

OIL AND NATURAL GAS PRIORITIES  
**for a prosperous British Columbia**



## KEY POINTS

### THE OIL AND NATURAL GAS INDUSTRY:

- Delivers jobs and economic benefits to B.C.
- Operates with environmental responsibility.
- Needs improved market access to grow and thrive.
- Produces 30 per cent of Canada's natural gas from development in B.C. alone.

(Source: CAPP, 2016)

## BRITISH COLUMBIA

has what it takes to be a global energy leader: an abundance of natural gas, a highly skilled workforce, a stringent regulatory system, and a commitment to environmental performance. Now is the time to develop our resources to their full potential through leadership and fair, balanced policies, attracting investment and delivering economic prosperity for all British Columbians.

## BRITISH COLUMBIA'S OPPORTUNITY TO MEET GLOBAL ENERGY NEEDS - RESPONSIBLY

The world needs more energy, in all forms. According to the International Energy Agency, global demand for energy will increase 31 per cent by 2040, including a 49 per cent growth in demand for natural gas and a 12 per cent increase in demand for oil.

British Columbia is well-positioned to help meet growing demand with reserves of more than 500 trillion cubic feet of natural gas deposits (Source: *National Energy Board*) and crude oil reserves of more than 110 million barrels (Source: *British Columbia Oil and Gas Commission*).

As Canada's gateway to offshore markets for both oil and natural gas, B.C. has safely shipped oil from Canada's West Coast since the 1930s. Today, oil is moved using double-hulled tankers that have two water-tight layers on the vessel's bottom and sides.



British Columbia has aspirations to be a global energy leader by providing sustainable natural gas to Canadians and global markets, specifically in the form of liquefied natural gas (LNG). The industry supports natural gas as a transportation fuel, finding new domestic markets for products derived from natural gas – such as fertilizer – and ensuring infrastructure is available to encourage investment and development.

The Canadian Association of Petroleum Producers (CAPP) believes responsibly developed oil and natural gas is good for British Columbia, Canada and the world. British Columbia exports substantial volumes of natural gas, which brings significant investment, jobs and revenues to the province. To sustain this prosperity, British Columbia must balance economic growth, environmental protection and energy security.

To achieve these economic benefits, industry faces two challenges: develop B.C.'s natural gas resources; and facilitate the transportation of Canadian crude oil and natural gas to offshore markets. Deliberate action means British Columbians can realize the full value and benefits their resources offer. The time is right for B.C.'s oil and natural gas priorities to ensure a prosperous British Columbia.

## Diversifying Markets

Through innovation and technology that facilitate responsible energy development, B.C. has the opportunity to provide safe, reliable energy to domestic and international markets. By developing new infrastructure to access those markets, natural gas from B.C. can displace fuels with higher carbon emissions currently used in other countries, thereby helping reduce global carbon emissions. And new pipeline infrastructure in B.C. will safely transport responsibly produced Canadian crude oil to international markets while providing economic benefits to B.C.

### CHALLENGE

B.C. has abundant natural gas to support a strong LNG industry. Finding new markets for B.C. natural gas is vital to ensure the province receives full value for its resource. Similarly, it's crucial for western Canadian crude oil to reach tidewater for export to growing offshore markets, so British Columbians can realize the many associated economic benefits.

### OPPORTUNITY

New infrastructure will facilitate market access for both crude oil and natural gas. This will generate substantial government revenues, economic growth, and employment for British Columbia and beyond. The highly regulated oil and natural gas industry means B.C. can supply responsibly produced crude oil, natural gas and LNG to meet domestic and global markets.

### CAPP COMMITMENT

CAPP will work with industry, provincial and federal governments and regulators to responsibly develop oil and natural gas, and safely transport it to reach new and domestic markets.

