Day 3 - September 6, 2012 - Edmonton

International Reporting Inc. -ThuSep06.12 - Vol 71 - A2Z8V4

Features for enhanced use:
- Link to the day's transcript
- Links to specific topics and discussions

Contents

Order of Appearances 1
Examination by Leanne Chahley for the AFL (continued) 1
Atlantic and Pacific Basins 2
China and free markets 3
Chinese interest in Canadian production and in Northern Gateway 3
Condensate 4
Refineries and Upgrading in Canada 4
Why no new upgraders? 5
Benefits from refined vs crude 5
Failed attemps and factors 5
Net long and net short 6
Opportunities linked to growth 6
Householding items 6
Examination by Caroline O'Driscoll for Alexander First Nation 6
Aboriginal title claims as a potential liability 7
Aboriginal equity in the project 7
Evaluation of natural capital and ecological goods 7
Examination of Elizabeth Graff for Province of British Columbia 8

Order of Appearances

Northern Gateway Pipelines Inc. (NGP) - Panel 1
Mr. John Carruthers [B90-17 CV]
Mr. Paul Fisher [B90-22 CV]
Mr. Neil Earnest [B90-20 CV]
Dr. Robert Mansell [B91-5 CV]
Mr. Roland Priddle [B91-12 CV]
Dr. Jack Ruitenbeek [B91-15 CV]
Mr. Mark Anielski [B90-7 CV]

Features for enhanced use:
- Links to reference documents provided throughout the notes
- Frequent paragraph numbers to the relevant text or discussion in the transcript

- Examination by Ms. Chahley (continued) 16781
- Examination by Ms. O'Driscoll 17751
- Examination by Ms. Graff 18118

Examination by Leanne Chahley for the AFL (continued) 16781

Yesterday, Ms. Chahley was examining the impact of the "Asia price" and she opens today asking about the consequences were that price to drop below other options available for Canadian crude. What magnitude of a drop and over what time-frame would result in what impacts.

Mr. Easton explains that a modest price drop of short duration would likely have no impact, for at least two reasons: it would be difficult to redirect the large volume of oil going to Asia, and because shippers "write a cheque to Enbridge … whether or not they ship". He says the price would have to get pretty low for a shipper to redirect the oil. 16789

Atlantic and Pacific Basins

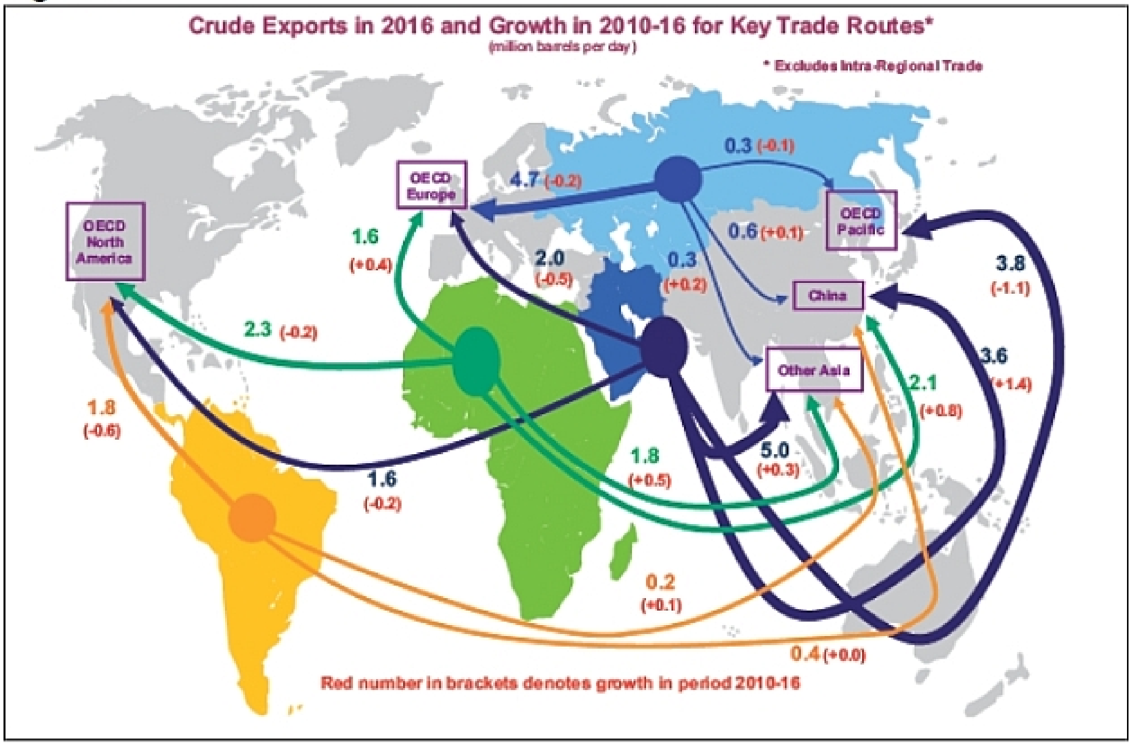
Referring to Figure 9 in the 2012 Muse update (B83-3), he describes two global markets for oil as the "Atlantic Basin" which is expected to be "long" on supply for the foreseeable future and the "Pacific Basin" which is typified as being 'short". "It's very difficult to craft a credible scenario whereby the Atlantic Basin structurally trades at a higher price level than the Pacific Basin." 16792

