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Chair

Mr. Leon Benoit

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• (0845)

[English]

The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)): Good morning, everyone.

Just before we get to the main business of the committee today, we do have a little bit of business to take care of. Because Peter Julian is no longer on the committee, we have a new critic, a new member from the New Democratic Party, Chris Charlton, but she isn't here. So we will very quickly deal with the issue of electing a new vice-chair from the official opposition.

Ms. Moore, I understand you have a nomination to make.

[Translation]

Ms. Christine Moore (Abitibi—Témiscamingue, NDP): I would like to nominate Chris Charlton as vice-chair.

[English]

The Chair: Thank you.

You've heard the nomination. Is it agreed that Chris Charlton become the new official opposition vice-chair of this committee?

(Motion agreed to)

The Chair: You can inform Ms. Charlton. We'll see her next week, I'm sure.

Yes, Mr. Calkins.

Mr. Blaine Calkins (Wetaskiwin, CPC): I have no qualms with Ms. Charlton being the vice-chair of the committee. My only question, through you, Chair, to the clerk, is whether the appropriate documents have been filed in the House of Commons in order to make Ms. Charlton a regular member of this committee.

The Clerk of the Committee (Mr. Rémi Bourgault): It was done yesterday afternoon.

The Chair: So it is in order, and it is finished.

Let's get on with the business of the committee. Today we are continuing our study of the cross-country benefits of the oil and gas sectors of the Canadian economy.

We have with us, from Analytica Advisors Incorporated, Céline Bak, president and co-founder of the Canadian Clean Technology Coalition. Welcome to you again. You've been before our committee before.

From the City of Saint John we have Mel Norton, mayor. Welcome to you, sir. It's good to have you here today.

From Enterprise Saint John we have William Teed, chair of the board of directors. Welcome to you, sir.

Thank you all for being here today.

By video conference today, from St. John's, Newfoundland and Labrador, we have, from Virtual Marine Technology Incorporated, Anthony Patterson, president and chief executive officer. Welcome to you today, sir, and thank you for being with us by video conference.

Also by video conference, from Fredericton, New Brunswick, from Maritimes Energy Association we have Barbara Pike, chief executive officer. Welcome to you, and thank you very much for being here today, Ms. Pike.

So those are the witnesses we'll hear from today. We'll start the presentations in the order the witnesses are listed on the agenda. We'll start, for up to seven minutes, with Céline Bak, president of Analytica Advisors Incorporated.

Go ahead with your presentation, please.

When everyone's given their presentations, we'll go to questions and comments from members.

[Translation]

Ms. Céline Bak (President, Co-Founder, Canadian Clean Technology Coalition, Analytica Advisors Inc.): Good morning, ladies and gentlemen.

[English]

Thank you for this invitation to appear before the Standing Committee on Natural Resources to address the important issue of the cross-Canada benefits of the development of the oil and gas industry on the Canadian economy.

We have circulated a presentation, which is available in both French and English. On page 2, we have summarized the exports of non-natural resources versus resource-related exports for Canada as well as the current account balance for Canada—just as a reference for the context of how important the development of our export capacity, both in resources and in non-resource-related areas, is.

On page 3, you'll notice that we've presented a framework that describes the different roles of players in this industry, from asset managers to technology integrators and solution providers. Today my presentation will be focused on solution providers, but there will be references to the obviously very important role that technology integrators and asset managers play in this industry.

I'd also suggest that there are some other important roles the committee may wish to consider over time in its deliberations. Those are found on page 4. You'll notice that in addition to these three main roles, there are also different funders that have important roles, including public sector funders like those you're very familiar with—Sustainable Development Technology Canada, and the Climate Change and Emissions Management Corporation of Alberta—but there are also export opportunities for infrastructure that are financed by private sector institutions, such as the World Bank. You'll notice that we've included the World Bank's logo.

I will not describe what's on page 5, but it is for your reference. You may recall past presentations on the broader clean technology industry. On page 5 we've included all of the subsectors we consider to be part of that industry. Three of those sectors are the focus of today's remarks: the extractive processes and products sector, the water and waste water sector, and the power generation sector. Within extractive processes, carbon sequestration, energy efficiency, soil remediation, tailings, and water treatment for extractive industries are all relevant.

There are other companies working in areas to do with desalination and water infrastructure that are now moving into the field of pipelines, for example. To the extent that, for example, in Alberta, large emitters are engaging in the development of renewable energy projects, power generation companies and those that provide technologies for that are also relevant to your work.

On page 7, I would like to draw your attention to the fact that within the clean technology industry, which is made up of about 700 companies, all of which have proprietary technology and three-quarters of which are exporting, there are some impressive economic credentials. These are impacted by the development of the oil and gas industry in Canada.

Current direct employment by these 700 firms is 41,100 employees. The rate of growth of employment in that industry is significantly higher than that of the economy, generally, at 6%. I think it's important to note that almost one-fifth of those employees are age 30 or younger. You will note, though, that the top skills gaps in this field are perhaps not what you're used to seeing. They include sales, capital raising, and international business development. These are companies that, while serving domestic interests and markets in the oil and gas industry, are very much focused on exporting in international markets.

I'll touch briefly on the credentials that are listed on pages 8 and 9. The oil and gas industry will benefit from the \$1 billion annually that these relatively small companies invest in R and D. Three-quarters of the \$1 billion is invested by companies that have less than \$50 million a year in revenue. I think that's important to bear in mind. These relatively small companies are generating 52% of their revenues from exports. Twenty-two per cent of overall industry revenues are from non-U.S. markets, which is a very surprising finding.

I think one of the most important things for you to bear in mind for your committee's work is on page 10. These relatively small companies are not looking to be integrated in global value chains or to deal indirectly with very large companies via partners.

● (0850)

But if you look at the pie chart on page 10 to your left in the white box, you'll see that these companies that have modest revenues, in the \$10 million to \$25 million range, are very serious investors in R and D; 71% of them expect to do business directly with those asset managers that we mentioned earlier. That changes when the companies get a bit larger, when they reach from \$25 million to \$100 million in annual revenue. At that point they will more naturally do business with the systems integrators that were listed on the first page of the presentation.

These are important insights for your work because it is quite difficult for some of our Canadian companies to do business with the large oil and gas companies when they come from an R and D innovation-based perspective.

I'll touch very briefly on the export potential of these companies serving our domestic market. The smaller companies will have greater exports to the U.S. but still significant exports to Europe. But as the companies grow larger, you can expect them to have a very important focus on non-U.S. export markets, which is obviously of great significance because of the growth potential in those areas.

I'll conclude by suggesting that you take a moment to refer to pages 12, 13, and 14 of the presentation. These are the logos of some sample companies that are here to serve the Canadian oil and gas industry in various capacities. On page 12 you have companies that are publicly listed. On page 13 you have companies that are not publicly listed but are relatively mature and have large-scale demonstrations and credentials, some of them around the world.

As an example, I'll draw your attention to Eco-Tec as a company that has significant deployments in the Middle East, but has yet to have significant deployments in Alberta. Then on the final page, page 14, there are some newer companies. A number of these have been part of the Climate Change and Emissions Management Corporation investment portfolio. For example, there's Inventys, CO₂ Solutions, and Carbon Engineering. These are emerging companies that will benefit particularly from the investments being made in reducing the carbon intensity of the Canadian oil and gas industry.

With that, I thank you very much for your attention and I'm very pleased to take any of your questions.

● (0855)

The Chair: Thank you very much for your presentation, Ms. Bak, and for keeping it on time. That is very much appreciated.

We go now to our second witness today, from the City of Saint John, Mel Norton, mayor. Welcome to you, Mr. Norton. Thank you for being here today. I look forward to your presentation.

Mr. Mel Norton (Mayor, City of Saint John): Thank you, Mr. Chair. Thank you very much to the members of the Standing Committee on Natural Resources and panellists. The City of Saint John is very grateful for this opportunity today. These remarks will include four points: the Saint John context, the energy sector broadly, the energy east pipeline, and natural gas.

Saint John was incorporated in 1785 via royal charter. It was the first city in our country to be incorporated, and from its founding, industry has formed the economic backbone of Saint John beginning with the timber trade and shipbuilding.

Following World War II, a variety of large-scale industrial enterprises emerged and in 1960 a new industry came to our city, oil refining. The refinery has become the largest in Canada. It has formed the basis for the city's reputation as an energy hub. The energy sector is key to growing the economy in Saint John. Our premier, David Alward, has called Saint John the economic turbine of the province.

As to the energy sector broadly, the energy sector as a whole has a tremendous impact on the Saint John economy. For the last several decades, the City of Saint John has played an increasingly important role in regional, North American, and international energy markets. Saint John is a proud home to Canada's largest oil refinery, the first deepwater crude terminal in the western hemisphere, Canada's first and only liquefied natural gas terminal, and one of the world's first refurbished CANDU 6 nuclear reactors.

The region serves as an increasingly important and diverse energy gateway including links to eastern Canada, New England, the Atlantic basin, and beyond. Our city supported in excess of \$10 billion in energy exports in 2012, accounting for approximately two-thirds of the province of New Brunswick's entire export portfolio. The city's commitment to energy remains strong and was recently reinforced through the release of our region's renewed economic development strategy, True Growth 2.0.

As for the energy east pipeline, the City of Saint John is working closely with private sector partners, the City of Calgary, as well as federal and provincial counterparts to support the development of the energy east pipeline and Irving Oil and TransCanada's joint venture to develop and construct a new Canaport energy east marine terminal at the Irving Canaport deepwater marine facility in Saint John.

As many of the members of this panel will know, the energy east pipeline is expected to carry up to 1.1 million barrels of crude oil per day through 4,500 kilometres of pipeline from Alberta and Saskatchewan refineries to eastern Canada and a state-of-the-art marine export terminal in Saint John. The energy east project is estimated to cost \$12 billion to complete and will generate over \$25 billion in GDP for the Canadian economy over its 40-year operational life. Additional benefits may accrue to the Saint John region through a multibillion-dollar investment in value-added bitumen upgrading and refining investments once the pipeline is completed.

The Irving oil refinery in Saint John is a strong competitor in regional markets. It has a capacity to produce 300,000 barrels of finished petroleum products per day, accounting for 64% of Canada's refined petroleum exports to the United States. Our region's traditional focus on energy is being expanded to capitalize on emerging energy sources including natural gas, clean energy technologies, energy efficiency, and energy literacy and education.

