HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Natural Resources

RNNR • NUMBER 118 • 1st SESSION • 42nd PARLIAMENT

EVIDENCE

Thursday, November 8, 2018

Chair

Mr. James Maloney

Standing Committee on Natural Resources

Thursday, November 8, 2018

● (1105)

[*English*]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): Good morning, everybody. Happy Thursday. Everybody is in a good mood today, I see. I think we all know why. This is the last meeting before our constituency week, which is the real reason everybody is so happy.

We have two witness groups joining us today in the first hour. Thank you very much.

From Efficiency One, we have Stephen MacDonald, chief executive officer; and Amelia Warren, director of customer experience and partnerships.

From Energy Services Association of Canada, we have Jean-Pierre Finet, vice-president.

Mr. Finet, I understand that you have provided a presentation which is in English only. It's going to be translated, but I think Mr. Finet is actually going to be delivering a lot of his remarks in French.

If everybody is okay with that, we can pass around the deck.

Some hon. members: Agreed.

The Chair: It will be translated subsequently. Thank you.

Before we get going, the other piece of information to mention is that the minister will be joining us on Thursday, November 22. He is coming to speak to us about the estimates, but also generally about his mandate as he's relatively new to the portfolio. We can look forward to that when we get back.

The process for today is that each group will be given up to 10 minutes to make their presentation, which they can do in French and/or English. This will be followed by a series of questions from members around the table.

Who wants to start us off? I'll leave it up to you.

[*Translation*]

Mr. Jean-Pierre Finet (Vice-President, Energy Services Association of Canada): Good afternoon, everyone.

[*English*]

I can answer questions in French and English. It's fine with me. I will provide you with a translated French version of the presentation as soon as possible afterwards.

My name is J.P. Finet. I represent the Energy Services Association of Canada. I'm here to talk to you about how energy performance contracting, as part of the energy-efficiency mode of intervention, can contribute to the Canadian Paris climate change commitments and also provide economic opportunities other than simply saving energy.

First, I'm going to talk to you briefly about who is part of the Energy Services Association of Canada. Briefly, I'm going to explain to you also very simply what is energy performance contracting and the benefits of energy performance contracting compared to other modes of intervention in the marketplace, and also the economic opportunities and environmental contributions ensuing from our work in the marketplace. Then after, you can ask all the questions you want.

The association was incorporated in August 2010. Our membership was founded by six very large companies. A lot of blue chip companies are in there, including Honeywell, Johnson Controls, Siemens, Ameresco, Trane, and MCW. However, we have more members than that. We also have Engie, which is the former GDF Suez, which is worth something like 60 billion euros. We have other energy service companies, but we also have manufacturers that are members of our association, such as Armstrong Fluid Technology, Philips Lighting, and so on.

These are all large, credible organizations. These companies represent approximately 90% or $300 million per year of guaranteed performance contracts in Canada. We represent where we do the most business.

I'll tell you what an energy performance contract is and what it is not. It's basically a partnering arrangement between a building owner and an energy service company. An energy service company is different from any other engineering firms in the sense that what distinguishes us from everyone else is that we guarantee savings. By the way, we intervene mostly in, I would say 90%, public buildings, so either federal or provincial buildings. Ten per cent would be the commercial sector. Basically we do a comprehensive review with guarantees that the savings will be sufficient to finance the cost of the project. If, for instance, in a case where we said we will save 30%—I say “we”; our members say we'll save 30%—in your building and they don't achieve that 30%, we compensate by writing a cheque for the difference. That's why we say the risk is on us. We transfer the risk and financial performance risk to the energy service company.

If you take a traditional engineering firm with their staff, they can make the exact same project, but they will just not guarantee the savings. That's why we provide over and above the traditional way of doing business.

On financing, there's a point I need to make. Our members don't make money from financing operations. Actually, they prefer not to finance. Many governments, like the Quebec government, for instance, even the federal government, use their own money, their own budgets, and we guarantee savings. But if there are clients... there are also some governments that prefer not to use their own money and use off-balance sheet accounting, then we can facilitate it as a pass on...the financing. We are linked to a lot of financial organizations, large banks that will provide the financing for the projects because they know that we are serious and we achieve savings.

● (1110)

As for how it works, before a partnership, the building owner and manager has an operating budget, with which he pays the utility bills. During our partnership, the operating budget is used to finance the energy-efficiency measures and the monitoring and performance reporting and so on, until the cost of the project is repaid. Then the customer—or the client, the building owner—retains all the savings once they have repaid all the costs of the project.

Our members basically make money on the inefficient use of energy, which we replace with the efficient use of energy. We've done a lot, by the way. There's the federal building initiative, a program of Natural Resources Canada that promotes energy performance contracting within the federal government organization. NRCan also provides coaching and qualifies facilitators who accompany building managers in these types of contracts. A lot of provinces also use energy performance contracting, but more could do so. Also, the private sector would gain by using more of this type of risk-free energy contracting.