Mr. Easton says that the two markets are largely about waterborne movement of crude oil, and the volumes of oil shipped from Canada, into either the Atlantic or Pacific Basin are not large enough to affect the overall prices. He describes how the Brent price[1] "establishes most of the prices of all the crudes traded within the Atlantic Basin", 16832

The Gulf of Mexico, with its large installed base of refineries, is connected to the Atlantic, and thus "a Brent-denominated price world" is the only alternative to moving west to Northern Gateway. 16852

[1] The Brent reference price is used to price about two-thirds of the world's internationally traded crude oil. The name is derived from the Brent oil field in the North Sea.

Figure 5



China and free markets

Ms. Chahley questions whether China operates a free market for oil as is practised in the rest of the world. Mr. Priddle asserts that it does, that in order to obtain the oil it requires it has no choice but to pay the market price and any internal controls on prices are at the retail end, not the supply side. State ownership does not mean that the companies lack transparency or are mere puppets of the state: disclosure requirements of the New York and Hong Kong Stock Exchanges, and responsibility to shareholders preclude that. He also notes that state ownership is a characteristic of many other countries. 16874

Ms. Chahley: “It's always been a question for me as to why everybody else's government thinks it's good to own oil companies, but the Canadian government won't.” 16914

Chinese interest in Canadian production and in Northern Gateway

Chinese companies have interests in, or outright ownership of a number of oil sands producers, including Sinopec in Syncrude and Daylight Energy, a gas producer, and CNOOC which is acquiring Nexen.

Enbridge owns 100% of Northern Gateway – no other company has an equity interest in the project, “right now” says Mr. Fisher. 16935

Sinopec is a funding participant in NGP, and MEG, Total, Cenovus, Nexen, and Suncor have also disclosed a funding role in NGP. Mr. Fisher would not disclose other funding participants. CNOOC may be one of them but the confidentiality agreement prevents Mr.

Fisher from sharing that information. MEG has an interest in CNOOC. Total has an interest in Sinopec. CNOOC is acquiring Nexen.

Condensate

Ms. Chahley asks where the condensate supply will come from for the condensate pipeline. In her questioning on this topic, she also explores which companies might be shippers of condensate, and what linkage there is between the condensate and oil pipelines. 16994

Referring to Exhibit AQ4[2], it was explained that NGP has not tried to firm up condensate supply, but has merely attempted to quantify supplies of condensate that could be available to Gateway. It would fall on the shippers to secure actual supplies. In the report, Australia and the Middle East appear to be the likeliest sources of condensate.

