.).
 - 7 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley, Vice-President, Communications, Canadian Association of Petroleum Producers); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Natural Resources Canada, document sent to the Committee on 8 April 2014).
 - 8 Ibid. (Janet Annesley).
 - 9 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Sarah Dobson, Economist, Alberta and the North, Pembina Institute).
 - 10 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).
 - 11 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt, Director, Industrial Economic Trends, The Conference Board of Canada); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Michael Priaro, Professional Engineer, as an individual); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Trevor Harrison, Director, Parkland Institute, Professor, University of Lethbridge).
 - 12 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).

According to Brenda Kenny, President and Chief Executive Officer of the Canadian Energy Pipeline Association, approximately 25% of the Toronto Stock Exchange is energy related, “so any large pension plans would certainly have a stake in this.”¹³ Ms. Annesley also noted that “When people think about who benefits from oil and gas, they often think about a C-suite executive in Calgary, but it’s really nurses and teachers.”¹⁴

Oil and gas exploration and production (upstream operations) take place primarily in western Canada, though there is significant oil and gas production in Atlantic Canada and the North. While this segment of the industry is concentrated primarily in those regions, the overall value chain of the industry – including, but not limited to, refining, manufacturing, maintenance, pipeline transportation, and retail and wholesale sales – extends across Canada and benefits all provinces and territories.

According to Peter Boag, President and Chief Executive Officer of the Canadian Fuels Association, energy pipelines, the midstream component of the industry, are an integral part of the oil and gas value chain, “providing [an] essential linkage between the location where the raw material is found, the processing facility, and beyond the processing facility.”¹⁵ The Committee learned that Canada’s network of pipelines extends over 115,000 kilometres and moves approximately 3.2 million barrels of oil and 14.6 billion cubic feet of natural gas across the country, every day.¹⁶ To emphasize the importance of energy pipelines in the Canadian economy, Ms. Kenny stated that “The energy pipeline industry is an enabler of prosperity across Canada and continues to be a hallmark of this country’s nation building. We help keep the cars moving, factories running, houses heated, creating jobs and economic activity in every region of the country.”¹⁷

The Committee learned that Canada has 18 oil refineries located in 8 provinces, with a combined capacity to refine nearly 2 million barrels per day of crude oil.¹⁸ Mr. Boag highlighted the importance of Canada’s oil refineries, the downstream component¹⁹ of the industry, by stating that “[they] are the crucial manufacturing intermediaries between crude

13 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny, President and Chief Executive Officer, Canadian Energy Pipeline Association).

14 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).

15 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag, President and Chief Executive Officer, Canadian Fuels Association).

16 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny).

17 Ibid.

18 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag).

19 The downstream component of the oil and gas industry involves the refining of crude oil and the processing and purifying of raw natural gas, along with the marketing and distribution of various oil and gas products (e.g., gasoline and chemical feedstocks).

oil as it comes out of the ground and the refined products that we as Canadians use every day.”²⁰

Speaking about Canada’s environmental regulatory regime, Mr. Boag raised the importance of policy alignment across jurisdictions so that the oil and gas sector remains globally competitive. He then added that “to Canada’s credit, and most provinces, we’ve done a very good job of making sure that the substance and pace of our environmental regulation is largely aligned with that of the U.S.”; Canada’s significant competitor.²¹ Normand Mousseau, Professor at Université de Montréal, noted that several provinces (i.e., British Columbia, Alberta, and Quebec), have introduced policies and programs that require their large greenhouse gas (GHG) emitting industries, including oil and gas, to undertake GHG reduction measures.²² Ms. Kenny told the Committee that the “industry overall is supportive of movement toward climate change action in a measured approach,” and it is already participating in a number of programs that aim to reduce its emissions.²³

Several witnesses commented on the world-class safety regime and innovations that the federal government has implemented and supported in the resource development sector to enhance economic benefits.²⁴ For example, Jay Khosla, Assistant Deputy Minister at Natural Resources Canada, noted that:

*... the Government of Canada is and has taken action to ensure success. In fact, much has already been done to support a vibrant and responsible energy sector. The government has modernized its regulatory system, is putting in place world-class safety and security regimes, and has invested in innovation and efficiency. The government is engaging domestically and internationally, and building partnerships with stakeholders to maximize Canadian benefits from resource development. In sum, the objective is to put all the building blocks in place to support the effective and efficient development of projects.*²⁵

20 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag).

21 Ibid.

22 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Normand Mousseau, professor at Université de Montréal, Department of Physics, as an individual).

23 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny).

24 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Heather Kennedy); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers, President and Chief Executive Officer, Canadian Manufacturers and Exporters – Ontario Division).

25 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla).

PART I – ENVIRONMENTAL BENEFITS OF THE OIL AND GAS INDUSTRY

The Canadian oil and gas industry operates in a regulatory environment that some witnesses have categorized as one of the strongest regimes in the world.²⁶ The Committee heard that Canada has world-class safety and security regulations, and that the government is building partnerships, both domestically and internationally, to maximize benefits to Canadians from resource development.²⁷ Terrence Hubbard, Director General at Natural Resources Canada, expanded that this regime “was put in place to manage the risk associated with resource development activities, both at the federal level and at the provincial level.” According to him, government-imposed environmental requirements “create obligations on industry to be able to manage and study environmental impacts and obligations that create employment directly in environmental monitoring-type activities to study and manage the risks associated with development.”²⁸ These environmental requirements ensure that resource development proceeds in a responsible manner, and that it generates long-term benefits for Canadians. Furthermore, Bill Streeper, Mayor of the Northern Rockies Regional Municipality (NRRM) in northern British Columbia, said that:

*The energy industry has created many technological advancements that have aided the environment in all other aspects, besides the oil and gas industry. I personally have seen a lot of changes in my life in the oil patch, and right now I would go forward on the record saying that the oil companies have become one of the highest environmental industries in Canada.*²⁹

The government has also invested in energy efficiency programs across the country, contributing to Canada’s world leadership in this field. For example, Mr. Khosla and Carol Buckley, Director General at the Office of Energy Efficiency, noted that “the International Energy Agency ranked Canada second for energy efficiency improvements

26 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Terrence Hubbard, Director General, Petroleum Resources Branch, Energy Sector, Natural Resources Canada); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Heather Kennedy, Vice-President, Government Relations, Business Services, Suncor Energy Inc.).

27 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla, Assistant Deputy Minister, Energy Sector, Natural Resources Canada).

28 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Terrence Hubbard).

29 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper, Mayor, Northern Rockies Regional Municipality).

between 1990 and 2010,” as a result of investments made by all Canadians over the two decades.³⁰

The oil and gas industry has provided Canada and the world with environmental, social and economic benefits through its innovation and contribution to modern standards of living. “Canada’s carbon fuel abundance is an economic and environmental blessing...” and “the development of coal, crude oil, and natural gas-powered technologies gave humanity the capacity to do a lot more work more efficiently, conveniently, and affordably than before,” Pierre Desrochers, Associate Professor at the University of Toronto, noted in his presentation.³¹ “As a direct result, every indicator of human well-being (from life expectancy, income per capita, hunger, and infant mortality to child labour and education) improved dramatically as soon as the use of carbon fuels became widespread.” He concluded that “Canada should continue to develop ever more efficiently and cleanly its vast deposits of crude oil and natural gas and share them (profitably) with the rest of the world.”³²

A. Benefits to Air Quality

Moving to the use of natural gas is improving air quality. Natural gas is a lower carbon emitting and cleaner burning engine fuel that “contributes significantly to improved local air quality” because it “produces 20% to 30% fewer greenhouse gas emissions and almost zero particulate emissions,”³³ Blaire Lancaster, Director at Ferus Natural Gas Fuels, informed the Committee. According to her, “if every gallon of [liquefied natural gas] LNG produced at our first LNG production facility replaced an energy equivalent amount of diesel, and given that natural gas emits 30% less greenhouse gas emissions than diesel does, then our 50,000 gallon-per-day facility would translate to a reduction of 43,000 tonnes of greenhouse gas emissions per year.”³⁴ Mr. Desrochers also noted that “air pollution in Toronto a century ago was worse than in Beijing today,” and that the past indicates that “there will be progress” in Chinese cities that are currently experiencing pollution.³⁵

30 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Carol Buckley, Director General, Office of Energy Efficiency, Natural Resources Canada).

31 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Pierre Desrochers, Associate Professor, University of Toronto, as an individual, brief presented to the Committee).

32 Ibid.

33 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Blaire Lancaster, Director, Government and Public Affairs, Ferus Natural Gas Fuels Inc.).

34 Ibid.

35 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Pierre Desrochers).

B. Benefits to Forestry

The Committee also heard that the use of oil and gas has led to reforestation not only in Canada, but also around the world. According to Mr. Desrochers, “our planet is today much greener because of fossil fuels” because we use natural resources from underground, and not from the surface, as our ancestors used to do.³⁶ To elaborate on this point, he noted that between 1920 and 1992 “the forest has made a huge comeback in all advanced economies” and that “we produced a lot more food on a lot less land than before.” Mr. Desrochers added that “something people don’t realize is that we’re actually gaining forest in places like Ontario and Quebec, despite urban sprawl.”³⁷

C. Benefits to Water Quality

Mr. Streeper spoke about the oil and gas industry’s contribution to local water quality. He explained that:

*Our water system in Fort Nelson is largely supported by the oil and gas industry as they purchase water in large amounts for use in their camps. This is strictly potable water that is purchased from the community, and with the amount paid by the oil industry, the community was able to increase the service and quality of water supplied, and it isn't completely done by taxation. It's done through contributions by the oil companies as they pay for the water they use.*³⁸

D. Environmental Benefits from Innovation

The Committee also heard from several witnesses about multiple environmental benefits derived from innovative technologies that are either developed or financed by the oil and gas industry. According to Martin Aubé, Director General at Natural Resources Canada, Canada’s oil and gas industry has invested approximately \$1 billion in research and development (R&D), most of which aims to address environmental issues.³⁹ According to him “these investments have had a positive impact”; for example, the underground in situ approach, which is used by the majority of oil sands projects, allows for “90% of the water used for oil sands projects to be recycled.” In addition, “we have reduced greenhouse gas emissions by 26%.”⁴⁰

36 Ibid. (Pierre Desrochers).

37 Ibid.

38 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper).

39 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Martin Aubé, Director General, Innovation and Energy Technology Sector, Natural Resources Canada).