There are key benefits. They include measurable accountability through performance-backed savings guarantees, and the mutual success guarantees partnering behaviours. Also, it's often used to offset costs around wider improvement initiatives, for instance, asset management. Regularly in our contracts in Canada and in Quebec, we're being asked to use the energy savings to finance asset management and improve the facility condition index of the building. For instance, a lot of schools in Quebec have suffered from a lack of investment through the years and now need a lot of reinvestment. Basically, energy savings also are used to finance these upgrades.

As well, it's a turnkey process with one contract and less coordination risk. If you want to do energy-efficiency projects within the federal government, you could do that on your own. You can hire people, be the mastermind, contract everything and be the general contractor, or you can hire an engineering firm. You can also hire an energy performance contractor, an ESCO, which will supervise everything, act as a general contractor and guarantee the savings.

Another benefit is that the contract value and energy savings are known before the installation commences, based on a detailed feasibility study. Also, there are full benchmarking, accountability and financial tracking. There's also, as I said earlier, a facilitator who accompanies the client in all of that; so there's a third party verification, if you will. As well, all of that is hedging against future increases in the cost of energy.

In terms of economic opportunities and environmental contributions, yes, we can focus, and this all depends on the RFPs that we answer. The criteria will vary by the function of the building and the priority of the client, but if we're asked to put a focus on greenhouse gas emissions reduction, we will put a focus on the measures that address that. For instance, in Quebec, if a building is heated with electricity, then we won't have as many greenhouse gas emissions, so we'll focus on other fuel sources.

As I said earlier, there's the possibility of allocating savings to asset maintenance and to improve the facility condition index, which is another economic opportunity. The fact is that energy-efficiency stimulates economic development and job creation in all regions of the country. Actually, in your case with the federal government, it's basically about leading by example. When you undertake an energy performance contract, you achieve savings and you show the rest of the marketplace how to do so.

If you have any questions, I would be happy to answer them whenever you want.

● (1115)

The Chair: That's perfect. Thank you very much.

Mr. MacDonald and Ms. Warren, who's going to start off on your side?

Mr. Stephen MacDonald (Chief Executive Officer, Efficiency One): I'll start, thank you.

Good morning, everyone. My name is Stephen MacDonald. I'm the chief executive officer of Efficiency One. With me is my colleague Amelia Warren, our director of customer experience and partnerships.

Thank you so much for the opportunity to speak with you today as part of your work on studying economic opportunities for energy efficiency. I have some prepared remarks to make, and I am anxious to answer questions as well.

Efficiency One is a North American leader in the design and delivery of energy-efficiency programs and services for households, businesses and institutions. Our model focuses on building industry capacity by partnering with a broad network of local businesses to deliver our services. These businesses include energy auditors, contractors, retailers, technical consultants, architects, builders and many more.

Currently, we work with more than 200 partners to offer advice, technical assistance and financial incentives to over 200,000 customers in Nova Scotia, as the franchise holder of Efficiency Nova Scotia, Canada's first and only energy-efficiency utility. As the franchise holder, Efficiency One has the exclusive right to supply Nova Scotia's electricity utility with reasonably available, cost-effective efficiency and conservation activities for a 10-year period. These activities are regulated by the Nova Scotia Utility and Review Board. Costs are included in electricity rates.

Efficiency One also administers programs to help homeowners reduce their use of home heating oil and other fuels, with support from the Government of Nova Scotia and the Government of Canada's low carbon economy fund. These programs focus on reducing the burden of energy costs on low-income households. They also include several innovative pilot programs and new incentives to support the adoption of solar photovoltaic systems.

One of our pilots focuses on partnering with Nova Scotia's 13 first nations communities to provide energy-efficient upgrades such as draft-proofing and insulation. These upgrades are expected to result in more than $1 million in lifetime savings for participants. The pilot also focuses on education and awareness building to enable future energy-efficiency activities in these communities.

Nova Scotia's focus on energy efficiency to date has reduced our electricity use by over 10%, while generating hundreds of millions of dollars in annual energy bill savings, money that will be recirculated in our economy for years to come. We are also on track to contribute more than one tonne of avoided CO2 for every Nova Scotian, every year. In fact, energy efficiency is one of the main reasons that Nova Scotia is on track to meet its climate change targets.

The Province of Nova Scotia has committed to expanding its energy-efficiency efforts, recognizing that these efforts are an extremely cost-effective way to reduce carbon emissions while supporting growth of the local economy. Our experience in Nova Scotia over the last 10 years is proof of the economic and environmental benefits that energy efficiency delivers.

What we have found is that energy-efficiency activities generate a significant portion of Nova Scotia's gross domestic product, and energy efficiency's share of GDP continues to grow. Our energy-efficiency industry directly provides over 1,400 full-time jobs with direct sector income valued at $83.5 million. The two subsectors that define Nova Scotia's energy-efficiency industry are non-construction firms that derive more than 50% of their revenue from energy-efficiency products or services, and firms that build energy-efficient residential homes or perform renovations to improve the efficiencies of residential and non-residential buildings.