Mr. Fisher observes that for perhaps five years that about 20,000 barrels a day of condensate have been tankered into Kitimat and transported by rail to Edmonton. 17034

Asked why condensate availability and pricing was not part of the economic case put before the Board, Dr. Mansell replied, "We had no information base to substantiate anything in terms of an input in that. We simply assume that there would be flows." 17109

Ms. Chahley points out that 193,000 barrels will be imported, and that's money lost to the Canadian economy. Dr. Mansell agrees that it's an import, but we may be "importing more from those sources and importing less from U.S. sources" 17117

Asked about prospective condensate shippers, Mr. Fisher says there are some who have signed for both pipelines – the ones named above in the discussion about China – and some who have signed just for the oil pipeline. 17131

Refineries and Upgrading in Canada

Ms. Chahley spends the next 90 minutes examining many aspects of the economics and benefits of refining and upgrading. The key points are highlighted here, but the transcript is there for those who want to dig deeper. The section begins at paragraph 17144.

In 1970, 40 refineries operating in Canada. Today, there are just 19. Ms. Chaley refers to a Conference Board of Canada report which states that "for every $1 reduction in real refining GDP, total real GDP is reduced by $3." The refining industry is highly capital intensive, which explains the high 1:3 economic and employment multipliers. 17192

She asks Dr. Mansell if this ratio is reasonable, and he concedes that it is "not unreasonable". Her next question, "Would the flipside apply? If we had a new refinery in Canada, would it have an impact of a similar nature?" elicits the answer: "It depends,"

[2] As an aid to questioning, Ms. Chahley asks for a report entitled "International Condensate Supplies & Pricing", by Poten & Partners, November 9, 2011. Since it has not been filed as evidence by NGP, it is not directly available, however, as an undertaking in today's hearing, NGP filed a report showing the pertinent information from the report. It is Exhibit AQ4

perhaps if the additional refining capacity was economic." "If, however, it required the government to subsidize it", Dr. Mansell says that the subsidy would require government to raise taxes or cut other expenditures, and that would have a negative impact. 17206

Why no new upgraders?

Dr. Mansell turns the question back: If it were profitable, why is it not happening? He doubts that today it is economic to build a new refinery, though upgraders may be economic under certain circumstances. He mentions Alberta's new Northwest Upgrader which is partly a function of the Alberta government's Bitumen Royalty in Kind (BRIK) – which requires producers to pay the royalty in bitumen, rather than cash. 17211

Dr. Mansell takes exception to Ms. Chahley's comment about "subsidies that already exist," for the oil and gas industry, though neither develop the argument.

Benefits from refined vs crude

Ms. Chahley hypothesizes a new refinery and upgrader that could handle the NGP volume, 525,000 bpd. She asks, "Would similar or greater benefits come from the production of that same amount of oil from it going to a refinery and being refined and then sold as finished products," as would come from shipping dilbit on NGP?

"At today's prices, not without a subsidy." The discussion gets quite confusing for a while, with Dr. Mansell appearing to say the opposite of what he explains later: "Light oil must trade at a much higher price relative to the heavy oil in order for it to be economic (to refine in Canada)," otherwise, the cost of refining cannot be captured in the selling price of the end products. His example is, we might get $1 for upgrading, and lose $3 - $4 in the reduced value of our exports. 17251 - 17260

Failed attemps and factors

Dr. Priddle reviews earlier attempts to build new upgrading capacity in Canada - projects which failed, ran in fits and starts before shutting down, or required large subsidy. 17271

Mr. Earnest lists some factors that work against refining in Canada, including:

- No nearby large population/demand base in Western Canada "to sell the product to."
- Shipping refined products to Asia entails higher transportation costs, versus crude. "The vessels are smaller. The per barrel transportation costs are higher."
- "Myriad of product specifications in all the various countries in Northeast Asia."
- Specs change on a seasonal basis, creating a logistical challenge
- "A lot more tankage" at Kitimat for "the much greater array of finished products."
- The demand growth is in Asia, where the cost to construct a refinery is significantly lower than it is in North America. 17288

Dr. Mansell adds that there may actually be some opportunity "on the petrochemical side" in Canada. 17301

Net long and net short

Mr. Earnest introduces the terms "net long" and "net short." Canada as a country looking for markets, needs to target markets that are "net short" in those commodities we wish to sell. Northeast Asia – China, Japan, Korea – are net long in refined product, net short in crude. Canada's export mix must match with what markets want to buy. 17319

Ms. Chahley notes that Canada's imports of refined products has increased from 48,000 bpd in 1980 to 276,000 bpd today, and asks, doesn't that indicate an opportunity for more refining in Canada? Mr. Easton replies that Canada's net export position in gasoline and diesel, the two leading refined products, is approximately 86,000 bpd." 17327

Opportunities linked to growth

Bringing the refinery topic to a close, Ms. Chahley asks about Canada's growing population and GDP growth and a correlated increased demand for petroleum products. Mr. Earnest, referring to the Conference Board report, says that the growth impacts are offset by at least two factors driven by government policy: The advent of renewable fuels, such as 10% ethanol requirements in the US, (and a 5% renewable requirement in Canada), and the stepped-up corporate average fleet economy (CAFÉ) standards imposed on vehicle manufacturers. 17361

Householding items

Ms. Chahley covers off a number of "householding" questions at the end.
Dr. Mansell responded to the ones noted here.

- Two-thirds of expenditures go for employment outside the construction sector
- 200-300 people employed directly in operations of the facilities
- $114.8 billion incremental return to producers net of incremental refinery costs over 30 years (2019-2048)
- The industry will reinvest about 47% of its incremental benefits. Range is 40%-50%.

Examination by Caroline O'Driscoll for Alexander First Nation 17751

Ms. O'Driscoll will be using these references B1-04; B83-04; B83-6; B24-02; B58-02, B90-7. She intends to examine three matters:

- Public interest benefits, focussing on government revenues and certain assumptions
- Aboriginal equity investment
- Evaluation of natural capital and ecological goods and services

Ms.O'Driscoll asks whether "the total amount of the production from Canada's oil sands has been approved by the First Nations affected by the oil sands projects." She means explicitly signed off. Mr. Carruthers responds that "within the regulatory process of the approval of the oil sands projects, there is a component of Aboriginal engagement."

Referring to the price uplift to producers, and to $28 billion over ten years accruing to producers. Ms. O'Driscoll asks what if any of that has been earmarked for Aboriginal people? Mr. Carruthers mentions procurement trickle-down by individual companies, and provincial and federal government revenue-sharing, but offers no details.

Ms. O'Driscoll points to tables and figures which indicate taxes payable to provincial and federal governments, she asks about land rentals, bonus bids, and royalties; in all her questions she is looking for an indication of any monies earmarked for Aboriginal peoples,. She draws a blank, and continues to do so with her questions.

She sums up: "Gateway does not know, it's really at the discretion of the federal government then as far as anything done to support and help First Nations; correct?" 17951

Aboriginal title claims as a potential liability

Turning to Assumptions and Inputs in B83-04 (Wright Mansell Public Interest Benefits Analysis), Ms. O'Driscoll notes that matters like CO2 emissions and environmental regulations – "potentially huge liabilities that could impact the project" – were included. "Where … is there reference to the potential impacts of Aboriginal title claims under Section 35 of the Constitution Act[3], or was it not considered?" Mr. Carruthers indicates this was a matter for the engagement process. Dr. Mansell acknowledges that it was "simply excluded from our report." 17956

She gets no further with Section 25 of the Charter of Rights and Freedoms[4], the Royal Proclamation of 1763[5], and specific treaties and settlements. Mr. Roth says these are legal questions and probably not appropriately fielded with this panel. Chairperson Leggett allows the questions, but only with respect to the assumptions that went into the model.