40 Ibid.

The oil and gas industry plays an important role in supporting the development of Canada's clean energy technologies. For example, Canada's Oil Sands Innovation Alliance (COSIA) is a world-leading partnership that was created to generate environmental benefits. COSIA is comprised of 14 oil and gas companies that joined their efforts to create innovative solutions to environmental challenges in oil sands development. To this end, COSIA member companies share their innovative projects, resources, and intellectual property.⁴¹ According to Ms. Kennedy, since its inception in 2012, COSIA members have shared 560 technologies that are worth nearly \$1 billion.⁴² Ms. Kenny highlighted another institution that focuses on environmental technology innovation, the Climate Change and Emissions Management Corporation (CCEMC), "where \$1.3 billion worth of innovation projects [funded by the provincial levy program] are underway."⁴³

On this subject, Céline Bak, Co-Founder of the Canadian Clean Technology Coalition, told the Committee that a multitude of clean technology companies, specializing in areas such as water and waste water treatment, soil remediation, and carbon sequestration, are benefiting from R&D investments made by the CCEMC and the oil and gas companies.⁴⁴ For example, Inventys, CO2 Solutions, and Carbon Engineering, are all clean technology companies that are part of the CCEMC investment portfolio.⁴⁵

Pond Biofuels is another clean technology company that has benefited from funding provided by the oil and gas companies. The company's Chief Executive Officer, David Holm, explained that Pond Biofuels has developed a technology that converts raw smokestack gas (i.e., carbon dioxide, the NO_x, SO_x) into organic biomass. He told the Committee that there is a market for this technology, and that it can help domestic and international oil and gas companies reduce GHG emissions, and meet their investors' expectations.⁴⁶ According to him, commercial development of his company will allow it to create more high-skilled jobs, and generate economic activity in construction and manufacturing industries.⁴⁷ In order to accelerate this development, Mr. Holm raised

41 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley, Vice-President, Communications, Canadian Association of Petroleum Producers); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Heather Kennedy); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Martin Aubé).

42 Ibid. (Heather Kennedy).

43 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny, President and Chief Executive Officer, Canadian Energy Pipeline Association).

44 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Céline Bak, President, Co-Founder, Canadian Clean Technology Coalition, Analytica Advisors Inc.).

45 Ibid.

46 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (David Holm, Chief Executive Officer, Pond Biofuels Inc.).

47 Ibid.

the importance of a strong government policy regarding GHG emissions, and Canadian innovation.⁴⁸

Speaking about innovative solutions offered by Ferus Natural Gas, Ms. Lancaster highlighted how injecting nitrogen (N₂) and/or carbon dioxide (CO₂) into conventional and unconventional oil and gas wells generates better production and lowers environmental impacts. She noted that “in addition to improving well results, using N₂ and CO₂ benefits the environment through reduced water use, reduced disposal of recovered water, reduced well-pad size, reduced chemical usage and reduced CO₂ emissions into the atmosphere.” Ms. Lancaster further elaborated that the company has designed emissions processing facilities that recover CO₂ waste from natural gas processing plants. These facilities have the capacity to process over 300,000 tonnes of CO₂ per year that would have otherwise been vented into the atmosphere.⁴⁹

48 Ibid.

49 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Blair Lancaster).

PART II – SOCIO-ECONOMIC BENEFITS OF THE OIL AND GAS INDUSTRY

A. Nation-Wide Benefits of the Oil and Gas Industry

1. Benefits to Gross Domestic Product and Jobs

During the course of the study, the Committee heard from Bryan McCrae, Chief Executive Officer of 3twenty Modular, that the oil and gas industry “without doubt has a profound impact on the economy.”⁵⁰ This impact is felt across numerous aspects of our lives from affordable transportation to efficient food production to higher life expectancy. Mr. Desrochers stated that:

We benefit from petroleum products in general in our daily lives to an extent that we don't even realize. How many of you drove in this morning? What was the seat of your car made of? The food that you ate this morning was probably produced using fertilizers that were produced with natural gas. The food was probably produced in Ontario and the fuel might have come from Alberta. The food you bought this morning was probably packaged in plastic. Again, there's a reason we're so much better off than our ancestors.⁵¹

According to a document provided by representatives of Natural Resources Canada, in 2012, the industry's contribution to Canada's gross domestic product (GDP) was \$112.4 billion⁵² or 6.4% of the Canadian total.⁵³ Direct GDP contributions from the energy pipeline industry and the Canadian refineries were \$8.8 billion and \$2.5 billion, respectively.⁵⁴

50 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (Bryan McCrae, Chief Executive Officer, 3twenty Modular).

51 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Pierre Desrochers, Associate Professor, University of Toronto, as an individual).

52 In today's prices.

53 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Natural Resources Canada, brief sent to the Committee on 8 April 2014).

54 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag, President and Chief Executive Officer, Canadian Fuels Association); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny, President and Chief Executive Officer, Canadian Energy Pipeline Association).

The Committee also learned about the direct⁵⁵ and indirect⁵⁶ effects of the oil and gas resource development on Canada's employment. Estimated direct employment for the overall oil and gas sector ranges between 100,000 and 200,000 jobs.⁵⁷ Approximately 17,500 people are employed by Canadian refineries, and more than 9,000 people are employed by energy transmission pipelines from across Canada.⁵⁸ Speaking about the context of Canada's overall labour force, Ms. Dobson pointed out that the oil and gas industry accounted for approximately 1.4% of Canada's full-time workforce in 2012.⁵⁹

While some witnesses⁶⁰ observed that direct oil and gas employment may appear relatively modest when compared to manufacturing and construction sectors, Trevor Harrison, Professor at the University of Lethbridge and Director of Parkland Institute, pointed out that much of the employment involved in oil and gas production is indirect.⁶¹ It is estimated that each well involves \$13 million of direct investment and creates direct and indirect employment for 40 to 50 individuals.⁶² In total, the oil and gas sector creates between 150,000 and 300,000 indirect jobs.⁶³ During his presentation, Mr. Khosla observed that:

A lot of people think about these jobs as direct jobs within the industry, construction or operations jobs, but when you look across the country, we are talking about an energy resource boom, which has secondary and tertiary effects—engineering jobs, manufacturing jobs, financial and

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- 55 According to a report by the Conference Board of Canada, direct effects are the employment effects that are immediately associated with the oil and gas industry investment spending.
- 56 According to a report by the Conference Board of Canada, indirect effects, also referred to as “supply chain effects,” measure the employment associated with the use of intermediate inputs or other support services of the oil and gas industry.
- 57 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt, Director, Industrial Economic Trends, The Conference Board of Canada); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Natural Resources Canada, document sent to the Committee on 8 April 2014).
- 58 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag); RNNR, [Evidence](#), 4 March 2014 (Brenda Kenny).
- 59 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Sarah Dobson, Economist, Alberta and the North, Pembina Institute).
- 60 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Sarah Dobson); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt).
- 61 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Trevor Harrison, Director, Parkland Institute, Professor, University of Lethbridge).
- 62 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (William Teed, Chair of the Board of Directors, Enterprise Saint John).
- 63 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Natural Resources Canada, document sent to the Committee on 8 April 2014).

*technical jobs, scientific jobs, and on you go. Those jobs impact every part of the country.*⁶⁴

Similarly, Christopher Smillie, Senior Advisor at the Building and Construction Trades Department, AFL-CIO, told the Committee that “these aren’t just jobs in oil and gas; these are jobs that create jobs,” and that “The more we invest in resource development and the infrastructure that comes with that, the more jobs in skilled trades we create.”⁶⁵ In his view:

*This means paycheques, good paycheques coming home to Canadian families. This means dollars going into the consumer economy. This means dollars going back into the economy. This means a solid quality of life for middle-class Canadians, the engine of our economy.*⁶⁶

Committee members were also interested in knowing about the type of jobs and expertise that the oil and gas sector creates across Canada. Mr. Khosla described the industry as highly technical, and remarked that it creates scientific and high-paying jobs.⁶⁷ For example, in Fort McMurray, “the average household income is in the neighbourhood of \$150,000 and upwards for a family.”⁶⁸ Similarly, in northeastern B.C., Mr. Streeper said that, “The average person involved in the oil and gas industry ... is quite common to have an income in excess of \$100,000 a year.”⁶⁹ Mr. Boag told the Committee that:

*Refinery workers earn well above average wages and salaries, two-thirds more than the overall Canadian average, and even 50% more than workers in the overall manufacturing sector. Nearly 75% of refinery workers have some form of post-secondary education. They're scientists, engineers, technologists, technicians. They're highly skilled, highly valued workers who get paid good salaries and wages, and obviously then contribute to the communities in which they live.*⁷⁰

Ms. Annesley also underlined that the oil and gas industry plays an important role in Canada’s skilled trades training and education. According to her, “increasingly, the average oil and gas worker is a graduate from a technical college or institute.”

64 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla, Assistant Deputy Minister, Energy Sector, Natural Resources Canada).

65 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Christopher Smillie, Senior Advisor, Government Relations and Public Affairs, Building and Construction Trades Department, AFL-CIO).

66 Ibid.

67 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla).

68 Ibid.

69 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper, Mayor, Northern Rockies Regional Municipality).

70 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag).

She described the oil sands industry as a “skilled trades training powerhouse,” where in some cases, the project labour agreements have up to 20% of the labour force as apprentices. In her view, this provides training and opportunities for people to move quickly through their apprentice rankings.⁷¹ Similarly, Jayson Myers, President and Chief Executive Officer of the Canadian Manufacturers and Exporters, noted that “The oil sands, in providing energy and resource development generally, are providing a tremendous opportunity to develop those skills that are really in need right across the country.”⁷²

Despite this, several witnesses noted that labour mobility and access to a skilled workforce remain a key challenge facing the oil and gas sector as well as the supply-chain industries, such as construction and manufacturing.⁷³ Roger Larson, President of the Canadian Fertilizer Institute, observed that “skills shortage is a challenge for all regions of the country, but is especially felt in rural areas of Canada where resource-based industries are usually centered.”⁷⁴

In their discussion about the government’s role in addressing the issue of skilled labour shortage, several witnesses acknowledged the value of the recently announced government program, the Canada Job Grant.⁷⁵ Mr. Smillie and Ms. Annesley told the Committee that the Canada Job Grant program is a step in the right direction. Mr. Smillie elaborated that “the key part that [industry members] like about the Job Grant is that it is aligned with what employers are willing to do.”⁷⁶ According to him and Mr. Myers, the program encourages companies to hire apprentices.⁷⁷ In line with this statement, Mr. Myers pointed out that the Canada Job Grant program “alleviates some of the upfront risk of doing some training and incorporating new hires into the company.”⁷⁸

With respect to the issue of labour mobility, Mr. Smillie explained to Committee members that credentials recognition across jurisdictions is not a problem because of the

71 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley, Vice-President, Communications, Canadian Association of Petroleum Producers).

72 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers, President and Chief Executive Officer, Canadian Manufacturers and Exporters).

73 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Christopher Smillie); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Roger Larson, President, Canadian Fertilizer Institute).

74 Ibid. (Roger Larson).

75 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Christopher Smillie); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Roger Larson).

76 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Christopher Smillie); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).

77 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Christopher Smillie); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers).

