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Chair

Mr. Leon Benoit

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● (1105)

[*English*]

The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)): Good morning, everyone. We're here today to continue our study on energy security in Canada.

We're dealing today with the section of the motion that we passed to give a framework to this study. We're dealing today with regional economic impacts of oil and gas development.

We have with us today two groups of witnesses on the first panel and we also have two groups of witnesses on the second panel.

In the first panel today we have, from the B.C. Oil and Gas Commission, Eric Alexander Ferguson, commissioner and chief executive officer. Welcome, Mr. Ferguson.

And we have, by video conference today from Edmonton, Alberta, Alberta's Industrial Heartland Association, Neil Shelly, executive director, and Jana Tolmie-Thompson, economic development officer. Welcome to both of you from Edmonton. The area you're talking about today extends into the constituency I represent, so you're particularly welcome today.

We will go directly to presentations in the order listed on the agenda.

Mr. Alexander, go ahead with your presentation for up to seven minutes.

Mr. Eric Alexander Ferguson (Commissioner and Chief Executive Officer, B.C. Oil and Gas Commission): Thank you.

Good morning, everyone. I am Alex Ferguson, commissioner and chief executive officer for the British Colombia Oil and Gas Commission.

Some earlier submissions to this committee have highlighted the fact that unconventional gas—and more specifically, shale gas—is changing the energy landscape in Canada. Believe me, nowhere is that more evident than in British Columbia today.

In this submission I'll speak about our role as a regulator in British Columbia and the extent of the province's natural gas resources from what we know today, and look forward a little bit from our perspective.

Certainly natural gas exploration and production has grown to become a crucial part of our province's economy, and as such, safe, responsible development has become a priority to stakeholders and citizens. The resource is abundant within our borders, and advances in horizontal drilling technologies have enabled more efficient capture. However, being rich in natural gas isn't the only piece we have in front of us. The government has driven competitive royalty regimes and a progressive regulatory structure we operate within. Prioritizing environmental and social stewardship has put us in the position we are in today.

My organization is a crown corporation that was signed into existence in 1998 through a piece of legislation in the province. We're headquartered in Fort St. John, which is the heart of our oil and gas industry for the province. We also have offices in Victoria, and satellite offices in Fort Nelson and Dawson Creek. We are an independent regulatory agency with responsibilities for overseeing oil and gas operations in the province through exploration, development, and pipeline transportation, all the way to reclamation—essentially a one-stop or single-window regulatory agency.

Essentially this means there's a split between government policy and the regulatory world. The province sells the land tenure, which gives companies the right to operate, and develops policies, whether they're environmental policies or fiscal policies, while we take on the regulatory responsibilities or the implementation of those policies. Our one-stop format not only brings all the industry requirements together in one place for streamlining; it provides a really good focus for coordinated, responsive decision-making. Part of our role is to inform our decision-making with a range of interests, from environmental to first nations and public concerns.

Our core roles as a commission, a regulatory agency, include reviewing and assessing applications for industry activity, consulting with first nations on every application, ensuring industry complies with the legislation, and cooperating with partner agencies. We don't do it alone. The policy interpretation work requires a lot of back and forth with different government agencies. The public interest is protected through the objectives of ensuring public safety—which is paramount for us, protecting the environment, conserving petroleum resources, and ensuring equitable participation in production for all operators.

As I said earlier, we are a crown agency funded by application review fees and production levies. Our sole shareholder is the Province of British Columbia, and our governing body is a board of directors appointed by cabinet. Regulatory decision-making is vested in me as commissioner. I also serve as the chief executive officer for the crown corporation in terms of keeping the operation running.

Decision-making authority is further delegated—I have the power to delegate authorities into the operation. We have three core operational divisions led by deputy commissioners: project assessment and compliance assurance; engineering, which is a core strength for us; and regulatory affairs and stewardship. Of course, we support that business with a variety of other administrative functions as a functioning business.

Natural gas in British Columbia is significant and growing. With the price of gas lately, it is a bit of a headache for people trying to figure out where that gas will go. But we have an opportunity in the province—it's the ninth year in a row that our reserves estimates have grown. We are one of the few jurisdictions in North America that have had consistent growth year-over-year, prior to unconventional gas discoveries through today.

● (1110)

We certainly have some of the more robust and defined basins for shale gas in Canada. The names of some of those basins are synonymous with anything you hear from the jurisdictions in the States: the Horn River Basin is one in particular; the Montney, in the south part of the Peace; the Cordova Embayment; and the Liard Basin. Those are significant opportunities, world-class shale plays or type gas plays.

The resource estimates for the Horn River Basin, for example, are anywhere between 500 trillion and 1,000 trillion cubic feet of gas. To put that in perspective, currently British Columbia produces approximately one trillion cubic feet per year. Given that one basin alone has upwards of 1,000 trillion cubic feet, we have a significant resource opportunity in front of us. These amounts of course are in addition to the approximately 90 trillion cubic feet remaining proven reserves in unconventional gas. These are reserves that are recoverable from our current technology.

Petroleum and natural gas land sales are a key indicator of industry's investment in the province. The year 2008 was a record year for us, generating over $2 billion in sales for the province. In 2009 it was slightly below that, at about $893 million for the province. It is anticipated that 2010 will surpass 2009 at this point. This June saw the fifth-highest single sale in the province's history, at over $400 million. Those are direct revenues to the crown. Royalties are forecast to increase $1.25 billion as a result of natural gas production increase alone between 2009 and 2013, and that trend is going to continue in the long-term forecast.

Coming back to the commission, we are recognized as a regulatory leader. We work well with other jurisdictions, most notably Alberta, our neighbour directly beside us. Our experience is being sought from other jurisdictions where unconventional gas interest is growing, for example, everywhere from Quebec, Atlantic Canada, and even Poland, as of the last few weeks. We're also a member of the Interstate Oil and Gas Compact Commission, a stateside agency that brings regulators together to share best practices. That's been a longstanding relationship we've had with all the jurisdictions across North America, in terms of understanding the regulatory pressures.

The commission maintains a number of working agreements and memorandums with different government agencies in the province. It's our way of properly interpreting the policy and legislation. The agreements we have support the commission's authority with respect to upholding the values associated with those partner agencies' mandates. We very much are a taker of their instructions and policies.

Commission employees ensure resources are recovered in the safest and most effective possible manner. We always attempt to ensure that liabilities incurred through these activities are borne by the operators. We interface with industry, first nations, landowners, the public, other government agencies, and of course peers in other jurisdictions.

The shift to unconventional gas in B.C. has been anticipated in the regulatory framework of the province. We recently enacted a new act in the province, the Oil and Gas Activities Act, which was brought into force on October 4 of this year. This legislation reflects a shift towards the future of oil and gas activity in the province, everything from ensuring we have the ability to incorporate technology advances, certainly the interest in unconventional gas and the different methods that are employed there versus the more conventional approach; increased social and environmental expectations—we've raised the bar in terms of addressing public and landowner issues—and also having the flexibility to allow the industry to drive forward.

In developing those regulations we've had extensive consultations over a four-year period with first nations, environmental groups, and industry. We believe we have a very streamlined and enhanced piece of legislation and regulations, reflecting the needs of those people, the environment, industry, and government itself.

On the ground we are certainly a newer jurisdiction, but we are one of the predominant shale gas operators in the country. In 2009-10 there were 557 wells drilled, which isn't a very large number. We're in the early stages of developing the plays.

Approximately 1,100 kilometres of pipeline were built in the province during this last year.

● (1115)

In the same period, on a yearly basis, we issued about 2,700 approvals for different aspects of oil and gas development in the province and we completed 4,300 site inspections with our field inspectors.

In conclusion, I really wanted to leave you with the notion that the success for us in responsibly developing this resource really comes down to four key attributes. One is what we like to refer to as "having the rocks". We do have the resource. The shale is there and it's world-class. We do have a second component. It's having an effective and efficient regulatory model, which we believe we've slowly started to implement now. Third, it's having a competitive fiscal and policy environment, which is certainly not my mandate as the regulator, but I do see that evident in the province. And of course the fourth is executing well on all those as we go through.

We believe we are on the path to responsible, world-class shale gas development.

Thank you very much.

The Chair: Thank you very much, Mr. Ferguson, for your presentation.

