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# **Presentation Theme: Securing New Markets for Canada's Energy Resources**

## **1. Introduction - Cover**

Thank you Tony, High Commissioner . . . it's great to be here again. London is an ideal location to talk about Canada's expanding role in the global energy marketplace and an issue of national importance to Canada – securing markets for our energy resources.

The past year has highlighted how the surge in North American oil production is transforming the global energy market.

Even OPEC, which once dismissed shale as “marginal”, now acknowledges that its impact could be “significant”.

The growth in North American oil production will be as transformative to the market in the future as was the rise in Chinese energy demand and economic growth.

## **2. Context**

In discussing Canada's market access imperative, I'll touch on a few key themes, focusing mostly on oil.

First, the tremendous pace of North American supply growth has continued unabated as shale production is exceeding expectations.

Conversely, North American demand will be flat at best.

Global energy demand will be driven by emerging markets, not North America or Europe.

Transportation bottlenecks have worsened and the resulting price dislocations in North America are creating significant economic implications for Canada.

And finally, infrastructure development is challenged by intensified scrutiny and heightened expectations from the public and from regulators.

Even with these challenges [*click*], we are making progress and the tide is turning.

Producers and refiners are supporting new pipeline capacity, investments are being made and the discussion about energy development has started to become more balanced.

### 3. Enbridge Footprint

This slide illustrates our footprint and why we have a view.

We operate the longest, most complex crude oil pipeline system in the world, delivering 2.3 MMBPD of oil to markets in Canada and the US.

That represents 60% of US-bound oil exports. In fact, Canada is the largest supplier of oil to the U.S., making up one-third of their imports, increasing to 60% by 2020.

Our natural gas systems extend from Northern British Columbia to the Gulf of Mexico.

We're the largest natural gas distributor in Canada, heating over 2 million homes.

And we're a major generator of renewable power; including wind, solar and geothermal.

So as you can see, we have a unique vantage point on North American energy markets.

And, it's our business to understand energy fundamentals and connect supply with the best markets.

#### 4. North American Crude Supply Growth (2013-2025)

This chart shows the dual punch of oilsands and light growth that will increase crude supply by 7 million bpd by 2025.

About half the growth will come from the Canadian oilsands; that part was well understood.

What caught everyone by surprise was light oil growth. With the application of new technologies and scale, the shale code has been cracked.

The Bakken will likely exit this year at 1 mmbpd and the Eagleford is up 60% year-over-year at 650,000 bpd. Canadian light plays, the Cardium, Duvernay and Viking, are in early development but will be a factor.

Of significance to Canada is that our only export market, the United States, is now the world's largest producer.

In fact, US production will exceed imports this year, for the first time in 18 years, and oil growth exceeds the other 9 fastest growing countries combined.

But it's the implications of this chart on oil markets and infrastructure that's important.

These barrels need to find a home – heavy needs to move to heavy refining markets.

Even more challenging, light barrels need to get to light oil markets.

Sounds simple in some ways. But the infrastructure to address these challenges takes years to make a reality.

## 5. US Production Displaces Waterborne Imports

Over the next decade, growing US and Canadian production will continue to squeeze out waterborne imports (Middle East, African, North Sea, Mexico, Venezuela).

This means that the continent could be energy self-sufficient – or perhaps better put, “energy secure”, by 2020.

A stunning turnaround from decades of reliance on imported energy sources.

In fact, the discussion is now being expanded to exports.

In September, the U.S. exported a record 3.2 MMBPD of gasoline, diesel, and other refined products – 65% more than 2010<sup>1</sup>.

So actually, while US consumption is flat, refinery runs are up by 1 mmbpd year-over-year because of these exports.

US refining sector margins are very healthy these days, compared to Europe.

So supply is robust, but as you can see, demand is flattish, so finding the best markets is key.

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<sup>1</sup> Jeffrey Jones, “*The Downside of Higher US Energy Exports*” Globe and Mail, October 24, 2013 – quoting US Energy Information Administration

## 6. North American Crude Demand

This slide captures the key refining markets and their sources of feedstock.

The 3.5 MMBPD U.S. Midwest market refines both heavy and light, much of that already sourced from Canada.

The U.S. Gulf Coast PADD III market is the largest at 8-9 MMBPD with significant heavy refining capability.

There is virtually no Canadian crude reaching that market; and therein lies the opportunity for Canadian heavy barrels.

Now, eastern Canadian and U.S. PADD I market is primarily configured to run light barrels.

That feedstock comes from foreign sources today – representing another opportunity for Canadian crude.

So, supply and demand are well understood; the problem is we don't have enough pipeline capacity to connect supply with the best markets.

## 7. North American Price Dislocation

This slide illustrates how the lack of sufficient pipeline capacity manifests itself into huge regional and global price disparities. I've included natural gas as well on this chart.

