HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Natural Resources

RNNR • NUMBER 053 • 1st SESSION • 42nd PARLIAMENT

EVIDENCE

Thursday, April 13, 2017

Chair

Mr. James Maloney

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● (1240)

[*English*]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): We are set to resume.

Good afternoon to our witnesses. Thank you very much for joining us today, particularly on a Thursday leading into a long weekend.

The format for the day is that we'll open the floor and each of you will be given up to 10 minutes to make a presentation. After all three of you are done presenting, we'll open the floor to questions from around the table. We do have rules with respect to timing for questions, not only for presentations.

I would encourage you to use your earpiece if you are not proficient in both official languages, because you will be asked questions in French and English. Of course, you are free to answer questions and provide your remarks in either official language.

I will open it up to whichever one of you looks most ready to go. Mr. Scholz, why don't you lead us off?

Mr. Mark Scholz (President, Canadian Association of Oilwell Drilling Contractors): Thank you very much, Mr. Chair and the rest of the committee. Thank you for inviting me.

Canada's oil and gas industry is the envy of the world, and for good reason. We are innovators, early adopters, and natural conservationists. The women and men who work in our industry also raise the families who make up our urban and rural communities. From young biologists tasked with protecting the boreal forest to senior engineers with over 50 years of experience at home and abroad, these are the Canadians whose values and hard work have made our oil and gas industry the most responsible and ethical of its kind anywhere in the world.

CAODC members often operate in the most remote locations of the country—natural outdoorsmen, so to speak. Clayton Byrt, whose company is 99% first nations-owned and operated and a member of our service rig division, is fond of saying, "We recognize the need to develop our resources responsibly with consideration of future generations".

With this in mind, I am here to speak about some of the innovations found in the drilling and service rig industry, which has lowered emissions and placed them at the cutting edge of environmental performance. I will also make some suggestions about how government and industry can coordinate in order to ensure that Canada's oil and gas sector can continue to lead the world in environmental performance.

Our association's focus has always been on making the industry safer for people and the environment. For nearly 70 years, we have been finding efficiencies in reducing emissions, fuel usage, and land disturbance. From our modern walking rigs to horizontal drilling techniques, the industry is home to hundreds of innovations that have redefined how we drill, and we have improved our rig productivity and environmental performance over the years.

Superior rig productivity translates into being able to develop petroleum products faster, at lower prices, and with less impact on the environment. In fact, the amount of oil and associated gas that can be brought out of the ground from one rig has increased about six-fold since 2012 in Canada. This means that more petroleum products can be produced using less energy and resources. It means lower costs and more revenue for Canadian companies competing for global market share. It means less GHGs and more tax revenues for government.

Take, for example, the Cardium formation in west central Alberta. Light, low-carbon oils are being extracted with rising rig productivities, comparable to what's being recorded in plays south of the border. Back in 2012, a rig working in the region for one month could add 200 barrels of oil equivalent per day of average production. Four years later, the output from one drilling rig was over 1,200 BOE per day, or six times the production. On the natural gas side, the Montney play, which spans northwestern Alberta and northeastern British Columbia, is challenging leading American plays like the Marcellus and Utica with similar increases in productivity.

The reasons for the productivity improvements are as follows: drilling faster and more accurately; employing new-age alternating-current, or AC, electric rigs; migrating to multi-well pads and batch drilling techniques; using rigs that "walk" and move quickly from one location to the next; high-grading resource prospects to the best areas; and realizing learning-curve effects.

Simply put, a modern rig today can drill more wells in a month, and each well can produce more oil and gas than in the recent past. This is a good thing for business, and it's a good thing for the environment. While some industry innovations arise from the co-operative efforts of industry, the academic world, and government, most of these advancements are made by people who care about their environment and the safety of their workers.

One of my favourite technologies being deployed in the field today is the bi-fuel engine technology, where up to 70% of the diesel to operate our engines can be replaced with clean-burning natural gas, which can often be sourced directly from the wellhead. This means we can significantly reduce our carbon footprint, reduce trucking and transportation resources, and preserve the lifespan of our engines.

It's important to remember that GHGs are generated across the full life cycle of fossil fuel production and consumption. Only 10% is generated at the upstream production stage, while over 80% is generated by the end-user, such as when a car's ignition is turned on, when a jet engine fires up, or when a diesel locomotive pulls heavy freight down the track. Identifying where emissions are generated across the life cycle of fossil fuels is a useful framework for evaluating the effectiveness of proposed solutions in reducing GHG emissions.

● (1245)

While technology on the production side is essential, the world is unlikely to achieve meaningful reductions in CO_2 unless the underappreciated issue of end-use consumption is acknowledged. The bottom line is that we all want to ensure that the country our kids and grandkids inherit is as ecologically healthy as the one we enjoy today. Most every Canadian can get behind that.

Many industries approach government seeking financial incentives to improve their operations. That is not so in the oil and gas industry in Canada. Why do we innovate without the promise of government subsidies? It's because efficiency runs both ways: what is good for business is usually good for the environment. Profits are the most significant drivers of innovation. Moreover, Canada must innovate to stay competitive with U.S. producers, especially in this price market.

I've tried to capture some of the things our members have been doing for years with respect to how you've defined your clean tech categories and the risks you've described.

The first category, clean technology, is described as “any product, process or service designed with the primary purpose of contributing to remediating or preventing any type of environmental damage.” The second category is any “product or service that is less polluting or more resource-efficient than equivalent normal products that furnish” a similar industry.

I think my examples have made it clear that both types of clean tech are not only inherent in our businesses but are providing meaningful competitive advantages within the context of today's marketplace.

Regarding the risks in your study, we believe that the free-market system in which our industry has traditionally operated addresses them in the following ways.

The first two risks, whether the technology will perform as expected and whether it is compatible with existing technologies and processes, we believe are borne by industry, because they must be overcome for our industry to be successful. Technologies not performing as advertised or unable to integrate cannot be sold for profit, so, as mentioned, the industry's best interest becomes the environment's best interest.

The last risk, a lack of capital and a stagnant industry, therefore becomes, arguably, the most important risk to the adoption of clean tech. We feel that this risk can be successfully mitigated in two ways.

The first is by facilitating a strong Canadian oil and gas industry. A successful industry can afford to invest. Over the years, billions of private equity dollars have been invested in clean technology. There are many examples within individual businesses, such as the ones I mentioned earlier, but there are also successful groups, such as the Canada's Oil Sands Innovation Alliance. For those of you unfamiliar with COSIA, it is a group of companies that combined forces and funding to improve environmental efficiencies, and it has shown fantastic results. COSIA's algae project, for example, is a project designed to process CO_2 , waste heat, and waste water resulting from oil sands production with algae in a photobioreactor to produce biodiesel or bio jet fuel and other products, such as livestock feed and fertilizer.