We go now to Alberta's Industrial Heartland Association. Mr. Shelly and Ms. Tolmie-Thompson, go ahead, please, with your presentation, for up to seven minutes.

Mr. Neil Shelly (Executive Director, Alberta's Industrial Heartland Association): Great. Thank you.

We appreciate the opportunity to speak before the committee here today.

What we'd like to talk about with you today is regarding a very important aspect of our resource development, and that is, adding value to the resources themselves. While we have this tremendous natural resource here in Canada, recent trends are towards exporting our resources out in a raw form and bypassing the economic opportunities for Canada.

Ms. Thompson will provide an overview of what's happening in the area, and then I'll follow up with some trends and facts and figures regarding what we see going into the future.

Ms. Jana Tolmie-Thompson (Economic Development Officer, Alberta's Industrial Heartland Association): Thank you.

I wanted to give you a little bit of history on Alberta's Industrial Heartland Association, why it came to be. We were actually incorporated in May 1998 and became operational in January 1999. What's important is that prior to that, between 1993 and 1998, we worked very closely with the industry. This in fact was an industry-driven initiative, wanting the municipalities to come together and get some common regulations, guidelines for industries to exist.

We encompass five municipalities, and each municipality at the time had different municipal development plans, area structure plans, etc., and different rules. It was making it difficult for industries that worked in one and had pipelines going to another for the regulations. That was very much a local impact, getting the local industries—and these are mega-players, your Dow, Shell, Sherritt—coming together to incorporate or to have municipalities incorporate this.

I sent a map to you. I don't know if you received it or not. I'm assuming you did. It gives you the geographic outline of the heartland. We are 582 square kilometres, zoned heavy industrial primarily, with of course some conservation area and buffer zones in there.

We presently have 48 industries existing in the area. They employ over 7,500 staff, full-time and contractors, and the majority are very highly skilled and trained employees—the managers, the operators, the PhDs, etc. Based on the multiplier effect of one to four, that's equivalent to about 30,000 jobs directly and indirectly created just due to the industries. That's not including the different positions such as engineering EMPs, the maintenance, the turnarounds, etc.

In terms of value of job creation, revenue generation, it's very important within the Alberta context and of course the greater Edmonton region.

In addition, on the map, we also have 20 land holdings that folks are holding onto. They purchased land back in 2003, 2008. Suncor, Petro-Canada, etc. are looking to build their upgraders. A lot of those have been deferred right now. Hopefully something will happen on those lands as well, because we have the potential of creating another 2,000 to 4,000 jobs, excluding the construction jobs.

We do work very closely with our province, our provincial government, with Alberta Energy, Finance and Enterprise, Environment, and Intergovernmental Relations.

I'll pass back to Neil for an overview of Heartland again.

● (1120)

Mr. Neil Shelly: Thank you, Jana.

That gives you an overview. In our area, in addition to Sarnia, are some of the major hydrocarbon processing areas. There's been a lot of discussion lately regarding the development of Canada's oil sands resources and their future, but extracting the material from the ground is just part of the story.

The bitumen that is extracted from the oil sands is one of the heaviest forms of crude oil in the world, and, unlike conventional oil, must be upgraded before it can be used in the refining process. The upgrading process transforms this very heavy crude oil into a material called “synthetic crude oil” that has properties as good as, if not better than, light sweet oil and can be used at any refinery operation virtually anywhere in the world. These upgraders are very capital-intensive and create huge economic spinoffs in terms of the construction and operation jobs in the region in which they are developed.

But the upgrading of the bitumen into that synthetic crude oil is just the first step in the process. There are other benefits to upgrading that lead to future opportunities. One material that is produced as a byproduct is actually very rich in the basic chemical feedstocks required for the petrochemical industry.

We've looked at these opportunities and how we can advance further up the value chain. Studies done by us in conjunction with the Government of Alberta and supported by the federal government have identified numerous opportunities to actually take our raw resources more towards a consumer-ready type of product.

The bottom line in our analysis is that, at a minimum, two-thirds of the value of the resource in the oil sands lies in the processing of the materials, and the region that processes the materials is the one that's going to gain the most economic opportunity and diversity from these materials.

This trend towards exporting raw products in a raw form with less processing in Canada is becoming apparent when we look at the refining situation in western Canada. In 2000 western Canada as a region was a net exporter of refined products. If you fast-forward to 2008, you'll see that western Canada is actually now a net importer of refined products. A recent study done by the Government of Alberta indicates that if we don't get more processing capacity, western Canada alone could actually be importing 200,000 barrels a day of refined products into our region to meet our needs.

While the west is sort of becoming what's being considered an energy superpower, the trend is to extract the raw products, ship the materials out of the country, and have somebody else process and refine them. We are then buying back the finished products. Not only does this rob us of an economic opportunity, but it has created a situation where in western Canada we are now running into fuel shortages. It seems to happen just about every year now as we rely upon longer and longer supply chains to get diesel to our farmers, our miners, and our logging operations.

So as we said, while the extraction side of the business seems to be enjoying a resurgence in these last days, we cannot say the same thing for the value-added side of the business. A recent report from Alberta's Energy Resources Conservation Board predicts that by 2020 our share of processing of this bitumen material will go from where it's at currently, at about 64%, down to about 44%, unless something is done. What this means is that the majority of our resources will be shipped out in the raw form and other countries will enjoy the benefits and the economic diversity of processing these into consumer-ready types of products.

The lost opportunity we're looking at by exporting these materials is fairly staggering. Based upon the analysis we've done of five individual projects that may or may not go ahead in our region, the economic impacts amount to $40 billion in capital investments, 50,000 person-years of construction jobs, 10,000 person-years of engineering design work, and close to $1 billion in federal and provincial corporate income tax.

Another aspect of this, as well as the environmental interests associated with upgrading, is that our region, the Heartland region, actually has some very good geology for carbon capture and storage in and around the area. In our area we actually have three projects on the go that are looking at carbon capture and storage, supported by the provincial and federal governments.

By tying the processing into a carbon capture and storage project, we can actually reduce the carbon footprint of our oil-sands-based fuels to standards that would actually meet what's being considered in California for carbon-intensity standards. So when we take a look at energy security for Canada, by processing it here and employing carbon capture and storage technologies, we can actually have control over the environmental factors and help set the agenda around this matter.

So what can and should be done? Well, this is a very complex situation. It's something that we are discussing right now with the provincial government. We feel that it's something the federal government, through its policies and processes, needs to consider as a very important part of the agenda for Canada when we look at energy security and how we maintain the maximum economic opportunity for our country.

● (1125)

Thank you.

The Chair: Thank you very much to both of you for your presentation.

We will go now directly to questions and comments, starting with Monsieur Coderre for up to seven minutes.

Go ahead, please.

[*Translation*]

Hon. Denis Coderre (Bourassa, Lib.): Thank you, Mr. Chair.

[*English*]

Mr. Ferguson, it's really interesting to have you here, because of course I'm from Quebec, and there are issues regarding shale gas.

Of course we want to be respectful of jurisdictions. You are a provincial regulatory body, and natural resources are under provincial jurisdiction. Nevertheless, I think that the Government of Canada might have a role to play vis-à-vis the monitoring.

I'm going to ask you a few questions to understand how it works, because clearly, what we've been learning since day one and what we hear every time we're talking about shale gas and the regulatory body is that, frankly, B.C. is a model. I'd like to understand more.

[*Translation*]

First of all, I would like to know how your organization works. When we talk about shale gas, that involves drilling holes, of course, which can lead to certain situations regarding the public.

How is your organization dealing with concerns between individuals and the industry? Specifically, what is your role? You talked about protecting people and the environment, but when it comes to people, what is your role in protecting the public?

[*English*]

The Chair: Mr. Ferguson, go ahead, please.

Mr. Eric Alexander Ferguson: Thank you for the question.

Certainly we distinguish between individuals who are public landowners, because we do have operations that are permitted on private land under certain conditions, with the right of entry being one of the preconditions. We do have a significant mediation role, which was set up in legislation 12 years ago, when we were formed, to offer an opportunity for those landowners to be treated fairly, equitably, properly, whether in compensation or in operating practices. We have quite a number of staff up in the north, even though the population certainly isn't anywhere as great as it is in many other jurisdictions, in Quebec for example.