The sector has created many innovative spinoffs including the University of New Brunswick's new energy certificate program offered by Saint John College, and industry partnerships with the

Saint John fire department that allow the department to provide expertise and training to enable them to better respond to incidents across the city and to generate revenue through training programs.

The Saint John region remains a focal point within the international northeast region for value-added hydrocarbon processing, electricity generation, head office and back office-related operations, energy transmission, and energy innovation efficiency and conservation.

We are New Brunswick's only city with a vibrant industrial and port capacity combined with a diverse and robust energy knowledge sector. We have proven that we have the social licence for major energy projects, which provides an additional and powerful competitive advantage.

As for natural gas, New Brunswick's existing natural gas reserves are estimated to be in the range of 80 trillion cubic feet, based on current exploration and development activities in southern New Brunswick. These reserves are recognized as economically significant from a North American perspective and may become even more significant based on the outcome of ongoing shale gas exploration.

• (0900)

The development of these resources has also provided the potential to support new value-added energy investments in Saint John, including the potential conversion of Canaport LNG to an export terminal, and investment in new petrochemical and fertilizer production operations.

Recently Saint John Common Council unanimously endorsed a resolution supporting responsible development of natural gas exploration, and it is taking a proactive approach to support the development of New Brunswick's significant natural gas resources and energy assets.

Saint John council has submitted a letter of intent expressing the city's interest in pursuing membership in the World Energy Cities Partnership. The economic health of our region is a top priority for Saint John Common Council. The energy sector, and particularly oil and gas, is vital to Saint John. We have benefited from it greatly, and we fully support its further development. There is much appreciation for this committee's important conversation on the economic future of not only the country but particularly Saint John, in this case.

Thank you, Mr. Chairman.

The Chair: Thank you very much, Your Worship, for being here at our committee today and for your presentation. I'm sure you will have some questions and comments directed to you later.

We will continue now, staying in Saint John, with William Teed, chair of the board of directors of Enterprise Saint John.

Welcome, sir, and thank you very much for taking time out of your busy schedule to be here. Go ahead with your presentation, please. You have up to seven minutes.

Mr. William Teed (Chair of the Board of Directors, Enterprise Saint John): Thank you, Mr. Chairman and members of the committee, for allowing us to appear and to talk about the benefits of developing our nation's oil and gas sector, particularly the impact that such development will have on the economic well-being of my community of Saint John, New Brunswick.

I am the chair of Enterprise Saint John. Enterprise Saint John is the lead economic development agency for the greater Saint John regional community. We were established by the City of Saint John and surrounding communities. We're supported by the private sector also.

Our goals are very specific. The number one goal is job creation. We know that to achieve these goals we have to work with our network of other economic development agencies, government departments at all levels, and the private sector, but we are focused. Job creation is our number one objective.

We focus on six priority sectors in the economy, but the energy sector is one of the foremost. We view our location on the Bay of Fundy and our ice-free deepwater port as key assets that provide year-round connections to international markets.

In terms of value-added manufacturing and processing, Saint John is arguably the industrial centre of the Maritimes. We are home to Canada's largest oil refinery, as mentioned by the mayor; Canada's first and only liquefied natural gas storage and regasification terminal; three of New Brunswick's largest forest products mills; and two potash mines, which are close by. The refinery imports crude oil from around the world and western Canada. It exports approximately 75% of its output.

All of this industrial activity requires energy—lots of it. The greater Saint John area is home to three of NB Power's electrical generation stations, including the Point Lepreau nuclear generation station. We have two privately owned gas-fired merchant plants. We have gas lines that transport the gas from the Sable offshore energy project, the Deep Panuke project, and a small producing field that exists in southern New Brunswick operated by Corridor Resources. These industrial and energy installations have stimulated the development of an extensive supply chain to build, maintain, and service them.

The recent downturn in our economy has caused the supply chain to look elsewhere. We have been lending too many of our skilled tradesmen to Alberta and western Canada in recent times, and many of our professional services have had to look elsewhere also to survive. The Saint John industrial complex, together with the energy complex and supply chain, forms a critical base for the economy of New Brunswick. Saint John draws raw materials from our mines, our forests, our energy sector from around the world. We add significant value to these raw materials in some of the most complex, modern, and efficient manufactories in the country, and we ship finished products to domestic and foreign markets.

What is the impact of the energy east pipeline project? This project represents a real game-changer for New Brunswick, particularly the greater Saint John area, where the pipeline ends and where a bulk storage and marine terminal facility will be built and operated. There will be jobs—let there be no doubt—created in

New Brunswick, and in Saint John, as a result of this project. It is anticipated that there will be approximately 325 direct jobs, 400 indirect jobs, and 125 induced jobs during the development phase. During operations they anticipate 120 direct jobs, 200 indirect jobs, and 60 induced jobs.

In terms of provincial revenues, we have a terrible debt situation. This project during the development and construction phase will cause approximately \$265 million in additional revenue to the province, and \$425 million during operational phase over 40 years.

With a stable, secure, long-term supply of crude oil from western Canada, we believe our oil refinery will be in a better position to consider expansion of its services, its production, and what's going on at that refinery. That risk factor being removed is huge. If we have, as we hope, these additional investments, that will have enormous positive implications for the further development of our industrial supply chain, our transportation infrastructure, and our next generation of skilled workers.

With regard to the implications of natural gas exploration and development, this also is a game-changer for Saint John and the province of New Brunswick. In approximately the last 15 years since the development of the Sable offshore energy project, we've seen an area of our country that never used gas now using gas at the domestic output level. There are days in the winter months when not one molecule of gas is sent from Canada to the U.S.

● (0905)

Our industrial complex, as well as our commercial and residential markets, have quickly become increasingly dependent on natural gas as a clean, efficient fuel source. We know that Sable is nearing the end of its useful life. Deep Panuke is a relatively small resource. LNG is increasingly used to serve high-priced markets in Europe and Asia. The northeastern part of North America still suffers from bottlenecks, huge bottlenecks, in the pipeline transportation and distribution system that has led to short supply and painful price spikes in times of peak demand: \$9 a gigajoule to \$29 a gigajoule, comparing one year over the next.

If New Brunswick is able to find and develop a stable, secure, and long-term supply of competitively priced natural gas from its deep shale formations, the results can be nothing but positive. It will de-risk a potentially critical input constraint. It will require the development of an extensive supply chain to serve the extraction and processing industry that's related to natural gas.

There will be investment and there will be job creation. They say per well, you will have approximately \$13 million of direct investment, and you'll have between 40 to 50 individuals, whether direct or indirect, that are related with new employment for each well. Most importantly, we believe that this will open up the opportunity for further development of additional value-added manufacturing and indigenous natural resource, petroleum from western Canada, and the potash and forest resources will all be feedstocks for the next generation of industrial development in our city.

In summary, Mr. Chairman, members, the development of oil and natural gas are part of the bedrock on which the future prosperity of Saint John is founded. We are a value-adding city, an exporting city, and the industrial heartland of our province and our region. Oil and natural gas development are critically important factors to our present economy and to our future capability to attract further investment and create jobs. We want to become a “have” area, not a have-not, and we firmly believe that these projects will allow us to do that.

Thank you very much.

• (0910)

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

Members of the committee would notice that the focus of today's meeting is on Atlantic Canada, and we move from Saint John to St. John's now.

By video conference from St. John's, Newfoundland and Labrador, we go to Mr. Anthony Patterson, president and chief executive officer of Virtual Marine Technology Inc.

Go ahead, please, sir, with your presentation up to seven minutes. Thank you again for being with us here today.

Mr. Anthony Patterson (President and Chief Executive Officer, Virtual Marine Technology Inc.): Thank you, Mr. Chair. This is a great honour and pleasure to be before the committee, even virtually.

I'd like to talk about four things. One is just to touch on the macroeconomic position of oil and gas within Newfoundland. Then I'd like to jump into the perspective of one of the high-tech companies that's emerging out of our milieu, and how we have penetrated export markets and the crossover into adjacent industries. As I go along, I will be pointing out how our experience mirrors that of other similar high-tech companies that are emerging out of an ocean technology cluster in St. John's.

First of all, to be in Newfoundland right now is a very exciting time. Our GDP growth rate is higher than India's, lower than China's. Our unemployment rate is the lowest since 1973, and that is largely attributed to the growth of the oil and gas industry in our province.

To put it in context, the oil and gas fields off the Grand Banks are a similar size to the North Sea. So if you can combine Norway and the U.K., that is the type of potential that we have in our offshore. Unlike the North Sea, our offshore is virtually unexplored: compare our 200 wells with 5,300 wells in their jurisdiction.

The big barrier to growth in our area, I believe, is the harsh environment that we have to deal with, in particular, ice, remote distances, and high sea states. That demands that our offshore needs to be grown on the back of innovation and high technology, much of which is being developed in Newfoundland by companies like ours.

To give an example, through the Atlantic accord, there is a requirement for research and development investments in Newfoundland. As of 2011, with the figures provided by the oil industry itself, there's been roughly \$200 million of investment by the oil industry in high tech in Newfoundland, mostly concentrated on

Arctic operations and improving health, safety, and environmental performance for the industry.

When we look at Virtual Marine Technology, our company emerged from solving an offshore oil and gas problem. What we were asked to do, and eventually were able to do, was to train offshore workers how to launch lifeboats from platforms in hurricanes. That is something we managed to do. The initial investment for that came from the oil industry itself, and was levered by a number of co-investments by federal and provincial innovation funds. The program started in 2003, and by 2009, the first simulator was deployed for training. As of today, we have thirteen systems in three countries.

When we look at the export—very much as our first intervenor Céline Bak had said—our economy and our company has to be based on export. The Newfoundland offshore, at this time, is too small to sustain a high-tech company like ours and like many of our peers. Of course, we have eyed the export potential in other offshore jurisdictions. In this we are very fortunate, not only when we solve a problem for a local oil and gas player like Exxon Mobil or Husky, but also when there are very many Newfoundlanders who are participating in the global offshore oil and gas industry, mainly having been trained at the Marine Institute in St. John's. Through those connections and networks, companies like ours are able to get introductions with the main players around the world.

Our first export sale was in Mexico, in 2010, after an offshore incident they had that mirrored the *Ocean Ranger*. We have since targeted the Gulf of Mexico and the North Sea. We expect that our first exports into the Gulf of Mexico will occur this year, and into the North Sea next year.