This type of development, however, can only be done if there is enough money for research and development. While COSIA has mitigated some of the costs by combining efforts, if each individual COSIA member were struggling to survive, or worse, went out of business, neither the group nor the clean tech would exist.

Second, a lack of capital to invest in clean tech begins with lower profits due to higher operating costs. Where higher costs are due to government policy, they can be controlled by better understanding the far-reaching, cumulative, and sometimes hard-to-see relationship between the two.

Clearly, there is a role for government in ensuring that our world-class resource industries do their due diligence in terms of conservation, but on a macro level, it is important to remember that a robust oil and gas sector, and well-thought-out policies sensitive to the cumulative cost implications, is the best provider of the innovations that have allowed Canada to carve out a place among the world's top 10 countries in green technology investment.

In short, the greatest threat to innovation in Canada's oil and gas industry is an uncompetitive market environment. If governments at all levels keep this in mind, the industry will continue to be one Canadians can be proud of.

With that in mind, I'd be happy to address any of your questions with respect to clean technology in the drilling and service rig industry, and I look forward to the other panellists' comments.

● (1250)

The Chair: Thank you very much.

Mr. Belzile, perhaps you can go next.

Mr. Germain Belzile (Economist, Montreal Economic Institute): Thank you very much.

My name is Germain Belzile. I'm a senior associate researcher with the Montreal Economic Institute. I'm also on the faculty of the Université de Montréal business school, HEC Montréal, in economics.

I would like to thank the Standing Committee on Natural Resources for the invitation issued to the Montreal Economic Institute. Our organization is devoted to economic research and education. We are an independent, non-partisan, and non-profit group. We accept no government financing, and we are very proud of that.

First of all, I'll talk a bit about natural resource firms and the environment. Canada is an important producer of natural resources. They represent a very large part of Canada's exports. Canada, with a highly diversified energy portfolio, is a major oil producer and exporter. Oil production is important for the Canadian economy and for ensuring a high standard of living and well-paid jobs for its inhabitants. Moreover, 41% of Canadian energy consumption consists of oil products.

Canadian natural resource firms spend billions of dollars each year to minimize the environmental effects of the exploitation and transport of their products. These investments include money spent on research and development, on building infrastructure and maintaining it, on making sure the day-to-day processes are working well, and in satisfying regulatory authorities.

Canadian firms face clear incentives to abide by the rules and to make sure people potentially affected by their activities are listened to, as well as to make sure scientific information circulates widely. Their own interest is to make sure everything runs smoothly and that the best technologies are used to minimize environmental problems. They have every reason to minimize environmental degradations for which they would ultimately be held responsible by the governments, by the courts, or by public opinion.

Research and development are costly and risky. They involve risk because the firms that engage in them are never sure in advance of the result. Any factor that makes an activity costlier or riskier will reduce this activity, including innovation. Therefore, reducing needless risks surrounding innovation in the environment should lead to more innovation.

Now, as for the factors complicating the adoption of the right environmental technologies, some risk is inherent in R and D, innovation, and investment, but some types of risk could be minimized by enlightened public policy. Among the problems that can be addressed by the government, we will mention four: the temptation to pick winners, the rise of the concept of social licence, the increasing complications surrounding official environmental assessments, and the effects of changing fiscal and regulatory environments.

First, on the temptation to pick winners, the role of government in a market economy is to make sure the rules of the game are clear and followed by all, not to pick winners in the market for ideas. In fact, no individual or group knows which innovation will be chosen as a winner by the market.

Trying to do this means trying to predict the future. Examples of bad choices by government abound. If the government decides to push for the adoption of a certain technoloy—by using subsidies, for example—the following problems may arise: a bad technology might be chosen, which will eventually be costly for all; the risk that companies did not want to take is not eliminated but simply transferred to taxpayers; and, finally, too much risk might be undertaken, which is a problem called “moral hazard”.

Trying to choose the winners de-risks innovation for companies, but increases it for society. Let us add that having the government actively deciding which technologies will be favoured probably reduces private R and D, as firms simply wait for the government to decide which technology to use.

Second, the rise of the concept of social licence has increased the risks involved in many innovations and investments that could lead to better environmental outcomes. Social licence is a concept that is ill-defined. In fact, its meaning varies from one individual to another, and Canada's laws and regulations make no reference to it. Taking into account such a fuzzy concept when deciding which projects will be allowed by regulatory institutions opens the door to arbitrary decisions and threatens the rule of law. This is clearly an investment killer.

● (1255)

Third, environmental assessment processes have become unduly long, complicated, costly, and uncertain. This increases the risks involved in investing in better ways of doing things and could lead to many abandoned projects, even if they are worthy of consideration. As an example, trying to replace the railway transport of oil by a safer alternative such as pipelines has become close to a nightmare.

Finally, a firm that commits to a major investment, whether in infrastructure or innovation, expects a return on its investment. The calculated return is always hypothetical, as the future is unknown. One of the determinants of return is the cost of regulation and taxation. A volatile regulation and tax environment discourages investment, as it creates uncertainty.

Now for our suggestions on what the federal government can do. The Montreal Economic Institute believes the Canadian government could help to de-risk the adoption of clean technologies in Canada's natural resources sectors in six ways. First, the Canadian government should not push for the adoption of technologies that may not be market-ready. Second, the government should not favour some technologies over others, by which I mean choosing prospective winners. Canada has largely abandoned the idea of an industrial policy, which involves picking winners in industry and we should not let this bad idea make a comeback by choosing which technologies will win in the future. Third, the Canadian government should make sure social licence aspects are addressed early on and in a way that does not run against the rule of law. Fourth, the government should streamline and guarantee a fixed duration for the process of environmental assessments. Fifth, the government should reinforce and make more credible the existing institutions such as the NEB. Sixth, the government should create a stable fiscal and regulatory environment.

I will now be pleased to talk with committee members.

Thank you.

The Chair: Thank you very much.

Ms. Labrie.

[*Translation*]

Ms. Marie-Hélène Labrie (Senior Vice-President, Government Affairs and Communications, Enerkem): Good afternoon.

Thank you very much for inviting me.

I am pleased to be here to speak to you about a topic which is at the heart of Enerkem's mission.

[*English*]

Enerkem is a Canadian clean tech private company operating in Quebec and Alberta. The company uses its proprietary clean technology to convert non-recyclable and non-compostable municipal solid waste and other residues into low-carbon transportation fuels and green chemicals such as ethanol and methanol.

We currently operate two plants in Canada: an innovation centre in Westbury, Quebec, and the world's first commercial-scale waste biofuels and chemicals plant in Edmonton, Alberta.

[*Translation*]

Our next plant will be located in Varennes, close to Montreal. We will be using construction wood residues and other residual urban matter to produce biofuels. We are also working on projects to export our technology throughout the world, in partnership with industrial groups.

[*English*]

Enerkem designs and delivers biorefineries with a standardized modular build process, which means that every Enerkem facility brings growth to the Canadian manufacturing sector.

