



Standing Committee on Finance 2017 Pre-Budget Consultations

5 August 2016

CEPA represents Canada's 12 major transmission pipeline companies who operate approximately 119,000 kilometers of pipeline in Canada. This critical infrastructure moves 1.2 billion barrels of oil and three trillion cubic feet of natural gas each year.

Growth in renewables and the related shift in energy systems is a critical priority; however, the importance of natural resources to Canada cannot be overlooked:

- Existing pipeline operations in 2015 added \$11.5 billion to Canada's GDP, sustained an estimated 34,000 full-time equivalent jobs and generated about \$2.9 billion in labour income. A conservative estimate of the total GDP contribution over the next 30 years from existing operations alone is \$175 billion.
- New pipeline infrastructure to new markets will increase the economic benefits to Canada even further. CEPA member companies have over \$50 billion in pipeline projects under development in Canada over the next five years. With access to Asian markets as well as enhanced access to refining capacity in the US and Eastern Canada, the energy sector could add more than \$51 billion to Canada's GDP and \$11 billion in additional annual tax revenue each year.

According to recent Statistics Canada data, the economy lost 31,200 jobs in July 2016, the GDP shrank by 0.6% in May and the unemployment rate ticked up to 6.9 % in June. In Alberta, the unemployment rate reached 8.6%, the highest level since September 1994.¹

We recognize that the responsibility to create the necessary investment confidence to build this new infrastructure comes hand-in-hand with building public confidence. That is why we support the government's review of Environmental and Regulatory Processes and intend to be full participants. Effective and efficient regulatory processes predicated in science, consultation and a deep regard for the environment and action on climate change are fundamental to Canada's future.

The attached report demonstrates that Pipelines Are Needed and is provided for your consideration.

¹ Stats Canada Labour Force Survey, August 5, 2016: <http://www.statcan.gc.ca/daily-quotidien/160805/dq160805a-eng.htm?HPA=1>



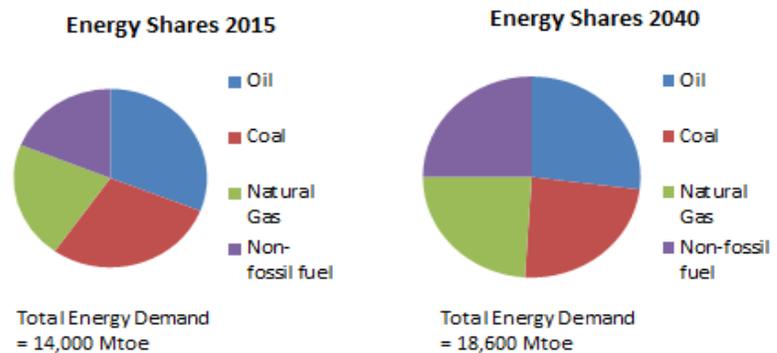
NEW PIPELINES ARE NEEDED²

Introduction

In 2012-13, wide differentials opened between the price of western Canadian heavy oil and WTI, with discounts averaging over \$20/barrel. The result was billions in lost revenue to producers and, by extension, governments and the Canadian public.

The primary cause of these discounts was lack of pipeline capacity to tidewater, resulting in a glut of heavy oil in mid-western US markets, which in turn resulted in the extreme price discounts. In this price environment, Canadian oil producers backed a number of large pipeline projects with the aim of reaching tidewater to enable Canadian oil to obtain world prices.

World Energy Shares 2015 and 2040*



* Adapted from IEA's 2015 World Energy Outlook

Pipelines are still needed

While the discounts have decreased in the last few years, additional pipeline capacity is still badly needed to ensure market diversification and to access the highest value markets. The purpose of this report is to outline the reasons why pipeline capacity is needed.

(a) Global demand

Energy demand is primarily driven by population and income growth. More people and people with more money to spend directly translates into increased energy consumption. World population is expected to continue to grow and incomes are expected to grow rapidly, especially in Asia. Accordingly, the overall demand for oil in the world is projected to increase by all analysts. The US Energy Information Agency projects that world oil demand will grow by about 27 mb/d by 2040, even though US demand will be flat³. British Petroleum projects that demand will grow by about 20 mb/d by

² This report contains excerpts from a report by Veracity Plus Consulting. Full report available by request.