Energy efficiency's share of Nova Scotia's GDP is valued at over $400 million. It's expected to grow by 5% over the next five years. That's compared to forecasted growth of about 2% for the rest of the province's GDP.

Government plays a critical role in helping the energy-efficiency sector achieve its growth potential. Through feedback from industry group participant surveys, respondents identified Nova Scotia's current incentive system as critical to sustaining and growing the industry. Respondents emphasized the continued need for government-supported financial incentives for energy-efficiency activities, including new rebate programs as well as the need for greater public awareness of energy efficiency and a skilled workforce.

● (1120)

Public opinion in Nova Scotia further supports the industry's feedback. Third party polling data shows that a significant majority of Nova Scotians consistently assign a high importance to reducing their energy use. What's more, a significant majority of Nova Scotians express a high level of agreement that adopting a more energy-efficient lifestyle adds to their quality of life.

While public demand for energy-efficiency programs and services is strong, Efficiency One's research consistently shows that cost is the most significant barrier to program participation. We believe there is significant opportunity to increase the adoption of deep energy-efficiency retrofits with innovative financing options and incentive programs.

In Nova Scotia, our most pressing gap, and our greatest opportunity, is in the non-residential, non-electric sector. In many cases, more than 60% of the energy used by facilities in this sector is in the form of natural gas, number two oil or bunker C oil. There are currently no rebate, incentive or support programs available in Nova Scotia to help these customers save non-electric energy.

I'll give you an example. A Halifax business owner, Duncan MacAdams, has invested in reducing energy use at four of his 50-plus-year-old multi-unit residential buildings. He's done this by transitioning from oil to a district heating system that relies on a combination of natural gas, biomass, solar, and ground-source heat pumps. Mr. MacAdams would like to further reduce his reliance on fossil fuels and eliminate his buildings' carbon footprint. He'd like to do this by adding additional solar and biomass capacity. However, support for projects such as Mr. MacAdams' is currently a funding gap in our portfolio.

Gaps like this exist in every province, and the role governments can play to support energy-efficiency activity across Canada goes beyond incentives and rebates. I would like to leave the committee with four recommendations for its consideration.

The first is to address the funding gaps that exist in energy-efficiency programs for industrial and/or multi-unit buildings for customers who use fuels like oil, natural gas or coal and who may wish to transition to low carbon or zero carbon options.

Second, government can play a critical role in training and skills development to grow a workforce that is prepared for a low carbon economy and that will benefit from the job opportunities created by increased energy-efficiency activity.

The third is to work in consultation with the private sector to leverage innovative and private sector financing options to assist in deep energy retrofits and upgrades of our building stock.

The fourth is to ensure there are public policy and regulatory standards, like national building codes, that can help drive demand for energy-efficiency products and services, and support market transformation.

The good news is that we are not starting from scratch. In Nova Scotia, we have a robust energy-efficiency market knowledge. We have expertise and we have industry capacity. We have a well-developed network of trade partners, and we have strong public awareness of and demand for energy-efficiency programs and services. The people, the companies and the know-how are ready and eager to contribute to Canada's economic and environmental prosperity.

Thank you.

The Chair: Thank you, Mr. MacDonald.

Mr. Harvey, you're going to start us off.

Mr. T.J. Harvey (Tobique—Mactaquac, Lib.): First of all, thank you to all the witnesses for being here.

I am going to start with Mr. MacDonald.

You touched on the funding gap around helping small businesses or residential tenants invest in the technology that's going to allow them to reduce their carbon footprints, and on the lack of funding that is available at this time.

How do you see that unfolding? How do you think the federal government can best play a willing role in some type of bilateral funding mechanism that's going to fill that gap or do you feel there should be more onus put on the provinces to fill that? How do you see that?

● (1125)

Mr. Stephen MacDonald: I think that both levels of government can play a role in filling that funding gap.

The federal government has recently come to the table through the low carbon economy fund and put a significant investment into energy efficiency in Nova Scotia. The majority of those dollars were directed to the residential, non-electric sector.

There is still an opportunity for the federal government to provide more funding to fill the gap for the non-residential, non-electric sector. The Province of Nova Scotia has shown some interest in the past, but I think there is an opportunity for both levels of government to play a role.

Mr. T.J. Harvey: Mr. Finet, is this something you see as a common problem across jurisdictions throughout the country, or is it something you think is more regionally specific to certain areas?

Mr. Jean-Pierre Finet: Do you mean the lack of funding?

Mr. T.J. Harvey: Yes.

Mr. Jean-Pierre Finet: Actually, it's everywhere. It's a general barrier, but it's not the only one. There are things the federal government could do, such as promoting energy performance contracting but also maybe guaranteeing loans and so on. That could help reassure the marketplace.

There are other barriers, such as split incentives. For instance, businesses in strip malls have a business place, but they have limited power of action on their energy consumption and energy savings. They don't own the building. They rent it. Green leases that address the issue of shared benefits and split incentives should be promoted.