As previously mentioned, many of the customers for the ocean technology companies in Newfoundland are the oil and gas majors themselves. The way that things are structured in the oil industry, we do not need to go through tiers as you would see in the defence industry in order to sell into the oil sector.

• (0915)

The final thing I would like to touch on is crossover into defence. Newfoundland and Labrador is not really a host to a very strong or large defence industry. However, our high-tech companies have been solving problems for the oil industry and many of these technologies have crossover applications into defence.

As a typical Newfoundland company like ours breaks out of serving the local oil industry and goes into a more regional market, we jump over into defence. An example of that would be our participation in the Halifax-class modernization program, which ultimately led to us being put into the supply chain of a major defence contractor and being brought into the German F125 frigate program as well.

Another interesting piece is that the Irish are spearheading a research program within Europe to help first responders operate in arctic conditions. Through our work with the oil industry, we've developed ice navigation modules for lifeboats. That is now being exported into Europe through Ireland—of all places—to be consumed in Norway and Sweden.

My final comment, though, I would say, is that there is a marked difference between defence contracting and oil and gas contracting. Companies like ours find it much more efficient and much easier to deal with oil majors in their procurement processes rather than with governments through their defence contracting processes. That's why you will probably see a lot of high-tech companies initially focused in our area on oil and gas and then switching to defence.

With that, thank you very much. It has been an honour to make this presentation to you.

The Chair: Thank you very much for your presentation, Mr. Patterson. It was fascinating indeed.

We continue now in Atlantic Canada and are going to Fredericton, New Brunswick, by video conference, to Barbara Pike, chief executive officer of the Maritimes Energy Association.

Go ahead with your presentation, please, Ms. Pike, for up to seven minutes.

Ms. Barbara Pike (Chief Executive Officer, Maritimes Energy Association): Thank you for the invitation to appear today and thank you for accommodating my schedule to allow my presentation via video conference from here in Fredericton.

By way of introduction, the Maritimes Energy Association is an independent, not-for-profit, industry group that represents companies that provide goods and services to the energy sector—onshore, offshore, renewable, and non-renewable—in eastern Canada. Some operators and producers are members, but for the most part our core membership are the local companies that employ thousands of people and invest hundreds of millions of dollars into our local economies.

Today I'll be covering the full energy spectrum the association does. The roots of the association really are in oil and gas going back more than 30 years, specifically offshore oil and gas under the acronym OTANS. I mention that to explain that we do have some deep roots and history in the oil and gas sector.

It should come as no surprise to you, and as you've heard so far today, when I say that the oil and gas sector has had a dramatic impact in Atlantic Canada, specifically from the offshore. The industry in the region directly employs 5,600 people and thousands more indirectly. As well, there are thousands more who work in the oil and gas industry in western Canada and commute home here to Atlantic Canada.

Since 1996 there has been \$31 billion spent in Newfoundland and Labrador, again on the offshore. Over the same period there has been \$8 billion spent in Nova Scotia, again offshore. Oil production amounts to roughly 30% of Newfoundland's GDP. Natural gas production in Nova Scotia is down to roughly 2% of Nova Scotia's GDP. It's estimated that the offshore industry supports more than 800 companies in this region.

The supply chain.... The Maritimes Energy Association has more than 300 member companies and they include everyone from law firms, to engineering companies, to environmental consultants, fabricators, accounting firms, transportation companies, logistics companies, and the list goes on and on. Few of them depend 100% on the oil and gas sector, but the oil and gas sector is an important customer for most of them.

On top of the money spent in the local supply chain, there's also the revenue from taxes and royalties. I'm sure I don't have to tell the committee members of the impact that oil revenue has had on Newfoundland and Labrador, royalties in the billions that have turned that province around. In Nova Scotia, roughly \$2 billion has been paid in royalties in crown share over the past decade and that does have an impact on the provincial coffers.

That's all under the offshore oil and gas sector. Onshore oil and gas has also had an impact. We would like to have more of it here in New Brunswick and Nova Scotia and we're working on that, but even the small amount of onshore production that is here in New Brunswick has an impact. In the area of Sussex, where Corridor Resources is producing natural gas, dozens have full-time employment and dozens of companies work on that project. It could be hundreds of jobs and millions of local companies, if we can get onshore oil and gas exploration moving. But that's in the "what if" file and can be left for another day.

The impact of oil and gas development in western Canada is also felt in this region. While numbers are difficult to confirm, it's estimated that a few thousand workers commute back and forth to work in the oil patch in the west. They maintain their homes here, their families are here, so the wages paid by the oil and gas industry in western Canada make their way to communities around Atlantic Canada. We also have many member companies that work on contracts for oil and gas projects in western Canada and the projects on the books for eastern Canada including the energy east pipeline and up to three LNG export facilities. I would also be remiss if I didn't mention the downstream industry in this region and in particular of course, the Irving oil refinery, the largest refinery in Canada. There are roughly 300 direct jobs. The economic impact in Saint John has been covered by his worship and also by Enterprise Saint John so I won't go further into that.

The offshore oil and gas industry has also provided our local companies with the experience and expertise to work in the global supply chain. We have companies in this region who work in the North Sea, Greenland, the Gulf of Mexico, you name it and they're there. This is an important spinoff and one that I can provide examples of, but likely not the hard figures. Suffice to say it can be in the millions of dollars.

Again I want to thank you for the opportunity to appear. We talked today just about oil and gas. When we're talking about renewables, I'm sure we could be back to talk to you about that as well.

Thank you for this opportunity and I welcome any questions.

• (0920)

The Chair: Thank you very much, Ms. Pike, for your presentation as well.

Thank you to all of you again for being here, either in person or by video conference, for your very informative and helpful presentations.

We'll go now to the first round of questioning and comments, a seven-minute round. We'll start with Ms. Crockatt, followed by Ms. Duncan, and then Mr. Regan.

Ms. Crockatt, go ahead please, up to seven minutes.

Ms. Joan Crockatt (Calgary Centre, CPC): Thank you very much.

I appreciate all the witnesses being here today. It makes us realize, I think, that we need to hear more from people from other areas of Canada. We would like to have been out there, on your turf, but thank you very much for being here on ours and those who are joining us by video conference.

• (0925)

Mr. William Teed: We would love to have had you here.

Ms. Joan Crockatt: Being an Alberta MP, I also want to thank you very much for sending those human resources that have kept the industry going in Alberta and Saskatchewan for quite some time. But we're very happy to hear about the development there.

Mr. Teed, I wonder if I could just start with you. You talked about the "economic turbine" in Atlantic Canada. I think we're all concerned with jobs and quality of life and so on. You see the oil and gas sector as being a game-changer, with 40 to 50 jobs per new well. Is that your calculation there?

Mr. William Teed: Those are the statistics that were given to us through a study that was carried out by UNB. Yes, the natural gas development project has huge potential for job creation, there's no doubt about it, both direct and indirect.

Ms. Joan Crockatt: Can you talk about that just a little bit? I'd like to get a sense of how people's lives on the ground have changed. How does this affect the average person? Can you bring it down to the human level?

Mr. William Teed: Let's put it this way. You've heard some comments on the number of people who travel to western Canada to have a job in the energy sector. When you get on a plane, no matter where you go you can tell that there are so many people on that plane who are going to work for one week, two weeks, three weeks, two months. The impact that's had on families has been tremendous. Everybody wants to make a good living, but let me tell you, most of the people who are going out west for a job to earn an income really would prefer to do that in their home province.

So from a very personal, grass-level thought, that's the huge impact these kinds of projects could have. New Brunswickers would

be able to stay in New Brunswick to earn their living, to bring their families up, and to have a good family living.

Ms. Joan Crockatt: Okay.

I want to ask the same question of you, Ms. Pike. Do you have any specific examples that you can talk about? You as well talked about the impact in general terms, but have you seen any examples, any poster children examples, of how the spinoffs are actually changing people's lives in Atlantic Canada from the oil and gas sector?

The Chair: Go ahead, please, Ms. Pike.

Ms. Barbara Pike: I can probably give examples of specific companies. We can take a look at a company like Encanex, which is based out of Nova Scotia. It's a local company developed by a guy actually from Newfoundland. They're in the process of moving operations or having an office in Alberta, and that has dramatically changed the people who are working for the company. It's expanded. It has offices in St. John's, Halifax, and Calgary. We're basically talking about going from zero to about 150 people in the space of about two years.

If you look at some of our engineering companies, we have engineering companies that are working on projects with some of the oil sands companies and are actually in Nova Scotia or in New Brunswick working on those projects, coming up with the engineering schematics, and then procuring that locally with various fabricators.

If you're talking about west to east, you can take a look at a company in Moncton, a fabricator that is part of the Shell global supply chain and actually fabricates certain specific components for offshore production facilities in the Gulf of Mexico. There are 50 people working at that company that would not have such high-paying jobs if we didn't have those contracts into the Gulf of Mexico or into the Shell supply chain.

I was on a conference call yesterday with a company in Alberta. We'll be working with them to provide better procurement information for companies in eastern Canada to be able to tap into the potential contracts that are coming out in Alberta. As you know, your supply chain is beginning to max out and needs help from the east. But that's work that will be done here and then sent across the country.

• (0930)

Ms. Joan Crockatt: Mr. Norton, on the ground, you're the mayor of Saint John. You want to see economic development. What's changed on the streets of Saint John since oil and gas started being developed?

Mr. Mel Norton: The first thing that has changed is optimism from the perspective of local business, and optimism then feeds into decision-making to invest in our community. The investments are very real. I think of, for example, one manufacturer in our city who manufactures custom metal fabrication components. They can deliver those components faster to Alberta than the Alberta companies can deliver them because of the backlog of these suppliers in Alberta. We have a real-life example of a Saint John company employing New Brunswickers who don't have to leave New Brunswick for the oil sands, who are working here supplying that same industry. Those decisions result in very real-life impacts, decisions to stay in Atlantic Canada, to buy a home, to invest, and to expand a business where there might not have been an expansion before.

The best example is from when we visited Calgary back last May. There was a gentleman on Prince William Street, one of our downtown streets, and he was putting up scaffolding. His words to me, and I won't ever forget them, were, "Go get 'em. Go out there and talk about what we can do to make, for example, the west-east pipeline happen." It's so very real in our region, the need for significant growth and development, and this is a sector that has a complete buy-in from our community.

I guess I would be remiss if I didn't just take a moment to acknowledge our MP Rodney Weston, who's been a significant supporter of both Saint John and these energy-related projects and how we can play a role. It keeps people there. It employs people. It's actually changing the fabric of Saint John.