78 Ibid. (Jayson Myers).

Red Seal program, which has been in place for nearly 50 years. Rather, it is the financial requirements involved in moving for work that impede workforce mobility. For this reason, his organization has been advocating for the introduction of a labour mobility tax credit that workers could use to reduce their work-related travel expenses.⁷⁹

2. Benefits through Government Revenues

The oil and gas industry is also a large contributor to Canada's critical social programs such as health, pensions, and education through taxes and royalties paid to provincial and federal governments. According to Natural Resources Canada, "The oil and gas sector provided Canadian governments with an average of \$23.6 billion per year from 2007–2011, of which \$22 billion was from the upstream oil and gas extraction industry, including its support activities." Nearly 90% of that revenue was paid to provincial governments.⁸⁰ Speaking specifically about Canada's energy pipelines, Ms. Kenny told the Committee that the industry pays "... both directly and indirectly to the communities [it] operate[s] in, over \$1 billion in municipal, provincial, and federal taxes, and [that] this can be used by local governments to support services such as health care, infrastructure, and education."⁸¹

Furthermore, health care and social programs across Canada are being funded by the oil and gas industry through equalization payments from the "have" provinces (i.e., Alberta, British Columbia, and Saskatchewan) to the "have not" provinces.⁸² For example, Colleen Mitchell, President of Atlantica Centre for Energy, told the Committee that "the royalties that Saskatchewan receives from the oil and gas sector roughly equate to New Brunswick's equalization payments," and that "once developed, natural gas royalties in New Brunswick could transform the balance sheet of the province."⁸³ Similarly, Mel Norton, Mayor of the City of Saint John in New Brunswick, asserted that the province wants to become a "have" province and not a "have-not."⁸⁴ He stated that "We look at Saskatchewan and how the economy has completely evolved there over the last 10 years. It's a complete 360.... More than 20% of Saskatchewan's revenues come from natural resources, oil and gas. In New Brunswick, it's 1%."⁸⁵

79 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Christopher Smillie).

80 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Natural Resources Canada, document sent to the Committee on 8 April 2014).

81 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny, President and Chief Executive Officer, Canadian Energy Pipeline Association).

82 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper).

83 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell, President, Atlantica Centre for Energy).

84 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Mel Norton, Mayor, City of Saint John).

85 Ibid.

B. Benefits of the Oil and Gas Industry at the Regional and Municipal Levels

While the majority of the oil and gas exploration and development activity is concentrated in western Canada and Newfoundland and Labrador, the industry's value chain extends across the country and thus generates economic benefits in terms of GDP and employment in every Canadian region (see Appendix A). Investment in oil and gas production in one Canadian region creates demand for labour as well as for goods and services from other regions. This demand translates into the supply chain effects or indirect effects (e.g., indirect jobs) as well as other economic spin-offs. For instance, Michael Burt, Director at the Conference Board of Canada, told the Committee that:

When we talk about the oil and gas industry it's also important to look at the other impacts, the secondary impacts in the economy. These take a variety of forms. For example, the investments that these businesses undertake, their supply chains and ... the induced effects or the income effects; the money people earn in their jobs creates additional economic impacts when they spend it.⁸⁶

During the course of the study, the Committee learned that the oil and gas industry has a significant influence on the socio-economic development of communities, small towns, regional municipalities, and their local businesses. Specifically, the industry contributes to family life and the social fabric through its investment in local recreational infrastructure, job creation and social programs. For example, Ms. Kennedy pointed out that "operating means reaching out and working with other businesses and being part of the community and local suppliers and communities who are impacted by our energy development."⁸⁷ According to her, "... Suncor currently supports 1,300 charitable and non-profit organizations across Canada and has invested \$22 million in communities in 2013 alone."⁸⁸ In northeastern B.C., "family life has excelled" because of the development of natural gas.⁸⁹ Mr. Streeper stated that "We have fresh water, we have a large community centre for recreation, we have large outdoor recreation facilities, we have all kinds of ball diamonds and soccer fields for families...."⁹⁰

Speaking about Canada's energy transmission pipelines, Ms. Kenny observed that "from over 60 years of practice and growth, [the industry] touched virtually all kinds of communities and regions...."⁹¹ According to her, the pipeline industry directly invests

86 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt).

87 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Heather Kennedy, Vice-President, Government Relations, Business Services, Suncor Energy Inc.).

88 Ibid.

89 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper).

90 Ibid.

91 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny).

\$20 million in communities across Canada, in areas such as in education and arts.⁹² Mr. Streeper stated that “[he] could go on all day about the benefits of pipelines. For one, every pipeline that exists is taxed. The Northern Rockies Regional Municipality gains from this taxation and so does the provincial government.”⁹³

Refineries have had a similar effect and are considered “a major, if not *the* major, economic anchor in communities like Come by Chance, Saint John, New Brunswick, Levis, Quebec, Sarnia, Regina, Edmonton,” Mr. Boag told the Committee.⁹⁴ The Committee also learned that thousands of workers commute from across Canada to work in western Canada’s oil and gas production sites, which results in significant income remittance effects.⁹⁵ The following discussion illustrates some of the social and economic benefits that the oil and gas industry generates for Canadian communities and local businesses.

1. Benefits to Western Canada

While hearing from witnesses from western Canada, the Committee learned that the oil and gas industry has been beneficial for communities and business owners in British Columbia, Alberta, and Saskatchewan.⁹⁶ For example, Mr. Streeper told the Committee members that the community of Fort Nelson is completely reliant on oil and gas exploration and development. According to him, “employment in [NRRM] is 100% oil and gas related,” whether it be direct or indirect.⁹⁷ He also stated that:

*... If it wasn't for the activity of the oil and gas industry companies, many communities, especially in the north, would have very restricted income to support [their] citizens.... We are very much in favour of the oil and gas industry, the things they do, the employment they created, and the jobs they supply to our communities.*⁹⁸

Mr. Streeper added that “All industrial development in Fort Nelson basically relies on the oil and gas industry. We have created industrial subdivisions that are the backbone of our

92 Ibid.

93 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper).

94 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag).

95 According to the Conference Board of Canada, income remittances refers to the portion of the income that workers earns while temporarily working out-of-province, and that they bring back with them to their home provinces.

96 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Dave Turchanski, President, Energy Services BC, brief sent to the Committee on 11 April 2014).

97 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper).

98 Ibid.

taxation. This taxation offsets the amount paid by private individuals, so the oil companies are contributing quite extensively to our tax base.”⁹⁹

The Committee also learned about the benefits of the industry on community infrastructure development. Mr. Streeper recounted that oil and gas industry has made significant contributions to the construction and improvement of NRRM’s road, water, and communication systems, which the local residents and businesses now enjoy.¹⁰⁰ Specifically, he noted “Our oil and gas industry has contributed extensively to a lot of our rural aspects such as road use, road development, and advancement of roads to the point of being paved. Most of it is to service the oil and gas industry.”¹⁰¹ Mr. Streeper also added that:

*It has allowed the community to advance quite extensively, especially in the communications aspect, where we now have cell service in the northeast corner of B.C. that extends to the Northwest Territories and the Alberta border. These stations were all installed because of the oil and gas industry, and many citizens rely on all these services that are put in because every service that the oil and gas industry establishes also has a component in there for private use.*¹⁰²

Similarly, Mr. McCrea observed that there is notable infrastructure development in Estevan, Weyburn, and other communities in Saskatchewan because of oil and gas resource extraction.¹⁰³

Looking at the industry’s benefits from a social standpoint, Mr. Streeper asserted that the oil and gas industry benefits families and the social fabric of his community. According to him, “It has made communities like Fort Nelson more whole; the younger people are not leaving to seek employment in other communities.... It has aided in school, it has aided in development of the town, but the biggest thing about all this ... is the family life.”¹⁰⁴ In reference to rural and semi-urban areas of Saskatchewan, Mr. McCrea made a similar point by stating that “no longer do young families need to move to the city to prosper. Now, thanks to the oil and gas industry, they can be employed, start a business, and raise a family in a town where they were born and raised.”¹⁰⁵

99 ibid.

100 ibid.

101 ibid.

102 ibid.

103 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (Bryan McCrea).

104 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Bill Streeper).

105 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (Bryan McCrea).

In a document presented to the Committee, Dave Turchanski, President of Energy Services BC, indicated that a decline of the oil and gas sector would have a major impact on the people of northeastern B.C. According to him, “in the 80s when there was a recession in the industry, we watched people go bankrupt, offices were closed, and the streets just about rolled up in the North. So today, if the same thing were to happen we would be in trouble.”¹⁰⁶ Mr. Harrison told the Committee that “greater long-term benefits would accrue to Alberta, and Canada as a whole, through a slower pace of oil and gas development.”¹⁰⁷ In contrast, other witnesses explained that slower oil and gas development can result in significant lost opportunity, and that Canada has a limited time-window to access new energy export markets to remain competitive. According to Mr. Burt, because of a lack of pipeline capacity and access to market, the oil industry lost an estimated \$25 billion in unrealized income in 2012. This translates to \$8 billion in lost government revenue paid by the industry through income taxes and royalties. In his view “it is something we need to address if we’re going to maximize the benefit of our non-renewable resources.”¹⁰⁸ Mr. Khosla pointed out that :

*Many forecasters, the International Energy Agency, CERA, and a few others, are saying they'll [U.S] be self-sufficient by the year 2035. You combine that with the fact that we're increasing our production and that they're our biggest customer, and you can imagine what we need to do between 2020 and 2035. We need to diversify our markets. That's one of the timelines on this. Another one is that when you look at B.C., a lot of forecasters on the LNG play are saying there's a race across the world. But B.C. is not the only area within the world that's chasing liquefied natural gas.*¹⁰⁹

2. Benefits to Eastern Canada

Committee members were interested in knowing how oil and gas production in western Canada is benefiting the provinces in eastern Canada and the Atlantic region. According to Mr. Burt, “30% of supply chain impacts associated with oil sands development occurs in provinces outside Alberta.”¹¹⁰ Among these provinces, Ontario was recognized as the biggest beneficiary of the oil sands development, with approximately \$600 million invested in oil sands-related activity.¹¹¹ Mr. Burt elaborated that Ontario’s industries including financial services, professional services, transportation and

106 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Dave Turchanski, President, Energy Services BC, brief sent to the Committee on 11 April 2014).

107 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Trevor Harrison).

108 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt).

109 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla).

110 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt).

111 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt).

manufacturing, have all benefited from investments in oil sands projects. Ms. Annesley also observed that “oil sands development has become such a major market for Ontario goods that projected sales for Ontario’s goods and services to the oil sands sector could potentially surpass Ontario sales to traditional markets such as China or Hong Kong.”¹¹² Speaking about the economic benefits of the pipeline industry, Ms. Kenny told the Committee that in 2012, the pipeline industry’s contribution to the province amounted to 5,300 jobs, \$1.4 billion in GDP, and more than \$85 million in procurement to over 350 local suppliers.¹¹³

In Quebec, the Montréal oil refinery and the larger petrochemical complex employ up to 6,000 people, but this does not include all the indirect benefits that are generated by the industry’s demand for goods and services.¹¹⁴ For example, Ms. Kennedy told Committee members that Suncor has invested \$241 million in Quebec’s goods and services.¹¹⁵ Among some of the companies in Quebec that service Suncor and other industry players, are Prevost, which supplies 25 to 45 buses to the oil sands every year, and, Ezeflow, which manufactures pipefittings for oil, gas, and steam. The Committee learned that Quebec’s financial sector is also heavily investing in oil sands development.¹¹⁶

3. Benefits to Atlantic Canada

Atlantic Canada experiences direct and indirect economic benefits generated by oil and gas companies operating in the region and in other Canadian provinces. According to Barbara Pike, Chief Executive Officer of the Maritimes Energy Association, the oil and gas industry “directly employs 5,600 people, and thousands more indirectly.” She also noted that more than 800 local supply and service companies support the region’s offshore oil and gas development.¹¹⁷ Additionally, oil production accounts for 30% of Newfoundland and Labrador’s GDP, and approximately 2% of Nova Scotia’s GDP.¹¹⁸

Speaking about Newfoundland and Labrador, Anthony Patterson, President and Chief Executive Officer of Virtual Marine Technology Inc., told the Committee that the province’s “GDP growth rate is higher than India’s...” and that its “unemployment rate is

112 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).