We do have a significant amount of resources applied to liaison with landowners. Quality of life is a pretty significant precursor to other issues that may happen, whether safety-related or not, so we pay a lot of attention to those quality of life issues first and foremost. There is road dust, for example, from increased traffic. We look at what kinds of reclamation standards are applied to the site once it's completed. There's construction—

Hon. Denis Coderre: I guess you're also working closely with environment, because water is an issue there. Is the protection of water and all that under your own jurisdiction, because it all came with...?

Mr. Eric Alexander Ferguson: Well, there are two levels. With regard to water specifically, we do take our mandate from the Ministry of Environment. We are given the authority to issue short-term water-use permits only, for one year at a time. The Ministry of Environment regulates longer-term, more stable licensing of water use, so ours are typically smaller.

One of the issues we're having now as the industry is starting to grow is how we properly align the Ministry of Environment mandate and instructions for us with an increased level of activity, or what we expect to be an increased level of activity, and demand for those short-term licences.

Hon. Denis Coderre: I understand that the Quebec situation is quite different, because the shale gas would be in the St. Lawrence River Valley, which is where you have two-thirds of the population, so it's not the same as B.C. You have to work, of course, with the first nations. How do you perceive your role? It's not just based on regulations. You also have to apply them and to upgrade. I guess you have an upgrading process to make sure you are connected with reality. How does it work in B.C.?

● (1130)

Mr. Eric Alexander Ferguson: With respect to first nations, we have contractual arrangements with each of the bands in the northeast part of the province. Those define specific types of applications, consultation periods and process requirements, as well as how we interact, so they're very detailed, spelled-out contractual arrangements. On top of that, certainly we apply a lot of resources to building a relationship over and above that contractual relationship.

I think no matter which business you're in, contractual arrangements are only as good as the relationship behind them. So we try to apply due diligence, both to ensure that if people are unhappy with the contractual process they have another avenue to have those kinds of discussions and hopefully to improve those.

Hon. Denis Coderre: So you've said you're based also on mediation or conflict resolution. Do you have kind of an appeal process, or does the buck stop there? How does it work?

Mr. Eric Alexander Ferguson: Well, we have a number of appeal processes. Certainly we strive a lot to mediate and get involved with landowner stakeholder concerns with the industry up front. If that's unsuccessful and we do go ahead and make a decision, that stakeholder has a right of appeal external to us in a new appeal tribunal that was formed under the new piece of legislation that I mentioned.

Hon. Denis Coderre: Do you perceive yourself as an independent monitoring process? One of the issues we're looking for is we have to be respectful of provincial jurisdiction. Is there a role for the Government of Canada to play? That's important, how you define yourself, because of course on environment assessment we have a role. Maybe eventually we'll think about, while still being respectful of jurisdictions, kind of a national strategy process where even the minister of Alberta, for example, wants it. So western Canada is very adamant on that. How do you define yourself regarding the monitoring process?

Mr. Eric Alexander Ferguson: As a regulator, we strive every day to maintain a level of independence from the policy-maker. I think if you talk to any of the jurisdictions through the U.S., it's very important to have that similar level of independence. We do have very good working relationships with the National Energy Board and some relationships for training as well as first-responder type things, because we have more people available within the province on some of those sites. So that level of independence allows us to form those kinds of relationships. But we're very much an on-the-ground, upstream regulator, and we try to maintain our independence as such.

The Chair: Thank you, Mr. Ferguson.

Merci, Mr. Coderre.

Madame Brunelle, for up to seven minutes. Go ahead.

[*Translation*]

Ms. Paule Brunelle (Trois-Rivières, BQ): Thank you, Mr. Chair.

Hello, Mr. Ferguson.

I am also from Quebec, so of course my concerns have also been expressed by the public and are very similar to Mr. Coderre's concerns.

How far are the drill sites from the nearest residences where you are in British Columbia? As we know, in Quebec, they are in the St. Lawrence Valley, which is densely populated. That is also agricultural land. This raises the issue of clean drinking water. It seems to me that, where you are, they are far from any residential areas. How far?

[*English*]

Mr. Eric Alexander Ferguson: Thank you very much.

We have some regulatory requirements right now. We call them setbacks from residences, and depending on the hydrogen sulphide content of the gas, there's a different distance that we require wells to be set back. Those are established from a longstanding review of the safety issues that have occurred with that distance. We also have a policy setback, we'll call it, which is not regulatory in nature. Right now I think our closest wells we have to residences are in the order of 300 metres distance to a residence. Part of the setbacks are probably more distance-related to issues like noise, light, for drilling. Those kinds of things create more of a setback than the actual safety setback for hydrogen sulphide gas.

● (1135)

[*Translation*]

Ms. Paule Brunelle: That seems pretty close to me, 300 metres, but I understand the situation better.

In your presentation, you said that petroleum and natural gas land sales have increased significantly. Who owns the land? The subsoil, the resource, should normally belong to the province. Was the land sold to people who live there? Who owns the land?

[*English*]

Mr. Eric Alexander Ferguson: British Columbia, like most of Canada, has a split estate model. The crown has reserved the subsurface mineral resources. In the process that government has for administering tenure, selling tenure, is giving those certain rights for that subsurface resource. Our job is to enable the surface access as well as the method of functioning to get that subsurface resource.

On private land, the companies will typically enter into a lease agreement for a period of time with the landowner for access to that piece of ground for the well or the road or the pipeline, whatever the case may be. There is a separate process from us for allowing those leases to be executed and managed; it's more of a contractual arrangement between the landowner and the operator.

[*Translation*]

Ms. Paule Brunelle: Is the value of those leases based on the market, the quantity of gas? Do you become involved in the relationship between the land owner and the company?

[*English*]

Mr. Eric Alexander Ferguson: It's not in my jurisdiction to mediate any of the commercial issues between the leaseholder and the oil and gas operator. My understanding is that it's very much more of a free market type of approach. The landowners—certainly in my area, and I used to live up there—gather together and share information on what some of the lease values have been and what other kinds of compensation are available.

I know the Province of British Columbia has funded a special office in the northeast for assisting landowners with more advocacy to make sure they get a fair deal in that kind of transaction, but I do not believe the value is totally related to the value of the subsurface resource there. That would be expressed in the company's interest in concluding an arrangement.

[*Translation*]

Ms. Paule Brunelle: You said that the members of your board, the BC Oil and Gas Commission, are appointed by Cabinet. Is the public represented on that board? Does the public have a seat?

[*English*]

Mr. Eric Alexander Ferguson: In any good corporate governance model, I would think the cabinet authorities or the cabinet assignments are done in the public interest. The board, like any board, has a responsibility to all the stakeholders in Canada, as opposed to one single shareholder. I think it's always a governance issue for any organization that's governed that way to understand the responsibilities to all the stakeholders and not just the one shareholder, or a shareholder.

We have many other ways for the public to give input to our processes. We are driven primarily by a piece of legislation and all the regulations under that, on which we consult widely with the public and the stakeholders. We also have the ability to strike advisory committees to advise the board on any kind of public interest matter that they wish to put before them in terms of changing how the commission is operated, but the board is the primary governance of the operation, not the statutory decision-makers that are there.

[*Translation*]

Ms. Paule Brunelle: If I am a land owner and I sign a lease with a company, if I am unhappy for any reason or if I have any concerns, to whom would I address my complaint?

[*English*]

Mr. Eric Alexander Ferguson: In terms of a contractual arrangement, the one certain place for landowners to go to get their rights better expressed would be a court process, because it is a third party contractual arrangement. If there are issues between the operator and the landowner, we do offer to mediate and we find ourselves quite engaged in mediating. If there is a break in that agreement that leads to a regulatory issue for us, we will address that directly, but if it's related to a compensation discharge that wasn't done appropriately or something, depending on our relationship with the landowner and the operator, we often find ourselves engaged in an informal mediation role. We have quite a bit of influence on the industry in that regard.

● (1140)

The Chair: Merci, Madame Brunelle.

Mr. Shelly and Ms. Tolmie-Thompson, we remember you're there. I'm sure someone will have some questions for you.

We go now to Mr. Cullen. I'm pretty sure he'll be the first one to do that.

Go ahead, Mr. Cullen.

Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP): I was going to ask Mr. Ferguson some questions first, but I am coming to you good folks in Alberta.