We really do want to play a role, as Mr. Teed said. We look to other provinces and we see what it's done for them. We recognize that we are still a have-not province. That is unacceptable to Saint John and to New Brunswickers. This is providing real opportunity. We look at Saskatchewan and how the economy has completely evolved there over really the last 10 years. It's a complete 360. We look at the numbers. More than 20% of Saskatchewan's revenues come from natural resources, oil and gas. In New Brunswick, it's 1%. It's a very real-life impact that we can have for people in Saint John, in New Brunswick, and for the Atlantic Canadian economy generally.

The Chair: Thank you.

Thank you, Ms. Crockatt.

We go now to the official opposition, to Ms. Duncan for up to seven minutes.

Go ahead, please.

Ms. Linda Duncan (Edmonton—Strathcona, NDP): Thanks.

Thank you to all of you. It's always nice to have a Pike back, being my other family name.

Ms. Bak, I would like to go to you. I would like to thank you additionally for the background materials that you provided and additional ones my staff looked up. I commend your association.

I noticed in your materials that you outline that the clean tech sector is almost 100% small and medium industry, and that they create over 60% of private sector jobs. In keeping with what Mr.

Teed said, it's obviously the preference of any worker in Canada with a family to have a well-paying job and stay in their community.

Your documents outline some of the challenges facing your sector, and you also outline some of the potential. I'm going to give you an opportunity to expand a bit more on what the potential for economic diversification is—as opposed to just market diversification—from your sector, and what some of the challenges you face are where the federal government could assist in building the clean tech sector.

The Chair: Go ahead, Ms. Bak.

Ms. Céline Bak: Thank you very much for that question.

I think one of the challenges that all of us as Canadians face is to have better information about the impact of SMEs on the economy, and particularly on exports. If one does an analysis of exports by size of firm, in the non-resource sector—because the way exports are counted, those firms, even though they serve the energy sector, will likely be counted in the non-resource sector—the percentage of overall exports of manufactured goods and services by SMEs is surprising. I should say that such information is not generally counted, and it would be good for Canada's economy if our economists overall gave us better information.

The other thing I would say the federal government could do, in addition to providing information on exports by size of firm, would be to provide information on R and D investments by size of firm. This information is produced only very occasionally. I think the last time it was made available was in 2009 and in that report 45% of R and D investments were made by firms with fewer than 500 employees.

So just as infrastructure for making better decisions, those two things would be helpful.

In terms of economic potential for this sector, I have to say that a number of larger companies play an important role in this industry—so I'm not saying it's all SMEs—but three-quarters of the R and D investments are being made by SMEs. I think what we're learning is that what we would consider to be tiny companies—the \$10-million to \$25-million companies with annual sales and employee bases of fewer than 100 people—if they're investing in R and D, as we heard earlier today from Mr. Patterson at Virtual Marine Technology, expect to be engaged with very large firms directly. This is new research that could be conducted in other sectors, including ICT and life sciences as examples. It's a new world, I think, that we may want to have more research done on, and firms like Mr. Patterson's would obviously be very good examples to include in that.

I think I'll leave it at that so that your question time is available for others as well.

•(0935)

Ms. Linda Duncan: That's okay. I'm going to concentrate on you because I'm very interested in your sector, and of course your sector is very closely linked to the fossil fuel sector, particularly in clean technologies to produce cleaner products from fossil fuels, whether electricity or gasoline or so forth.

I've had some experience with dialogues in the province I'm from—Alberta—pursuing cleaner emissions and so forth. We've found, and in fact I'm told by the clean energy sector in Alberta, that they're not looking for handouts, particularly for energy efficiency. They're looking for regulatory triggers such as a price on carbon. I wonder if you could speak to that. What do you see as the main missing triggers to actually shift investment by the oil and gas sector towards actually deploying cleaner technology?

Ms. Céline Bak: This is a very interesting question. I have to say first that, as you all probably know, Alberta has a price on carbon. It's \$15 a tonne, and the way it works is that in the oil and gas industry large emitters can either invest in renewable energy projects, or they can improve their energy efficiency, or they can pay \$15 a tonne into the CCEMC, which currently has \$400 million to invest.

I think the challenges have to do with risk and with how capital is deployed by asset managers, as shown on the first page of the presentation I made earlier. The hurdle rates required for investment in the oil and gas industry are set by those shareholders, and they're very high, obviously. In order for capital to be deployed to energy efficiency projects, there has to be something else to make that happen. That something else could be a higher price on carbon. It could be bringing different types of capital to the situation. For example, pension funds may want—well, they all want—to be invested in projects that have recurring revenues or recurring payments, and energy efficiency projects have those characteristics.

So there's innovation that could occur on the financial side. You've heard me speak in the past about the notion of risk insurance. I used the idea of a CMHC for technical risk. I know it's not exactly the same thing, but we do have the issue that in order to get capital deployed we have to meet different hurdle rates. At the moment the price on carbon at \$15 will get us a little bit of that, but if we want more of it, we will need different tools.

The Chair: You have time for an extremely short question followed by a short answer.

Ms. Linda Duncan: I probably will just let it go and come back in the second round.

The Chair: Thank you very much, Ms. Duncan.

We go now to Mr. Regan, please, for up to seven minutes.

Hon. Geoff Regan (Halifax West, Lib.): Thank you very much, Mr. Chairman.

I want to note at the outset that while we've had some very good witnesses prior to today, I'd say that this is the best group of witnesses we've had so far, clearly, and that isn't just because I'm the member for Halifax West. Until the mayor started saying all those nice things about my friend Rodney, I thought we were doing really well here today.

Voices: Oh, oh!

Hon. Geoff Regan: I want to ask the witnesses to comment on a report that came out last week. I think Mr. Teed was answering it in some of his comments. The report was released by a group of four organizations: the Council of Canadians, the Ecology Action Centre, Environmental Defence, and Equiterre. It is suggesting that the energy pipeline wouldn't be the “boon” to Atlantic Canada that

eastern Canadian refineries and supporters claim, because a substantial portion would be shipped offshore.

Now, clearly, for the companies that Ms. Bak referred to as the “asset managers”, the producers in western Canada, getting to tidewater is important. It's important in terms of getting world prices for Canadian energy. I'd like your comments.

It was interesting that these groups, instead of choosing at this point to go on the environmental issues, tried to go on attacking the economic aspects of the energy east pipeline. Would you like to comment on this question about whether or not the benefits will materialize because of the question of how much goes to export markets? How important is this project to refineries, if you can tell us, not just in New Brunswick but also in Quebec?

I think you talked somewhat about the investments in terms of upgrades and upgrading at the refinery in Saint John. What about storage facilities? I guess you talked about bulk storage, but there are the shipping facilities and so forth.

● (0940)

Mr. William Teed: I did briefly see that article you're referring to. There's no doubt about it. Part of the oil that's coming from western Canada to eastern Canada will be shipped offshore. However, we do have Canada's largest oil refinery, and we can be darn sure that the owners of that refinery are not just interested in seeing a pipeline land at their shore and at their facility, of which they are a member of the joint venture to operate, just for the purposes of shipping it offshore.

The opportunity to have a supply—which is non-threatening—from western Canada is obviously a great opportunity for eastern Canada, but also, those in the industry clearly tell us that the possibility of other petroleum-based industries being developed as a result of this source of crude oil coming to the Saint John area is immense. This supply is going to definitely create direct jobs, indirect jobs, and induced jobs—huge numbers. However, the opportunity to diversify in the petroleum industry is also immense. This is the beginning.

There will always be markets offshore to send our oil to, but let me tell you, the refinery in Saint John is not known for just receiving oil and shipping it elsewhere. They take it, they refine it, and they add value to it, and that industry in itself creates direct and indirect jobs. Then they ship the finished product to other parts of North America.

The position that all we're doing is receiving oil and shipping it elsewhere without taking it, using it, and adding value to it to me is overstated. The opportunity is there now to do it and there's greater potential for the future.

Hon. Geoff Regan: Did you say at the beginning that this oil would be non-threatening—you used that word—or something like that?

Mr. William Teed: Well, in the sense of the supply.

Hon. Geoff Regan: Yes, the comparison in terms of oil from places like Venezuela or...

Mr. William Teed: Exactly.

Hon. Geoff Regan: There's a question of security of supply.

Mr. William Teed: Yes. I think it's the fact that the source is a very stable source. It's Alberta, Canada. It's not the other foreign countries where we've seen a lot of political turmoil happen over the years. Stability obviously has to be a key factor in determining investment for the future.

Hon. Geoff Regan: Thank you.

Ms. Pike, I turn to you. You talked quite a bit about the economic benefits that Newfoundland and Labrador, and Nova Scotia, have seen from offshore oil and gas development. Could you talk more about that, as well as the potential for onshore production? I presume that when you speak of onshore production you primarily or maybe solely are referring to shale gas development. Is that correct?

Ms. Barbara Pike: The benefit is obviously for onshore, and hopefully continued offshore, because we have Newfoundland Statoil, which announced one of the largest offshore finds in 2013 off Newfoundland. We also have \$2 billion going to be spent in exploration off Nova Scotia by BP and Shell, and they are both looking for oil. Hopefully they're going to find it, and we're going to move forward with that. Those projects are 10 or 12 years out.

For onshore, yes, onshore natural gas and oil, because Contact Exploration is producing oil here in New Brunswick. Currently in Nova Scotia things are on hold until we have that expert panel review, which we expect will be coming out in June or July and provide us with some very clear rules as to how to move forward. We have East Coast Energy that has a coal-bed methane well that they drilled earlier this year.

We will hopefully continue to see onshore development in Nova Scotia and in New Brunswick, and yes, some of that is going to include shale. New Brunswick's potential for shale, as was mentioned by the mayor and Mr. Teed, is huge. It can be turned around and production can begin very quickly. We need that natural gas here locally in the Maritimes because we're running out of Sable natural gas. Deep Panuke is an extremely small project. It's only going to be producing for 10 or 12 years. As was mentioned earlier, we are no longer producing enough natural gas of our own to meet our demand in peak periods. Without access to natural gas moving forward our companies are not competitive on the North American market anymore, if you start looking at the manufacturing positions, because they're competing against companies that have converted to natural gas and are experiencing much lower prices than what we've seen in eastern Canada the past couple of months.

Does that answer the question?

• (0945)

The Chair: Thank you, Mr. Regan.

We now start the five-minute round with Mr. Trost, followed by Mr. Calkins, and then Ms. Moore.