As we go into deep retrofits, there are longer payback periods. The federal government can help by reducing these longer payback periods for deeper retrofits. When you start looking at building envelopes, they cost a lot. There are other solutions done elsewhere that are more regulatory. For instance, I think in Burlington and Oakland, in the U.S., when a building is sold, they automatically have to bring it up to code.

There are different avenues. There are different solutions. Some are financial, some are regulatory and some are organizational, such as green leases and so on. There are different barriers and different solutions for different barriers.

Mr. T.J. Harvey: If the federal government were to expand upon what's already being done investment-wise to try to put a significant dent in this issue, what do you think the number one target area would be? What type of technology could best be employed to have the most significant impact per dollar value of taxpayers' money?

Mr. Stephen MacDonald: The number one need, I believe, is industrial energy efficiency, meaning industrial facilities and industrial manufacturing processes. That's the case in Nova Scotia, but I also know it's the case across Canada. That was brought out in the Generation Energy Council report. There are significant targets for increasing Canada's level of industrial energy efficiency. In my view, that is the number one sector.

In terms of a specific technology, it really differs by facility and by its use of energy. We found that in some cases, investing in combined heat and power generation is a need and gets at deep energy retrofits. It really depends on the facility, though, in terms of the type of technology.

Mr. Jean-Pierre Finet: If I may add, it depends exactly on which market or which sector we're looking at. We're intervening mostly in the commercial, industrial, institutional sector, but less industrial, because when companies have processes, it's kind of tricky to play into their processes.

If you look at the residential market, my personal belief is that, technology-wise, heat pumps, air source heat pumps, not necessarily ground-source heat pumps, will pave the way. I don't understand why NRCan hasn't come up with anything yet at this stage. Heat pumps would be a big asset.

● (1130)

Mr. T.J. Harvey: In closing, if there's one take-home message I've heard from both of you, it is that the federal government stands to have the biggest impact in terms of a reduction in emissions by investing in technologies with small, medium, and large businesses to help them become more energy efficient.

Thank you.

The Chair: There is another minute left.

Mr. Serré.

[*Translation*]

Mr. Marc Serré (Nickel Belt, Lib.): Thank you, Mr. Chair.

My question is for you, Mr. MacDonald. You made some recommendations regarding Canada's energy efficiency, and I thank you for them. You mentioned the investment of the Canada Infrastructure Bank, the national code and the labour shortage.

I'd like to know if you worked with the Infrastructure Bank or CMHC to see whether there were any opportunities to support changes in that regard. Do you have any recommendations for CMHC or the Infrastructure Bank?

[*English*]

Mr. Stephen MacDonald: We have not had direct discussions with the Canada Infrastructure Bank or other financial institutions, but we are a part of a conversation that's happening across Canada that's being led by a relatively new organization, Efficiency Canada. I believe they may have presented to this committee recently.

One of the proposals or initiatives that Efficiency Canada is embarking on—and it does have the support of organizations like Efficiency One across Canada—is seeing whether there's a way to access some of the resources of the Canada Infrastructure Bank to help spur financing in energy-efficiency projects.

We talked earlier about the opportunities in industrial energy efficiency. These are large projects involving deep retrofits. There is an opportunity for the Canada Infrastructure Bank to help backstop some of those projects. If, in the case of my friend Jean-Pierre, the private sector doesn't yet have an interest in those projects, the Canada Infrastructure Bank can help accelerate some of them.

The Chair: Thank you very much.

Mr. Falk, you're next.

Mr. Ted Falk (Provencher, CPC): Thanks, Mr. Chair.

Thank you to our witnesses for coming to committee. Obviously, we're looking at energy efficiency across Canada. It was interesting to listen to your presentations.

Mr. MacDonald, you talked about how the government can help generate energy efficiencies, but what kind of return on investment are you looking for?

Mr. Stephen MacDonald: Do you want to take that one?

Ms. Amelia Warren (Director, Customer Experience and Partnerships, Efficiency One): Yes. I think one of the parts of energy efficiency that is so interesting is it's one of the few solutions out there where you can clearly see the return on investment. In our case, because we are a regulated entity, we have to be able to measure all the money we spend, all the savings we generate with that spending to report back to the regulator and to show that return on investment.

Even when we talk about investing in industrial facilities, we are often asked why we would have to give incentives to companies where there is that return on investment. Would they not be making those investments on their own? One of the things we've seen in our own calculations is that for every dollar we spend on incentives, large companies are spending two to three dollars in additional project costs.

As you can imagine, the types of projects you're doing in energy efficiency are bringing in local businesses to install those projects. They're purchasing that equipment or those building supplies in the local economy. In terms of that return on investment, yes, there are the bill savings, the carbon reduction, but there's also the additional spending it generates within those companies in the local economy.

Mr. Ted Falk: I appreciate and understand that, but I'm guessing why your organization would feel there needs to be government intervention in financing incentives. If what you're suggesting to companies makes sense from an energy-efficiency perspective, if it's going to help them save dollars, why wouldn't they make that investment on their own?

● (1135)

Mr. Stephen MacDonald: That's a great question, and it's one we are asked quite a bit.