Mr. Ferguson, at the very end of his presentation we heard Mr. Shelly mention the need to maximize the economic opportunity from the resources in Alberta. Does the B.C. Oil and Gas Commission have that as their mandate? In the legislation that guides you or directs how you do leases or what you approve or don't approve, is there anything that directs you to maximize the economic opportunities for British Columbia?

Mr. Eric Alexander Ferguson: Thank you.

I would suggest it's more in the form of soft, indirect language related to an optimization, given all the other issues that we have in front of us.

Mr. Nathan Cullen: I suppose there are competing interests whenever you sit on a commission.

Mr. Eric Alexander Ferguson: Yes.

Mr. Nathan Cullen: I just wanted to go over your numbers again. In 2008, around $2 billion in leases, is that right?

Mr. Eric Alexander Ferguson: In land sales.

Mr. Nathan Cullen: In land sales, and then in 2009, $893 million?

Mr. Eric Alexander Ferguson: Yes.

Mr. Nathan Cullen: That's dramatic. Is that simply a reflection of prices?

Mr. Eric Alexander Ferguson: Certainly the big year was an interest in the shale gas basins that were up there. I do want to clarify that those land sales are done by the Ministry of Energy now, not by us as a commission.

Mr. Nathan Cullen: Some boards are set up in such a way that people who sit on the board represent a certain perspective. They come from an industry perspective and that's the chair that they hold. The B.C. Oil and Gas Commission isn't set up that way, though. You have members appointed who are meant to hold all perspectives, is that the idea?

Mr. Eric Alexander Ferguson: It's not—

Mr. Nathan Cullen: My question is you don't have anyone who sits there and says “I come from a first nations perspective and I hold that position so that we can have that perspective in our meetings”, or someone from an environment perspective—nothing like that, right?

Mr. Eric Alexander Ferguson: None that I know of, although we do have one board member who is a retired industry executive from a drilling company. I don't know if that would be an interest area. From my experience, I haven't seen him talk about an industry emphasis.

Mr. Nathan Cullen: Does B.C. have an energy security strategy? Does that discussion happen in British Columbia? Do you have a mandate for that? Do you have a plan?

Mr. Eric Alexander Ferguson: As a regulator, no, we don't.

Mr. Nathan Cullen: Now to our good folks in Alberta.

Mr. Shelly, this is a very interesting presentation, by the way, in terms of looking at the actual value of bitumen when you get it out of the ground: how much is actually achieved through mining, and how much is achieved through upgrading.

To go over your numbers, on two million barrels a day, you have $25 billion for the actual bitumen mining, but twice that for the synthetic crude production, and then three times that amount for the petrochemicals production. Is that correct? Am I hearing those numbers right?

Mr. Neil Shelly: That's correct.

One of the differences between bitumen and synthetic crude oil is called the light-heavy differential, and this number actually bounces around quite a bit on market factors. The numbers you see there were done back in about 2008 based upon market prices. Since then the differential has narrowed down, but it's widening back out again, so these numbers depend upon market factors that are there. The doubling is based upon about a 50% difference in heavy and light prices. Right now we're sitting at about 30%, so you can sort of factor that in there.

The $25 billion in petrochemicals was based upon three different studies we've done in conjunction with the Government of Alberta that said if we now take these byproducts and move them up the chain, what will the net value be? They identified a number of different opportunities. There would be feedstock advantage, and the consultants' estimates were that the value of these petrochemicals would be $25 billion annually.

● (1145)

Mr. Nathan Cullen: So these studies, and you mentioned another one that was supported by both the provincial and federal government.... We've invested taxpayer money to understand what the value could be in upgrading bitumen, yet it seems that the same governments, both provincially and federally, are also promoting a policy that says export it before any of those values can be achieved, before the money can be made for the people of Alberta, for the people of Canada.

It seems contradictory on the surface for a government to support studies that say here's all the value we can get, and at the same time, in the same breath, say we'd like to export it raw anyways.

Mr. Neil Shelly: If you look back to the map that Ms. Tolmie-Thompson provided with all the land holdings, it goes back to what we call the gold rush days back in our areas, where we were cost-advantaged and all this was going to happen. Because of a number of different factors—the rising Canadian dollar, inflationary costs, and whatever—a lot of companies are proposing to go to the United States. I think the will is there when you talk to a lot of people. It's almost like motherhood and apple pie that we advance this up the chain.

The question is, how do you do it now? It forms a balance between not scaring away investors in the actual extraction of the resource, and yet making us more competitive here. We've been on fact-finding missions to Louisiana and Houston, and we've seen some of the incentives they have in place there. An accelerated capital cost allowance for refinery upgrades is in place in the United States, which gives them an advantage. There's a lot of infrastructure in the United States that's considered public infrastructure that directly helps the industry in that area.

As I said, I wish there was a silver bullet answer that if you just do this, we'll get to retain the value. Now that we've identified the size of the prize, the next challenge is to look at what practical policy options can be put into place to make sure that we gain this maximum value.

Mr. Nathan Cullen: We're in the midst of studying energy security in this country. One of the questions we've been putting to various representatives from industry and other stakeholders is whether Canada needs a Canadian energy security strategy. Energy security is about affordability, economic benefits, and some sort of long-term plan. Former premier Lougheed and others have talked about this with respect to Alberta.

What is your group's opinion about the need to have some sort of national strategy to address some of the questions you've raised here today?

Mr. Neil Shelly: We believe that there actually needs to be a long-term vision. As we said earlier, we've been given this huge national advantage in Canada, and across western Canada, specifically. We have it, and it's almost like we don't know what to do with it.

There are a lot of aspects to energy security. As we mentioned earlier, we're having problems with refining capacity in western Canada. We have diesel supply shortages, because we have underutilized or not enough refining capacity.

Whether it's a national strategy or just a vision, it's a consideration that as we develop the resources, we have to understand that this is multi-faceted. There are a number of factors, other than just pulling it out of the ground, that have to be considered and built into policies.

The Chair: Thank you.

Thank you, Mr. Cullen.

We go now to Mr. Shory, for up to seven minutes.

Mr. Devinder Shory (Calgary Northeast, CPC): Thank you, Mr. Chair.

Thank you to the witnesses for coming to help us study energy security in Canada.

My question would be to Mr. Ferguson.

Mr. Ferguson, in your opening remarks you made a comment that shale gas is changing the landscape in the industry and that B.C. is a model for shale gas exploration. You also said that B.C. has an effective and efficient regulatory model and that the B.C. Oil and Gas Commission is recognized as a regulatory leader.

We all know that natural resources are under provincial jurisdiction. We also know that the federal government is leading with several research and mapping initiatives in the field, as well. I also understand that other governments and foreign entities have recently been engaging with Canadian experts with regard to developing their oil and gas exploration and their regulatory frameworks.

My question to you is whether you are aware of any of these jurisdictions. If yes, then I'd like you to elaborate on what you feel Canada has to offer in terms of expertise, both in establishing the proper regulatory framework and with regard to the potential economic opportunities.

Mr. Eric Alexander Ferguson: Thank you.

We do, as a matter of course, with our fellow regulatory agencies across Canada and the United States, share a lot of information. So we're quite familiar with and understand what each jurisdiction is struggling with and tackling in terms of issues and opportunities. At least we try to share it.

As an example, one of the jurisdictions that both Alberta, as a regulator, and I visited three or four weeks ago was in Poland. The request, other than to have three or four days of a lot of meetings, was to help the Polish government, through the Canadian government, understand what different regulatory models might look like for that jurisdiction, which frankly doesn't have one at this point. Of course, it's a very heavily populated area. There are 39 million people living on a land base a third of the size of British Columbia who have a significant shale gas play in the works underneath them. There's cause for a lot of work on their part to get the resource out using a very well-defined energy security model and to understand, at the same time, how that affects the energy balance for the country.

I think all those types of things, if I use Poland as an example, certainly speak to the kinds of issues we have across Canada, whether they're in Quebec or Alberta, Saskatchewan, the Maritimes, or certainly British Columbia. I think the varied issues across those jurisdictions, as I know them today, offer experience and tools that can be applied and shared with the rest of the countries in the world. I think Canada has a great opportunity to demonstrate leadership in providing that expertise beyond our borders.

● (1150)

Mr. Devinder Shory: That is regarding the regulatory framework.