113 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Brenda Kenny).

114 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Jean Côté, Vice-President, Montréal Refinery, Refining and Marketing, Suncor Energy Inc.).

115 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Heather Kennedy).

116 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).

117 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Barbara Pike, Chief Executive Officer, Maritimes Energy Association).

118 Ibid.

the lowest since 1973,” largely because of its growing oil and gas industry.¹¹⁹ Furthermore, Mr. Patterson commented on the industry’s contribution to Newfoundland and Labrador’s high-technology sector and innovation. Up to 2011, the oil and gas industry had invested \$205 million in the province’s high-technology R&D, mostly concentrated on Arctic operations and improving health, safety, and environmental performance of industry operations.¹²⁰ Ms. Pike also discussed the numerous engineering companies that are emerging in Atlantic Canada in response to industry’s demand for innovative technologies. As an example, she mentioned a Nova Scotia-based company, Encanex, which has grown significantly in a span of two years because of the offshore oil and gas industry, and is now expanding its operations to Alberta.¹²¹

Residents and local businesses in New Brunswick benefit from supplying western Canada’s demand for labour, goods and services, and innovative technologies. In 2011, the oil sands contributed \$19 million to the province’s GDP.¹²² New Brunswick also benefits directly from its small natural gas production, and from hosting Canada’s largest refinery, which employs directly and indirectly 2,000 people, and accounts for 64% of Canada’s refined petroleum exports to the United States.¹²³ Mr. Norton told the Committee that “the region serves as an increasingly important and diverse energy gateway including links to eastern Canada, New England, the Atlantic basin, and beyond. [The] city [of Saint John] supported in excess of \$10 billion in energy exports in 2012, accounting for approximately two-thirds of New Brunswick’s entire export portfolio.”¹²⁴

Certain economic benefits are accrued directly from Atlantic’s offshore oil and gas production and eastern refineries. For example, Mr. Norton remarked that “the sector has created many innovative spinoffs, including the University of New Brunswick’s new energy certificate program offered by Saint John College, and industry partnerships with the Saint John fire department that allow the department to provide expertise and training to enable them to better respond to incidents across the city and to generate revenue through training programs.”¹²⁵

Several witnesses pointed out that the recent economic downturn in the region prompted local businesses and individuals to look for economic opportunities elsewhere.¹²⁶ According to Ms. Mitchell, overall interprovincial migration from Atlantic

119 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Anthony Patterson, President and Chief Executive Officer, Virtual Marine Technology Inc.).

120 Ibid.

121 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Barbara Pike).

122 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla).

123 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Mel Norton).

124 Ibid. (Mel Norton).

125 Ibid.

126 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Mel Norton, Barbara Pike).

Canada to other parts of Canada remains at over 400,000 people.¹²⁷ Speaking about the oil and gas labour supply, Ms. Pike explained that “a few thousand workers commute back and forth to work in the oil patch in the West. They maintain their homes [in Atlantic Canada], their families are [in Atlantic Canada], [and] so the wages paid by the oil and gas industry in western Canada make their way to communities around Atlantic Canada.”¹²⁸ The Committee also learned that an estimated 5,000 residents of Atlantic Canada commute to Alberta to work in the oil sands. According to Mr. Burt, the resulting income effects in the Atlantic Provinces may actually be larger than the supply chain effect in other Canadian regions.¹²⁹

Despite these income benefits, several witnesses acknowledged that the above-mentioned interprovincial migration has had a visible impact on families and on the social fabric of Atlantic communities.¹³⁰ Speaking about his own city, Mr. Norton explained that “it is very difficult for families who are in Saint John, not only for the parents and the children who are separated from their spouses for weeks at a time, but also difficult for the grandparents.”¹³¹ William Teed, Chair of the board of Directors at Enterprise Saint John, agreed that “The impact that [worker migration has] had on families has been tremendous. Everybody wants to make a good living, but ... most of the people who are going out west for a job to earn an income really would prefer to do that in their home province.”¹³²

In this context, Mr. Norton and Mr. Teed voiced their support for further development of New Brunswick’s oil and gas resources. Mr. Norton asserted that:

*We really do want to play a role, as Mr. Teed said. We look to other provinces and we see what it's done for them. We recognize that we are still a have-not province. That is unacceptable to Saint John and to New Brunswickers. This is providing real opportunity.... It's a very real-life impact that we can have for people in Saint John, in New Brunswick, and for the Atlantic Canadian economy generally.*¹³³

Similarly, Ms. Mitchell observed that “The toll it takes on the families is significant. The longer-term initiative would be to develop the oil and gas sector here in Atlantic Canada.” She also added that “Nova Scotia, with its offshore program on the natural gas

127 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell).

128 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Barbara Pike).

129 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt).

130 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Mel Norton); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (William Teed); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell).

131 Ibid. (Mel Norton).

132 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (William Teed).

133 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Mel Norton).

side, has created more than 1,000 jobs. In Newfoundland and Labrador there are 6,000 jobs. We'd like to see New Brunswick share in part of that.”¹³⁴

4. Benefits to Aboriginal Economic Development

The Committee learned that the oil and gas industry has made considerable effort in engaging Aboriginal peoples, and on delivering benefits to Aboriginal communities, as well as Aboriginal businesses across Canada. For example, Peter Turner, President of the Yukon Chamber of Commerce, reported that:

*Beneficiaries of the energy industry in the Yukon are primarily First Nations, who have received approximately \$30 million in royalties from the Kotaneelee gas fields over the course of their operation [of 25 years], and, Yukon businesses supporting oil and gas exploration in areas like Eagle Plains with all manner of supplies from helicopter charters to groceries to logistical support.*¹³⁵

Ms. Annesley discussed the industry’s influence on Aboriginal entrepreneurship. According to her, “Aboriginal companies have earned more than \$8 billion in revenue through working relationships with the oil sands industries.”¹³⁶ On the same subject, Peter Howard, President and Chief Executive Officer of the Canadian Energy Research Institute (CERI), noted that according to the CERI’s research, collaboration between First Nations groups and oil sands producers, as well as pipeline companies, is continuously improving.¹³⁷

Additionally, the Committee heard that Suncor and other major oil and gas producers are investing in Aboriginal communities to promote economic development and facilitate training for in-demand trades.¹³⁸ Ms. Kennedy elaborated that “[Suncor] think[s] it is important to have a targeted approach to hiring Aboriginal people...” and that “community investment in Aboriginal communities promotes diversity, and provides training for in-demand trades including female focused programs like Women Building Futures.”¹³⁹ In his view, Mr. Myers stated that “the platform that oil and gas or other

134 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell).

135 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Peter Turner, President, Yukon Chamber of Commerce).

136 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).

137 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (Peter Howard, President and Chief Executive Officer, Canadian Energy Research Institute).

138 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Heather Kennedy).

139 Ibid. (Heather Kennedy).

resource development provides for Aboriginal skills development is really the platform for overall economic development and social development.”¹⁴⁰

While discussing the socio-economic benefits of the oil sands industry, Chief Allan Adam of the Athabasca Chipewyan First Nation (ACFN), emphasized the importance of impact and benefits agreements (IBAs) for the economic development of Aboriginal communities. According to him, these agreements provide legal grounds for protecting the traditional lands of Aboriginal people, and ensuring that economic benefits are maximized for First Nation communities. He also noted that while some First Nation groups, like Fort McKay, were successful in reaching IBA with oil sands producers, the ACFN have experienced some challenges in maximizing benefits from this resource sector.¹⁴¹

140 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers).

141 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Chief Allan Adam, Chief, Athabasca Chipewyan First Nation).

PART III – CROSS INDUSTRY BENEFITS OF THE OIL AND GAS INDUSTRY

The oil and gas sector supports a host of industries, such as construction, engineering, finance, and hospitality to maintain and grow its operations. As well, “[o]il and gas companies do not develop their projects and resources alone. They rely on thousands of vendors in their supply chain who have developed specialized expertise, products and services to support a project's life cycle. As such, the oil and gas industry provides vast opportunities for enterprising individuals to be a part of the supply chain,” Mr. McCrea from 3twenty Modular pointed out.¹⁴² According to him, “there are small, medium, and large enterprises that participate in all aspects of the supply chain.”¹⁴³ During the course of the study, the Committee heard from witnesses representing various supply chain industries that support the oil and gas sector, and benefit from its growth and development.

A. Benefits to the Manufacturing Industry

“[T]he oil and gas industry helps sustain and grow a healthy Canadian manufacturing industry,”¹⁴⁴ Mr. McCrae noted in his presentation. Investment in oil and gas projects, their operation, and maintenance drive significant demand for manufactured products including structured steel, manufactured pumps and valves, heavy mining machinery, and transportation equipment. Mr. Myers told the Committee that “for every dollar of new investment in new projects in the oil sands, 62 cents is spent on manufactured products, out of which 28 cents is derived from domestic manufacturing, and 34 cents from goods that are imported into the country.”¹⁴⁵ More than \$300 billion of investment in oil sands development (including operations and maintenance), generated \$64 billion in demand for Canadian-produced manufactured products, which is equivalent to 640,000 person-years of work.¹⁴⁶ To illustrate the importance of the oil sands development projects, Mr. Myers referred to the 2008 recession, and stated that “if it were not for the oil sands, the downturn ... in manufacturing would have been much more severe than it was.”¹⁴⁷

142 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014, (Bryan McCrea, Chief Executive Officer, 3twenty Modular).

143 Ibid.

144 Ibid.

145 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers, President and Chief Executive Officer, Canadian Manufacturers and Exporters).

146 Ibid.

147 Ibid.

B. Benefits to the Construction Industry

The Committee learned that the oil and gas sector is a major employer in the construction industry.¹⁴⁸ In 2013, approximately one third (21 million) of construction hours were worked by trades personnel in Alberta's oil and gas projects.¹⁴⁹ Speaking about the construction industry's relationship with oil and gas, Mr. Smillie told the Committee that:

*As much as our members rely on construction work to put food on their table, the oil and gas sector relies on the construction industry. Construction activity on an oil and gas project is a major employer of our members. In the course of a year, nearly 40% of our national membership is actively engaged on an energy project in some way.*¹⁵⁰

He also noted that every billion dollars invested into an oil and gas construction project creates at least 4000 direct construction jobs, and many indirect jobs in other industries such as engineering, manufacturing, and services. With this in mind, Mr. Smillie pointed out that the \$650 billion dollars of planned investment, identified by the Major Project Management Office, could result in the creation in "tens of thousands of jobs."¹⁵¹

C. Benefits to the Steel Industry

The Committee also heard from the President of the Canadian Steel Producers Association, Ron Watkins, who indicated that the oil and gas industry accounts for approximately one-third of the demand for a multitude of Canadian steel products. To illustrate the cross-country benefits that the industry has through its supply chain, he told the Committee that steel products "might be manufactured in Sault St. Marie and threaded in Alberta with proprietary technologies using steel originally melted in Sorel-Tracy, Quebec."¹⁵² To summarize his point, Mr. Watkins stated that steel "products embody cross-Canada supply chain relationships that add value and jobs in multiple phases in several regions, and for multiple uses."¹⁵³

Mr. McCrea, a young Saskatoon-based entrepreneur, told the Committee that his growing business is a success story because of the oil and gas industry. His enterprise, 3twenty Modular, designs and manufactures steel modular units that provide housing and

148 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Christopher Smillie, Senior Advisor, Government Relations and Public Affairs, Building and Construction Trades Department, AFL-CIO).