Go ahead, please, Mr. Trost, for up to five minutes.

Mr. Brad Trost (Saskatoon—Humboldt, CPC): Thank you, Mr. Chair.

Ms. Bak, one of the things that struck me, glancing through the package you provided, was that people often don't associate clean tech and the oil industry; that's not normal. The second thing was why this was necessarily here, again because of that connection.

Then as Mr. Patterson was talking about how his business had developed into being more than one sector, I began to think that's probably fairly common. Could you talk to me a little more about how your member companies work, both in the oil industry and other industries; how that feeds back and forth inside companies; and give us a little insight to understand how clean energy technology companies don't just concentrate on oil but do other things back and forth. Are my presuppositions there correct, and if so...?

Ms. Céline Bak: I think it's a terrific question. Thank you very much, Mr. Trost.

The reason why technology companies flow back and forth between different industries is that their investments in R and D are so significant that often they need to be leveraged across value propositions in many different industries. Technology companies in general should be paid as a function of the value they create, and that's what their shareholders expect. I'll give you a couple of examples to support your point.

Hydrogenics is a company that has worked in the hydrogen sector for many years. They provide technology that is often associated with large-scale energy storage in the electricity sector. But you should know that they've recently signed an agreement with Enbridge, and that the Ontario government has recently included storage within natural gas pipelines in its long-term energy plan. Hydrogenics and Enbridge are going to work together to convert natural gas into hydrogen to store in natural gas pipelines so that when peak demand occurs, we can use natural gas, or we can convert that back into natural gas and make that available into the system.

Another example would be Pure Technologies, an Alberta-based company that has for many years worked in water infrastructure. Their technology has enabled hundreds of customers to understand defects within large water pipes. They've now built a new technology to test any possible weaknesses in oil and gas pipelines, so they've moved from perhaps a less hostile environment to a much more hostile pressurized environment, which is oil and gas pipelines. There are many examples of this.

• (0950)

Mr. Brad Trost: So it would be safe to say that sometimes in the economy of industry we see the effects of the oil and gas industry, but we don't always recognize them because of the interlinking of the technology and engineering companies that goes back and forth. What may be recorded as something else may be an indirect effect of the oil and gas technology spreading out.

Ms. Céline Bak: Yes, and I would say and vice versa. The two examples I gave you a moment ago began in other industries and flowed into the oil and gas industry. Obviously Mr. Patterson's company began in the oil and gas industry and has flowed into other industries, so both relationships exist.

Mr. Brad Trost: A quick question to the gentlemen from Saint John, whoever wants to take this one.

Energy east pipeline is one of the major things you're emphasizing today. If there are one or two recommendations you could make from your perspective to speed this along—because I get the impression sooner is better as far as you're concerned—what would be the one or two quick recommendations you would make?

Mr. William Teed: Quickly from my perspective, I think the timetable change that was made under which the National Energy Board has to operate was a huge factor in making the process react much more quickly in getting a response. From the industry all we're hearing are good things with respect to that change.

As to what else is needed, it's beyond my scope to answer. It seems to be moving along at a very good pace, and it seems to be on schedule.

Mr. Brad Trost: Mayor Norton.

Mr. Mel Norton: I would echo those comments that the more streamlined the regulatory process the better. We have to have a good regulatory process.

The Chair: Thank you, Mr. Trost.

Mr. Brad Trost: You cut me off seven seconds early, Mr. Chair.

The Chair: Now we have used that seven seconds, haven't we?

Mr. Calkins, go ahead, please.

Mr. Blaine Calkins: Thanks, Mr. Chair. I know you will be more generous with me.

I want to introduce myself. I'm Blaine Calkins. I'm a member of Parliament from rural Alberta. I represent great, hard-working people there, many of whom work in the oil and gas sector in Alberta. I just want to say thank you as an Albertan for the fact that a large number of Canadians—and rightfully so—come from across Canada to work in Alberta or in Saskatchewan. But I understand full well, Mr. Norton and Mr. Teed, that it would be nice to be able to live where you work.

For the last eight years I have been commuting back and forth to Ottawa, and I understand how that happens, but part of that commute is getting on a flight usually on Thursday nights here in Ottawa—or maybe Toronto, if I happen to be connecting—where I hear from people. I know from their accents they are either francophones, they are Acadians, or they are people from Atlantic Canada getting on the airplane, and they are wearing Firebag jackets or they are wearing Albian jackets. They are wearing whatever they happen to be wearing because of the projects they are working on.

They are wearing those jackets because they are proud of the work they are doing, and they come to where the work actually is, and I have no qualms. I'm going to tell you as an Albertan that I have absolutely no qualms. I am a big proponent of east and west energy corridors in our country, far more so than I am of north and south energy corridors.

I just want to let you know where my head's at on this, and I want to thank both of you for coming here today.

My question for you two gentlemen or anybody who wants to take this question is this. Given the varying changes in employment across the country right now, what further potential is there in your regions, the regions you are operating business in, for further

growth? I mean we're bringing people in. We're net importers of workers. If you are able-bodied in Alberta, you can have a job. The most common sign in my riding is "Help Wanted". I guess my question for you, from a labour force perspective is, how much room for growth is there in overall training in your particular areas?

My question for Ms. Bak is one dealing with intellectual property. We don't deal a lot and we don't talk a lot about intellectual property. It's very complicated and very technical, but I believe the key to a successful society and a successful industry is having the right intellectual property in place to spur innovation, growth, and so on.

You talk about how a lot of these companies trade, how they value, and what they sell. For a lot of companies it's not just the products they sell, it's the actual intellectual property that's the most valuable part of their company.

I wonder if you would talk about investments in intellectual property, the energy sector's investments in intellectual property and its advancements in technology. Would you talk about that side of the industry a little bit?

I'll leave it at that.

I think that will use up all my time, Mr. Chair.

• (0955)

The Chair: Thank you, Mr. Calkins.

Ms. Bak, maybe you could go ahead and give a short response to Mr. Calkins' question about intellectual property. Then we'll go the Mayor and Mr. Teed, and anyone else who would like to answer, if there is time, of course.

Go ahead, please, Ms. Bak.

Ms. Céline Bak: There are two things.

Obviously, COSIA is a very important setting for the sharing of intellectual property regarding the oil sands. You are familiar with COSIA.

It's also important to note that smaller companies invest between 8% and 9% of what they spend on R and D to protect their IP. Of the billion dollars a year that is spent to do R and D, between \$60 million and \$100 million is to protect it. The number of patents for these companies, on average, is about six—that is, jurisdictions for patent protection. That gives you an idea.

I'll turn it over to you.

The Chair: Thank you, Ms. Bak.

We only have about a minute left in Mr. Calkins' time, so make very brief answers, please.

Mayor, do you want to start?

Mr. Mel Norton: Thank you, Mr. Chairman.

The simple answer to the question, from a Saint John perspective and especially from a New Brunswick perspective, is that our unemployment rate in New Brunswick—and in Saint John specifically and across Atlantic Canada—is constantly much higher than that in the rest of Canada. The labour force is there, but we have to have the opportunities. Right now, the opportunities in Alberta are pulling some of that labour force, but our unemployment rate is still well above the national average.

The Chair: Thank you.

Mr. Teed, do you have a further response?

Mr. William Teed: I'm fine.

The Chair: Mr. Patterson or Ms. Pike, does either of you want to add a short answer to Mr. Calkins' question?

Ms. Pike.

Ms. Barbara Pike: I think it was answered by the mayor. We have a lot of people here who are looking for work. It would be much better if they worked at home. On the other hand, there is a history in Atlantic Canada, particularly generations ago and centuries ago, of going off to the fishery and being away from home for a long period of time. It would be much better if they worked here, but...

The Chair: Thank you.

Mr. Calkins' time is finished.

We go now to Ms. Moore for up to five minutes.

Go ahead, please.

[*Translation*]

Ms. Christine Moore: Thank you.

Mr. Norton, you are a mayor, and for that reason, I'd like to ask you some questions.

When a natural resources sector is growing quickly, it can put pressure on cities. That's what happened in my region during the mining boom.

How does a city adapt? Demand for housing can exceed supply. Infrastructure also has to satisfy the increased demand. It's quite possible that existing resources can't be adapted to a fast-growing population, and that population increase can give rise to social problems. Housing prices can skyrocket, a situation that hurts families. Workers are brought in, but unfortunately, they can't bring their families with them. So they travel back and forth between where they work and where they are from, all because they cannot find or buy a place where they can live with their families.

As a mayor, how do you adapt to deal with that kind of reality?

Mr. Mel Norton: Thank you for the question.

[*English*]

Pardon me for not being able to respond completely *en français*. I would do disservice to your question if I tried to do that.

You are certainly touching on an important point. There are social, environmental, and economic impacts to any rapid expansion of industry or of job creation. That is a reality.

It's a problem we would welcome in Saint John, and New Brunswick would certainly welcome that kind of challenge. Right now, we see in Saint John the willingness, and we've always had this willingness, to embrace big development. The social licence is there. We don't see big development and quality of life as mutually exclusive.

If you were to visit Saint John, you would see that the homes are literally a stone's throw from the refinery. The fact that there may be challenges in the initial phase of having large development could probably be met with the existing housing stock, for example. We have the largest vacancy rate for rental accommodation of any community in Atlantic Canada. The same goes for commercial space. The vacancy rate for commercial space is the largest found in any place in the Maritimes.

So the opportunity is there. We have the geographical space. We know from the unemployment rates that the people are there. We also have the physical space to accommodate it.

Certainly, there would need to be attention from all levels of government working together for the necessary educational programs and the necessary training to accommodate an increase in the workforce of the kind we'd like to see. That is something we need to be doing right now, rather than when these projects happen down the road.

• (1000)

[*Translation*]

Ms. Christine Moore: Just for our information, what is the average price of a family home in Saint John right now?

[*English*]

Mr. Mel Norton: I apologize; I don't have the exact average home price. But I can tell you that you can easily buy an average family home, a three-bedroom home, in Saint John for \$200,000 or less.

[*Translation*]

Ms. Christine Moore: Do you anticipate that prices will rise quickly? For example, just 10 years ago, in some parts of my riding, municipal property assessments of single-family homes were \$50,000. Since then, the value has tripled, if not quadrupled. And now, all of a sudden, families can no longer afford to buy a home.

Do you expect a rapid increase in the number of jobs to cause a surge in housing prices, a situation that would hurt families?