Enerkem has raised more than $400 million in capital in order to develop and bring its industrial revolutionary technology from the lab to commercial scale, and to prepare the company for commercial growth. The majority of the financing comes from private sources. Enerkem has generated significant intellectual property with 96 patents for its breakthrough technology and process. The company currently employs 200 people.

Clean tech companies like Enerkem generate economic benefits while solving environmental issues. We create value-added products out of waste and residue. We therefore replace the use of fossil sources with the use of waste for the production of fuels and chemicals. We provide synergy with our natural resources sector by offering the possibility of using forest residue, residue from pulp and paper processing, and residue from the agricultural sector. Many of the skills needed to build and operate our biorefineries are similar to those of the petrochemical industry, as well as those of the pulp and paper industry.

We produce clean energy for transportation. Each Enerkem facility can produce enough biofuels to fuel 400,000 cars annually on a 5% ethanol blend. By displacing gasoline and avoiding waste landfilling, Enerkem's facilities can reduce greenhouse gas emissions by over 60%.

We produce renewable chemicals to make our everyday products greener. Chemicals are used in many everyday products—textiles, plastics, paint, etc.—and today we can make those chemicals using waste, instead of only limiting ourselves to producing them from fossil sources.

We also create high-quality jobs. Enerkem started as a family business and grew out of the labs of the Université de Sherbrooke. We now employ 200 people, as I said. Nearly 70 of our people are engineers, and many others hold professional positions. Many young families benefit from Enerkem's jobs.

In addition, each Enerkem facility generates 600 direct and indirect jobs during construction and, once in operation, generates 150 direct and indirect jobs.

Our facilities stimulate regional economies. Based on an independent study, they increase spending across Canada by $200 million during construction, and $65 million per year during operation.

We also open the door to more high-tech exports, thereby increasing and diversifying Canada's export activities. Enerkem is currently developing a project in the Netherlands with industrial partners such as the world leader, AkzoNobel, and Air Liquide. This will generate significant export revenue from technology licensing, engineering services, and the sale of Canadian-made, specialized equipment, as we have built our modular manufacturing infrastructure here in Canada.

● (1300)

A research project on clean innovation undertaken by the Smart Prosperity Institute found that Canada does fairly well at R and D but poorly at the commercialization and deployment of clean innovation, which are the stages where most wealth and jobs are created.

I'd like to present some of the recommendations for policy mix that are required to fix this. In our opinion, the priority should be put on growth capital support for companies that are ready to develop commercial-scale clean tech projects. The deployment of these innovations requires a long development cycle compared to that for other high tech sectors and therefore more capital.

Enerkem has reached a stage in its growth trajectory in which there is a void of available private capital in Canada. To compound the problem, public financing programs are not accessible given that Enerkem is considered to be a late-stage start-up.

Second, another key ingredient is market access. For Enerkem, Canada's renewable fuel standard, RFS, and the clean fuel standard currently in development are important for any enabling access to the fuels market and to stimulate private investment as they send the right market signal. To strengthen these policies, we recommend that the RFS be increased to 10% ethanol in the gasoline fuel pool up from 5% today as we already blend an average of 7%. So we're already over-compliant.

A third recommendation is about eco fiscal measures that further help attract private capital. For example, exempting cellulosic biofuels from the federal fuel excise tax, an exemption that is already applied to natural gas and propane used in transportation and that was used in the past to encourage uptake of first-generation ethanol, would drive more private investment into biofuels produced from forest residues, agriculture waste, and municipal solid waste.

Timing is of the essence. Canada's clean tech advantage is unique but Canada is falling behind in this global growth sector. If urgent action is not taken, Canadians will forfeit the jobs and economic growth that should be generated by our country's clean tech advantage. In fact, research by Analytica Advisors, whose president, Céline Bak, appeared in front of this committee last month I believe, shows that Canada has lost 41% of its global clean tech market share since 2005.

Promised new innovation and clean tech programming may address the needs of such companies that are ready for commercial scale-up, but the urgency of these opportunities does not allow many of these companies to wait until the budget and all of the programs are implemented at the end of 2017.

To date, no program is available to allow Enerkem to maintain its current growth trajectory, including the ones offered by BDC and EDC. We look forward to learning the details of the recently announced $1.4 billion that the Government of Canada will allocate to BDC and EDC over three years for clean tech commercial growth.

We are equally eager to learn how this commitment will add new resources and capital and broaden the mandates of BDC and EDC for clean tech. We hope that these agencies will now be equipped to support large-scale clean tech commercial growth. Growing Canada's clean tech sector begins with retaining and growing the ambitious companies that have built strong IP here in Canada and can diversify our economies, stimulate our manufacturing sector, and generate greater value from natural resources.

Thank you very much.

● (1305)

The Chair: Thank you to all three of you.

I can honestly say that's the first time we've had three witnesses who all came in under time. There must be some long-weekend effect here, for which we're very grateful, and I appreciate that.

Mr. Lemieux, you're first up.

[*Translation*]

Mr. Denis Lemieux (Chicoutimi—Le Fjord, Lib.): Thank you, Mr. Chair.

I thank our three witnesses for their excellent presentations.

Unfortunately I missed part of Ms. Labrie's presentation because an interpretation problem. She raised some good topics.

My first question is for Mr. Belzile.

Mr. Belzile, why is Montreal so reluctant to agree to the Energy East Pipeline project, despite already having several oil pipelines on its territory that function well, such as those from Portland, Maine, and others from Ontario?

Mr. Germain Belzile: I'm going to answer in French.

[*English*]

I think more quickly in French than in English.

[*Translation*]

General de Gaulle once said about something else: “What a wide-ranging program!”. The expression continues to be associated with him. I would say to you: “What a wide-ranging question!”.

I think that there are several hypotheses. The first is that a lot of Montrealers do not understand the importance of natural resources for our prosperity in general. I think they have the impression that this only generates wealth in the west, and that they do not profit from this general prosperity.

I also think that to a certain extent there is an almost religious element at play for a large number of Quebeckers. The environment seems to have replaced Catholicism in a way. I think there are a lot of reasons for that.

We have some very important work to do to educate and convince our fellow citizens, especially those in Montreal, of the advantage of developing our natural resources in an environmentally viable way, and I would even go so far as to say that we have the strictest environmental standards in the world.

Mr. Denis Lemieux: That is very interesting, Mr. Belzile.

Are you familiar with the oil production technologies used in the Canadian west? They use on-site technologies that are able to capture CO_2 in the ground. Do you know that the western Canadian oil production technologies have one of the smallest carbon footprints in the world? Do you think that if these facts were known in Quebec, this would improve the social acceptability of projects such as the Energy East Pipeline?