### DID YOU KNOW?

- **In 2015, B.C.'s upstream oil and natural gas industry INVESTED ABOUT \$5 BILLION in exploration and development.**  
*(Source: CAPP, 2016)*
- **In 2016, more than one million tonnes of crude oil, or about 23,000 BARRELS PER DAY, was shipped from the Port of Vancouver.**  
*(Source: Port of Vancouver)*
- **By 2040, India and China will need an additional 10 MILLION BARRELS PER DAY OF OIL AND 54 BILLION CUBIC FEET PER DAY OF NATURAL GAS.**

Source: IEA

**To put this demand in context, in 2015, Canada produced about 2.4 million barrels per day of oil and 15.7 billion cubic feet per day of natural gas.**

*(Source: CAPP)*

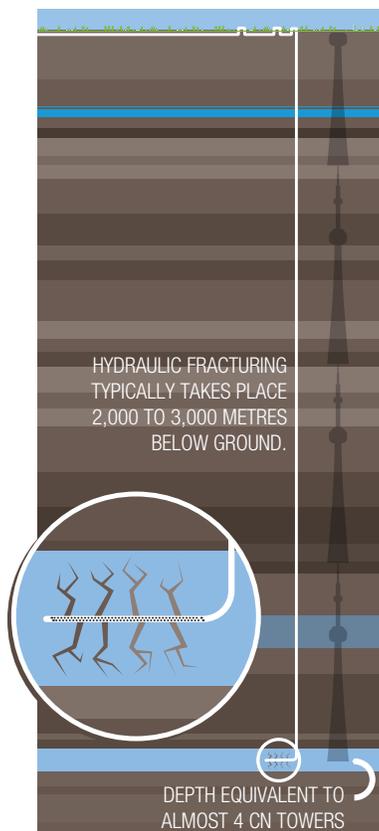
## TRANS MOUNTAIN EXPANSION PROJECT

In November 2016, the Government of Canada granted approval to build the Trans Mountain Expansion Project (TMEP). This project will move western Canadian oil from B.C.'s coast to new global customers.

What does this mean for B.C.?

It means, employment, both short- and long-term jobs; training opportunities; local spending for goods and services; community investment; and government revenues including property, corporate and personal taxes. The Conference Board of Canada estimates the project's economic impact in B.C. will be **\$5.7 BILLION**, including \$480 million in direct construction workforce spending in communities along the pipeline route.

## RESOURCE ROCK IS ISOLATED FROM GROUNDWATER



## Environmental Responsibility

Like all British Columbians, the upstream oil and natural gas industry places high value on the environment. Industry is governed by B.C.'s robust laws and regulations, which are enforced by the BC Oil and Gas Commission (BCOGC) and others. In addition, operators are always seeking to improve their environmental performance through innovation, technology and research. The upstream industry also works collaboratively with other industries such as forestry, and with government and stakeholders, to understand, address and mitigate environmental impacts.

### WATER USE

Water used for natural gas development is highly regulated. The B.C. Water Sustainability Act requires operators to obtain water licences or withdrawal approvals, report water withdrawal volumes and monitor the water source to ensure their activities meet regulations.

### HYDRAULIC FRACTURING AND INDUCED SEISMICITY

Hydraulic fracturing is a highly regulated, safe and proven production technique that's been used in Canada for 60 years. B.C.'s natural gas industry supports a responsible approach to hydraulic fracturing and water management. In collaboration with our members, CAPP developed *Guiding Principles for Hydraulic Fracturing*, supported by seven operating practices that strengthen industry's commitment to safe and responsible operations and continuous performance improvement.

### RECLAMATION AND CARIBOU HABITAT IMPROVEMENT

Industry funds ongoing caribou research that's jointly managed by industry and the B.C. government. This funding supports research and helps implement numerous management activities for boreal caribou such as protecting habitat areas, mitigating effects of industrial development, and habitat restoration.

### PIPELINE AND MARINE TRANSPORTATION

While pipeline and marine transportation for oil and natural gas fall outside the upstream industry's direct management, we recognize that Canadians put a high priority on the safe transportation of energy in British Columbia. Our industry works with the regulators, operators and organizations to ensure safeguards are in place.

### CHALLENGE

The industry acknowledges concerns associated with oil and natural gas development and recognizes the need to demonstrate accountability to British Columbians. Canada's upstream industry must protect the environment while developing resources that benefit British Columbians.

## OPPORTUNITY

Industry must continually demonstrate to British Columbians that operations are safe, environmental risks are managed and the industry operates responsibly. The industry's overall environmental performance is excellent, and we continually take action to address concerns and improve environmental protection.

## CAPP COMMITMENT

Our first priority is safety of people and protection of the environment. We work closely with provincial regulators and other stakeholders to address concerns to ensure both people and the environment are protected.