³ US Energy Information Agency, "International Energy Outlook", May 2016



2035⁴. The IEA projects growth of 13.0 mb/d by 2040⁵. All three say that petroleum demand will be flat to declining in well-developed economies such as western Europe and the US, but demand will grow in Asia and other developing economies.

While the world's use of renewable energy will increase rapidly, oil use will also increase to meet growing world energy demand over the next 25 years. While total demand will increase, oil's share of total energy consumption will fall while the use of renewables increases, as illustrated above, which is adapted from the IEA's 2015 World Energy Outlook.

(b) Asian Demand

There is a market for Canadian crude oil in Asia. This market would provide market diversification for Canadian producers and higher netbacks.

There is very little domestic production of oil in most Asian countries. There is, however, considerable oil refining capacity throughout the region and China is the world's largest refiner after the U.S. These countries import almost all of their oil, primarily from the Middle East.

China has stated that it will diversify its sources of oil imports and has begun imports from Africa even though the shipping distances are considerable. China has also expressed interest in importing oil from Canada and has invested in the oil sands. However, to date China's desire to import Canadian oil has been frustrated by Canada's inability to build pipelines to the west coast.

Canadian oil producers want to export to Asia in order to diversify markets and obtain access to premium markets. Canada has a proximity advantage to northern Asian markets as compared to the Middle East and Africa. Importantly, ocean transport is relatively inexpensive and the distance from Alberta to the west coast is considerably shorter than the distance to the US Gulf Coast. Hence, the transportation cost to deliver Canadian oil to China is expected to be less than the cost to deliver to the Gulf Coast. This means that there will be an opportunity for producers to earn higher netbacks from Asian sales.

(c) US Demand

Although the US market is likely to shrink over time, there are still opportunities to increase Canadian exports.

Market analysts agree that US demand for oil will be flat over the next 25 years. In its 2016 Energy Outlook, the US Energy Information Agency projects⁶:

⁴ BP 2016 Energy Outlook: <https://www.bp.com/content/dam/bp/pdf/energy-economics/energy-outlook-2016/bp-energy-outlook-2016.pdf>

⁵ International Energy Agency, 2015 World Energy Outlook, "New Policies" scenario.



- US demand will stay flat and then decline after 2030 as vehicles become more efficient
- US production will rise slowly but steadily from 9.4 mb/d in 2015 to about 11.3 mb/d by 2040.
- Consequently, US imports will decline to 7% of its total needs by 2040, down from 60% in 2005 and 25% in 2015

While overall demand is expected to stay flat, the US has considerable refinery capacity that is well suited to process Canadian heavy crude. Therefore, Canada can expect to continue to export significant volumes of heavy oil into the US mid-west. The California and Washington refinery markets have depended on Alaskan production which is declining. As these markets are not connected to U.S. continental production, they will provide growing market opportunities for western Canadian crude, if there is access to tidewater.

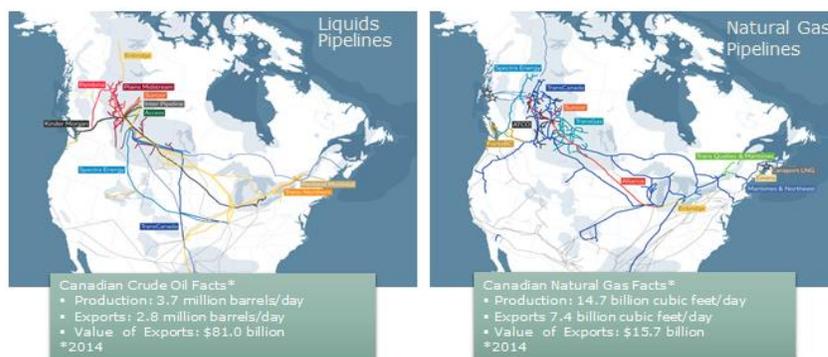
Nonetheless, it would be risky for producers to depend solely on US markets in the long term. Thus, as the US market continues to shrink Canadian oil producers must gain access to tidewater and new markets in order to remain competitive.

Adequacy of Pipeline Capacity

Some have argued that there is no need for additional pipeline capacity because the price discounts have decreased. However, the industry needs new capacity to avoid a repeat of the previous discounts.