Mr. Germain Belzile: I believe it would. Some surveys, particularly those of the Montreal Economic Institute, show that the facts are not well known at all. When we explain to people that Canadian environmental regulations, for instance, are a lot stricter that those in many other countries, and that Quebec imports a lot of oil from Algeria, Venezuela or other countries where the environmental regulations are much more lax, we see that Quebeckers become much more favourable to the production of oil in the west. When they find out that there are a lot of innovations in the field to reduce greenhouse gas emissions and other negative effects, they become much more agreeable to the concept.

Let me reiterate that I think we have a great deal of work to do to educate our fellow citizens who are not aware of most of these facts.

● (1310)

Mr. Denis Lemieux: It could thus be said that the reputation western oil has of being dirty oil is unfair, and that it nevertheless persists in Montreal and elsewhere in Quebec.

Mr. Germain Belzile: I agree with you.

About two years ago, we commissioned a survey. We asked Quebeckers what they thought of the pipelines that carry western oil. A clear majority of people were opposed to them. But when the survey explained to Quebeckers that most of our oil is imported from other countries—the survey provided a list of those countries—we asked the same question again and the figures changed markedly. In fact, most Quebeckers prefer to consume Canadian oil rather than foreign oil.

I am not a protectionist, and I think that international trade is a very good thing. However, we have to improve the way in which facts are presented to Quebeckers. Quebeckers are as a rule rather moderate and reasonable. When they become aware of the facts, I think it is quite possible that they will change their opinion on western oil, which is subject to some extraordinarily strict standards.

Mr. Denis Lemieux: I have another question for you, even though it is somewhat hypothetical. We spoke to the representatives of the Canadian oil industry.

Do you think that a major new oil refinery project to be located in Quebec, using crude oil delivered by pipeline from Alberta and destined to international markets for refined petroleum products, might be supported by Quebeckers, because of its economic benefits and the thousands of jobs it would create?

Mr. Germain Belzile: Quite possibly.

The results of the surveys are quite clear. When we explain to Quebeckers that there are refineries in Montreal that would be jeopardized if low-cost Canadian oil were no longer available, they revise their position and become more favourable to western oil. I think that if Quebeckers saw more advantages to petroleum development, without saying that this would be a game changer, many of them would probably change their attitude.

That said, there may be a certain percentage of Quebeckers, perhaps 15% or 20%, that we will not convince; they are opposed to oil on principle, even if they use a lot of it themselves in their daily lives. If there were more oil development in Quebec, I think that this would change Quebeckers' attitudes.

In this respect, I am disappointed that small oil development projects in Quebec, for instance those on Anticosti Island and in Gaspé, do not seem to be moving forward currently. I think that when we start to produce oil in Quebec, this will change things completely.

Mr. Denis Lemieux: Because of that reason, and not because it's taking a long time?

[*English*]

The Chair: Thank you. We're going to have to stop there and move on.

Mr. Strahl.

Mr. Mark Strahl (Chilliwack—Hope, CPC): Thank you to the witnesses for your presentations.

I want to talk to Mr. Scholz. As you just heard in the questioning back and forth, there is still a lot of work to do to convince some folks that our oil and gas industry deserves respect. I want to salute you for the work that you've done with Oil Respect, which defends Canadian oil and gas and tries to get some facts out to people about what it does for our economy, what it's all about, who the women and men who work in it are, and to dispel some of those myths. I thank you for that. I might give you an opportunity to talk about that in a minute.

I did want to talk about what you said. The government is very fond of saying—it's a great catchphrase—that the environment and the economy go hand in hand. I liked what you had to say, that profitability and research and development also go hand in hand, that if you are struggling to make payroll, you're probably not dumping a lot of money into R and D, or if your company is going bankrupt, you're not investing in this country, or if companies are moving their entire operations to a different country, that's where the research and development will take place.

We're very concerned on this side about competitiveness, about the cumulative effect of government policy, be it provincial or federal, and we've seen the impact on some of the major players and heard rumours of Statoil, Shell, ConocoPhillips, Total, and Chevron all divesting their Canadian assets and moving to the United States or to other places where, quite frankly, there isn't the same level of regulatory burden, or the tax structure is different.

What has the impact been on smaller drilling companies that perhaps you represent? Are we competitive still? Are you seeing this impact in the industry at your level? We're not talking now about the multinational companies, but about the Canadian small to middle-sized companies. How are we doing in terms of our competitiveness?

● (1315)

Mr. Mark Scholz: I think in the short term that's a difficult question to answer. From a medium- to long-term perspective, in terms of some of the capital that we're seeing pulled out, that certainly will have huge implications for the activity of my members and their ability to have a larger customer base to ultimately put their people to work and their equipment to work.

Let me just start by saying that the oil and gas industry is a highly specialized, highly segregated business. I represent drilling rig contractors and service rig contractors. Our customers are the producers. Producers like Shell, Suncor, and Statoil are the folks who ultimately are making the high-level business decisions as to where they want to allocate capital. From an international perspective, what we're seeing is that some companies go back to their boardrooms and make some calculations as to where they are going to get the highest returns for their investment. When they make that analysis and they ultimately decide to put more dollars into the Permian Basin, that impacts Canadian families, restaurants, and hotels, the folks who indirectly and directly depend on that type of investment.

What I would say is that we are absolutely in a highly global, competitive environment. From a technology perspective, a lot of this technology is starting to be proven during the downturn. That's where we see the true companies, the companies that have an idea and are taking a risk to put it into place in order to lower their costs of operation. In the past two to three years, we've seen significant developments in the use of different downhole tools that have increased productivity. In my membership, most of the high-spec rigs—the $50-million rigs, the walking rigs with operating systems that have sensors all over the rig, that understand penetration rates in order to drill in the most effective way—are working right now.

Oil is certainly not commanding the price that it used to back in 2014. But what I'm saying is that at a time like this, where it is so competitive, producers are at a stage where they have to use the best, most efficient, most high-tech equipment in order to lower their costs, and that's going to make us a better industry down the road. Government policy certainly matters, and Canada is not alone in saying that anything we do is not going to have a consequence or an impact on investment. When we've seen some fairly dramatic signals from the United States in terms of lowering the burdens of business, lowering corporate taxes, cutting red tape, we have to be very sensitive to what that is going to mean to our industry.

I'll just make one other point. You have to look at signals in the market, and where investments are being made. I represent small mom-and-pop drillers all the way up to international drillers, and if you look in any of the MD&As or the analysis of these companies, look at where they're upgrading their equipment. Canadian companies are investing millions of dollars in upgrading rigs. They're doing it in Canada, but they're doing that at a more exponential rate in the United States, to go after the Permian and the Eagle Ford basins, those sorts of plays, because that's where they see the market moving.

● (1320)

Mr. Mark Strahl: Thank you.

The Chair: Go ahead, Mr. Cannings.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): Thank you all for being here today.

I just wanted to start with Ms. Labrie. You mentioned that Enerkem's process reduces GHGs by 60%. I assume that if you throw a tonne of stuff into the landfill versus if you put a tonne of stuff through your process, that's where that 60% difference is.