## DID YOU KNOW?

- Under a Memorandum of Understanding between the B.C. government, CAPP and other industry stakeholders, the oil and natural gas industry voluntarily contributed up to **\$10 MILLION FOR CARIBOU RESEARCH** in B.C.

(Source: Government of British Columbia)

- CAPP, along with the government of Canada, and other stakeholders, was **A FOUNDING MEMBER OF CLEAR SEAS**, an independent, not-for-profit organization that provides impartial and evidence-based research about marine shipping. CAPP members also invest in the **WEST COAST MARINE RESPONSE CORPORATION** to ensure safe and efficient marine shipping in coastal waters.
- Tankers currently represent about two per cent of total ship traffic visiting the Port of Vancouver. The Trans Mountain Expansion Project is expected to increase the number of tankers from around five to around **34 PER MONTH, OR ABOUT 14 PER CENT OF TOTAL SHIP TRAFFIC.**

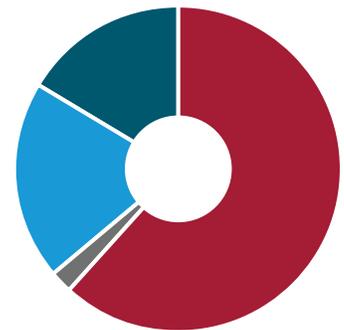
(Source: Clear Seas)

- The largest tankers used to ship oil out of the Port of Vancouver are Aframax tankers (245 metres long) that can carry **ABOUT 850,000 BARRELS OF OIL.**

(Source: Clear Seas)



## SOURCES OF WATER USED FOR HYDRAULIC FRACTURING IN 2014



● Surface Water	61.7%
● Groundwater	2.3%
● Alternatives	19.8%
● Other	16.2%

(Source: BCOGC)

WATER WITHDRAWN BY THE OIL AND NATURAL GAS INDUSTRY ACCOUNTS FOR **0.004%** OF MEAN ANNUAL RUNOFF.

(Source: BCOGC, 2016)

## ADDRESSING AIR QUALITY

CAPP, the B.C. government and the BCOGC established the Northeast Air Monitoring Project to ensure industry impacts are minimal. The project included public outreach and technical advisory groups, and installed monitoring stations to measure sulphur dioxide and total reduced sulfur. B.C. has eliminated routine flaring from oil and natural gas facilities which reduces venting of methane.

## Emissions and Climate Change

In addition to protecting water and land, industry is addressing air emissions through technology and innovation, and regulations.

Natural gas is recognized as a fuel that will help move the world toward a lower-carbon future. B.C. can contribute to reducing global carbon emissions by exporting our LNG to new markets, primarily in China, Japan and India, where it can displace higher-carbon fuels used for electricity production and transportation.



### CHALLENGE

There is a desire to reduce and mitigate GHG emissions, to explore the electrification of new upstream facilities, to reduce methane emissions from existing natural gas production by 45 per cent from 2012 levels, and establish regulations to enable carbon capture and storage.

### OPPORTUNITY

Technology is critical. Canada's oil and natural gas industry is always looking for new and innovative ways to reduce emissions from construction to operations and during production. It's the key to unlocking the value of B.C.'s oil and natural gas resources while continuing to reduce and mitigate production emissions. Technology and innovation continue to drive change, as industry identifies opportunities to improve environmental performance, particularly GHG emissions and industrial process efficiency.

## CAPP COMMITMENT

CAPP and upstream producers continue to develop solutions that reduce emissions while encouraging investment and growth in our industry, especially through a commitment to innovation and new technology. For example, the industry is working to address venting and other non-combustion emissions sources, to help meet provincial methane emissions targets.

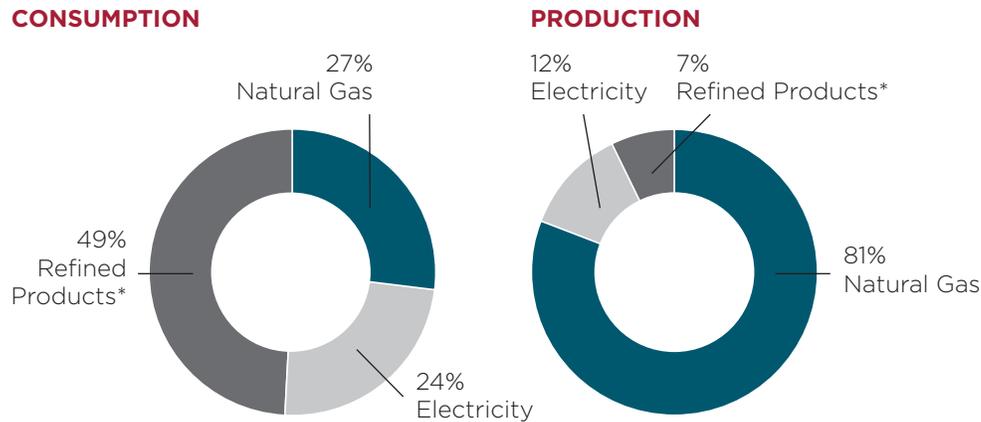
## DID YOU KNOW?