Our job, as we like to think about it, is trying to convince and incent people to do something they otherwise wouldn't do on their own. We use a mix of tools. Financial incentives are one of the tools, but we also use education. We use financing in some cases. Incentives are a way to transform the market. If you think about energy-efficient products or technologies that have gone to the market, incentives are a way to transform the market, to increase adoption of those technologies at a rate they otherwise wouldn't be adopted. When Canada is looking to make its transition to a low carbon economy, one of the roles the federal government can play is to help accelerate the transition to those low carbon technologies.

In our business we offer incentives on a wide range of energy-efficiency products, but the types of products we offer incentives on today are not the same products that we offered incentives on five years ago, because the market is transforming. Part of our job is to stay in touch with the market. What's happening with the price of energy-efficiency technologies? Are they becoming more widely adopted, so we can put our efforts on those technologies that require a bit more help?

Ms. Amelia Warren: As you can imagine, when we go into an industrial facility, for example, even if you think about yourself as a homeowner, energy efficiency may be one project you're considering, but you probably have in mind a list of projects you may like to do in your home. It's the same thing in a business.

Often when we're looking at the return on investment, when we're looking at the payback, when we're making those calculations for a business, to put that energy-efficiency project at the top of their list, because they have limited resources and they're only going to be able to implement three projects this year, our incentive can make the difference to shorten that payback time or to improve that ROI. Then they are able to get that project on the list this year and it is in the top three that move forward. Without those incentives, the payback is too long, and it means they wouldn't make that decision. Again, the idea is how we get them to take action through those incentives which they otherwise wouldn't take. Being able to shorten that payback period in a competitive environment is an important part of it.

Mr. Ted Falk: Sure. What kind of a return are you looking at? Are you looking at a five-year payback on an investment or is it three years, two years or one year? I'm a business guy, so I understand that. If something makes economic sense for me and I can save energy by investing a few dollars, then if there's a five-year payback, I'm going to give it serious consideration. If there's a one-year payback, it's a no-brainer.

Ms. Amelia Warren: It depends on the business, but typically, there wouldn't necessarily be a set payback period. Whether we're working with small businesses or we're working with larger businesses, we have flexibility in the incentives that we offer. We would have maximums that we can't go beyond because, at the end of the day, it is public money that we're spending.

Mr. Ted Falk: What kind of return should a business owner who owns an industrial building expect if he is making an investment?

Mr. Stephen MacDonald: It really does depend on the type of energy-efficiency project you're putting in place. If you think of a retail building, you're using energy to heat and cool the building, for lights, computers and whatnot. You can make some relatively low-cost changes, for example, lighting or smart thermostats, which will have a relatively quick payback. In some cases, you're looking at less than a year payback on those products.

You could also look at what we often refer to as deep retrofits. For that building, you could look at heavy insulation in that building, glazing the windows, putting in building systems and controls. Those types of projects have a much longer payback and you're into the five-year or ten-year period. It really does depend on what type of an initiative you put forward.

Mr. Ted Falk: I'm curious why government would need to intervene in those kinds of situations. If it's a good business decision for a business to reduce their energy costs and there's a viable and economic payback on this investment, they should be able to do that simply through education.

Mr. Finet, I know you want to—I'm barely going to get to you, so I'll let you move into that one.

To me, it just doesn't make sense why a government would want to take tax away from people and then have them apply to get an injection into their business to become energy efficient. Why not just leave them with the money and create awareness that they can make that investment because it's a good business decision to do that?

Mr. Jean-Pierre Finet: I would say it's risk. Much of the time, risk is what refrains businesses from moving ahead; whereas, the payback periods in the institutional sector, like the federal and the provincial government, go up from seven to 11 years for the payback period. Again, we should push that a bit more, if we want to go into deep retrofits.

● (1140)

Mr. Ted Falk: I know my time is up.

The Chair: You have about 30 seconds.

Mr. Ted Falk: Okay.

Do you actually write out cheques? Have you written out cheques to people?

Mr. Jean-Pierre Finet: Yes.

Mr. Ted Falk: Your program works.

Mr. Jean-Pierre Finet: Not personally, but my members in ESAC have.

The Chair: That would be a good place to stop.

Mr. Jean-Pierre Finet: I could give you examples. If we did not, then we wouldn't put our money where our mouth is. To come back —

The Chair: I'm going to have to cut you off there.

Mr. Ted Falk: I'd like an answer, but the Chair's been very lenient.

The Chair: We might get one.

Go ahead, Mr. Cannings.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): I'll pick up where Mr. Falk was going.

What I understand from what he was saying is that perhaps awareness should be enough and we don't really need to make these investments. When we heard from the Canadian Home Builders' Association, and when I talked to them in my riding, they really noticed a big increase in their business when these incentive-type funding projects, such as eco-energy retrofit, were in place. You mentioned the leveraging on industrial and commercial properties. In that program, it was something like the government would invest a dollar and there would be four or five dollars spent by the homeowner. That's where I see some of the benefit of why it makes eminent sense to do these.

To change gears a bit, Mr. Finet, right off the top, you mentioned that 90% of your business is with government and 10% is with private. What's the reason for that?