Ms. Marie-Hélène Labrie: I can explain that. This is based on the recognized life cycle model to calculate a reduction in the biofuel section. In the case of Enerkem, not only do we reduce the GHG emissions when the ethanol is burned in the gasoline, in the engine, but also there's a factor where we avoid the methane emissions from landfills. Of course, that can vary if there is already a methane capture system, but it's never 100%. So we get both benefits from a greenhouse gas emission standpoint.

Mr. Richard Cannings: Right.

Has Enerkem done the big-picture calculations on this? If there was an Enerkem plant at every big landfill in Canada, how would that affect Canada's efforts to reduce greenhouse gases? What kind of impact would that have on that battle?

Ms. Marie-Hélène Labrie: We haven't done that type of calculation. I think emissions from waste in Canada are below 10%. I may have the Quebec number in mind, but it's not the largest one. I think transportation is a bigger one.

In terms of volume, yes, it's probably at least 100,000 tonnes per facility, so you need to scale up. There's enough feedstock in residues and waste generated to build a lot of facilities across Canada. We could target the large urban cities, but we could also target rural areas with forest residues, agriculture waste, etc.

Mr. Richard Cannings: Could you explain the tax exemption you talked about that you would like to see for biofuels? I'd like it to be clear in my mind which tax you were talking about, what's already exempt, and the money you would like with regard to that.

Ms. Marie-Hélène Labrie: It's the 10¢ fuel excise tax. This exemption was used in the past to kick-start the first-generation ethanol industry. Then it was replaced by a producer credit program, which does not exist. We could not really benefit from it, because we were really the second wave of the biofuels sector. Today the natural gas sector and the propane sector benefit from that exemption when they use their resources as a transportation fuel. Liquefied natural gas is an example.

Mr. Richard Cannings: There's no excise tax paid on those...?

Ms. Marie-Hélène Labrie: On their products, yes, exactly. We would like to see the same—

Mr. Richard Cannings: So you would like to see no excise tax, not—

Ms. Marie-Hélène Labrie: The 10%?

Mr. Richard Cannings: You wouldn't bump it down to 9% if it were just 10% biofuels, or...?

Ms. Marie-Hélène Labrie: On the portion that is the biofuel, that 10% would be applied.

Mr. Richard Cannings: Okay. That's one thing I wanted to clarify.

Mr. Scholz, I've had representatives from the drilling industry come into my office and talk to me. I don't know if they were part of your group or some other group.

Mr. Mark Scholz: Take names. I want to find out who they are.

Voices: Oh, oh!

Mr. Richard Cannings: I would have to look back in my book.

They brought up issues around orphaned and abandoned wells and the work that those contractors could get if the government really tackled that problem. The other thing they brought up was the possibility, which we've heard is out there, that we could use these abandoned wells for geothermal energy production. Your people would be keeping good jobs in that shift to a renewable economy.

I just want to know if those are issues that are on your radar.

● (1325)

Mr. Mark Scholz: On the geothermal bit, it is on our radar, but I don't have a lot of information or expertise on the process of converting an abandoned well into geothermal. I know the Alberta government has been doing some work with some companies on that, but I don't really have any details. Having said that, it's a great idea. We should absolutely be looking at all avenues within the oil and gas sector to look at pivoting, and to get opportunities like that to move toward geothermal or renewable energy. Our position would be that it's a good idea for jobs, and it's a good idea for my members. We're not going to stand in the way of that.

In terms of the orphan well perspective, this is a very difficult issue. This is a black eye on the industry and the Government of Alberta. I certainly saw, within the budget, that $30 million went toward the Alberta government to support efforts in remediating some of those abandoned wells. I don't have all the information, because it's a side of the business with which I'm not familiar. Certainly, when our customers come and ask to abandon wells, we send in that equipment to do that work. We would have to look at the regulations in terms of how we improve that record. I agree that it's something that absolutely needs to be improved.

When you look at, for example, North Dakota—and I don't have a 100% degree of expertise on this—the state abandoned two wells in the past 10 years, and North Dakota doesn't come close to the environmental regulations we have. Why is that the case in that particular area?

Let's not reinvent the wheel. Let's look at what the best practices are internationally of how we can do a better job on this file. We certainly have not done a very good job.

Mr. Richard Cannings: Thank you.

The Chair: Mr. Tan.

Mr. Geng Tan (Don Valley North, Lib.): Mr. Belzile, you mentioned something in your presentation about the risk and the de-risk in the adoption of new technology on the environmental side. I guess your idea can be extended to clean tech and other areas, as well.

You suggest the government should stay away from providing funding. For many start-up companies and for many innovative technology companies, they're just at the beginning, so without funding from the government—federal, provincial, or whatever—they cannot go anywhere. They cannot even survive.

I believe it is the obligation of the government to support new innovations or new technologies. At the same time, though, the government does not want to waste money, because it only wants to support or fund the projects that have potential, or will bring benefits to Canadians in the future. It doesn't want to waste money and, more importantly, it doesn't want to waste time, because a few years of time means a lot in maintaining our leading edge in global competition.

I asked a similar question before, but I did not get a good answer. I hope I can get a good answer from you, even though you think the government should stay away. If the government has to provide support or funding, in your opinion, where can the government get the expertise to evaluate or validate those proposals from industry to make sure it is doing the right thing?

● (1330)

Mr. Germain Belzile: I maintain what I said earlier, which is that the government does not have the expertise to pick winners. Neither do I, and neither does anyone here, because you would need to be able to predict the future.

There are many examples of governments making bad choices with an industrial policy. On the Minitel in France, for example, which was supposed to be better than the Internet, well, it's not, and it's not there anymore. What I think the government should do is create, through legislation, clear incentives for companies to do research and development, unless there are really particular problems in the financial industry that prevent companies that have good ideas from getting financing for these ideas. In that case, maybe direct help could be warranted, but I don't think it's the case. In fact, I think we have a lot of risk capital. That's not a problem, in fact. I think it's simply a bad idea for the government to decide which technologies we will be or should be using.

This being said, it does not mean that the government should not do anything. It should, I believe, simply create, through legislation, incentives for companies to do the research. They're already doing research through COSIA, for example. In fact, companies are sharing the results of the research they're doing. If I'm not mistaken, companies are even abandoning their patents, in fact, and the royalties they could get from their research, because they simply want to share. They know they're in the same boat.

The government certainly has a role, but I personally believe that in most cases the government creates risks for companies. In fact, it's not de-risking but increasing the risks. I gave a few examples, such as overly long environmental assessments of projects without any certainty. Eventually, if it's a political decision, a company can spend hundreds of millions of dollars in a project and have all the permits.... There's one example in Quebec, not a federal government one. A mining company in northern Quebec wanted to open a uranium mine not that long ago. They got the 22 needed permits to do it, but the government intervened finally and decided, “Well, let's put a moratorium on that.” In fact, they're in court right now.