Are you aware of any comparative studies on the overall economic impact of energy development in Canada and countries like Norway, or any others?

Mr. Eric Alexander Ferguson: Certainly I focus a lot of my attention on regulatory constructs, and not so much on fiscal and broader government policy issues. I know that Australia has done quite a bit of work in trying to understand and pick apart the competitiveness of their upstream regulatory model. I think that work was completed a year or so ago. It was a fairly extensive piece of work. I think they compared it to other jurisdictions as well.

I believe my favourite province next to us, Alberta, has also been doing a lot of work on a regulatory improvement competitiveness piece that I would point you to. There's probably some good learning there as well.

The Chair: Mr. Anderson, go ahead.

Mr. David Anderson (Cypress Hills—Grasslands, CPC): Mr. Ferguson, you mentioned the Interstate Oil and Gas Compact Commission. Can you tell us about it? What role does it play? I assume it's international.

Mr. Eric Alexander Ferguson: It's international as a name. It is certainly centred and founded in the United States. It is a formally recognized organization of all the state regulatory agencies. They appoint people to it. We and several of the provinces in Canada are associate members—we're certainly not full members. But it is an avenue for those states and us as associate members to get involved and share information.

Our interest is probably more in the regulatory tools and enhancement they're working on and struggling with. It's also an outstanding network of opportunity for learning what's going on.

Mr. David Anderson: Is it mainly an advisory commission? Does it have any legislative teeth?

Mr. Eric Alexander Ferguson: No.

Mr. David Anderson: But it's a good avenue for you to get information, and that kind of thing.

Mr. Cullen talked about the land sales, and I know that in my province the land sales dropped off dramatically in 2009. You say royalties are forecast to increase $1.25 billion as a result of natural gas production. Do you want to talk a little more about the longer-term benefits of natural gas production? Do you have any numbers on the kind of impact it's going to make on the economy?

Mr. Eric Alexander Ferguson: My apologies, but as a regulatory agency I'd have to pass you over to the Ministry of Energy in our province to talk more about those kinds of long-term predictions and value gains. I just quoted the numbers they gave us that are published on their websites.

As far as ultimate value to the crown over time, the only thing I would offer is my knowledge that those are direct revenues only. They are not the indirect revenues from employment and other spinoff opportunities we see throughout the industry.

● (1155)

The Chair: Thank you, Mr. Anderson. We are out of time.

Just before we suspend to get the second panel in place, I'd like to thank very much all of you who presented: Mr. Ferguson; and Mr. Shelly and Ms. Tolmie-Thompson from Alberta. Thank you very much for coming today. You have been very helpful for our study.

We will now suspend for a few minutes as we change to the second panel for the day.

● (1155)

(Pause)

● (1155)

The Chair: We will resume the meeting with our second panel.

From the University of Ottawa we have Serge Coulombe, professor, department of economics. By video conference from Calgary, Alberta, from the Canadian Energy Research Institute we have Peter Howard, president and chief executive officer.

We will have the presentations in the order on the agenda, starting with Professor Coulombe from the Department of Economics.

Hon. Denis Coderre: Repeat after me: Coulombe.

The Chair: Got it. Thank you. I appreciate your tutoring, Monsieur Coderre.

Go ahead, Professor.

[*Translation*]

Dr. Serge Coulombe (Professor, Department of Economics, University of Ottawa): Thank you.

It took the English-speaking economic community in Canada over ten years to properly pronounce my name. It was not easy.

In the few minutes I have here today, I would like to address two subjects. The first is the issue known as Dutch disease, in the Canadian context. The second subject has to with the relationship between oil and gas development and regional increases in productivity.

With respect to Dutch disease, the name comes from an article published in *The Economist* in the 1960s regarding the Dutch economy. The Dutch manufacturing sector suffered considerably following the discovery of oil and gas in the North Sea. Several theoretical and empirical studies were then conducted. To put it in extremely simple terms, Dutch disease results from the relationship between a booming resource sector and the manufacturing sector.

A booming resource sector leads to rising production costs and an appreciation of the national currency. That is what happened in Holland's case and in many other countries like Australia, Norway and Canada. This increase in the value of the exchange rate decreases the competitiveness of the manufacturing sector.

In Canada, Dutch disease has a very particular regional dimension because, generally speaking, the resource boom is in Alberta and Saskatchewan. The secondary sector, manufacturing, is in Ontario and Quebec. Australia is facing a similar problem.

For instance, during the resource boom of 2002-2007, Canada lost approximately 275,000 manufacturing jobs. In a study I did with some European colleagues, we estimated that approximately 50% of these job losses in the manufacturing sector were caused by the impact of the resource boom on the value of the Canadian dollar.

Clearly, the question we must ask ourselves is this: Is Dutch disease really a disease—a bad thing—or is it simply a question of labour market adjustments? When there is a boom in one sector, jobs must come from elsewhere.

I would now like to quote Mr. Krugman, the 2008 Nobel Prize winner in economics. When he was an economist, and not a journalist, he said: “The worry seems to be that when the natural resources run out, the lost manufacturing sectors will not come back.”

As far as Canada is concerned, it is pretty clear that our oil and gas resources will not run out any time soon. One way to address this problem would be to significantly drop the price of oil, for instance, in the medium and long term. This could also create a problem like the one Krugman describes.

It is worth noting that Canada's manufacturing sector has not always been depressed by the resource sector. Prior to 2002, for about six years, the opposite effect was noted. With a drop in the cost of raw materials and a decline in the value of the Canadian dollar, many jobs were created in Canada's manufacturing sector.

The basic problem with the relationship between Canada's resources sector and manufacturing sector is that there seems to be excessive volatility in the manufacturing sector. This excessive volatility stems from how natural resources affect the value of the Canadian dollar. Thus, it is pretty clear that Ontario and Quebec benefit from having a more stable currency that does not depend on the uncertainties of the recourses sector, therefore, a currency like the euro or American dollar.

My second point pertains to certain facts from a study I am currently preparing for the C.D. Howe Institute on the relationship between Canada's resources sector and regional productivity.

● (1200)

In the study, I compared the strong growth of resources in Newfoundland following Hibernia, so Terra Nova and White Rose, and the growth in Alberta.

Note that productivity in Newfoundland has seen the largest improvement in Canada in the past 25 years, and this is mainly because of changes to the economy's structure. I am summarizing and simplifying, but we have gone from a very low-productivity resource, fish, to a very high-productivity resource.

In contrast, Alberta has seen among the lowest growth in productivity in Canada. Since 2002, productivity growth has been relatively weak in Canada. Note that the level of productivity is still very high, but the growth has been very weak. Basically, this is because we have moved away from oil production using normal standards with relatively high productivity. That source has been partially used up and there is growing reliance on extracting oil from the oil sands, which requires more labour and very high production costs.

I have provided a graph that shows both productivity measures. The graph shows that the oil boom has caused extraordinary growth in productivity in Newfoundland, while productivity in Alberta has actually decreased.

When we look at what is going on in the economy as a whole, we again see the opposite effect. It may seem a little surprising, but in Alberta, productivity growth has been extremely strong in sectors other than natural resources since 2002. Thus, the resource boom in Alberta appears to spread more easily to the other sectors of the economy, while this has not at all been the case in Newfoundland.

So that is basically my second conclusion for you here this morning. We must not assume that oil and gas development will always have the same effect on regional economies. It basically depends on the type of resource.

Thank you.

● (1205)

[*English*]

The Chair: Merci, Professor Coulombe. We appreciate it very much.

We'll now go by video conference to Peter Howard, president and chief executive officer of the Canadian Energy Research Institute.

Go ahead, please, for up to seven minutes.

Mr. Peter Howard (President and Chief Executive Officer, Canadian Energy Research Institute): Thank you

Good morning. My name is Peter Howard, and as the moderator indicated, I am the president and CEO of the Canadian Energy Research Institute.

Founded in 1975, the Canadian Energy Research Institute, or CERI, as we call it, is an independent, non-profit research institute specializing in the analysis of energy economics and related environmental policy issues in the energy production, transportation, and consumption sectors. Our mission is to provide relevant, independent, and objective economic research.

Members of the institute include the Government of Canada, the Government of Alberta, the University of Calgary, the Canadian Association of Petroleum Producers, and the Small Explorers and Producers Association of Canada.