- In March 2017, B.C. approved \$13.7 million in royalty credits to support the construction of 13 clean infrastructure projects through the province's Clean Infrastructure Royalty Credit Program, designed to reduce emissions from oil and natural gas operations. Approved projects are expected to **REDUCE GHG EMISSIONS BY 180,000 TONNES ANNUALLY.**

*(Source: Government of British Columbia)*

- Of the top five oil and natural gas suppliers to the U.S. (Canada, Mexico, Nigeria, Saudi Arabia and Venezuela), **ONLY CANADA HAS GREENHOUSE GAS REGULATIONS.**

## Natural Gas Consumption and Production



*(Source: Statistics Canada, Report On Energy Supply And Demand In Canada, 2014)*  
*\*CAPP Estimate*



## Aboriginal Engagement

Canada's oil and natural gas industry is committed to consultation and building respectful relationships with Indigenous Peoples. Through the Government of Canada, the commitment to implement the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) presents an opportunity to transform the relationship between Indigenous Peoples and all Canadians. CAPP endorses UNDRIP as a framework for reconciliation in Canada. We support the implementation of its principles in a manner consistent with the Canadian Constitution and law.

In B.C., the government negotiated Consultation Process Agreements (CPAs) between the BCOGC and Treaty 8 First Nations where the oil and natural gas industry operates. These agreements, indirectly funded by the resource industry, ensure territories have the resources needed to consult and provide comment on regulatory approvals.



MEANINGFUL ENGAGEMENT CAN IMPROVE PROJECT PERFORMANCE, ASSIST EFFORTS TO ADDRESS SOCIAL IMPACTS AND ENSURE ECONOMIC BENEFITS ARE AVAILABLE TO COMMUNITIES.

THE RATE OF ABORIGINAL ENTREPRENEURS IN CANADA'S OIL AND NATURAL GAS INDUSTRY IS THREE TIMES HIGHER COMPARED TO THE REST OF CANADA.

*(Source: Canadian Council for Aboriginal Business - A Snapshot of Aboriginal Entrepreneurs (2006))*

### CHALLENGE

The industry must work with Aboriginal communities to develop relationships based on mutual trust and respect. The industry must collaborate with Aboriginal communities to enhance their ability to benefit from industry, such as skills training, employment, community investment, and environmental stewardship which contribute to building strong northern communities in British Columbia.

### OPPORTUNITY

Industry understands the value of consulting with Aboriginal communities at the earliest stages of project development to identify concerns and mitigate potential impacts in a proactive manner. Meaningful engagement can improve project performance, assist efforts to address social impacts and ensure economic benefits are available to communities.

## CAPP COMMITMENT

Our industry has a role in building respectful and mutually beneficial relationships. CAPP calls upon member companies to ensure employees proactively engage with Aboriginal communities to strengthen relationships, ensure economic benefits are equitably shared and that B.C.'s northern communities are strong and prosperous.

## DID YOU KNOW?

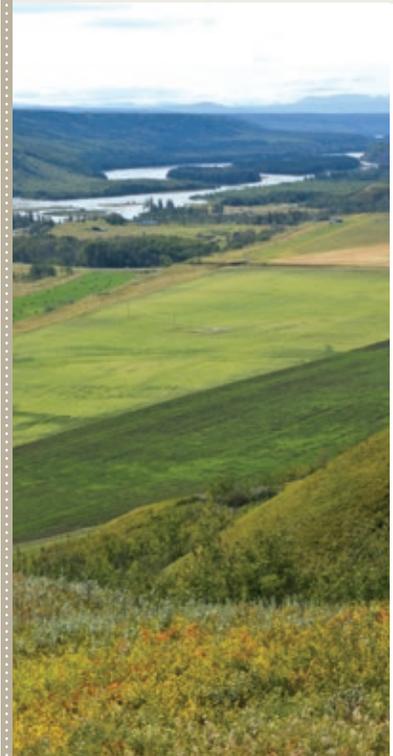
- **Nearly 90 PER CENT OF THE 32 FIRST NATIONS** in B.C. where proposed pipelines cross their traditional territories have indicated their support through one or more pipeline benefits agreements.