That's a major risk. In fact, I personally believe that we will not be seeing any other investments of these types in Quebec for a while. I think the government can do many things, but the first thing a government should do is make sure that it's not preventing the implementation of better ways of doing things.

Mr. Geng Tan: Thanks, but remember that the government is the policy-maker. They create the proper environment or atmosphere for free competition, for industry to take a role, but at the same time they have to give direction. That's the job of the government.

I want to ask Ms. Labrie a question. I only have one question. I will come back in the second round.

Your company has converted municipal solid waste into biofuels and the green chemicals. That reminds me a bit of a company called Responsible Energy. They used their technology, the plasma torch, at 5,000°C, basically to break down all the molecules of organics to make their biofuels. What is the similarity between your technology and theirs?

● (1335)

Ms. Marie-Hélène Labrie: Enerkem is the only one that can produce ethanol and methanol using full solid waste. Our process is different from what you are referring to, in that you are referring to plasmafication, which operates at very high temperatures, more like 4,000°C or 5,000°C. We operate at low severity. We have our own process to crack this solid material and transform it into a synthesis gas.

Then, not only is our process producing that gas and burning it in an engine to produce electricity, it is converted into liquid products by interacting with catalysts. We produce methanol and then ethanol. Methanol is produced from natural gas. Our gas can interact with those catalysts that are today producing methanol from natural gas, and then we convert it later with other catalysts. In five minutes, the solid material—this garbage mix of diapers, old pairs of shoes, plastics that are non-recyclable, pizza containers, and whatever—is converted into methanol or ethanol.

It's different. Ours is integrated. I haven't seen any plasma gasification that can convert to liquid chemicals. It usually produces electricity.

Mr. Geng Tan: I guess that's at lower temperatures.

The Chair: Mr. Tan, I'm going to have to stop you here.

Ms. Marie-Hélène Labrie: It's slower, but we also use catalysts to convert to liquid products, rather than a gas product.

The Chair: I'll come back to you later in the agenda.

Go ahead, Ms. Stubbs.

Mrs. Shannon Stubbs (Lakeland, CPC): Thank you, Mr. Chair.

I just want to take the opportunity to make clear that there is not a consensus around the table, among the members of Parliament here, that it is the role of the government to give direction to the private sector, given that we are not in a command-and-control economy. I think it's been clearly articulated, particularly in regard to the subject we are discussing, that it is the private sector that has to lead innovation. In many ways, government actually stifles the private sector and the combination of their policies and added costs can result in the very opposite thing that they say that they care about, by making these companies that already have a track record—in the case of 2016, a $2-billion investment in R and D across the Canadian energy sector with $1.45 billion of those private sector investments coming specifically from oil and gas and oil sands companies. It's very clear that if the government makes things more difficult for those companies, therefore, they will be less able to invest in innovation and R and D and continue to lead the world, as has been articulated effectively.

Just on that note, I would invite both Mark and Germain to make any comments you might want to make, specifically about the impact of a lack of clarity, for example, in Canada's case, regarding four major regulatory reviews that have not yet been completed. This is in addition to the bizarre spectacle of a government that seems to be driven by the social licence concept. On the one hand, they do things like talk about actively phasing out a world-leading energy sector while funding automotive and aerospace companies and on the other hand, they talk about increasing the costs by reducing expense allowances for oil and gas exploration in Canada.

Mr. Mark Scholz: Do you want to take a stab at that one first?

Mr. Germain Belzile: I would say that research that's been done, in maybe the last 40 years, in economics has shown pretty convincingly that industrial policy is not a good thing. In fact, the government is not better at picking winners than I am or anyone here is. In fact, the market is a process to find, as Hayek has said, what's right and what works. It's impossible to replace the market with government policy.

As just one example outside the oil and energy sector, when the airline industry was deregulated in the 1970s and 1980s in the United States, no one had imagined that airline companies would invent hubs. You don't fly direct now. You have a stopover somewhere. That makes flights much more efficient. The percentage of people in the flights is higher. The market discovered that. Regulators did not discover that. It's very easy to find many examples of people in different countries doing things in a certain way—we deregulate and we find somehow, very quickly, that there are better ways of doing things.

I should say that I agree with you that the government very often stifles companies. I didn't say it this way, but I would almost say to the government, get out of the way and things may be better if you do that. It does not mean, don't do anything. Create a regulatory environment—

● (1340)

Mrs. Shannon Stubbs: The government should just set the rules.

Mr. Mark Scholz: We have an amazing story to share as a country. We have an amazing story to share about the way that we develop our natural resources. One of the things that's always good in a debate is really sticking to facts and reality, and in any sort of indication in terms of where our energy mix is going.... The IAA came out with a statistic that showed that by 2040 we're going to consume 35% more energy, and 75% of that's going to come from fossil fuels.

One of the things that I would really implore this committee to think about is where does the world want to be getting its resources from? Canada is a leader on so many fronts, in terms of our responsible stewardship with the environment. I go out to rigs as much as I can, in the most remote locations in western Canada. The level of detail and care that's taken in ensuring that those operations are done efficiently, environmentally responsibly.... There isn't even a single garbage bag that is left on site when our contractors and our operations leave. It is left in the most pristine circumstances, ultimately until the end of life for that well, when it's remediated to the point where you have that natural landscape again.

One of the things that I think is an opportunity as a nation-building exercise.... I wrote an op-ed a couple months ago about—

The Chair: Mr. Scholz, I'm going to have to stop you.

Mr. Mark Scholz: Okay. I'll send you that op-ed.

The Chair: You might be given a chance to go back to that in a moment.

Mr. McLeod, it's over to you.

Mr. Michael McLeod (Northwest Territories, Lib.): Thank you to the witnesses.

I was hoping to hear more about clean tech today. We don't seem to be hearing a lot of examples of what your organizations could do or should do, besides the government staying out of the way and things of that nature.

I come from the Northwest Territories. We don't produce a lot of greenhouse gas emissions. We're downstream from Alberta, so we live in constant concern of effects coming downstream in our waters and our different bodies that are out there. I attended meetings with people in northern Alberta, and they're concerned about what's happening on their lands too.

We do have communities in the north that have a lot of waste that they're producing, and no way to really get rid of it. We can bury it, but because of the permafrost it doesn't deteriorate. I really think that what you're doing at Enerkem could maybe be processes that we could look at in the north. In fact, maybe our committee could come and see what you're doing at your sites in Quebec and in Edmonton.

I'm curious at what scale your biorefinery process currently operates. Could you give us an idea of the volume of waste we're talking about, being produced at those two sites, and the amount of fuel and chemicals that are being produced at the same facilities?

● (1345)

Ms. Marie-Hélène Labrie: A standard Enerkem system like this one, which is the one in Edmonton, takes 100,000 dry metric tonnes of garbage and produces over 40 million litres of ethanol. This is its annual capacity. The volume in the wet basis, because usually the garbage is mixed with wet materials, is more like 200,000.