Take a look at the blue bubbles, which represent heavy crude markers on November 7. As you can see, WCS in Alberta traded at \$32/bbl lower than Mayan crude in the Gulf Coast.

In a balanced market with good infrastructure, the basis differential should reflect, at most, the cost of transportation of about \$7-\$8, not \$32.

The problem is a lot worse if you compare WCS to Asian prices of \$105/bbl – a massive dislocation of almost \$50/bbl.

The light oil story is the same.

Western Canadian and Bakken production fetch considerably lower prices than Brent on the east coast or even LLS on the Gulf Coast.

The corollary is that Canadian and U.S. East Coast refiners are facing a major competitive challenge given higher priced feedstock costs (many closures).

Equally concerning is the disconnect between continental and global natural gas prices (green) . . . some \$13/mmbtu between AECO and world prices.

Two key takeaways: one, these price dislocations scream for new infrastructure; and two, Canada is not getting anywhere near full value for its natural resources.

The translation of that is that Canada is leaving billions of dollars on the table today by not achieving fair value for our natural resources.

Now, we haven't just been sitting around watching this happen – as a company, we recognized these issues early on.

What this slide tells us is that there's a big opportunity to close these differentials and to optimize pricing by better connecting supply and demand

...

... first in North America, but equally important to global markets.

## 8. Getting to Coastal Markets

Today, the North America energy transportation grid is being transformed.

Whereas, volumes used to flow from coastal to inland markets, the game today is all about getting inland production to the coast.

What we have underpinning the market dynamics today is both a supply push and a demand pull.

You don't often see those two at the same time.

This is best evidenced by both producers and refiners making long-term commitments for pipeline space.

Today's market is characterized by producers wanting excess capacity as a buffer against uncertainty.

And you can see that the strategic positioning of our systems means that we are well situated. . .

. . . to expand, extend, reverse and repurpose infrastructure to facilitate reconfiguration of the grid.

## 9. Providing New Market Access (Heavy & Light)

This slide captures the strategies we have in execution right now that will open up 1.7 MMBPD of new markets within North American in the next three years.

The strategy is basically this; get heavy barrels to heavy markets (blue), and get light oil to light markets (orange).

Through our Light Oil and Eastern Access programs, we're connecting light supply from the Bakken and Western Canada to premium markets in the U.S, Midwest, Ontario and Quebec.

That's significant, in that Ontario and Quebec currently derive 18% and 90% of their crude from offshore sources, respectively.

Our Gulf Coast access program is connecting Canadian heavy barrels to the PADD III heavy market.

By mid-2014, we'll have established and 850 kbpd pathway to that market.

Importantly, we're capitalizing on existing pipe in the ground and ROW, which minimizes our environmental footprint. . .

. . . and we can get crude flowing to market sooner at a lower cost.

## 10. Regional Oil Sands Position

This is a map of what we're doing to ensure sufficient regional capacity is available.

As you can see we have a strong position in the oil sands region.

We just announced \$3 billion in projects to connect Suncor's Fort Hills mine (the 11<sup>th</sup> oil sands project we've connected) and to bring diluent north.

From a broader perspective, the Fort Hills mine and supporting infrastructure like ours represent significant investment in Canada's oil sands . . .

. . . creating jobs and generating substantial economic value for Canada.

And it certifies the competitiveness of the oilsands, especially given the long-lived reserves – 50 years.

## **11. Enterprise Wide Growth Capital In-Service (2013-2017)**

Not to boast – this slide gives you a sense of the capital we're putting to work to open new markets. . .

. . . some \$36 billion over the next 5 years, most of which is commercially secured. ‘

This program represents one of the most active of any company in North America.

And while this looks easy on a slide, it requires a huge focus on major projects execution, human resources, and financing.

So far, I've focused on North American markets, but a critical imperative for Canada is access to tidewater and markets beyond the U.S.

Why? It's ironic that the country with the 3<sup>rd</sup> largest oil resources in the world . . .

. . . and one with the skills and capital to develop that resource – has virtually zero access to tidewater.

And as you saw earlier with the chart showing price dislocations, gaining access to global markets is critical.

## **12. Growth in Global Refinery Capacity 2013-2015**

So what are the best markets for Canadian crude beyond North America?

This slide shows expected distillation capacity additions in gold and heavy oil upgrading capacity additions in green.

In the US, capacity expansions are small and are focusing on processing lighter crudes.

Not a good target market for Canadian heavy production.

On the other hand China and India combined are being expanded, by 2.2 and 1.6 million bpd respectively. . .

. . . which makes them ideal to take Canadian heavy barrels.

### **13. Northern Gateway Pipeline**

Enbridge's Northern Gateway project is the most advanced project to open access to Asian markets.

Gateway would connect Alberta production with the Pacific Rim.