[*English*]

Mr. Mel Norton: Historically what we've seen in Saint John is that when there has been some optimism for large growth, there has been some increase in property values. But generally, the property values in our city have remained relatively flat since approximately 2008. I would expect and I suspect that individual homeowners and property owners would benefit from some increase in property value, but certainly we have never experienced the kind of rapid inflation in home prices or property values that other places in Canada have seen.

[Translation]

Ms. Christine Moore: In your estimation, how many more people can Saint John accommodate? How many more people could move there without any adverse impact on the level of services delivered by the city?

[English]

Mr. Mel Norton: The city was originally planned to have, at this point in history, a quarter of a million people living in it, and we have 70,000 people.

The Chair: Thank you.

Thank you, Ms. Moore.

Continuing with the five-minute round, we have Mr. Leef, followed by Ms. Duncan and Ms. Block.

Go ahead, please, Mr. Leef.

Mr. Ryan Leef (Yukon, CPC): Thank you, Mr. Chair, and thank you to all our witnesses.

Mayor Norton, I was going to ask questions along the same vein as questions that Ms. Moore was asking, and you touched on the subject. I'm a member of Parliament for the Yukon, and we've certainly benefited from the Atlantic Canada labour force as well over the years, particularly from Newfoundland and Labrador.

The interesting thing we noticed, and it's the reason we engaged in this study in the first place, is that, to get down to the kitchen table items for Canadians, there has to be a discussion about risk versus reward. Many people either see the footprint or they picture the negative aspect of development—not just of oil and gas, but of all kinds of development in the country—but don't, we feel, necessarily appreciate the depth and the breadth of the rewards that come with it.

You've talked about the social licence and you don't see large development as a problem. What do you think are the largest contributing things to having that licence? Is it the vacancy rates, both commercially and independently, or are your projections of having a 250,000-person community that only has 70,000 people in it now spurring a desperate need for growth, or is it something deeper ingrained in your community that just welcomes it? I would say the situation is probably very different across the country, in terms of welcoming development.

May I have a quick comment on that?

•(1005)

Mr. Mel Norton: Mr. Leef, thank you for the question.

We simply want what the rest of Canada in many ways already has, and that's the opportunity to pull ourselves up and be self-sustaining. We want to be a “have” place. We see what it has done in Saskatchewan, what it has done in Alberta, in Newfoundland, in British Columbia. We see so many provinces that are “have” places.

That culture of being entrepreneurial is ingrained in Saint Johners from the very foundation of our city. When they founded the city, they were entrepreneurs. It's embedded in the fabric of Saint Johners. We have not had much chance to ensure that we realize those opportunities, but we know that we drive the New Brunswick

economy. We want to play a bigger role, and this is an opportunity for us to do that.

Mr. Ryan Leef: It would be nice to be able to focus on the positive, but you're looking toward growth, so we have to talk a little about the negative aspect of this, because those are kitchen table issues for Canadian families.

What does it mean to your community when people board the planes and are away for three to four weeks at a time? What does it do in terms of the social fabric of the community, the development, and the growth? What does it mean for kids growing up, when they have a one-parent family and are having periodic time with intermittent parental relationships? What does it mean for community growth, and community strength and wellness, from that point of view?

Mr. Mel Norton: It's very difficult. It's very difficult for families who are in Saint John, not only for the parents and the children who are separated from their spouses for weeks at a time but also difficult for the grandparents. What we see increasingly happen—I have seen countless stories of this—is that parents who have worked in Alberta, for example, for a couple of years will finally decide to leave and go to Alberta. The grandparents are separated from their grandchildren, and suddenly the grandparents decide they need to be closer to that family, so they leave too. We've lost not just one but two and three generations of Atlantic Canadians and New Brunswickers.

This is slowly but surely pulling apart the fabric of the entire province. Right now we have experienced another population decline. It's not sustainable. We're either going to be self-sustaining or we're going to be reliant on the rest of the country to do for us what we should be able to do for ourselves.

It's as simple as that, Mr. Leef.

Mr. Ryan Leef: This is the oil and gas, the energy sector, and Mr. Teed pointed out that there are six areas of focus. You just basically said it's among the top six, but where does it rank in terms of those six?

Mr. Mel Norton: In terms of opportunity, this is the top one. We see the opportunity for everything, from expansion of our refinery to just the tax base that would come from having a pumping station from the west-to-east pipeline running through our city, as just vital factors in ensuring the viability of our community.

Mr. Ryan Leef: Thank you.

The Chair: Thank you, Mr. Leef.

We go once again to Ms. Duncan. You have up to five minutes, please.

Ms. Linda Duncan: Thank you very much.

Your Worship, my heart goes out to you. My family actually left New Brunswick, went to North Dakota, and came back up. Of course, that was when there wasn't enough farmland when you had 13 children. Now you're losing the families for other reasons. But you certainly come from a beautiful part of the world. My family is from the Petitcodiac, the Steeves gang.

I am trying to recall in the background...or I can remember some controversy around a proposal for a pipeline through the city of Saint John. Concerns obviously have been raised. Obviously people want the jobs, but there is the risk.

Can you tell us a bit about what kind of consultation is going on at maybe the provincial or the municipal level around managing the risks of increased refining? Have there been concerns about the rail traffic of Bakken and other fuels into Saint John?

Mr. Mel Norton: You've asked several great questions.

As many will know, about a year or more ago the Irving oil refinery put in place rail capacity to bring in 100,000 barrels per day of crude product from western Canada. Certainly there were conversations about the impact of that.

The community consultations are really driven by the reputation and the track record of Irving Oil. It has an exceptional safety track record. I touched in my opening remarks on the partnership between the City of Saint John's fire department and Irving Oil. Irving Oil of its own volition went out and purchased a state-of-the-art brand new super fire truck to respond to any issues. They've partnered with the Saint John fire department to provide training to the Irving Oil employees. It has been done in a way that will save money and generate revenue for the city. So we've seen really good community collaboration on dealing with risk factors.

In terms of the consultations, the challenge that you mentioned was the Brunswick Pipeline that ran through Saint John. That's been a really good news story. It was related to the development of our LNG terminal. It ultimately resulted in a multimillion-dollar investment in Rockwood Park, which is one of the largest municipal parks in Canada. It completely transformed the landscape of that park. I don't think you would find a Saint Johner today who has any concern with how that ultimately turned out.

Yes, there were conversations, and yes, there are individuals who...and rightly so. We have to make sure that the environmental regulations are there and the environmental safety is there. But ultimately Saint John is a place where you can on the one hand be in Rockwood Park, and on the second hand go out the door and be at the refinery. We don't see those as mutually exclusive at all.

• (1010)

Ms. Linda Duncan: Thank you.

If I have a few more minutes, I have a question for Mr. Teed or anyone else who would like to respond.

There is some consternation around the potential impacts of gas fracking. Of course we have been hearing lots of concern around opposition of fracking in New Brunswick. I'm wondering if you, Mr. Teed, or if any of you have been directly engaged in the Royal Society study and if you're anticipating that it will provide direction on potentially better regulation of the sector.

Mr. William Teed: No, I have not been involved in that study. Certainly the Government of New Brunswick has done extensive work on the regulating of the industry, and has recently released what they believe to be some of the toughest regulatory rules in place to govern the development of the shale gas industry.

The business community, I would suggest, is strongly supporting the development of shale gas. In fact, in a recent survey of the Saint John Board of Trade membership, of which about 40% of the members responded, there were specific questions about the extraction of natural gas. Over 75% of respondents said they were in support of that development. Then it went on to ask of that 76%, how many were supportive of the process of fracking, and 72% of that 76% said yes, 4% said no, and the rest were undecided. So I suggest that the business community understands what's about to take place—what we hope will take place—and that they feel comfortable with the regulatory regime that's been put in place.

The Chair: A short question....

Ms. Linda Duncan: So you're saying the business community supports it, but what about the communities where the fracking is occurring?

Mr. William Teed: Obviously, there is still an educational process to take place, but again the comfort level, I would suggest, of the general population has increased immensely throughout New Brunswick. The fear of the unknown is sometimes hard to overcome, and the information that is now being dispersed, and the discussion that's taking place within New Brunswick communities, I think, is helping to educate people on the process, and helping them to basically understand it and support it now.

The Chair: Thank you.

Thank you, Ms. Duncan.

We go now to Ms. Block, Parliamentary Secretary to the Minister of Natural Resources, followed by Ms. Moore and Ms. Crockatt.

Go ahead, please, Ms. Block.

Mrs. Kelly Block (Saskatoon—Rosetown—Biggar, CPC): Thank you very much, Mr. Chair.

I, too, want to echo the comments of my colleagues in welcoming all of our witnesses here today. It's been very good testimony.

I also want to commend the members from New Brunswick. I think you make some very compelling arguments for the need to continue on this path of resource development and interconnecting provinces all across the country so that we can all benefit from the growth and prosperity that we see in some places.

I appreciate very much what you've shared about the impact on communities and families. I don't think that's something that I've taken into consideration up until this point in time. We certainly have heard many stats from many of our witnesses in regard to the revenue from taxes and royalties that provinces receive, as well as the benefits to local supply chains, but haven't really stopped to think about the impact on the fabric of a community when individuals get on a plane and leave for weeks at a time, or when whole families have to move in order to take advantage of employment opportunities.

We've also been getting a very clear picture throughout this study of the benefits across the country from the development of oil and gas in the west, and now we are being challenged to consider what that will mean for you on the east coast. I think we've also been made more aware of the opportunities that are being lost daily as we perhaps take a fair bit of time looking at how we can get our resources to tidewater. I know that's why we introduced the responsible resource development plan, and Your Worship, or perhaps it was you, Mr. Teed, spoke to the fact that we have made timelines more predictable and timely through that plan.

I guess one of the things I would ask any one of our witnesses to speak to, because I think it's becoming more and more something that we are aware of, is the imperative. I think there's an imperative here, and you've put that into context very well for us. I can tell you coming from Saskatchewan, managing growth and prosperity is the challenge of choice when you look at where we've been, so I would just like any one of our witnesses to speak to the imperative of continuing on this path of responsible resource development and making sure that we have the infrastructure in place to ensure that all provinces benefit.

•(1015)

The Chair: Could you give me an indication of who would like to start with answers?

Mayor, you go ahead and start.

Mr. Mel Norton: Thank you, Mr. Chairman.