On the oil and gas industry in Canada, the oil and gas component of the Canadian economy is historically focused on hydrocarbon production, pricing, royalties, and taxation. Success or failure is usually measured by levels of production, the profitability of hydrocarbon exploration and production companies, the royalty, and taxation levels of government. Often absent from this group of companies are the tens of thousands of workers that support the efforts of the E and P sector, namely the oil and gas service sector, or the OGS.

My brief this morning will focus on the economic impacts of the oil and gas service sector and its relationship to the Canadian economy.

Before I start I would like to go over a few definitions. The oil and gas producers are the corporate entities whose business it is to explore and develop hydrocarbon resources in the form of oil, oil sands, natural gas—including conventional, tight, and shale—and natural gas from coal, commonly referred to as coalbed methane.

Oil sands operators are a subset of the oil and gas producers who explore and develop oil sands resources. These companies may or may not have involvement in conventional oil and gas exploration.

The natural gas industry is a subset of the oil and gas industry, which covers all activities related to exploration, development, and transportation of just natural gas from the resource pools to the city gate meter stations. This includes exploration, drilling, production, gathering, processing, and pipeline transportation. The report generated by America's Natural Gas Alliance, ANGA, in 2008, whereby it states that natural gas activities support more than 600,000 jobs and contribute $100 billion to Canada's GDP, is an example of this portion of the oil and gas industry.

The oil and gas service sector is made up of the companies that offer products and services employed in direct support of oil and gas exploration and production activities for the oil and gas producers. These activities include exploration, drilling, completion, production, construction, processing, transportation, logistics, manufacturing, maintenance, and fabrication. This activity covers all conventional hydrocarbons, including oil, gas, and coalbed methane; all unconventional activities, including tight gas and shale gas; and all oil sands developments, but it does not include gas transmission in the form of pipelines.

On the oil and gas service sector, wells drilled, production rates, revenues, royalties, and taxes are replaced by words like casing, production strings, tubing strings, bits, wellheads, rig move, rig days, rig release, packers, plugs, fracing, cementing, coring, testing, and abandonment. Engineers, landmen, geologists, and geophysicists are replaced by surveyors, rig crew, drilling supervisor, trucker, loader operator, jug hound, mud man, snubber, well tester, tool push, well site geologist, and safety supervisor.

● (1210)

Hon. Denis Coderre: A point of order.

The Chair: A point of order, Monsieur Coderre.

Hon. Denis Coderre: I just see the fumes coming from the translator right now. Can he just slow it down a bit? That's another form of gas, but you don't want to go there.

The Chair: Could you slow down a little bit with your presentation? The interpreters have trouble keeping up.

Mr. Peter Howard: My apologies. I was trying to—

The Chair: Some of these things probably don't translate that well either. But go ahead.

Hon. Denis Coderre: The form of energy, you mean.

Mr. Peter Howard: Numerous other words and jobs describe the manufacturing and fabrication industries that develop products used by the oil and gas sector in the construction of thousands of field facilities that dot the western Canada landscape. At the end of the economic life for a field facility, the final word is “abandonment”. The OGS sector also includes companies responsible for sealing, removing, and reclaiming the disturbed land footprint back to its original condition.

In order to estimate the economic contribution of the OGS sector, we utilize the Stats Canada 2006 P Input, modified base price of input-output tables at the “W” level of aggregation. These were examined. There are 38 industries that are either totally dedicated to the oil and gas services or partially dedicated with varying degrees of contribution. These 38 industries participate in manufacturing or utilizing 225 commodities that are employed by the OGS sector.

The many contributors to the OGS include industries that supply gravel for well-site road access, to the sands used for fracking, to engineers, designers, welders, carpenters, and electricians who manufacture modular components for field installations, to drill pipe, concrete, chemicals, boilers, tanks, heaters, and compressors, and to the truckers and mail service that support the OGS activities. Also included were the local machine shops, portable welding trucks, warehousing, transportation facilities, communication systems, nuts, bolts, and wire that indirectly support the OGS sector. From the Alberta fabrication facilities in Leduc, Alberta, to the pipe manufacturing facilities in Regina, Saskatchewan, to the manufacturing industries in southern Ontario and Quebec, the OGS sector covers thousands of companies employing hundreds of thousands of people located in virtually every province and territory of Canada.

Based on this examination, we came up with the following results:

It was determined that Canada's GDP, at a specified basic price for the year 2006, was $1.35 trillion.

The oil and gas service sector of the Canadian economy generated $65 billion, or 4.8% of that GDP.

In 2006 the provincial and federal governments took in $225 billion in government revenues over and above the oil and gas royalties.

The oil and gas service sector contributed $9 billion, or 4.1%, of the taxes paid to the provincial and federal governments.

In 2006 the oil and gas producers paid $12 billion in royalties from conventional resources, and an additional $2.1 billion from oil sands, totalling $15 billion.

In 2006 the Canadian economy employed 16.5 million people. The oil and gas service sector employed 800,000 people, or 4.8% of the total workforce.

Comparing these numbers against other industries, the oil and gas producers generate GDP of $87 billion; the automotive sector, $25 billion; the agriculture sector, $26 billion; the mining sector, $18 billion; the forestry sector, $29 billion; residential construction, $34 billion; non-residential construction, $15 billion.

Stating the GDP contributions of OGS by industry type, we came to the conclusion that 48% of the OGS is classified as “direct impacts” and covers the activities in the province where the developments are occurring; 25% is in indirect manufacturing, and this coverd industries that are manufacturing components for the oil and gas sector; and 27% is in other industries, made up of things like truck transportation, communication, engineering, warehousing, etc., which takes place all across Canada.

While the direct industries are specifically related to locations where oil and gas activities take place in western Canada, western Canada accounts for the majority. The other industries are located throughout the country. Breaking these numbers down, Alberta-based industries account for 67% of the oil and gas impact; Saskatchewan and British Columbia account for an additional 20%; Ontario and Quebec account for 12%; Manitoba and the Atlantic provinces account for 1%.

I would add one point: that the industries in Saskatchewan that generate pipe rely on the steel plate that is sourced from Ontario.

● (1215)

In 2009 international revenues from select Canadian-headquartered, Canadian-controlled OGS companies were $12.8 billion. A selection of these companies included eight drilling companies, 25 oil and gas sectors, and three pipeline companies. These companies have Canadian head offices and Canadian finance; they file provincial and federal tax returns but they do activities outside the country.

In summary, the oil and gas service sector contributes $65 billion to the Canadian economy, employs 800,000 workers, and pays $9 billion a year in government income and corporate taxes. In one form or another this sector can be found in virtually every province in Canada, and trade between the provinces makes this industry what it is today.

Thank you very much.

The Chair: Thank you very much, Mr. Howard.

We go now directly to questions, starting with Mr. Tonks, and if there's time left, Mr. Andrews.

Go ahead, please, Mr. Tonks.

Mr. Alan Tonks (York South—Weston, Lib.): Thank you very much, Mr. Chairman.

And thank you to Professor Coulombe and Peter Howard for being with us.

It's an interesting juxtaposing of theory and practice, if you will. I'd like to follow up on some of the questions that have been asked by Mr. Cullen.

To Professor Coulombe, with respect to the Dutch disease, how can we compare 1960, and the rather insulated regional impacts of the North Sea resources opening, to 2010, when the movement of capital and investment is critical to multipliers, which you have just heard from Mr. Howard are absolutely critical to the future of all Canadians?

Pursuant to your thesis of the Dutch disease, how can we in a global economy allay the impacts you have outlined, which I acknowledge happened in the sixties? How can we apply those experiences and lessons to 2010 with respect to an energy strategy that is going to do the kinds of things we all want to do in terms of value added throughout the country, not just in regional pockets, as you have quite rightly pointed out?

The Chair: Go ahead, Professor.

Dr. Serge Coulombe: The big difference, as you pointed out, between 1960 and today is that we have much more movement of capital today than we had in the 1960s. But capital does not play an important role in the Dutch disease mechanism. The mechanism was operating probably in the 16th century, 50 years ago, and it is operating now and it will in the future.

Simply, when you have a very rich resource you are exploiting, that will increase the real exchange rate of the economy. It will make the other sectors of the economy that export on the international scene.... I am not talking about the same sector the other person was talking about; I'm talking about the exporter of goods and services in the rest of the world. With whatever we have—mobility of capital, labour mobility—the mechanism is operating.