Mr. Jean-Pierre Finet: The payback period.

Mr. Richard Cannings: The payback period? It's that risk—

Mr. Jean-Pierre Finet: It's what Mr. Falk was talking about earlier.

In the private sector, usually 18 months they will take, no problem. Above that, it takes a bit more arm-twisting because there's also the risk factor that adds to it and some of them don't know if they're going to last two years sometimes. I would say that it's mostly the risk factor, but in the institutional sector, we don't have this.

When talking about deep retrofits, I don't want to forget one deal that one of our members has done, for instance, Engie in Ohio with the University of Ohio. They've done a deal for 50 years at $1.25 billion. They're taking care of all the energy efficiency there for the next 50 years. This is a long-term deal. This is a lot of deep retrofits.

Mr. Richard Cannings: Okay.

I want to move to Efficiency One and ask about the Nova Scotia examples you're giving. Most of those are with homes and not with commercial buildings. What are those incentives? How do they work? I mentioned the eco-energy retrofit. Is it something like that, where people do an audit and then get a grant? Is that something we could expand to cover some of the funding gaps you mentioned?

Mr. Stephen MacDonald: Before I speak to how the programs work, I will say that on the residential side, the federal government has recently come to the table through, as I mentioned, the low carbon economy fund to put some additional monies into that sector. I mean, more can always be done, but there has been a recent expansion of activity.

As to how our programs work on the residential side, for a homeowner, for example, we will come and do an initial audit of a home. We do a base-level assessment of that home's energy efficiency. We give the homeowner a report of the energy efficiency opportunities that are available in terms of upgrades they can make and investments they can make. If they increase the level of the home's efficiency to a certain level, we will provide them a financial incentive to help them get there, if you will. That's generally how it works on the residential side.

I want to come back, if I can, to the discussion around why there are incentives. I mean, why don't people do it if it just makes sense? This might be a simplistic example, but there are lots of examples of situations where people or businesses or companies should make rational decisions and they don't. I know I should eat better and work out more, but I don't, even though I know it's the right thing to do.

A voice: [*Inaudible—Editor*]

Voices: Oh, oh!

Mr. Stephen MacDonald: Yes, that's right. I could use a coach or a personal trainer.

Businesses and institutions are much the same. As Amelia said, they have such a long list of priorities of where they can spend their money and their time. Often, they just don't have the information to know where to start. The programs and services we offer are more than just financial incentives. They're also about education and trying to build capacity in the market with contractors so that they can educate homeowners and businesses about the economic return that's there from energy efficiency.

● (1145)

Mr. Richard Cannings: Okay.

Mr. Finet, 90% of your work is with the government side of things. What is the uptake there like? It's a lot of your business. How much needs to be done with government buildings, or how much could be done by you or other providers in terms of retrofitting?

Mr. Jean-Pierre Finet: I can't tell you about the potential, exactly, but I can tell you that we intervene in a lot of army bases, for instance, at RCMP headquarters, and at research facilities everywhere across Canada. It's limited to your building stock in your case, but the system can be extrapolated to the commercial sector. Again, the payback period is....

Mr. Richard Cannings: Do you have any idea of what percentage or what the future is of that work just within government buildings? Does your group do any analysis along that line, i.e., how much needs to be done or what the federal government could be doing more?

Mr. Jean-Pierre Finet: We've been talking a lot with the people from NRCan, having workshops together and so on. According to what we've been told, the federal government wants to undertake deep retrofits from now on and not skim the savings. It makes sense, because once you skim the savings, then your next project will have a much longer payback period. We're envisioning longer payback periods to address these and are focusing on greenhouse gas emission reduction measures.

So yes, there is a lot more investment to be done. If we do around $300 million a year, the potential is way more than that, because we are only scratching the surface yet of what we could do.

The Chair: Thank you.

Mr. Hehr.

Hon. Kent Hehr (Calgary Centre, Lib.): Thank you very much, Mr. Chair.

Witnesses, thank you for your presentations.

I was struck by the conversation between Mr. MacDonald and Mr. Falk. I want to follow up on that.

This is in terms of getting the businesses the information they need, through your programs and the like, in regard to making energy efficiency a priority. In your view, would the businesses even know how to go about doing those retrofits and these energy-efficient things if you guys weren't there? People know what they know and businesses know what they know. Are you guys providing the bridge, in terms of the gap in the information system, that businesses need?

Mr. Stephen MacDonald: I believe we are. I believe that extends to the entire energy-efficiency industry in our province, and it would be the same in all provinces. If you're the owner of a small business, as I said, you have so many competing priorities. Energy efficiency is an area that often falls to the bottom of your list.

One of the things we can do and the industry can do is help paint the picture of the business case that exists for energy efficiency. That information gap is a critical, critical piece.

Hon. Kent Hehr: How have you guys been reaching out to the marketplace and getting your services known to them?