In terms of the overall picture in Canada, we know that even in recent years we've seen a number of refineries close in eastern Canada. Mr. Regan's hometown is no exception. A refinery was closed there recently. So we know just for the viability of existing industries the west-east pipeline is an imperative.

We also know that in Saint John, particularly, it's not even so much the arrival of the pipeline that's an imperative; it's the potential impact. So whether it's a bitumen upgrader, whether it's a coker, whether it's all the secondary plastics industries or other petroleum product industries that can develop, those are imperatives. If we're going to grow a city that is self-sustaining and really assist New Brunswick, those are imperatives.

The Chair: Mr. Patterson, go ahead, please, sir.

Mr. Anthony Patterson: Thank you.

In the context of Newfoundland and Labrador, benefiting from the oil and gas blessing that we have at the moment is our number one priority. If we look at the cluster of companies in my peer group, our job over the next 20 years, while there is an oil industry that is investing in research and development, is to grow a high-tech industry that is globally competitive and that can generate revenues and jobs within our province so that we can step into place as being equivalent to the mining sector.

We're trying to do something very similar to what Norway has done. That's who we view as our number one competitor and our number one model when we look at the growth of the Newfoundland economy, and at taking the oil and gas benefits and reinvesting them into stimulating the growth of a new industry.

The Chair: Thank you.

Mr. Teed, did you want to give a short answer?

Mr. William Teed: I have just a quick one on the natural gas. More and more we're hearing from our industrial partners that we need cheap natural gas to be competitive. The bottlenecks that exist today in the distribution system in the States have driven costs to astronomical levels this year. Having our own natural gas available for our industries is necessary to remain competitive. Industry tells us that time and time again.

The Chair: Thank you.

Thank you, Mrs. Block.

We go now to Ms. Moore for up to five minutes. Go ahead, please.

•(1020)

[*Translation*]

Ms. Christine Moore: Thank you.

Mr. Norton, a project suddenly getting the go-ahead could mean a significant increase in the number of jobs available, so much so that local workers might not be able to fill them all. As the mayor, how would you be able to accommodate a major influx of people from other provinces as well as immigrants? In fact, depending on how many jobs were created, there might not be enough workers in the entire country to meet the demand.

These people usually come from a different background and have different needs. In most cases, the worker can speak the language, but not necessarily their spouse or family. How would you deal with that kind of situation?

Ms. Duncan would like to ask another question. I'll turn the floor over to her after we hear from you.

[*English*]

The Chair: Yes, go ahead, please, Mr. Norton.

Mr. Mel Norton: Thank you, Mr. Chairman.

Another excellent challenge we would love to face is that kind of increase. What you're talking about is an opportunity for us to start planning for that right now. For example, the west-east pipeline is expected to be in production in 2018, so we have between now and 2018 to have that planning phase. We can work with all levels of government so that if we have a huge expansion of our existing refinery, for example, we can plan how that is going to work out.

I mentioned the unemployment rate. There is already a significant gap between the unemployment rate in New Brunswick, in Atlantic Canada generally, and in the rest of the country. There are many thousands more unemployed per capita in New Brunswick than there are any place in the rest of Canada, and it's always been that way. It's just historically how it's been, in part, I suppose because we haven't had those same opportunities. We know the workforce is there. We know the bodies are there. The training is vital, and we would certainly welcome the opportunity to pull back some of the folks from western Canada.

We know that New Brunswickers will come home. Even if they're not getting paid quite the same amount, they'll come back to New Brunswick, and we'll leave it to the Alberta-based places to make sure that maybe they have to hire some more.

In terms of the immigration side, Saint John, in particular, is a very welcoming place for immigrants. We have a number of immigrant resettlement programs and English as a second language programs. We have a university that participates in that, and our YMCA does that. So it's the kind of community that is already welcoming. We have a significant Korean population and Chinese population. We have folks from all over the globe calling Saint John home, and we'd welcome more immediately.

Ms. Linda Duncan: Do I have time for just a quick question?

The Chair: Yes, go ahead, Ms. Duncan, you have a couple of minutes.

Ms. Linda Duncan: I'm not sure who would like to answer this, maybe Mr. Teed or Ms. Pike. The reason why the bitumen is being shipped, we're told by the producers of the bitumen, is because it's not affordable to upgrade. So can you tell us how it is that they're going to be financing the upgrading in New Brunswick?

Mr. William Teed: That's a good question for Ms. Pike.

The Chair: Go ahead please, Ms. Pike.

Ms. Barbara Pike: Not quite because we're the supply chain in... But basically the refinery, as I understand it—and maybe Mr. Teed or the mayor can talk about this more with the Irving oil refinery—will be able to add some additives in order to process that. But again, as has been mentioned, the ability also to have that crude oil in Saint John arriving there and then the potential for other industries will provide for us opportunities sitting as Saint John is right on...it has one of the best ports. In western Canada they don't have the capacity and the refinery and neither do they have the access to the large port. It makes a lot of other things affordable.

Ms. Linda Duncan: To clarify quickly, I'm talking about upgrading not refining. What's being shipped is raw bitumen, which has to be upgraded and then refined. So my question is who is going to be financing the upgrading before the refining?

Ms. Barbara Pike: It's my understanding that is being built into the plan by Irving Oil.

•(1025)

The Chair: Thank you, Ms. Duncan.

We'll go now to Ms. Crockatt for up to five minutes followed by Mr. Trost.

Ms. Joan Crockatt: If I might be allowed just to address the question that was asked by my honourable colleague across, bitumen is an upgraded product. It is already upgraded at the source in what some people call a refinery and others call an upgrader. But that is essentially what you have. They have refineries that are already there ready to go. It's not economical to build new ones. It is economical to add on to existing ones. My understanding is, as well, that there's a very large area of land that's available already for expansion.

Maybe you could just talk to that briefly, Mr. Norton.

Mr. Mel Norton: Thank you.

Our new municipal plan just allocated a significant portion of east Saint John as a super heavy industry area and it's specifically zoned to accommodate significant expansion of existing refinery capacity. We know, also, that the economics of building on to that are significantly more favourable in Atlantic Canada where we can bring

large components in for the upgrader or cokers or expansion to the refinery by sea water versus overland to inland provinces like Alberta. In addition, there's already some capacity to deal with raw bitumen from the oil sands in Saint John presently.

Ms. Joan Crockatt: I'm going to go to Mr. Patterson because I think we've focused largely on New Brunswick and I appreciate that there are lots of things happening there.

But I would love to hear you, Mr. Patterson.

Did you grow up in Newfoundland?

Mr. Anthony Patterson: Thank you. It's a strange question. No, I'm a Saskatchewan boy. I grew up in Moose Jaw and I moved to Newfoundland after high school.

Ms. Joan Crockatt: Tell us about...

Mr. Anthony Patterson: So I'm from Newfoundland and Saskatchewan pre- and post-boom

Ms. Joan Crockatt: So you've seen Newfoundland pre-boom and afterwards. Can you tell us about why you moved to Newfoundland, because this is a reverse story, I think, to New Brunswick? Why did you move to Newfoundland and what have you seen as a direct result of the development of the oil and gas sector in Newfoundland in terms of the impact on people there?

Mr. Anthony Patterson: Basically, I left home right after high school to join the Coast Guard, so that's why I came out east. Basically I stayed because I stayed with the marine industry.

I was here in the early 1990s when the fisheries collapsed and I think what I saw was the lowest point in any part of Canada I've ever been to as far as the mood of the people is concerned. A lot of people had to retrain. They had to move into different industries. A lot of them had to get on airplanes and leave. The price of houses, all that stuff, went right down through the floor. There were potholes in the streets, everything you could think of. The mood in Newfoundland was very dark.

I think if you fast-forward to early 2000s when Hibernia came on stream.... It came on stream before that, but just as Husky *SeaRose* came on stream, what you saw was a real sense of optimism come into Newfoundland. I think we saw people start to migrate back to the province, especially people with oil and gas expertise. I think with the investments coming through the Atlantic accord in high tech—when we had nothing we had to develop an entrepreneurial spirit—basically the R and D investments added fuel to that burnt little ember and I think what you're seeing now is that Newfoundlanders are very export-focused, very entrepreneurial in spirit, and very much of the sense that this is an opportunity that we can't let pass by and we have to move ahead with.

Ms. Joan Crockatt: Maybe you can just develop that further because you've moved into a high-tech sector. I was captivated by your comment. I think it was that there's been.... Maybe you can tell me what the statistic is. How much investment has there been in the high-tech sector in Newfoundland as a result of oil and gas, the spinoff of that industry?

Mr. Anthony Patterson: The number that the oil companies report up to 2011 was \$205 million. That was their direct investment. Just to give you an idea, in 2011 it was \$70 million in that particular year, so their investment is ramping up. It's based on the production and price of oil. On that investment, there has been significant co-investments by both federal and provincial funding sources, ACOA's AIF being an example. I would say that has almost reached \$1 billion of investment in high-tech R and D over roughly a 10-year period.

You can imagine what impact that has in the development of micro-companies that are very locally focused to regional players. Some of us have now broken into the export markets, and when we do so, we more than triple our revenues. So that's the flywheel that we see. We prove ourselves locally, and we work for some of the hardest customers on earth. Exxon Mobil is not an easy customer to deal with, but if we can satisfy their needs, we can meet the needs of anyone, anywhere.

• (1030)

Ms. Joan Crockatt: I find it astonishing and fascinating that this is an industry that is hewers of wood and drawers of water, and you're saying that is absolutely not the case. It has actually spawned a high-tech industry that's flourishing in Newfoundland.

Mr. Anthony Patterson: Absolutely. In fact, I think our competitors are the Norwegians, where they've done the same thing. I think when people come back to Newfoundland if they haven't been here for a while, they're amazed at the technology industry that we're building here.

I would also say that we're crossing over into defence because of our capabilities. This is one of the big benefits I see out of oil and gas. The oil and gas is driving innovation in our neck of the woods. It's not the defence spending.

The Chair: Thank you.

We'll go next to Mr. Trost. I actually have no other names on the list after that, but I'm sure there will be.

Mr. Trost, go ahead, please, for up to five minutes.

Mr. Brad Trost: Thank you, Mr. Chair.

At this committee, one of the things we often ask witnesses about has to do with labour and skills and training. It's rare to sometimes listen to discussions about high unemployment rates in anything we do around this committee. So it is a little bit different hearing from Atlantic Canada where the unemployment rate is higher than it is in other parts of the country.