149 Ibid.

150 Ibid.

151 Ibid.

152 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Ron Watkins, President, Canadian Steel Producers Association.).

153 Ibid.

offices for resource and construction companies. In 2013, 75% of the company's revenues came from Alberta. Mr. McCrea also stated that "the oil and gas industry's continued growth has provided [3twenty] with certainty to plan [its] business growth and invest capital into additional infrastructure, human resources and R & D," and that "without the oil and gas industry, expansion and investment would seem risky and unattractive."¹⁵⁴ According to him, "it is undeniable that the oil and gas industry has enabled thousands of entrepreneurs to take an idea or an opportunity and turn it into a business – much like [3twenty's] story."¹⁵⁵

D. Benefits to Other Industries

Some witnesses spoke about how Canada's oil and gas production enables the manufacturing of petrochemicals and fertilizers to give Canadians access to plentiful food grown on less land. For example, Mr. Larson informed Committee members that natural gas is essential to Canada's nitrogen fertilizer manufacturing and potash production. It represents between 70% and 90% of total input costs of manufacturing nitrogen fertilizer, and between 20% and 25% of total input costs of potash production.¹⁵⁶ Speaking about the benefits of affordable natural gas, George Mallay, General Manager of Sarnia-Lambton Economic Partnership, pointed out that shale gas has proven to be a very cost-effective feedstock for making hydrogen, used by the refineries of the Sarnia-Lambton industrial complex.¹⁵⁷

154 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014, (Bryan McCrea).

155 Ibid.

156 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Roger Larson, President, Canadian Fertilizer Institute).

157 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (George Mallay, General Manager, Sarnia-Lambton Economic Partnership).

PART IV – INNOVATION BENEFITS OF THE OIL AND GAS INDUSTRY

A. Research and Development

Canada is leading the world in natural resource development because of the oil and gas industry's commitment and contribution to innovation through research and development (R&D). Mr. Khosla observed that "Canada is seen as a world leader ... in terms of its innovative ability to develop these resources," and that countries want Canada's help and expertise when it comes to developing their own resources.¹⁵⁸ According to Ms. Annesley, environmentally efficient technologies developed in Canada's heavy oil extraction will be highly exportable to other oil-producing countries, such as Venezuela.¹⁵⁹ She stated that:

The technologies that we develop there in heavy oil extraction, particularly on the environmental front [for example] non-aqueous extraction, or carbon capture and storage, [are] types of technologies [that] are going to be highly exportable to other oil-producing countries, places like Venezuela and others where they just don't have the kind of innovation culture that private enterprise brings.¹⁶⁰

The Committee also heard that "around the world, when [Canada] sign[s] agreements with various countries, [it has] an energy dialogue...."¹⁶¹ For example, in "... India, China, Japan, the first thing they obviously want to talk to us about is very clearly the resource" and "the very next thing they generally want to talk to us about is our innovations in terms of developing the resource, so that we can help them."¹⁶²

Part I of this report discussed how the oil and gas industry supports the development of Canada's clean technology sector, and funds environmental R&D and innovation. Yet, the Committee also learned that industry's innovation benefits extend beyond the environment sector. For example, Virtual Marine Technology (VMT) is an innovative company that emerged with the help of the oil and gas industry and government financing. VMT has developed simulators that train and prepare offshore oil and gas workers for emergency situations that are specific to offshore installations. Mr. Patterson

158 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla, Assistant Deputy Minister, Energy Sector, Natural Resources Canada).

159 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley, Vice-President, Communications, Canadian Association of Petroleum Producers).

160 Ibid.

161 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla).

162 Ibid.

told the Committee that investment in innovation is one of the big benefits he sees coming from the oil and gas industry.¹⁶³ Specifically, he remarked “You can imagine what impact [investment] has in the development of micro-companies that are very locally focused to regional players. Some of us have now broken into the export markets, and when we do so, we more than triple our revenues.”¹⁶⁴

Similarly, Mr. McCrea observed that the oil and gas industry enables entrepreneurship, and that it provides “vast opportunities for enterprising individuals to be a part of the supply chain.”¹⁶⁵ He also stated that :

*What's interesting about being an entrepreneur in the oil and gas industry is that it opens the door to a variety of backgrounds in everything from starting a janitorial service, which may not require significant post-secondary education, to fabrication shops, which require some trades, to working on the leasing side of the business, which requires a finance background. In other words, there's huge variability in the opportunities that exist within the oil sands, which is what is so attractive about it to me and to so many others.*¹⁶⁶

Wealth associated with the development of oil and gas resources also supports progress, and environmental efficiencies in industrial production and operations. Mr. Desrochers explained that :

*... if the past is any indication, there will be progress. There will be innovation. We heard about the natural gas industry this morning ... but ... this is the whole history of the energy sector turning waste into wealth, creating wealth out of what used to be a pollution problem. Let's not block things. Let's focus instead on human creativity and again creating wealth out of what are problems.*¹⁶⁷

He added that if “you can turn a problem into an opportunity and improve your bottom line, that is still ... the main driver of greater efficiency and greener behaviour in business....” In his view, this process “... has been going on for a century and a half in the oil business.”¹⁶⁸ The Committee also heard from other industries about the importance of

163 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Anthony Patterson, President and Chief Executive Officer, Virtual Marine Technology Inc.).

164 Ibid.

165 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (Bryan McCrea, Chief Executive Officer, 3twenty Modular).

166 Ibid.

167 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 March 2014 (Pierre Desrochers, Associate Professor, University of Toronto, as an individual).

168 Ibid.

operational efficiencies and better environmental performance. For example, Canada's steel industry recycles over seven million tonnes of steel per year. According to Mr. Watkins, "Not only does this add economic value and create necessary and valuable products for the oil and gas industry, and over 1,000 jobs in Regina alone, but it also contributes to steel's environmental record as the most recycled product in Canada."¹⁶⁹

169 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Ron Watkins).

PART V – FUTURE OPPORTUNITIES IN THE OIL AND GAS INDUSTRY

A. Opportunities in Oil and Gas Market Access and Diversification

1. Future Benefits of Timely Market Access

The Committee heard projections from government officials and various research organizations that Canada's oil and gas industry will continue to grow over the next two decades, but Canada needs to act quickly.¹⁷⁰ The growth of the oil and gas industry will largely depend on Canadian producers having adequate access to markets.¹⁷¹ Mr. Howard explained that “market access” refers to “infrastructure, either pipeline or rail, that would allow conventional, crude/bitumen, or refined products to achieve unhindered access to refineries and markets either in North America or globally.”¹⁷² A number of witnesses pointed out the importance of “timely” market access. For instance, Mr. Hubbard told the Committee that:

*It is a global market that we're competing against. If we don't move forward and capitalize on this opportunity we have here in Canada, our competitors will. There are significant opportunities and significant proposed investments, in the United States, in Australia, in other countries, in terms of oil and gas development. The market for these products is limited, so those first to market are going to capture those long-term opportunities presented by the growing demand, in the Asia-Pacific region in particular.*¹⁷³

Similarly, Mr. Khosla asserted that “Canada has a huge economic opportunity, but needs to act quickly.” According to him, “many argue that this is a time-limited window ... [and that] economic experts agree on the tremendous importance and potential of Canada's energy sector.”¹⁷⁴ He referred to a recent International Monetary Fund study,

170 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla, Assistant Deputy Minister, Energy Sector, Natural Resources Canada); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (Peter Howard, President and Chief Executive Officer, Canadian Energy Research Institute).

171 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Michael Burt, Director, Industrial Economic Trends, The Conference Board of Canada); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley, Vice-President, Communications, Canadian Association of Petroleum Producers).

172 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (Peter Howard).

173 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Terrence Hubbard, Director General, Petroleum Resources Branch, Energy Sector, Natural Resources Canada).

174 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla).

which indicates that Canada has the potential to increase its GDP by 2% by 2020, if it is able to adequately diversify its markets.¹⁷⁵

Speaking about the benefits of the government's responsible resource development policy, which placed time limits on the reviews of major natural resource projects to foster certainty in the sector's investment environment, Ms. Annesley pointed out that:

*Streamlining the regulatory process provides a level of investor assurance that there will be a decision in a set time period. That is essential so that these projects don't move on and drag on for decades....*¹⁷⁶

Similarly, Ms. Kennedy stated that "... from a government's perspective continuing with the implementation of responsible resource development is an important component, so that creates some certainty and creates some stability."¹⁷⁷

Some witnesses encouraged the federal government to further simplify the regulatory compliance process, and apply the abovementioned streamlined approach in other approval processes. Mr. Myers elaborated that "right now, we have a lot of duplicated and ... unnecessary differences in compliance requirements from province to province."¹⁷⁸ Having said that, Mr. Myers, along with Mr. Larson, asserted that a one-window approach for regulatory approvals, be they for the environment or health and safety, would be the best outcome.¹⁷⁹

2. Future Benefits of Energy Infrastructure

The Committee heard that achieving market access requires a timely development of energy infrastructure.¹⁸⁰ For example, Ms. Mitchell observed that in order "to maximize the price of our oil and gas reserves, Canada needs to have the infrastructure in place, so that we can use it domestically, and for foreign markets."¹⁸¹ In this context, witnesses discussed the oil and gas industry's several large infrastructure investments, including the

175 Ibid.

176 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).

177 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Heather Kennedy, Vice-President, Government Relations, Business Services, Suncor Energy Inc.).

178 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers).

179 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Roger Larson, President, Canadian Fertilizer Institute).

180 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag, President and Chief Executive Officer, Canadian Fuels Association); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Janet Annesley).

181 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell, President, Atlantica Centre for Energy).

Northern Gateway Pipeline project, the reversal of Line 9 pipeline project between Sarnia and Montréal, and the Energy East pipeline project. According to Mr. Khosla, these “proposed pipeline projects could increase [Canada’s] export capacity to 3 million barrels a day.” Furthermore, he told the Committee that the “industry is also pursuing a variety of proposals to export Canadian natural gas resources to international markets via liquefied natural gas [LNG],” with 10 LNG export terminals in British Columbia, and one on the East Coast.¹⁸²

Some witnesses highlighted the projects’ potential economic benefits to the Canadian economy. Using British Columbia as an example, Jeff Labonté, a Director General at Natural Resources Canada, reported that:

*The pipeline projects that are proposed in the west coast look at a combined GDP contribution of almost \$17 billion to the Canadian economy over the period of growth, with over half of that accruing to British Columbia. The LNG projects have a cumulative GDP effect of \$171 billion. That’s \$386 billion when you include the upstream development of the gas resources in Alberta and British Columbia with the 43,000 jobs proposed. The impact to provinces across the country other than Alberta and B.C. would be \$10.8 billion. So these are substantial, staggering amounts of money to the economy over the period of those 20-year horizons.*¹⁸³

The Committee also learned about the potential economic benefits of the proposed Energy East Pipeline project, and its potential to reduce Canada’s reliance on imported crude oil. Announced by TransCanada in August 2013, the Energy East Project, worth an estimated \$12 billion, will carry approximately 1.1 million barrels of crude oil per day from receipt points in Alberta and Saskatchewan to existing refineries in Montréal and Lévis, Quebec, and in Saint John, New Brunswick. It will also include deliveries to two export marine terminals, in Cacouna, Quebec, and Saint John.¹⁸⁴

According to John Van Der Put, Vice-President of the Energy East Pipeline project at TransCanada Pipelines Ltd., eastern Canadian refineries currently rely on foreign imported oil for 86% (or 700,000 barrels per day) of their feedstock.¹⁸⁵ Given this reality, he argued that “In addition to laying the foundation for energy independence, this cross-Canada connection also allows Canadian producers and refineries to realize greater value for their products as producers gain access to new markets and refineries displace higher-

182 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla).