I am not saying this is bad for Canada; I am saying this is bad for the sector of the economy that exports manufacturing goods to the rest of the world.

● (1220)

Mr. Alan Tonks: Okay, thank you for that clarification.

Mr. Howard, when you talked about the impacts, economic value added, in a very wide spectrum of 67% in Alberta, and then it came down to 12% in Ontario, those statistics seem to give validity to the theory that the professor has put forward, that the value added is inequitably distributed across the country.

I have an observation from the Alberta's Industrial Heartland Association. I don't know whether you heard their presentation, but they were prior to you. They indicated it was absolutely critical to achieve the high value added: the jobs, the equity in terms of a national job strategy, if you will, to process and upgrade more bitumen, and to do more refining in Canada, as opposed to our dependence on piping across the United States and so on and so forth.

Could you respond to that? First, do you think there is an ongoing challenge that value added will not be equitably distributed as a result of the oil and gas sector? Second, do you think commensurate with that we should be upgrading more of our bitumen, and refining, I guess in order to utilize the spinoffs? Do you think that should be part of a national strategy?

The Chair: Mr. Howard, go ahead.

Mr. Peter Howard: If you were to look at today's current differential between WTI pricing and Edmonton pricing as far as bitumen is concerned, the suggestion would be that upgrading does not make a lot of sense, primarily because there isn't enough value in that basis differential to support it.

However, historically, the basis has been in the $15 to $20 per barrel range. That by itself, if that were to be the case in the future, would support upgrading here in Alberta and sending refined petroleum products to the United States.

That definitely would add to a national strategy of employment. That is not just employment in Alberta. Since upgraders and refineries utilize components that are sourced from Ontario and Quebec, that would definitely assist in those businesses. Second, there are additional structural products; namely, steel, structural beams and stuff like that, which would have indirect and induced employment in Ontario and Quebec.

The thing I would be concerned about is the northern tier refiners in the United States. If they were not receiving Canadian bitumen, that means they would be looking for feedstocks out of the Gulf of Mexico, which then would put refined petroleum products on a very head-to-head competition in the northern tier states, and I'm not sure of the outcome of that.

The Chair: You have 15 seconds left.

Mr. Alan Tonks: No, I'm fine.

Mr. Scott Andrews (Avalon, Lib.): If there are 15 seconds, I have one quick comment.

Dr. Coulombe, I'm glad you identified that Newfoundlanders have the most productivity. We're doing our best to make sure many of them go to work in Alberta to help the productivity in Alberta as well.

The Chair: We do appreciate that.

Monsieur Pomerleau.

[*Translation*]

Mr. Roger Pomerleau (Drummond, BQ): Thank you, Mr. Chair.

Thank you, Mr. Coulombe. I very much enjoyed your presentation. I found it extremely scientific.

First of all, I would like to know if it was in the context of your study that you found that 275,000 jobs had been lost in the manufacturing sector. Since manufacturing jobs are mainly in Ontario and Quebec, I imagine that is where most of them were lost.

● (1225)

Dr. Serge Coulombe: Approximately 90% of the jobs lost during that period were lost in Ontario and Quebec, with about two-thirds of them lost in Ontario and one-third in Quebec.

Mr. Roger Pomerleau: So, when people tell us that the oil sector pays royalties, it also costs us jobs. People often use that argument. People say lots of money must be invested in oil and gas because it pays for equalization. It has made us poor, because the gas is there and it costs us jobs.

Dr. Serge Coulombe: That's right. Equalization has redistributed part of the surplus revenue the federal government has brought in with the oil and gas boom, but there have also been some job losses in the manufacturing sector mainly in Ontario and Quebec, of course.

Mr. Roger Pomerleau: I am not an economist. Can you explain to me more specifically how large-scale primary sector development affects rising exchange rates? Can you explain to me how that happens?

Dr. Serge Coulombe: Yes. Canada exports more natural resources that it imports. Therefore, when there is a natural resource boom or an increase in the price of natural resources, this increases the value of our exports, which automatically increases the value of the Canadian dollar.

Note that this increase in the value of the Canadian dollar helps stabilize the resources sector, because when the price of oil goes up from $60 to $80 and the Canadian dollar increases at the same time, oil revenues—in Canadian dollars in Canada—are stabilized. Thus, fluctuations in the Canadian dollar stabilize the natural resources sector, because they follow the cost of raw materials, but they destabilize the manufacturing sector, which exports products.

Mr. Roger Pomerleau: And that needs a lower price.

Dr. Serge Coulombe: That needs a much more stable currency.

Mr. Roger Pomerleau: Exactly.

Since I have heard this argument and I have an economist before me, I have another question. Because of the debate surrounding shale gas, all kinds of arguments have been invoked. One argument I've heard against the use of shale gas is that no one has looked at the impact it will have on electricity sales. If gas prices increase or push up the value of the currency, is there any chance we will have a hard time selling electricity and therefore do we risk losing on one side what some people claim we are gaining on the other side?

Dr. Serge Coulombe: I do not think that shale gas production in Canada will lead to an increase in the value of the Canadian dollar the same way that oil production has. The reason for that is because the profit, the surplus over the price on production costs, is much lower in the case of shale gas. That activity is going to have a relatively minimal impact on the Canadian dollar. It will likely be comparable to softwood lumber or other primary resource production. Primary resource production is more likely to affect the value of our currency when the sale price and the production costs vary significantly. Such resources include oil, potash and those kinds of activities.

Mr. Roger Pomerleau: Okay.

My next question has to do with Mr. Krugman's statement: “The worry seems to be that when the natural resources run out, the lost manufacturing sectors will not come back.”

Although I am not an economist, I have often used this argument. Perhaps it is a little off track, but it seems to me that if we abandon our manufacturing industry for any reason at all, every year there are 600,000 Chinese engineering graduates who are ready to take them away from us, and the industry will never come back. That is my impression. And India will soon be doing the same thing. If we let the manufacturing sector die too quickly, I'm afraid it will never come back.

Is that what Mr. Krugman means?

● (1230)

Dr. Serge Coulombe: Yes, exactly. What Mr. Krugman means is that in order to have a manufacturing sector in any country, a number of fixed costs must already be covered. Research and development need to be done and an international market needs to be developed. Once that sector shrinks or contracts because the national currency has appreciated, it is possible that the sector will be gone for good. There have been many examples throughout history when it became clear that a resources boom destroyed productivity and competitiveness in many other sectors. As a result, it is extremely difficult to have a competitive manufacturing base in an economy that has a strong manufacturing sector. This has been observed all over the world. Countries that have a strong manufacturing base are not generally major exporters of raw materials.

Mr. Roger Pomerleau: Exactly.

The Chair: Thank you, Mr. Pomerleau.

[*English*]

Mr. Cullen, for up to seven minutes.

Mr. Nathan Cullen: Thank you, gentlemen, for your comments.

A brief question to you, Professor Coulombe. In global terms, do other economists and other countries regard the Canadian dollar as a petrodollar now? Is the relationship between the price of oil and gas directly correlated to what happens to our dollar, or is it too weak a correlation to say it is a true petrodollar?

Dr. Serge Coulombe: No, there is a very strong correlation. I have myself estimated that around 50% of the evolution of the Canadian dollar is driven by the evolution of the price of natural resources, mainly oil and other energy sources. It is a well-accepted fact. It is even accepted by the Bank of Canada.

Mr. Nathan Cullen: We've seen this from the IMF, *The Economist*, and others. Almost out of hand now they say “The Canadian dollar did this today, and that is because energy prices also did this.”

The question we're trying to understand in the so-called Dutch disease is how much effect does that directly have on the manufacturing strength in Canada? Some folks have said that this only has a regional impact, that if there's a boom in the oil and gas sector, if the tar sands create another 10,000 jobs, then it only affects Ontario and Quebec. Is there also an effect within Alberta and B.C., or does it break out regionally that way?

Dr. Serge Coulombe: The Canadian manufacturing sector that is exporting to the rest of the world is very concentrated in the Quebec-Windsor corridor. The rest of the manufacturing sector in Canada is intimately related to the natural resource industry. Consequently, it is supplying inputs to the natural resource industry and will generally benefit from an oil boom.