Having said that, as new developments come—hopefully, the pipeline to the east, development of natural gas, etc.—there's going to be shifting demands in labour patterns. So without going too far away from the natural resources theme, I'll start with the gentleman from New Brunswick and then over to Newfoundland.

What needs to be done to prepare your province, your region for the job changes that are going to start to come as you get more natural gas drilling, as more construction jobs become available? I know you're hoping to recruit some of the children and grandchildren who have moved out west, but what else is going to be done other than to call the families home?

Mr. William Teed: One knows that if you're trying to entice business to come to your community, one of the first things they look for is skilled labour, and the opportunities that are being provided by both natural gas development and by the pipeline project have certainly caused government specifically at the provincial level, together with participation by the municipal level, to make sure that the proper skills and the availability to have access to proper skills training are brought into play.

A few years back, there was a potential, and it didn't proceed, for a second oil refinery in Saint John. At that time, there was a concerted effort to really put in place a program, because it was going to be needed, to train people for the proper skills of that industry. The same type of cooperation and planning is now taking place for the upcoming energy sector projects.

Mr. Brad Trost: How is that planning taking place?

Mr. William Teed: It's planning by business, government—at both provincial and municipal levels—and economic development agencies, like ourselves, to really make sure that there are proper education programs offered at our community college level for the skills that are needed to make sure these projects are developed by New Brunswickers.

• (1035)

Mr. Brad Trost: I'll ask a variant of that question to Mr. Patterson. You're a high-tech industry there. One of the things as you expand your business is that you're going to need to acquire more brain power. As you develop more products and so on, where are you looking to recruit your labour force in Newfoundland? The unemployment rate has been going down there, and it's not just in trades—I'm talking engineering and across the board. Where are you looking to fulfill your labour needs in the upcoming future?

Mr. Anthony Patterson: Our company spun out of the university in our early days. We've maintained a very strong linkage back with the university. They're part of our research supply cycle. Through that, we work with a number of grad students and work-term students. In essence, we grow our own. So 90% of the engineers who work in our company came from work terms or are grad students, and at any one time we might have another 10 or so in the wings.

If you look at—

Go ahead.

Mr. Brad Trost: Can you expand that to describe—I'm sure you know of other businesses in similar situations—if that tends to be basically normative in your area. People draw from Memorial and they just grow organically, or is this going to be a problem? Are there enough engineers, or does something need to be done to supply more labour going forward?

Mr. Anthony Patterson: It is the norm that we draw from Memorial, and Memorial, as you know, has the cheapest tuition rates in our area. Memorial is attracting an awful lot of immigrant students into it; that's a source, as well.

As companies grow big here, the trend is that they start to expand their engineering offices into Nova Scotia and New Brunswick. That's more of the strategy that we have, that we start diversifying geographically within Atlantic Canada once we start to exhaust the available pool of labour in Newfoundland.

The Chair: Thank you.

Thank you, Mr. Trost.

We go now to Mr. Regan, for up to five minutes.

Go ahead, please, sir.

Hon. Geoff Regan: Thank you very much, Mr. Chairman.

Ms. Bak, let me ask you a question. I think you mentioned that three-quarters of the research and development in the industry is done by small and medium-sized enterprises, but they have huge problems working with the majors—the large companies—who seem to expect to work with the global companies. Are there things that could be done to help with the situation? Is there any role for government, in your view?

Ms. Céline Bak: Mr. Patterson has made a number of allusions to the Atlantic accord, which is a formula that stipulates a certain investment in R and D by the participants in Newfoundland's offshore oil industry. I'm not aware of anything quite like that in Alberta. It is certainly something that could be considered.

It's an interesting conundrum. In Canada—across all industries, not just this industry—we have a long tradition of being late to adopt technology. I'm not bringing news to anybody, right? It's the same in this industry. I mentioned the example of a company that has extensive credentials in the Middle East and slowly but surely there will start to be adoption in Alberta, but it's certainly slower than one would hope.

I think it's an area that merits its own study because we've certainly been considering this question for a number of years. We now have really good information about what shareholders in smaller companies expect in terms of being able to sell directly, as Mr. Patterson has described, to very large players. Statoil is an international company that might provide some interesting opportunities for us to learn, and then there are other sectors. I think the Atlantic accord perhaps looks a little like the IRB system one has in the aerospace industry, so I would suggest that this is an area where more evidence gathering might be required, because so far, sale cycles in Canada are definitely longer than they are in other parts of the world.

Hon. Geoff Regan: Your Worship, municipalities across Atlantic Canada face tremendous challenges in relation to infrastructure, and as I'm sure you know, as of Tuesday next week, April 1, the federal funding for infrastructure drops from \$1.7 billion a year to \$210 million, which of course if you spread it across the country doesn't provide very much. It's pretty thin.

Of course, the promise is in a few years it will go back up again. We'll see, but as you look forward to the energy east pipeline potentially coming online and the impact that will have, what challenges do you see in relation to infrastructure for your city?

• (1040)

Mr. Mel Norton: Fortunately, we've had very good partnerships both with the provincial and the federal government on some of our major infrastructure needs so funding is now in place for a new drinking water treatment system, which Saint John hasn't had until now, and then the cleanup of all our waste water will be completed this year. Some major highway projects have been completed

through the provincial government. A major corridor linking our highway directly into our major industrial park was completed at the end of 2013, so a lot of the infrastructure is already there.

The key driver for most of our infrastructure expenses going forward, especially if there is more major development, will be on those hard things like roads. Then in addition to that, we want to make sure quality of life is there, so the flexibility built into the gas tax fund now as a result of recent changes so we can use some of that gas tax funding for recreational investments is important. Our primary focus will be on the roads and then utilizing additional revenue to deal with improving our recreation situation.

Hon. Geoff Regan: Thank you.

Mr. Patterson or Ms. Pike—Mr. Patterson, you said earlier that in the North Sea over 5,000 exploratory wells had been drilled and only a couple of hundred or so off Newfoundland and Labrador. I wonder if one of you could tell us about the number of exploratory wells drilled off Nova Scotia. Also, what can we draw from the fact that so few wells have been drilled and so little relative exploration has been done so far, even though one thinks of these areas as having had quite a bit of exploration?

The Chair: There is time for a short answer.

Go ahead, please, Ms. Pike.

Ms. Barbara Pike: About 212 exploration wells have been drilled off Nova Scotia and approximately about the same off Newfoundland. More wells have been drilled off Newfoundland because they have more production wells at this particular time.

It's a drop in the bucket considering the size of the land that we have here, the size of the land off Nova Scotia, for exploration. Obviously it's extremely expensive to drill but if we're going to take a look at the importance of or add to our offshore industry in Nova Scotia and in Newfoundland, we have to do more exploration. We have to invest more in geoscience to see what is out there. That is exactly what has attracted \$2 billion in exploration off Nova Scotia.

The Chair: Thank you.

Mr. Calkins, you have about three minutes to close off today's meeting.

Mr. Blaine Calkins: I'll be quick. I just want to come back to a couple of things.

Your Worship, could you clarify something for me? I know that some comments have been made around the table, but the gas tax transfer is something that comes through with the building Canada fund. It would come directly to your community. I'm sure that's a fairly sizable amount of money when it comes to your community.

Could you talk about that and how that's important? It was important to FCM and so on, but could you also talk about the corporate social side of things? I don't know about it in Atlantic Canada. I know in my riding, Encana or Calnash Trucking, or all of these either primary or big companies—or even small service companies—can provide hundreds of thousands if not millions of dollars to social infrastructure in the form of buildings and so on.

How does that play out in Atlantic Canada?

Mr. Mel Norton: Well, certainly in the Saint John context, the flexibility in the gas tax and the ability to allocate that to recreation is vital because most of our recreation infrastructure dates from the mid-1960s and is in need of significant replacement or repair in the next number of years.

On the social side of things, what we've seen from our corporate citizens are incredible partnerships. I think particularly of our PALS program. It's a partnership between local industry and all of our community schools in Saint John, and literally hundreds of employees from those companies go in daily, whether it's for hot lunch programs or whether it's for volunteer mentoring in the classroom. That happens daily across a variety of sectors.

Then I've mentioned the hard investment by some of the major energy companies in recreation facilities and improving our municipal park. There have been really incredible investments there.

Mr. Blaine Calkins: That's a great opportunity, and I want to build on the line of questioning I had before.

You have opportunities to grow. You have a labour force there that is wanting to come back. There are even some sitting on the sidelines for certain parts of the year, whatever the case might be, and we talked about some of the pressures.

Mr. Teed, you talked about some of the pressures on the price of natural gas, more from a delivery standpoint, because there is more natural gas on the market. There is a glut of natural gas on the market in North America in certain areas, and the problem is delivery, getting it to certain places. Propane in particular was a great example this year—it's not a great example, it's a terrible example—of how the price has spiked, and it was more of a delivery issue.

But I want to talk a little bit more about how you guys are uniquely positioned in the Atlantic basin. You said it. We see pressures on our NATO allies in Europe right now when it comes to energy. We have international tension with the country that is the largest supplier of energy to our NATO allies. What are the opportunities? Is anybody in Atlantic Canada talking about this? You

have LNG terminals. You have the ability to export not just in the North American context; you have the ability to ship it across the Atlantic.

What's happening through any of your organizations—anybody here at the table can talk about this—looking at the economics and making sure that it's economically viable. We are stable. I know we're not terribly politically stable in Alberta right now, but we are a stable supplier of energy to the rest of Canada, the rest of North America, and we're willing to be so for the rest of the world. I guess my question is this. What kinds of opportunities are there to get products from Canada—from Alberta, from Saskatchewan, from wherever, from Manitoba, wherever these things happen, even in Atlantic Canada—to supply our friends and allies with a reliable stable source of energy?

Are the economics in place, and who's looking at it?

●(1045)

The Chair: Okay, we are almost out of time. A very brief answer from you, Mr. Mayor.

Mr. Mel Norton: Thank you, Mr. Benoit.

The simple answer is this. Our port is geographically positioned better than any other port in the country to supply our allies in Europe, to supply India, and we're exactly 100 nautical miles further away than New York City is from Brazil. So if we want to service the entire world from Canada, Saint John is the place to do it.

The Chair: Thank you. Thank you, Mr. Calkins.

I want to thank all of our witnesses for coming today and for providing your time and expertise to the committee. It has been very helpful for our study, and I look forward to the rest of our meetings looking at the benefits right across Canada of developing the oil and gas sector of our economy.

Thank you all very much.

This meeting is adjourned.

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