Currently, oil pipeline capacity out of western Canada is about 4.0 mb/d and productive capacity is about 4.0 mb/d⁷. In other words, pipeline capacity is just adequate to transport production. While there is adequate capacity, this does not mean there is adequate capacity to carry production to the best markets. Currently, most Canadian pipeline capacity is directed towards the U.S. market.

Transmission pipelines



⁶ US Energy Information Agency (EIA): <http://www.eia.gov/forecasts/aeo/data/browser/#/?id=5-IEO2016&sourcekey=0>

⁷ Production in 2016 is down because of the wildfire in Fort McMurray but is projected to return before year end.



Inadequate pipeline capacity is very costly to the industry and Canada. In 2012 alone, the CIBC estimated that Canadian producers lost \$25 billion due to price discounts they would have received if they had access to world markets⁸. CIBC also noted that this meant that the federal government lost considerable potential tax revenues, illustrating the serious costs to Canada from inadequate pipeline infrastructure.

It is important to note that all infrastructure works best when there is some excess capacity. Whether it is a road network, the electricity grid, or the pipeline system, some extra capacity is needed for at least three important reasons.

First, there will be times of peak demand and, if the system cannot handle these peaks, there will be costs associated with congestion. On a road, it can mean sitting in a traffic jam. On the electricity grid, it can mean power outages. On the pipeline system, it will mean that oil cannot get to the highest value markets and producers will lose market opportunities.

Second, there will be times when part of the system is unavailable. When a road is under construction, you have to take an alternative route. If there isn't an alternative, there will be serious traffic backlogs. Similarly, if a pipeline segment is closed for maintenance, and there are no alternatives, oil will be trapped behind the congestion point and producers will lose sales or be forced to take discounts.

Third, there will always be market fluctuation and producers need flexibility to take advantage of these opportunities. For example, if there is an interruption in production from California's heavy oil wells, refineries would pay a premium to obtain oil from other sources. If Canadian producers have the ability to swing supplies away from the US mid-west towards California, they could benefit from the market opportunity. The excess capacity allows for flexibility and "option value" as it provides producers with more options to market their products⁹.

Benefits of New Pipelines

Pipeline opponents often argue that further investment in the oil sands will not bring benefits to Canadians. However, the reality is that oil production and export makes a huge contribution to Canada's economy.

According to NRCAN, the oil and gas sector directly contributes almost 8% of Canada's GDP and indirectly contributes another 3%¹⁰. This is a huge percentage of the 'real' goods economy because the service sector accounts for about 70% of GDP in Canada. NRCAN also reports that the industry generates on average \$22 billion/year in taxes.

⁸ CIBC Report: See http://business.financialpost.com/news/energy/canada-oil-producers-losing-15-billion-a-year-keystone-cibc?__lsa=9a6a-d3f0

⁹ The NEB recognized the importance of option value in its recommendation to Cabinet to approve the TransMountain Expansion, May 2016, p. 310-311.

¹⁰ See NRCAN "10 Key Facts on Canada's Energy Sector":

https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/10_facts-Energy_e_acc.pdf



In 2014, exports of oil accounted for 17.5% of all Canadian merchandise exports, generating \$92 billion in revenue¹¹. Crude oil was Canada's number one export from 2011–2014, surpassing all sales of motor vehicles and auto parts. The value of oil exports fell in 2015 with the worldwide fall in oil prices, but was still tied for second in value of exports, along with metals.

A report by the Conference Board of Canada found that almost one-third of the economic benefits from oil sands development would accrue to provinces outside Alberta¹². This study demonstrated that, due to supply chain effects, the benefits of oil sands development is widespread across Canada.

Conclusions

The conclusions in this report, equally applicable to both oil and gas, are:

1. World demand for oil will increase over the next 25 years;
2. There will continue to be US markets and there will be new markets in Asia for Canadian oil that would provide high netbacks and diversification value ;
3. New pipeline capacity providing access to tidewater is critically needed; and
4. Construction of new pipeline capacity would provide economic benefits to all Canadians.

¹¹ Statistics Canada: Export of Goods on a Balance of Payments Basis

¹² "Fuel for Thought: The Economic Benefit of Oil Sands Investment for Canada's Regions", Conference Board of Canada, 2012