Ms. Amelia Warren: We do it in a lot of ways. Partnerships are extremely important to us. We have a team of what we call our business development managers who are out meeting face to face and building relationships with larger businesses. We also have a lot of marketing that we do to small businesses. We do a lot of work with associations, with the folks like the Canadian Home Builders' Association, you name it.

One of the things we have found that works well in the business world is word of mouth. Of course, small businesses are notoriously really hard to get in front of because they are so busy. We use a lot of case studies and success stories in the hopes.... We've seen that one business owner who has had a good experience with us will tell 10 of their business owner friends to give us a call. That's been a really successful way that we've been able to reach business owners.

● (1150)

Hon. Kent Hehr: I have a more general question.

When we look at Canada and compare it to the rest of the world in terms of policies of both carrots and sticks and developing more energy-efficient means, are we measuring up? Are there nations you could point to that are better examples?

What more should we be doing on the policy front to make things move in a fashion that is more carbon neutral or uses less carbon?

Mr. Stephen MacDonald: There are various studies that are done that rank different countries. I think Canada is somewhere in the middle of the pack, but I wouldn't want to try to quote a specific study.

There are things that Canada can do from a policy perspective. One of the things that the federal government can do is lead on building codes and standards around high performance homes and buildings.

On the residential side, passive house technology is a technology that I believe originated in Saskatchewan. It became very popular and common in Germany. It's a whole home envelope that's very tight with very low energy usage. In Germany.... You can find videos on YouTube of these homes being heated by hair dryers. They are very common.

One of the things government can do is lead on trying to advance standards like the passive house. Net zero home is also a leading standard that government can play a role in pushing forward. There are lots of opportunities.

Hon. Kent Hehr: I know we haven't touched on that, but our government is putting a price on pollution. Do you guys feel that will lead to more efficient businesses?

Do you generally see the world heading in this direction, that the world is going to be demanding lower carbon options and businesses to be run this way and their products, in fact, to be headed in this direction, whether here at home or whether we're trading with partners over the seas?

Mr. Stephen MacDonald: Certainly one of the ways that any business can mitigate the effects of the price on carbon is to become more energy efficient in terms of their energy usage. Whenever any business, whether it's a small business or a heavy industrial user, becomes more energy efficient, they become more productive and more competitive.

That improves Canada's productivity. That improves the competitiveness of the business. If they are paying a price on carbon, they're using less energy through energy efficiency, and that's certainly it's one of the tools that they can use to help mitigate against the price on carbon.

Hon. Kent Hehr: Mr. Finet, you were discussing some of those policy options around the building code. In fact, if people purchased a building that had been long overdue, they would have to bring it up to modern codes. Would you recommend that be a policy we put in the national building code here?

Mr. Jean-Pierre Finet: No. I think it's more of a municipal responsibility. I don't think it's feasible for the federal government.

I've been participating in standing committees involving national energy codes and so on. I think this is great work by the Canadian government and the provinces together to develop and keep developing these model energy codes and so on. I think the implementation is more for the provincial and municipal jurisdictions.

Hon. Kent Hehr: Are we seeing new technologies evolve that allow for even more energy efficiencies to be had? Should government play more of a role in incenting those incubators, those types of technologies, that are coming to the surface? Can you point us to other jurisdictions that may be doing that better?

Mr. Stephen MacDonald: I look to my colleague here.

I don't know if I can pinpoint a specific jurisdiction that is doing that better, but part of the role governments can and do play around incentives is around providing incentives for new technologies. When I spoke earlier about where we focus our efforts for incentives, the technology that we incent today is not the technology that we incented five years ago, because we're trying to incent new technologies. Government can play many roles. One is providing funding to fill gaps for efficiency programs, as I mentioned, in the industrial sector. It can provide funding for innovation or tax credits for new technologies in the energy-efficiency sphere.

I guess the one area that I haven't spoken a great deal about is the role that government can play in helping to build industry capacity and skills capacity. We need skilled workers. We need people who are fluent in energy-efficiency practices, and that goes all the way to auditors, architects, designers, engineers. We need a workforce to be able to implement all of this energy efficiency. That's a role the federal government can play.

● (1155)

The Chair: I'm going to have to stop you there, Mr. MacDonald. Thanks.

We have about three minutes.

Ms. Stubbs and Jamie, I understand you—

Mrs. Shannon Stubbs (Lakeland, CPC): Don't we have five? Are you sure?

The Chair: I want to stop a few minutes early so we're not late in the next hour.

Mrs. Shannon Stubbs: Okay, thanks, Mr. Chair.

Thanks to all of the witnesses for being here today.

Stephen, I noted that you said one of the biggest opportunities would be in the non-residential sphere, and I was very glad to hear you mention the opportunity in natural gas. It is a particular challenge in Nova Scotia, though, so I have a question for you about those details.

I think it makes good sense for you to say that, of course, because the majority of life-cycle emissions come from tailpipes, and 28% of emissions come from the transportation sector, and I think another 6% beyond that from coal-fired electricity, clearly, transitioning diesel and gasoline-fuelled vehicles to natural gas, and also electricity generation to natural gas is a huge opportunity and a no-brainer for Canada, with almost limitless natural gas supplies.