It can be a mix of urban residues, forest residues, or agricultural residues. The facility can take mixed garbage as well, not only one stream. The municipal solid waste is already heterogeneous, it's already mixed, but it can also use forest residues. Those two streams can come together in the system and convert into those chemicals.

Mr. Michael McLeod: I guess it's safe to say that the lifespan of the landfills are extended.

Ms. Marie-Hélène Labrie: Totally. In the case of Edmonton, today, with recycling and composting, they are achieving a waste diversion rate from landfills of about 55%. That's very high.

With our facility, this rate will increase to 90%, so with only 10% still going to landfills.

Mr. Michael McLeod: Could you maybe expand on some of the suggestions you made to help create a better environment for clean technology in the area that you're in, and that the federal government could assist in?

Ms. Marie-Hélène Labrie: Yes, I can be very quick. The first one was on growth capital support. They were very good at putting money in R and D. The thing is that if we only focus on helping R and D, and we don't look at it from a holistic approach, we create these companies that remain small. They don't create jobs, they don't create wealth, and then they get purchased by foreign companies. There is a risk that this IP will leave Canada if we don't look at the full chain of financing, from the R and D lab to pilot and demonstration to full commercial scale.

I'm not talking about subsidies. I'm talking about all kinds of supports. They can be regulatory, fiscal, or—when I talk about growth capital, when those companies are post-demonstration and are ready to really expand—in the form of loans, loan guarantees, or equity. At BDC that's what they do—equity investments—but sometimes they get focused on the first rounds, which are less risky, and then those companies stall. They cannot grow, and then they get purchased by Chinese investors or investors here in Canada.

Sustainable Development Technology Canada, SDTC, has really been a vehicle to grow those companies. They are helping our natural sectors. They work a lot with COSIA and others. We're building great companies, but we don't take them to their full potential, where they can create jobs. That is the main issue.

On market access and market demand, in the fuel sector the renewable fuel standard is really a key regulation to provide market access to biofuels in the fuel space. To date the federal mandate is at 5% for ethanol, but we're already over-compliant, and governments around the world are increasing mandates because we need a green liquid support. We're not going to switch to electric cars all of a sudden. We have millions of cars that are running on liquid fuel. Our infrastructure is liquid, our customers are the refiners, and they buy our products. It's also an oxygenate for fuel, so it replaced MTBE. It really has a use.

The last one was on the eco-fiscal side—

The Chair: I'm going to have to stop you there, unfortunately.

Thank you.

Mr. Strahl, we'll go back to you.

Mr. Mark Strahl: Thank you, Mr. Chair.

I just have to quickly address the comments by Mr. McLeod. Obviously he doesn't like what he's hearing from some of the witnesses today. He mentioned there is not much in the way of GHG emissions in the Northwest Territories. In fact, the latest information from the Government of the Northwest Territories shows that the average per capita GHG emission for the Northwest Territories is 50% higher than the national average, as it obviously would be, given the very cold and remote nature of those communities. It's simply not true that GHG emissions are low in the Northwest Territories, so I don't really know where that came from.

Mark, I wanted to give you an opportunity. You were going to talk to us about the post you had written—

A voice: You're talking about me.

Mr. Mark Strahl: Sorry, Mr. McLeod, I do have the floor.

Mark, I was going to ask if you could continue with your answer to Ms. Stubbs. You got cut off there by the time, so could you just expand on some of your answer?

● (1350)

Mr. Mark Scholz: I'll be brief. I just wanted to articulate that I think it's a real opportunity for us as a country to look at a nation-building opportunity. You go back to the way our country was built in the late 1800s and early 1900s when this country really came together to build what was effectively a project that many people thought wasn't possible. That was the national railroad. It linked eastern Canada to western Canada in a way that really put the two sides of our country together economically, socially, and politically.

We can do that same exercise with what we would consider, in today's age, the modern transportation corridor, that being the pipelines. One of the things that I think we have to understand as a country is that 41% of Canadian oil was imported. We spent hundreds of billions of dollars layering the pockets of oligarchs, autocrats, and countries that have no recognition of human rights or environmental standards, and as Canadians we should be so proud to ensure not only that we can produce it responsibly but consume it responsibly here in Canada.

It's not to say that we want subsidies; we want the producing regions of our country to be given an opportunity to get to market. If we can get our resources to market, into Montreal refineries and across into eastern Canada, we can get it offshore and into other countries. That really is our opportunity. One in eight jobs in Ontario is the result of the oil sands. Hundreds of jobs and businesses are dependent on the oil sands and the oil and gas industry in the province of Quebec.

One of the most alarming statistics is that 90% of Quebec's oil is imported, and 37% of those imports are coming from some of the lowest environmental regimes when it comes to their oil and gas environmental record. We can do a much better job. We have a huge opportunity as a country. It's a win-win opportunity right across the board. Not only that, it will help us ensure that, as we transfer to greener technologies, we're not losing sight of the reality that our economies continue to grow over the next decades, if not centuries, on fossil fuels as we continue transition to greener types of energy.

Mr. Mark Strahl: The University of Ottawa's Institute of Fiscal Studies of Democracy calculated that there were 147 different programs with interchangeable names intended to foster innovation, and we see more in the latest budget. Do you not agree with their take-away that, if more government programs and more government money was the answer, perhaps this would have been the greatest success story in Canadian history? Instead we continue, under every stripe of government, under every budget, to try to foster innovation, and obviously more money in more programs hasn't gotten the job done so far.

Mr. Germain Belzile: I agree. In fact, I think that the biggest problem we have right now is a fiscal problem, especially in light of what's probably going to happen in the United States in the next few months. The Republicans have promised to reduce marginal tax rates for personal marginal but also marginal tax rates on profits, and we, as Mark has said, have seen a lot of money going to the United States. Innovation is not accelerating in Canada because of that, because we're putting less money than we could in research and development. I think that the big problem we have is a fiscal problem right now. It's not enough money, in fact, through subsidies given to companies or all the rest. I think the biggest problem we have right now is that we are in fact creating an incentive not to invest with high tax rates.

● (1355)

The Chair: Thank you.

Mr. Tan, I believe we're going to go back to you for five minutes.

Mr. Geng Tan: Thank you.

Ms. Labrie, you mentioned that you can use your technology to use the residue from the pulp and paper industry to produce biofuels —I guess mostly from pulp in the pulp process. I worked in pulp and paper for a few years, so I know in that the pulp mill the people burn that residue—they call it black liquor, actually—in the recovery boiler to produce steam to drive a turbine and generate electricity. The amount of electricity generated in that way is always sufficient, and more than sufficient, to meet the demand for the whole pulp mill. But with your technology, the residue is gone. The pulp mill will find a way to get enough electricity to drive their plant, and probably even drive your plant as well, on site. I'm trying to get the big picture of the costs between these two approaches, and the carbon footprint when you compare these two approaches.