This link, at ultimate capacity of 800,000 bpd, will lift the price of Canadian crude to global levels.

But it's much more. If there were ever a project in the national interest of Canada – this is it!

In June we wrapped up the public hearings and we expect a regulatory decision by year end.

Gateway will be a world class project, with significant economic spin-offs, jobs and community benefits.

## **14. Sustainable Energy Development**

That's all pretty clear but here's the dilemma.

There is no doubt that consumption will continue to drive the need for energy and infrastructure to move it.

And we know that 80% of our energy needs will continue to be supplied by fossil fuels.

And we know that Canada is blessed with highly strategic reserves.

Yet, there continues to be significant opposition to all energy projects; oil, gas, nuclear and even wind and solar.

That's creating delays and significant uncertainty, which increases the cost of developing energy in North America.

To secure new markets for Canada's resources our industry understands that economic benefits alone are no longer sufficient to gain public support for energy projects.

The way I look at it, energy leadership and environmental leadership are two sides of the same coin – you are not going to achieve one without the other.

Things are starting to change.

There's now broader acknowledgement of the benefits of market access and the need for infrastructure.

And our industry is also making great strides in furthering our commitment to safe and responsible development:

- Reducing energy intensity
- Lower water use
- More effective land reclamation
- A price on carbon

The area where the pipeline industry is making strides, as well, is safety and reliability.

Pipelining is not a seat-of-the-pants business.

## **15. Priority One – Safety and Operational Excellence**

For example, at Enbridge, our No. 1 priority is on operational excellence.

Our goal is to be the industry leader in all operational areas like the ones you see here.

And we've invested substantial capital to further enhance safety and the integrity of our systems.

That's because safety and environmental protection enable everything else that we do.

## **16. Sustainable Energy Development**

Over the last 3 years we've undertaken the most extensive maintenance and inspection program in the history of North American pipelines.

By the end of this year, we will have completed 500 in-line inspections across our systems and 10,000 verification digs.

We're using the most advanced inspection tools available in the world (like the one here on the left) . . .

. . . which piggyback on medical imaging technology (like an MRI) to inspect pipelines millimetre by millimetre.

And we're aggressively researching ways to further improve our inspection, leak detection and control systems.

## **17. Sustainable Energy Development**

We're also making significant advancements in pipeline design and construction.

We use the same technology NASA uses to map the surface of Mars to identify the safest pipeline route.

We embed environmental scientists alongside our engineers to deliver the highest in safety and environmental protection.

And we've opened a new state-of-the-art control centre that monitors our entire system 24/7 with the best possible technology.

The goal is prevention of all accidents and continually checking the health of our systems, just like we all take care of our own personal health.

## **18. Community Engagement**

We're also upping our game by engaging communities earlier, listening carefully, and being highly transparent.

For example, on our proposed Line 9 reversal in Ontario and Quebec, and on Gateway. . .

. . . we've discussed the project with thousands of individuals and organizations.

And we've taken their input to make our projects better.

For example, local knowledge gives us new insight on:

- Optimal routing
- Placement of redundancy systems
- Emergency response

## **19. Neutral Footprint**

And even though we're not a large GHG emitter ourselves, we're leading the way by stabilizing our environmental footprint.

Our "Neutral Footprint" commitment includes generating a kilowatt of renewable power for every kilowatt of conventional power our operations use.

In fact, we're the largest generator of solar energy in Canada and second largest in wind (\$3 Billion invested).

We plant a tree for every tree removed, and we conserve an acre of natural habitat for every acre that our operations disturb.

You can see with this chart that we are meeting or exceeding our objectives.

## 20. Summary - Cover

So to sum up:

North America is going to see massive growth in oil and gas supply.

It's by far the most important change we've seen in our industry in decades.

Transportation bottlenecks persist, resulting in continuing volatility in prices and significant discounting for Canadian crude oil and natural gas production. Billions are being left on the table.

Industry's imperative, and Canada's, is clear.

We need to access new markets so that we can achieve fair value for our resources.

There's vigorous public debate around energy development. That's part of our business now – it's not going away.

But I believe that's positive - because it focuses the energy industry on addressing stakeholders' concerns over safety and the environment. And industry is getting better.

Today, we're starting to see a more balanced discussion about developing energy resources . . .

. . . and creating access to the right markets within North American and globally.

I'm encouraged that our political leaders are working together to bridge the gap . . .

. . . between the dual goals of increased market access and safe and responsible development.

Yes, we do have challenges with lack of adequate transportation capacity.

But we are solving those problems.

The energy business is one of the most industrious and entrepreneurial in the world.

We are rising to the challenges.

Enbridge itself is opening up 1.7 mmbpd of new markets in North America alone, with more on the way . . .

. . . both in North America and globally.

One thing is certain – Canada has a unique opportunity to emerge as a major energy force of vital importance to growing global markets.

Thank you.