However, the province that will be the least able to export manufacturing goods to the rest of the world will be Alberta. It is extremely hard to export goods that are not related to the oil and gas sector in Alberta because the cost of production there is so high.

Mr. Nathan Cullen: I think you were here during our previous testimony from Alberta's Industrial Heartland Association. They brought forward figures—and this is for both our witnesses—that showed that for the GDP derived from two million barrels per day, $25 billion of value would come from the actual mining of raw bitumen, a further $50 billion would be added if you upgraded to synthetic crude, and a further $75 billion would be added to the GDP economy if you advanced up the supply chain to petrochemicals.

It seems to me that whether we're talking about the Alberta region's economy or the national economy, if a government were interested in the Canadian economy, they would encourage as much value-added production as possible.

We also heard that the Canadian government actually funded studies to arrive at these figures and to understand the value to Canada's economy. What confuses me is that the Canadian and Alberta governments are both promoting the export of raw materials, thereby forgoing the lion's share of the potential economic benefit in jobs.

Mr. Howard, you folks do research into energy. Is it sound energy security policy for Canada to be pursuing more raw bitumen exports?

● (1235)

Mr. Peter Howard: I think what you may be looking at is some of the facts of life, I suppose you could say.

The biggest problem with upgrading and refining in Alberta is that the refining business in North America has very thin margins. It's difficult to get corporate interests to step forward and actually construct these types of capital-intensive facilities. The future may dictate or result in the development of further upgrading and further refining to RPPs, but unfortunately the economics of today do not support that idea.

Mr. Nathan Cullen: You used the term “facts of life”. What confuses me is that when this industry was first created and subsidized by both levels of government, the facts of life were that there was no money to be made in mining bitumen because it was too expensive to do, but the government set up a series of policies for tax incentives and research and development to enable the resource to be developed.

We now hear those inside the industry saying that we need a national energy security strategy because absent of one, we're losing this endowment and we're not maximizing the benefit, as the group from Alberta said. Now we're told that it's just the market.

It wasn't the market when we created this industry in the first place. We enhanced the market, we directed the market, and we gave subsidies to develop this product. Now we're exporting it at the lowest point of profit return for industry in Canada and Alberta. I don't understand why we suddenly say it's laissez-faire time now. We didn't say laissez-faire before: we said we'd like to develop this industry, which we did. That was taxpayer money from across the country.

We're now saying we're going to forgo the vast majority of the profit simply because there's a capacity available in the southern United States and now in China. How is it benefiting the Canadian economy to export raw bitumen to China, contrary to government policy?

The Chair: Mr. Howard, go ahead.

Mr. Peter Howard: The original research that went into the oil sands was to develop the production of bitumen. The secondary development, which came about as a result of declining conventional oil, was the upgrading of bitumen to synthetic crude oil to promote the transportation of that product.

I don't think the idea of further upgrading of bitumen to refined petroleum products in Alberta has been totally discounted. All I said was that the economics of today probably don't support it, but these types of projects are 30- and 40-year manufacturing systems; eventually the economics will change, and that will probably change as the price of crude moves up. The business sector will come to the conclusion that investing in this industry will in fact make sense.

The Chair: Thank you, Mr. Howard.

Thank you, Mr. Cullen.

We go now to Mr. Allen for up to seven minutes.

Mr. Mike Allen (Tobique—Mactaquac, CPC): Thank you, Mr. Chair.

Before I start, I want to make sure I heard this right. I don't think Mr. Cullen was saying that he wants us to subsidize oil to build new refineries, but I might have heard that. I don't know that that's what his leader necessarily supports. Anyway, I just thought I would throw that in.

Professor, I have just a couple questions with respect to a study that was released on October 7, 2010. It was done by the Quebec Oil and Gas Association as well as SECOR Consulting. It talked about the potential economic benefits to the province of Quebec, for example, from the development of the shale gas. Are you familiar with that study at all?

Dr. Serge Coulombe: Yes.

Mr. Mike Allen: Okay. It talked about the benefits to Quebec. It said if 1,000 wells were in production at 150 sites, the Government of Quebec could receive $150 million in royalties annually. Under a second scenario with 7,000 wells, that would translate to annual royalties of slightly above $1 billion. The study of the benefits does not include expenses incurred for transportation, distribution of natural gas extracted, or corporate taxes paid by the industries and their suppliers, nor does it integrate the dynamic or structural effects for the economy of Quebec.

With regard to your comment on your C.D. Howe background that you're preparing, following Hibernia, Terra Nova, and White Rose, Newfoundland and Labrador saw the largest improvement in productivity. Doesn't that make the case, when you look at those numbers and this study, that Quebec should be looking at fostering this development of shale gas?

● (1240)

Dr. Serge Coulombe: I am not a specialist in the production of gas in Quebec or anywhere in Canada, but I will try to answer the question the best I can.

Regarding this new source of natural gas, I think it is of relatively the same nature as what is going on in Alberta right now with the oil sands with regard to its potential effect on the rest of the economy in terms of stimulating productivity growth, simply because most of the expenditures are not offshore, as they are in Newfoundland. It is underground, and it is spread out in various geographical areas of the economy, and it would also be using inputs that are produced by the economy.

I expect this new source of gas to stimulate productivity at the regional level in Quebec and in Canada. However, the effect overall is not of the same magnitude as what is occurring with the oil sands exploitation in Alberta simply because the rent is not there.

The production of this new source of gas has already pushed the price of gas to a relatively low level, and I expect that it will remain low for a good period of time, as long as we don't know exactly which amount of gas can be produced with this new source. I expect some sort of a spillover at the regional level, but not of the same magnitude, really smaller than what we have in Alberta.

Mr. Mike Allen: I mean, $1 billion economically to....

Dr. Serge Coulombe: Absolutely. There could be various spillovers.

Mr. Mike Allen: Okay.

Mr. Howard, looking back, our previous witness, Mr. Ferguson, was talking about some of the development in B.C. and some of the huge volumes of natural gas that are out there. He talked about one reserve having 500 trillion cubic feet. The Business Council of New York had some information on the Marcellus and Utica shales, which are probably two or three times bigger than that actual reserve. They're talking about an economic uplift for the State of New York, somewhere in the area of $92 billion to $123 billion a year from that.

I'm looking at your numbers, where you talk about the oil and gas sector and the service sector. In the analysis you do, do you have any uplift numbers based on how many trillion cubic feet...? What does that mean for the economy and GDP, whether it be for a province or for Canada as a whole?

Mr. Peter Howard: What I can do is perhaps give you some current numbers.

If you look at the entire oil and gas industry in Canada—this is everything from the producers through to the service through to the pipeliners—that contribution is in the order of $165 billion, or 12.1% of Canada's GDP, and that was in 2006. In 2006 in Canada we generated or produced something approaching 17 billion cubic feet a day, and something approaching 1.75 million barrels a day of crude.

I'm not sure I can relate that to an uplift number. Actually I think that's all I can say about that. I'm not sure I can answer that one.

Mr. Mike Allen: Just following on, but looking at the expansion now with the number of new natural gas reserves that we have, if it was 17 billion cubic feet in 2006, we're talking about tremendous reserves that we could be bringing online.

Of the $165 billion, do you know what share is natural gas? And assuming that we have development of two to three times in the next few years, what would the impact of that development be?

● (1245)

Mr. Peter Howard: In 2006 the share of natural gas probably would be something around three-quarters of that number.

Let me just throw out one comment.

In the old days when one talked about reserves, reserves were very important because they back-stopped contracts. In today's oil and gas industry, it's not reserves that are the critical issue, it's the number of holes in the ground or the number of wells that you can complete. So having 4,000, or 14,000 trillion cubic feet is a nice number, but what we need to do is drill something in.... Our forecast is now suggesting we will drill 5,000 natural gas wells per year in the coming years. We need to double that in order to regrow our market share in natural gas, and that development of wells is primarily focused on northeast B.C., and in Alberta.

Mr. Mike Allen: That's helpful to link the two articles, so thank you.

The Chair: Thank you, Mr. Allen.

And thank you very much to both panel members, to Professor Coulombe and to Mr. Howard. Thank you very much. Your input has been very helpful indeed to the committee, and I thank you very much for taking the time to come here today.

I will suspend the meeting. We'll go in camera to discuss future business for about 15 minutes.

The meeting is suspended.

[*Proceedings continue in camera*]

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