Ms. Marie-Hélène Labrie: I think you're talking about electricity production or heat and power. Is that what you're referring to?

Mr. Geng Tan: Yes.

Ms. Marie-Hélène Labrie: We're in the chemical business, so it's a little bit different. We produce liquid fuels. Those are two different things. We don't produce electricity. That's the main—

Mr. Geng Tan: That's my question. Before your technology, the pulp mill had enough of the residue to burn to produce electricity, but once they apply your technology, all the residue is gone, so there's no source of energy, no source of electricity. Where do they get the electricity from? When you compare your approach and their way, probably they have to buy electricity from a coal plant or even a gas plant. They produce CO_2 in that way. How do you compare these two approaches?

Ms. Marie-Hélène Labrie: We tested over 25 types of feedstock that industry asked us to test that were really waste, that had no value for them. I'm not talking about that feedstock. We have the capacity to help industries get rid of their residues. I'm not talking about things that have value for them, so that does not apply in this case.

Today, we decided to take municipal solid waste as our primary focus because we get paid to take that feedstock as well, instead of having to pay for the biomass. That makes it even more attractive, especially for the first project we're launching. What I'm saying is that there is a lot of flexibility. We've been approached by different groups to deal with their residues, and to have that synergy where waste becomes a resource to produce high-value product. We get more into a circular economy, rather than just a linear economy.

Mr. Geng Tan: Okay. Thank you.

That's it.

The Chair: Mr. Hardie.

Mr. Ken Hardie (Fleetwood—Port Kells, Lib.): Ms. Labrie, where did the idea come from? Nobody from the oil and gas sector was coming to you and saying, “Well, help us do this”. Where did the idea for your process come from? What gap did you recognize, and what was the process you used?

Ms. Marie-Hélène Labrie: The vision, the idea, came from Dr. Esteban Chornet, a retired professor of chemical engineering at the Université de Sherbrooke. He was involved in looking at solutions to take forest residues to produce electricity at the time, and he had the idea in the nineties of trying to find a solution to basically use mixed waste, to try to solve the issues related to managing our waste, while also producing liquid transportation fuels.

The company was co-founded in 2000 by Dr. Esteban Chornet and his son, who's the businessman and has a finance background. They started at the lab phase, using the Université de Sherbrooke installation, and then they invested in a pilot. They got some money from the regional economical development fund in Quebec, but soon they had to go outside Canada to find some private capital. They went to New York and they found two clean tech funds that were ready to invest; and basically the company has gone through all the steps in terms of technology development and validation, from pilot to the demonstration phase.

NRCan supported us with some R and D programs at the beginning. Then SDTC helped us. It really complemented the capital we were able to attract from private investors, and for our private investors, it was really key to have the Canadian government through all those phases of development.

SDTC was also involved at the commercial phase, with the next generation biofuels fund. The way they do the technical due diligence is by having an independent engineer. It was a very thorough selection process with commercial due diligence, technical due diligence; and we got a repayable loan from SDTC for the large-scale facility, but most of the funding we got was private. We got most of our skills from universities. A lot of people also coming from the petrochemical industry came to work for us, and we have great people with very strong skills. We have headquarters here in Canada and and we can grow the company internationally.

● (1400)

The Chair: Thank you very much.

Mr. Cannings, you are last up.

Mr. Richard Cannings: I think I'll turn to Monsieur Belzile. I haven't chatted with you today. I'm going to ask a long, rambling question here, and it may not have much to do with clean tech, but since you brought it up, I thought I'd rise to that bait.

You talked about some of the challenges around natural resource extraction in Canada, and two you mentioned were this rising concept of social licence, and environmental assessments that were unduly long. I forgot what your terms were, but I'm referring to those two things, which I think you'll agree are connected in some ways.

Monsieur Lemieux brought this up, I think. I'm from British Columbia. There has obviously been a dramatic increase in polarization around these issues over the past 10 years. I have laid the blame in the past partly on the previous government, which tried to call people who were against some of these energy projects foreign-funded terrorists or something like that. That caused people like me to sit up and take notice, and think about which side they were on. It really split the population.

The present government was elected on a promise to regain the confidence of Canadians in these projects by having a new environmental assessment process that would listen to communities, to first nations, because that's at the heart of it, I think. That's where social licence, however fuzzy it is, comes from, from listening to people and having them feel they've been listened to. I would say from my conversations with people in British Columbia that the process that they invented, and that happened last summer around the Kinder Morgan approval, didn't accomplish that at all.

So we're stuck with...even though the government is claiming that they've already created 20,000 jobs because they have all these pipelines that are being built, when they're still facing a lot of social opposition. There's Kinder Morgan in British Columbia. We have the —

The Chair: Mr. Cannings, I should have reminded you at the beginning that you have only three minutes. You're getting dangerously close to that now.

Mr. Richard Cannings: Okay, I'm sorry.

We have these projects that are still facing substantial opposition from the public, who say, “These are our resources. This is our environment.”

It would be difficult for you to go and say, “Let me teach you about the environment.” They would try to teach you.

Could you comment on that conundrum and how we get through it?

● (1405)

Mr. Germain Belzile: It's a very difficult question. It's a very difficult problem. I don't have a ready-made solution for that.

Maybe I could give you a few ideas I have about that subject.

First of all, I think we should make sure that we deal with all the social licence problems early on in the processes. We should not let the process drag on.

Once companies have spent tens or hundreds of millions of dollars to get a project approved and in the end we decide, “Well, there is a social licence problem, so we won't do it,” I think it's very unfair. I think it goes completely against the rule of law.

Let's not forget that we owe much of our prosperity in the west—I'm not talking about western Canada, I'm talking western civilization—to the fact that we've been using the rule of law for so long. That's why other countries are copying us, in fact.

The rule of law means that we have rules, that we have objective ways of implementing them, and that the rules are known.

When we enter into social licence, there are in fact no rules and we don't know what's going to happen, so it's very difficult.

That's the first thing.

Second, if I still have a few seconds—

The Chair: Please answer very quickly, sir.

Mr. Germain Belzile: —I think it's very important to understand that social licence does not mean that everyone has to agree.

Mr. Richard Cannings: Oh, I know.

Mr. Germain Belzile: I think it comes down to that, in the end. We are trying to have everyone agree and it's very difficult.

Maybe I can give a bad example. You will not get Homer Simpson to agree with you sometimes.

Some people will not agree with you anyway, whatever you do, so we need to think hard about that. There is no way to make everyone happy in this situation.

Mr. Richard Cannings: I agree.

The Chair: Thank you very much to the three of you. Your evidence has been very helpful and will be useful to contributing to our report when it's completed in a few months' time.

On that note, we will adjourn. I hope everybody has a very happy Easter long weekend, and works hard but enjoys the next two constituency weeks. We will see you on May 2 when we get back here and talk about clean tech. Thank you.

The meeting is adjourned.