Aboriginal equity in the project

Drawing attention to Exhibit B24-02 (July 2011 report on Aboriginal Engagement, including the Aboriginal Economic Benefits Package), Ms. O'Driscoll asks whether the government's duty to consult has been designated to Northern Gateway Pipelines and whether the benefits package is viewed as consultation. Mr. Carruthers avoids a direct answer, and the Chairperson says these questions should be asked in Prince Rupert. 18018

The Aboriginal Equity Program is an offer to allow Aboriginal groups to acquire 10% equity in NGP. Exhibit B58-02 describes it in part. Mr. Fisher and Mr. Carruthers provide some more information. 18025

Evaluation of natural capital and ecological goods

Exhibit B83-6, entitled "Evaluation of Natural Capital and Ecological Goods and Services at Risk Associated with the Proposed Enbridge Northern Gateway Pipeline" was prepared by panel witness Mark Anielski. Ms O'Driscoll asks him how he arrived at the

[3] Consitution Act, S35: deals with protection of aboriginal and treaty rights of Aboriginal peoples
[4] Charter, S25: deals with Aboriginal peoples, does not create rights, but ensures that treatment of Aboriginal peoples under the Charter does not diminish right created elsewhere (ie, the Constitution).
[5] Royal Proclamation: attempted to organize England's empire in North America and stabilize relations with Native North Americans following the Seven Years War and the transfer of France's claims in North America to England.

valuation of $1.60 /ha/yr for "Culture". Mr. Anielski says he drew the valuation from the Boreal and Mackenzie regions, cited in the note attached to Table 4. 18075

Table 4: Ecosystem Goods and Service values by land classification and ecological service

Values US$2011/ha/yr	Forests	Wetlands	Grasslands
Climate regulation[26]	4.91		
Water stabilization and regulation	0.11		4.96
Water supply		608.89	
Erosion control and sediment retention (soil maintenance)			47.97
Soil formation			1.65
Waste treatment			120.00
Pollination			41.35
Biological control	25.97		38.04
Habitat/Refugia	0.63	303.00	
Food production	2.55	82.29	110.82
Raw materials		25.60	
Genetic resources		324.33	
Recreation	18.53	20.33	3.31
Culture	1.60		
Total EGS value	**54.30**	**1,364.44**	**368.11**

Source: Anielski, Mark and Sara Wilson. 2009. *Counting Canada's Natural Capital: Assessing the Real Value of Canada's Boreal Ecosystems*. Report originally prepared in 2005 for the Canadian Boreal Initiative but revised and updated in 2009. Anielski, Mark and Sara Wilson. 2009. *The Real Wealth of the Mackenzie Region*. Prepared for the Canadian Boreal Initiative. Original study published in 2007 and updated in 2009.

Examination of Elizabeth Graff for Province of British Columbia 18118

Ms. Graff appeared with Terry Lake, BC's Minister of Environment, and Geoff Plant, former BC Attorney-General and now "legal strategist" for BC in these hearings. She says she will be asking questions about "the extent of the insurance coverage that is planned for the project, as well as the financial liability and the ways Northern Gateway has identified to cover any costs in the event of a large spill that could exceed insurance coverage."

She doesn't get far. Ms. Graff has not read the relevant evidence, and her issues appear best suited for Prince George.

Chairperson Leggett recommends that Ms. Graff go read the evidence, and "come back tomorrow with the ability to have us understand how the questions that you're seeking to ask today fit within the issues that we've outlined for the Edmonton hearings, and not where we've outlined them to be dealt with in Prince George."