183 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jeff Labonté, Director General, Energy Safety and Security Branch, Energy Sector, Natural Resources Canada).

184 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 10 April 2014 (John Van Der Put, Vice-President, Energy East Pipeline, TransCanada Pipelines Ltd.).

185 Ibid.

cost imports.”¹⁸⁶ On this subject, Michael Priaro, a professional engineer and consultant, suggested that the Energy East Pipeline, along with other pipeline projects transporting western crude oil to eastern Canada, are more important for Canada than the proposed Keystone XL and the Northern Gateway pipeline projects.¹⁸⁷ Specifically, he asserted that:

*New pipelines connected to bitumen upgraders in Alberta, and refineries and marine terminals on Canada’s east and west coasts, maximize the cross-Canada value of the largest oil reserves on earth, provide energy security, and by adding 4 million barrels a day of capacity, together with new crude rail terminals, make low-value export pipelines such as Keystone XL and Northern Gateway unnecessary until 2028.*¹⁸⁸

Mr. Boag and Jean Côté, Vice-President of Suncor Energy’s Montréal Refinery, both testified that eastern Canadian refiners would gain from proposed energy transportation pipeline projects.¹⁸⁹ Mr. Côté told the Committee that the Line 9 reversal project and the Energy East Pipeline are “good news” for Canada’s eastern refineries because they enable access to raw products sold at cheaper prices. He added that having access to western crude oil will allow the Montréal refinery to remain competitive, maintain jobs, and possibly invest in new developments.¹⁹⁰

From a local community perspective, Mr. Teed described the Energy East Pipeline project as “a real game changer for New Brunswick, [and] particularly the greater Saint John area, where the pipeline ends and where a bulk storage and marine terminal facility will be built and operated.”¹⁹¹ Ms. Mitchell highlighted that the project will, in addition to creating employment, contribute an estimated \$2.8 billion to New Brunswick’s GDP over a span of more than 40 years.¹⁹²

186 Ibid.

187 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Michael Priaro, Professional Engineer, as an individual).

188 Ibid.

189 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Jean Côté, Vice-President, Montréal Refinery, Refining and Marketing, Suncor Energy Inc).

190 Ibid. (Jean Côté).

191 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (William Teed, Chair of the Board of Directors, Enterprise Saint John).

192 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell). Ms. Mitchell referred to a study completed by Deloitte entitled, *The Economic Benefits of TransCanada’s Canadian Mainline Conversion Pipeline*. The project’s estimated contribution to New Brunswick’s GDP includes direct, indirect, and induced economic effects.

B. Opportunities in Adding Value to Oil and Gas Products

Multiple witnesses spoke about the opportunities and additional economic benefits that could be generated from adding value to Canada's oil and gas products. Speaking about Canada's largest hydrocarbon reserve, Robyn Allan, an economist, explained that "bitumen is not an export-ready crude oil product," and that it is upgraded or diluted before it is moved through a pipeline. According to her, "Exporting a barrel of bitumen achieves 35% of the value of bitumen. Upgrading bitumen in Alberta captures 70% of its value, while refining it into petroleum products captures 100% of the value."¹⁹³

Mr. Myers and Mr. Larson voiced their support for more upgrading and refining of Canada's oil and gas resources.¹⁹⁴ For instance, Mr. Larson reported that "CFI [Canadian Fertilizer Institute] recommends government policies that support value-added natural gas resource upgrading." He further argued that "These policies drive industry, including fertilizer companies, to make long-term capital investments ... [which] means more cost-competitive products and enhanced access to key markets, including the United States."¹⁹⁵ Ms. Allan informed Committee members that "most countries have policies to support the value-added" aspect of oil and gas production. Specifically, she observed that the U.S. has "the 1975 energy policy and export act, which restricts crude oil exports until that crude oil is turned into valuable products like petroleum, gasoline, jet fuel, diesel, etc."¹⁹⁶

Andrew Leach, Associate Professor at the University of Alberta, argued that "encouraging more value-added processing of bitumen" may actually diminish the value of bitumen.¹⁹⁷ He elaborated that to encourage more processing of Canada's bitumen, governments would need to use trade policy, fiscal policy, or get directly involved in the sector. He expanded that:

Implicitly what these policies would do is either directly assign government assets, resources, or direct financial support to the upgrading of bitumen or de-value Canada's bitumen through trade policies in order to underpin increased processing. Neither of those options would generally be value-added; they would be value-transfer or value-detracting; they would be taking away the value of our natural resource to support greater processing. We must recognize that using

193 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Robyn Allan, Economist, as an individual, 1 April 2014).

194 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Jayson Myers, President and Chief Executive Officer, Canadian Manufacturers and Exporters); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Roger Larson).

195 Ibid. (Roger Larson).

196 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 1 April 2014 (Robyn Allan).

197 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (Andrew Leach, Associate Professor, Author, Alberta School of Business, University of Alberta, as an individual).

*resources to support processing is not the same as adding value. We should all want to add value; we should not necessarily want more processing.*¹⁹⁸

On a similar note, Mr. Boag told the Committee that it is “much easier, more effective, more efficient, and less costly to export and import crude than it is to move refined product,” and that “The costs of moving refined product are higher than the costs of moving crude because of the quality standards that need to be maintained.”¹⁹⁹ According to him, “the economics of the refining business are very complex” and that “it’s a very capital-intensive industry.” In his view, “You need to have a market for [refined products], you have to be able to get it to market, and you have to be able to do it and actually make a reasonable return on investment. That’s the issue that investors face today.”²⁰⁰ On the subject of investments in upgrading and refining, Committee members learned that certain oil and gas companies are looking into the possibility of building a new upgrader plant in the Sarnia-Lambton region. Mr. Mallay noted that while there has been some discussion about a government subsidy for the upgrader, a market-based approach is preferable. In his view, there needs to be “a private sector champion” that would allocate significant funds towards a feasibility study.²⁰¹

C. Opportunities in Developing the Oil and Gas Resources Found in Other Canadian Regions

1. Future Benefits to Quebec

While studying the potential benefits of Canada’s oil and gas industry, the Committee learned that certain provinces and territories outside of western Canada are looking to further develop their own potentially large oil and gas resources. For example, Quebec’s total natural gas resource potential may be more than 120 trillion cubic feet (Tcf), of which between 18 and 40 Tcf is expected to be recoverable. According to a document provided by Natural Resources Canada, the market value of these natural gas resources is assessed to be up to \$170 billion, based on current Alberta wholesale natural gas prices (\$4.40/gigajoule).²⁰²

Government officials also reported that there is significant resource potential in the Gulf of St. Lawrence and surrounding offshore areas, with an estimated 39 Tcf of natural gas and 1.5 billion of oil. Between 19.8 and 48.2 billion barrels of oil resources are also

198 Ibid.

199 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag).

200 Ibid.

201 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 3 April 2014 (George Mallay, General Manager, Sarnia-Lambton Economic Partnership).

202 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Natural Resources Canada, document sent to the Committee on 8 April 2014).

found on the Anticosti Island. Mr. Labonté informed Committee members that “the federal government has signed an [accord](#) with the Province of Quebec to pursue shared management of offshore resources in the Gulf of the St. Lawrence.”²⁰³

2. Future Benefits to New Brunswick

A number of witnesses²⁰⁴ expressed their support for further developing New Brunswick’s oil and gas resources, and explained that onshore exploration and production could lead to “hundreds of jobs and [many] local companies.”²⁰⁵ Currently, the province’s natural gas production is very small when compared to national standards.²⁰⁶ According to Ms. Pike, even the small amount of production has an impact on the province. She explained that “in the area of Sussex, where Corridor Resources is producing natural gas, dozens have full-time employment and dozens of companies work on that project.”²⁰⁷

According to a document provided by Natural Resources Canada, New Brunswick has up to 78.2 Tcf of predominantly shale gas resources, of which 15 Tcf are recoverable. This resource potential has an estimated market value of more than \$60 billion, based on current Alberta wholesale prices.²⁰⁸ Ms. Mitchell told the Committee that the benefits of developing these resources “... include creating a stable, long-term supply of natural gas and lowering tolling fees to local manufacturing, industry, and residential users.”²⁰⁹ In line with this comment, Mr. Boag noted that access to cost-competitive natural gas would help the competitiveness of Canadian refineries in eastern Canada.²¹⁰

Additionally, Ms. Mitchell affirmed that natural gas development “creates an opportunity for export, balances the Atlantic energy requirements, and provides a significant source of royalty and taxation revenues to the government.” To summarize, she declared that “The economic impact of having an indigenous supply of natural gas in New Brunswick includes \$21 million in direct, indirect, and induced investments and a direct GDP of \$4.5 million.”²¹¹ Mr. Norton stated that “we simply want what the rest of

203 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Jeff Labonté).

204 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Barbara Pike, Chief Executive Officer, Maritimes Energy Association); RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Mel Norton, Mayor, City of Saint John, and William Teed).

205 Ibid. (Barbara Pike).

206 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell).

207 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Barbara Pike)

208 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 27 February 2014 (Natural Resources Canada, document sent to the Committee on 8 April 2014).

209 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell).

210 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 6 March 2014 (Peter Boag).

211 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 4 March 2014 (Colleen Mitchell).

Canada in many ways already has, and that's the opportunity to pull ourselves up and be self-sustaining. We want to be a 'have' place. We see what it has done in Saskatchewan, what it has done in Alberta, in Newfoundland, in British Columbia. We see so many provinces that are 'have' places."²¹²

3. Future Benefits to the Yukon

The Yukon is another Canadian region that is looking to further develop its oil and gas industry. According to Mr. Turner, the Yukon has a relatively short history of oil and gas activity, and that natural gas production began at the Kotaneelee Field in the southeastern region of the territory. He also noted that over the last decade, Yukon's natural gas extraction declined to nominal output.²¹³

Given the lack of local production or supply of natural gas, the Committee learned that the Yukon relies heavily on hydroelectric- and diesel-generated power, which have reached their maximum combined capacity. In light of this, Mr. Turner declared that the Yukon's business community would like to see "a significant increase in the growth of oil and gas exploration in the Yukon ... the eventual lifting of the current ban²¹⁴ on exploration in the Whitehorse Trough..." Consequently, he affirmed that:

*Certainly there'll be tremendous benefit to Yukoners to being able to source natural gas locally, particularly if we're converting some of our diesel electric backup generators to natural gas. I'd certainly much rather be burning natural gas that's extracted here in the Yukon by companies employing Yukoners and being transported perhaps 100 or 200 kilometres than transporting liquid natural gas 1,500 to 2,000 kilometres from Alberta or British Columbia to the benefit of those provinces and to the detriment of the greenhouse gases associated with 2,000 kilometres worth of transportation up to the Yukon.*²¹⁵

Mr. Turner also conveyed that an active oil and gas sector in the Yukon, would "enrich the First Nations communities in terms of employment opportunities," and allow First Nations people to work close to their homes and families.²¹⁶

212 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 25 March 2014 (Mel Norton).