*(Source: Government of British Columbia)*

- **THE LIQUEFIED NATURAL GAS ENVIRONMENTAL STEWARDSHIP INITIATIVE (LNG ESI)** establishes collaboration among the provincial government, Aboriginal communities and the natural gas/LNG industry. The LNG ESI facilitates environmental stewardship associated with LNG development, such as ecosystem assessment and monitoring, restoration and enhancement, research and knowledge sharing. This initiative will generate credible, high-quality environmental information.

*(Source: B.C. Environmental Protection and Sustainability)*

CANADA'S OIL AND NATURAL GAS INDUSTRY IS COMMITTED TO CONSULTATION AND BUILDING RESPECTFUL RELATIONSHIPS WITH INDIGENOUS PEOPLES.



## OVER 730 COMPANIES

In British Columbia directly supply the oil sands with services including:

- Construction
- Electrical equipment
- Engineering
- Parts and supplies

## Economic and Fiscal Benefits

B.C.'s oil and natural gas sector provides economic benefits such as employment and government revenues through taxes and royalties. B.C. is uniquely positioned to help meet increasing domestic and global energy needs, and help drive economic growth to build strong northern communities.

### CHALLENGE

Due to an industry-wide economic downturn, revenues and capital spending in the natural gas sector have declined in recent years – from \$7.1 billion in 2010 to \$4.9 billion in 2015 (Source: CAPP). That means less money to grow the industry, employ people and generate government revenues. And, without access to offshore markets, British Columbians will not realize the economic benefits B.C.'s tremendous natural gas resource offers.



### OPPORTUNITY

To be a global energy leader and realize the full potential of B.C.'s natural gas resource, B.C. must develop new markets, support the infrastructure needed for LNG, and maintain industry competitiveness while maintaining environmental responsibility. B.C. also holds an important link to offshore market access and diversification of Canada's abundant crude oil resources.

### CAPP COMMITMENT

CAPP will work with the provincial government to promote and develop the policies, processes and regulations needed to help B.C. attract and retain the capital investment that grows jobs, public revenues, and strong northern communities.

## DID YOU KNOW?

- The **9,000 KILOMETRES** of oil and natural gas pipelines currently operating in B.C. contribute to the economy with:

- \$115 million paid by operators for annual property and corporate taxes.
- \$60 million in local procurement.

(Source: CAPP)

- In 2015/2016, the B.C. government received **\$949 MILLION IN REVENUE** from oil and natural gas activity, which helps fund social services such as health care and education.

(Source: B.C. Ministry of Natural Gas Development, 2015/16 Annual Service Plan Report)

- The **BC LNG ALLIANCE**, a voice for the province's leading LNG project proponents, supports growth of a safe and environmentally responsible LNG industry in B.C.
- When developed, a B.C. LNG industry exporting about 30 million tonnes per year of natural gas **WOULD GROW CANADA'S ECONOMY BY AN AVERAGE OF \$7.4 BILLION ANNUALLY**. This increased trade would generate substantial new government revenues for B.C., economic growth and jobs for British Columbians.

(Source: Conference Board of Canada)



## WHAT DOES THE OIL AND NATURAL GAS INDUSTRY MEAN TO B.C.?

**\$1.3 BILLION** was spent by oil sands producers on procurement in British Columbia between 2014 and 2015.

(Source: CAPP, 2016)

**67,000 DIRECT AND INDIRECT JOBS** enabled by the oil and natural gas sector for British Columbia in 2014.

(Source: CERI)

The B.C. government could receive an average of **\$2.4 BILLION PER YEAR IN REVENUE** as a result of oil and natural gas activity.

(Source: CERI)



CANADA'S OIL & NATURAL GAS PRODUCERS

[CAPP.CA](http://CAPP.CA)

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