213 RNNR, [Témoignages](#), 2^e session, 41^e législature, 8 avril 2014 (Peter Turner, président, Chambre de commerce du Yukon).

214 The Government of the Yukon introduced a five-year moratorium on any oil and gas exploration in the Whitehorse Basin.

215 RNNR, [Evidence](#), 2nd Session, 41st Parliament, 8 April 2014 (Peter Turner)

216 Ibid.

CONCLUSION

Over the course of 9 meetings, the Committee heard from 35 witnesses from across the country, representing government, industry, academia, First Nations and individual citizens.

The purpose of this study was to tell Canadians about the various environmental, social, and economic benefits that derive from the development of Canada's oil and gas resources. The Committee learned that the oil and gas industry benefits Canadians from the Northern Rockies Regional Municipality in British Columbia all the way to St. John's, Newfoundland and Labrador through job creation, government revenue that supports important social programs for communities and families, as well as research and innovation opportunities for universities and colleges.

The Committee also heard that various environmental benefits are generated from the development of the oil and gas industry, including an increase in air quality, water quality, and reforestation.

Throughout the study, witnesses voiced their strong support for further development of Canada's oil and gas resources, and agreed that Canada has enormous opportunity to reap more benefits from the industry if it acts quickly in accessing new export markets.

APPENDIX A

Table 1: Natural Resources Canada Estimate of Direct Contribution of the Oil and Gas Industry to Total GDP (Nominal) (2012, in millions \$CAD)

	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC
GDP – Oil and Gas	112,455 ^a	8,204	0	586	762	1,576	1,767	2,058	15,136	74,958	7,408
GDP – Total Economy	1,710,999	31,616	5,143	35,080	29,087	335,234	631,111	54,312	74,524	301,884	204,086
Oil and Gas Share of GDP	6.6%	26.0%	0.0%	1.7%	2.6%	0.5%	0.3%	3.8%	20.3%	24.8%	3.6%

Note: Does not include territories.

Source: Statistics Canada CANSIM table 379-0028, TD Economic Estimates for Provincial GDP.

**Table 2: Employment – 2012 (Annual Average), according to Statistics Canada
(System of National Accounts/Labour Force Survey)**

	Canada	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC
Total Direct and Indirect Employment in Oil and Gas	351,755	1,592	81	3,590	2,871	6,325	17,385	2,865	26,223	248,405	36,587
Total Employment	17,850,790	227,560	71,840	467,945	358,235	3,959,045	6,911,110	662,245	558,630	2,211,405	2,349,000
Oil and Gas Share of Total Employment	-	0.7%	0.1%	0.7%	0.8%	0.2%	0.3%	0.4%	4.6%	11.0%	1.5%

Source: Statistics Canada CANSIM table 383-0031 – NRCan estimates direct employment for provinces for which data are not available due to confidentiality using Labour Force Survey data (special tabulation).

APPENDIX B LIST OF WITNESSES

Organizations and Individuals	Date	Meeting
<p>Department of Natural Resources</p> <p>Martin Aubé, Director General Strategic Science-Technology Branch, Innovation and Energy Technology Sector</p> <p>Carol Buckley, Director General Office of Energy Efficiency, Energy Sector</p> <p>Terence Hubbard, Director General Petroleum Resources Branch, Energy Sector</p> <p>Jay Khosla, Assistant Deputy Minister Energy Sector</p> <p>Jeff Labonté, Director General Energy Safety and Security Branch, Energy Sector</p> <p>Jonathan Will, Director General Electricity Resources Branch, Energy Sector</p>	2014/02/27	16
<p>Alberta Federation of Labour</p> <p>Gil McGowan, President</p> <p>Atlantica Centre for Energy</p> <p>Colleen Mitchell, President</p> <p>Canadian Energy Pipeline Association</p> <p>Brenda Kenny, President and Chief Executive Officer</p> <p>Conference Board of Canada</p> <p>Michael Burt, Director Industrial Economic Trends</p>	2014/03/04	17
<p>Building and Construction Trades Department, AFL-CIO</p> <p>Christopher Smillie, Senior Advisor Government Relations and Public Affairs</p> <p>Canadian Fuels Association</p> <p>Peter Boag, President and Chief Executive Officer</p> <p>Parkland Institute</p> <p>Trevor Harrison, Director professor, University of Lethbridge</p> <p>Unifor</p> <p>Roland LeFort, President Local 707A</p>	2014/03/06	18

Organizations and Individuals	Date	Meeting
<p>Analytica Advisors Inc. Céline Bak, President Co-Founder, Canadian Clean Technology Coalition</p> <p>City of Saint John Mel Norton, Mayor</p> <p>Enterprise Saint John William Teed, Chair of the Board of Directors</p> <p>Maritimes Energy Association Barbara Pike, Chief Executive Officer</p> <p>Virtual Marine Technology Inc. Anthony Patterson, President and Chief Executive Officer</p>	2014/03/25	19
<p>Athabasca Chipewyan First Nation Allan Adam, Chief</p> <p>Ferus Natural Gas Fuels Inc. Blair Lancaster, Director Government and Public Affairs</p> <p>Pembina Institute Sarah Dobson, Economist Alberta and the North</p> <p>Pond Biofuels Inc. David Holm, Chief Executive Officer</p> <p>As an individual Pierre Desrochers, Associate Professor University of Toronto, Geography Department</p>	2014/03/27	20
<p>Canadian Association of Petroleum Producers Janet Annesley, Vice-President Communications</p> <p>Canadian Fertilizer Institute Roger Larson, President Emily Pearce, Director Government Relations</p> <p>Canadian Manufacturers and Exporters Jayson Myers, President and Chief Executive Officer</p> <p>As individuals Robyn Allan, Economist Michael Priaro, Professional Engineer</p>	2014/04/01	21

Organizations and Individuals	Date	Meeting
Canadian Steel Producers Association Ron Watkins, President	2014/04/03	22
Sarnia-Lambton Economic Partnership George Mallay, General Manager		
Suncor Energy Inc. Jean Côté, Vice-President Montreal Refinery, Refining and Marketing Heather Kennedy, Vice-President Government Relations, Business Services		
As individuals Andrew Leach, Associate Professor, Author Alberta School of Business, University of Alberta Normand Mousseau, Professor Department of Physics, Université de Montréal		
Energy Services BC Art Jarvis, Executive Director Dave Turchanski, President	2014/04/08	23
Northern Rockies Regional Municipality Bill Streeper, Mayor		
Yukon Chamber of Commerce Peter M. Turner, President		
3twenty Modular Bryan McCrea, Chief Executive Officer	2014/04/10	24
Canadian Energy Research Institute Peter Howard, President and Chief Executive Officer		
TransCanada PipeLines Limited John Van Der Put, Vice-President Energy East Pipeline		

APPENDIX C LIST OF BRIEFS

Organizations and Individuals

Allan, Robyn

Canadian Energy Research Institute

Desrochers, Pierre

Energy Services BC

Pembina Institute

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. 16, 17, 18, 19, 20, 21, 22, 23, 24, 28, 29, 30 and 31](#)) is tabled.

Respectfully submitted,

Leon Benoit

Chair

Official Opposition – New Democratic Party of Canada

Dissenting Opinion - Standing Committee on Natural Resources

Cross-Canada Benefits of Developing the Oil and Gas Industry of the Energy Sector

New Democrats recognize the importance and major contribution of the oil and gas sector to Canada's economy. However, as Canada's Official Opposition, we favor an approach to Parliamentary Committee studies that offer objective and balanced analyses contributing to sound resource management. We are appreciative of all of the witnesses who took the time to share their perspective and expertise. The Majority Report of the Committee provides a reasonable summary of their testimony. Regrettably, the testimony was constrained by the limited scope of the study as proposed by the government, which prevented a net benefit assessment of the oil and gas sector. Few witnesses were invited to testify on current or potential risks or costs associated with the sector. The Majority Report consequently fails to provide meaningful or balanced direction for public policy.

The government has espoused that "responsible" resource development requires balanced consideration of both economic development and environmental protection, as well as enhanced consultations with Aboriginal peoples. Yet by design, this study was limited to a narrow review of economic benefits of the sector. Inclusion of testimony by a broader range of witnesses on associated risks or challenges faced by the oil and gas sector could have offered more credible and constructive advice for sound and balanced federal policy.

New Democrats believe that sound federal oil and gas policy, as with all natural resource and energy sectors, must be premised on optimizing long-term benefits to Canada. This includes not only addressing our own energy needs, but providing Canadians with stable, well-paying jobs over the long-term. It is also essential that we require use of the best available, clean and energy efficient approaches and technologies to minimize the environmental footprint. Regrettably, the study was limited in focus to the short-term benefits of exploiting these resources absent parallel consideration of the associated economic, social and environmental challenges.

A more balanced review could have afforded the Committee the opportunity to hear testimony on these factors. A number of witnesses expressed concern with the short-sighted "rip and ship" approach of the Conservative government, which fails to offer value-added benefits in upgrading, or refining raw resources creating jobs for Canadians. Notably, recent budgets have either revoked or weakened environmental laws, gutted energy and environmental review processes, and compromised the independence of the National Energy Board (NEB).

In a 21st century economy, a progressive, realistic and responsible policy must also factor in the true costs of resource exploitation and apply a policy framework addressing those challenges to ensure sustainability. The study could have benefitted from testimony on strategies to address social or environmental issues while still creating employment.

“For some reason, we can’t have a rational, nuanced conversation about the benefits and costs—and I underline the word “costs”—of developing this important resource. For too many people in government and industry, “you’re either with us or against us”. If you raise a question about pace, or royalties, or value-added development, or, heaven forbid, the environment, then you are painted as a simpleton, or, worse, some kind of traitor to Canada and its core industries. This has to stop.”

Gil McGowan (President, Alberta Federation of Labour)

Pursuing “Added- Value” Opportunities in Canada

A number of witnesses testified that the current extraction model for the oil and gas sector delivers only a fraction of its potential value to Canadians. While Canada’s capacity for processing oil and gas has been diminishing, Conservative policy has consistently endorsed the shipping of larger and larger amounts of unprocessed bitumen, with diminishing returns and harmful extractive technologies. Robyn Allan (Economist), Michael Priaro (Professional Engineer) and Gil McGowan (President, Alberta Federation of Labour) testified that a clear deterioration of Canada’s capacity for domestic added value in the sector translated into a loss of direct and indirect jobs impacting every region of Canada.

“According to a study from the Alberta government itself, which we had to pry out of their hands using freedom of information legislation, we get far less for our heavy oil than other nations with comparable resources. We get less than Norway; that’s perhaps no surprise. We get less than Russia; we even get less than Angola.”

Gil McGowan (President, Alberta Federation of Labour)

These witnesses presented a compelling case for adopting an alternative policy framework that helps create jobs in manufacturing, science and financial services by ensuring that oil and gas development is, at least in part, refined and processed in Canada. For example, as was pointed out, it is bewildering that Canada, the 6th largest oil producer, finds it necessary to import around half of its domestic fuel requirements. The Official Opposition believes that the Government of Canada has a responsibility to promote domestic energy security over the long-term for Canadian consumers. We are

disappointed that the current government is more focused on spending millions of taxpayer dollars on government advertising abroad rather than pursuing means to create jobs in Canada through cleaner, more efficient energy solutions.

The Canadian economy will achieve higher value if it transforms oil and gas resources into finished products, which mean more money and jobs for every region of Canada. As Trevor Harrison (Professor and Director, Parkland Institute, University of Lethbridge) pointed out, the agenda of multinational companies in Canada, which dominate the oil and gas sector, is to create a supply chain that minimizes Canadian value-added and solidifies the “rip and ship” approach. This pressures the Canadian economy to export increasing volumes of low added-value bitumen. This view was echoed by Robyn Allan:

“When it comes to non-renewable resources rapid extraction and export is exploitation, not development. Development means enhancement, value-added, wealth generation and societal improvement—some form of contributing to a better state because of economic activity.”

Robyn Allan (Economist)

The Official Opposition supports an energy strategy that would place oil and gas development as part of a larger resource policy framework integrating clean energy objectives with a long-term goal of building a balanced, sustainable economy.

Sustainable Development

The Official Opposition recognizes the fundamental importance of developing Canada’s vast natural resources in a responsible and sustainable way, while seeking opportunities to develop, use and promote environmentally friendly technologies. Unlike the Conservative government, New Democrats do not see a conflict between developing clean energy and developing fossil resources. Normand Mousseau (Professor, Université de Montréal, Department of Physics) presented the view that Canada has a huge variety of natural resources and needs a comprehensive sustainable energy strategy based on both renewable and fossil resources, a strategy developed by the federal government in consultation and cooperation with the provinces, territories, first nations, industry and the public.

A sound Canadian energy strategy would incorporate the basic principles of sustainable development – economic, social and environmental security. Such a strategy would take a long term view on how to develop our vast natural resources so as to not only secure maximum benefit for all Canadians into the future, but also preserve the integrity of our environment for future generations:

“It has to be part of a strategy that means everything to us; that means we're going to be developing this resource knowing that at some point there's an end, so we prepare for that end in the transition process. We develop it knowing we have some responsibilities to the world, that we're not growing it to an extent that is not sustainable, that our strategy includes not only the extraction of the resource, but the refining, and marketing, and we accept responsibility for emissions in all of that, and come up with a target that is achievable.”

Roland Lefort (President, Local 707A, Unifor)

Whereas the Conservative government has chosen to focus entirely on fossil fuel resources, the Official Opposition believes a sound natural resource and energy strategy would focus also on the benefits to Canadians of developing renewable sources. For example, gas may be viewed as a transition fuel as we progress towards a cleaner, renewable energy sources. Renewables can reduce emissions levels in the extraction of oil and gas. Céline Bak (President, Co-Founder, Canadian Clean Technology Coalition, Analytica Advisors Inc.) presented evidence to the Committee to show that the clean technology industry offers a huge potential in terms of job creation, including opportunities for the oil and gas sector. This view was echoed by Sarah Dobson:

“The scenario of lower oil demand and thus lower oil prices coupled with fast-growing demand for clean energy needs to be acknowledged by the Government of Canada in its policy choices and economic planning. By shifting our focus towards investing in sectors such as clean energy, we can build the kind of diversified economy we need to be competitive in a global low-carbon economy.”

Sarah Dobson (Economist, Alberta and the North, Pembina Institute)

Andrew Leach, (Associate Professor, Author, Alberta School of Business, University of Alberta) demonstrated that industry is considering the risks associated with expected constraints on the use of carbon-based energy sources around the world. He made a clear case that Canadians deserve a similar assessment of the risks, compared with the benefits that arise from oil sands development and climate change policies. The Official Opposition believes that a more balanced approach that considers the effects of climate change and the need for government responses is warranted.

Sustainable development of the oil and gas sector should not rest solely on consideration of short-term commercial interests and the quarterly reports of those who are extracting and exporting the resources. According to testimony shared by Chief Alan Adam, Athabasca Chipewyan First Nation:

“Not only are the first nations not benefiting from it, but I don't think Canada and Alberta are benefiting from the natural resources in the area because of the fact that we're continuing to let this non-renewable resource be extracted at a fast rate right now, and we can't comprehend the magnitude of the environmental disaster that's going to erupt from it.”

Chief Allan Adam (Chief, Athabasca Chipewyan First Nation)

As a result, the Conservative government's Majority Report does not adequately reflect the concerns of this witness, who made a strong case against the lack of level playing field experienced by First Nations with respect to equal partnership in energy decision making and project management:

“Everybody across Canada thinks that the First Nations are benefiting from the oil sands development in this region. We have to argue, and we have to lobby hard with industry in order to obtain contracts in this region. In more ways than one, the First Nations, with regard to our traditional territories, are being overlooked with respect to how economic prosperity would be moved forward.”

Chief Allan Adam (Chief, Athabasca Chipewyan First Nation)

The focus of the standing committee should have been broadened to include critical Aboriginal related issues such as revenue-sharing, benefit-sharing, resource access, or legacy measures, which are important for creating useful partnerships and for the sustained development of the oil and gas industry.

New Democrats have repeatedly stressed the importance of full inclusiveness and recommend, once again, that Aboriginal communities be considered as equal-partners and be involved in all aspects and at all levels of resource development decisions to respect their inherent rights and treaty rights. We regret that the Standing Committee on Natural Resources once again failed to uphold their duty to adequately consult and reflect the perspective of Canada's Indigenous peoples.

By only considering the benefits to oil and gas developments in Canada – and none of the risks – the Conservative government has completely abandoned objective analysis and its responsibility to ensure that the public interest is at the forefront of natural resources policy in Canada.

Dissenting Report: Liberal Party of Canada
Cross Canada Benefits of Developing the Oil and Gas Industry of the Energy Sector

Geoff Regan, Member of Parliament

Vice Chair, House of Commons Standing Committee on Natural Resources

To start, we would like to thank all the witnesses who shared their time and expertise with the Committee throughout this study. Their testimony and first-hand accounts have helped shed some light on the very paramount issue of developing our energy economy, something that is critical to our country's economic development going forward.

We also must apologize to those witnesses who were forced to restrict their testimony to fit the narrow focus adopted by the Conservative government and members of the Committee. The original motion called for a study of the benefits experienced across Canada from developing the energy industry, with a focus on oil and natural gas. That would have included the benefits of hydro, wind, tidal, nuclear, biomass and other renewal and clean energy resources. Unfortunately, the Conservative majority forced the Committee to restrict the study to only look at the "benefits" of the oil and gas sector. The Conservatives were determined to eradicate any suggestion that oil and gas projects might occasionally have deleterious impacts along with their economic benefits. Instead of simply allowing cheerleading for oil and gas, a more complete discussion of Canada's energy risks and opportunities would have been more beneficial and been viewed by the public as more balanced.

Nevertheless, many of the witnesses have made clear that there are significant opportunities for Canada's energy sector. There is an increasing demand for oil and gas especially in Asia-Pacific markets, and Canada needs to take advantage of these opportunities to remain globally competitive. According to Terrence Hubbard of the Department of Natural Resources: "It is a global market that we're competing against. If we don't move forward and capitalize on this opportunity we have here in Canada, our competitors will. There are significant opportunities and significant proposed investments, in the United States, in Australia, in other countries, in terms of oil and gas development. The market for these products is limited, so those first to market are going to capture those long-term opportunities presented by the growing demand, in the Asia-Pacific region in particular."¹

Assistant Deputy Minister Jay Khosla further noted that "Canada has both an opportunity and an imperative to diversify energy markets in order to continue reaping the key economic benefits that we enjoy today."²

The key is for Canada to maximize the benefit of these opportunities by developing our oil and gas resources *sustainably* and *responsibly*. The prevailing ideology is that strict climate change policy comes at the expense of profitable oil and gas development. University of Alberta professor Andrew Leach has disproved this in his research. He found that "[oil sands] projects are very robust to low

¹ RNNR, *Evidence*, 2nd Session, 41st Parliament, 27 February 2014 (Terence Hubbard, Director General, Petroleum Resources Branch, Energy Sector, Department of Natural Resources)

² RNNR, *Evidence*, 2nd Session, 41st Parliament, 27 February 2014 (Jay Khosla, Assistant Deputy Minister, Energy Sector, Department of Natural Resources)

carbon scenarios and to significantly more stringent carbon policies at home than those they face today.” He also noted that “Canadians are generally told that they have to pick either climate change policy or oil sands development. Our research suggests that this is not necessarily the case.”³ The government also needs to place equal importance on developing renewable energy resources – something this study has failed to do. There are significant opportunities for Canada to benefit from renewable energy technologies, but these opportunities are being overlooked. Université de Montréal professor Normand Mousseau explained, “Canada’s renewable and non-renewable energy resources vary greatly from region to region. Canada can’t simply focus on fossil fuels, which aren’t renewable. It also has to support renewable energy resources.”⁴

Responsible development of our oil and gas resources also requires obtaining legitimate social license from First Nations communities. Chief Allan Adam of the Athabasca Chipewyan First Nation – whose testimony was repeatedly curtailed because it did not simply talk about *benefits* of the oil and gas sector – pleaded that “we need to come up with a strategy whereby first nations people are heavily engaged in the process of developing a regulatory process for protecting the ecosystem and yet can continue to build an economic platform.”⁵ The government needs to make sure that First Nations communities are reaping the benefits of nearby oil and gas projects, and are not being failed by our regulatory system.

In conclusion, Canada would benefit from a more balanced approach to developing our energy resources. There are obvious benefits to every region of the country and future economic growth and job creation depend on a strong energy sector which requires international investment and access to diverse global markets. The government must start taking action with respect to both sides of the equation – benefits and risks – if Canada is to realize the full potential of our world-class energy resources. And we must place an equal emphasis on renewable and non-renewable resources. As Dr. Leach noted, “Canadians deserve a similar assessment of the risks compared with the benefits that you’re hearing about and the risks to oil sands development that arise from climate change policies here and abroad.”⁶ A study that focuses only on the positives while ignoring any negatives creates a report that lacks credibility.

³ RNNR, *Evidence*, 2nd Session, 41st Parliament, 3 April 2014 (Dr. Andrew Leach, Associate Professor, Author, Alberta School of Business, University of Alberta, As an Individual)

⁴ RNNR, *Evidence*, 2nd Session, 41st Parliament, 3 April 2014 (Normand Mousseau, Professor, Université de Montréal, Department of Physics, As an Individual)

⁵ RNNR, *Evidence*, 2nd Session, 41st Parliament, 27 March 2014 (Chief Allan Adam, Athabasca Chipewyan First Nation)

⁶ RNNR, *Evidence*, 2nd Session, 41st Parliament, 3 April 2014 (Dr. Andrew Leach, Associate Professor, Author, Alberta School of Business, University of Alberta, As an Individual)