I am concerned in Nova Scotia's case, in particular, with the decommissioning of offshore natural gas development. Within the next two years, I think supplies there are supposed to end. Of course, the barriers to Nova Scotia's shale gas and other conventional gas opportunities are precisely government policy and legislation. I know there are potentials for LNG opportunities out of Nova Scotia. There are some estimates that it would help reduce the costs for Nova Scotia consumers if Nova Scotia is put into a position where there's a lack of local generation of natural gas instead of having to be brought through a pipeline from western Canada, from the United States.... I think an incentive to develop natural gas and adopt natural gas would be obviously removing high fuel taxes off of natural gas.

I wonder if you could expand on what you meant by that and what sort of opportunities you see there.

Mr. Stephen MacDonald: There was a lot there. I'm going to speak about the Nova Scotia experience.

Our work and our expertise is on energy efficiency and reducing energy usage. In Nova Scotia, primary sources of energy usage come from home and building heating and cooling, which is a mix of electricity. In our province, about half of our electricity is generated from coal and the other half is a mixture of wind, a bit of hydro—soon to be more—some natural gas and some mix of oil or whatnot. The rest of the energy usage in home and building heating and cooling is primarily oil, a bit of wood, some natural gas predominantly in the Halifax area through our natural gas provider, and I think we have a couple of industrial facilities that may also have access to natural gas.

When we speak to customers, they want to talk to us about reducing all of their energy costs and all of their energy usage. I spoke about some of the gaps earlier. When we go to an industrial facility, if they're using a mix of natural gas for either their building heating and cooling or their industrial processes, or a mix of electricity or a mix of oil, currently we're only able to help them reduce their electricity usage. In many of our industrial facilities, that electricity usage is in industrial processes, if you will, but for building heating and cooling, they're using a mix of oil, sometimes natural gas.

Mrs. Shannon Stubbs: Yes. Nova Scotia increasingly uses heavy oil and heating oil. They're having trouble adopting greater usage of natural gas because of the massive price differences in the region of $100 per MMBtu for natural gas versus $9 for heating oil.

That's a major challenge where government could take action, but probably through reducing costs, removing taxes and unlocking barriers to local natural gas generation. That would actually achieve real emissions reduction. Thanks for highlighting that.

● (1200)

The Chair: We're going to have to stop there.

Ms. Warren, Mr. MacDonald and Mr. Finet, thank you very much for joining us this morning. We appreciate the opportunity to hear from you and to ask you questions, but unfortunately, we don't have enough time and we're going to have to stop there.

We'll suspend for a few minutes and get our next panel ready.

● (1200)

(Pause)

● (1205)

The Chair: Welcome back, everybody. We're going to get started. We're starting a bit late; I apologize.

Thank you to our witnesses for joining us for this hour.

From Loblaw Companies Limited, we have Mark Schembri, vice-president. Thank you very much, sir, for joining us.

From the Department of Industry, we have Andrew Noseworthy and Gemma LeGresley.

I understand we have a deck from Loblaw. We don't have enough English copies to go around.

Do we have consent to use the French only? It will be translated to English.

Some hon. members: Agreed.

The Chair: It's the first time I've been able to say that. It's usually the other way around.

Each group will be given up to 10 minutes to make a presentation, and then the floor will be open to questions from members around the table.

Mr. Schembri, why don't you start us off.

Mr. Mark Schembri (Vice-President, National Maintenance, Loblaw Companies Limited): Thank you.

Good afternoon. My name is Mark Schembri. I head up technical services and store maintenance for Loblaw Companies.

ln my role, I oversee electricity, waste and refrigeration operations within our stores. I'm a member of our company's carbon steering committee and my team focuses a great deal of its efforts on reducing electricity consumption and reducing our carbon footprint.

Thank you for the opportunity to speak with you today. I hope you'll find what we've been doing of interest.

First off, I'll tell you a bit about Loblaw. Loblaw is Canada's largest food and pharmacy retailer. We employ over 200,000 Canadians in our corporate and independently operated stores across the country.

We are a multi-banner format. We trade under such names as Real Canadian Superstore, No Frills, Provigo, Maxi and Shoppers Drug Mart.

Loblaw occupies over 90 million square feet of retail space across the country, with over 2,500 retail stores. Due to our size, the scale of our footprint and emissions is significant and my group focuses on improving that.

In terms of our energy profile, as a business that sells and stores perishable products as its core function, we rely heavily on refrigeration equipment. The operation of our refrigeration equipment constitutes about 50% of our total electricity consumption. Loblaw's national electricity consumption is about three terawatt hours. This represents half of one-tenth of all the electricity generated in Canada. Our annual electricity bill is greater than $300 million a year.

In 2011, we established our baseline carbon footprint. Then in 2016, we worked to establish targets on reducing that footprint. We have set public targets of a 20% reduction by 2020 and a 30% reduction by 2030. In 2011, 50% of our carbon footprint was attributed to the electricity that we consume in our stores.

In terms of big data, we have been installing digital interval meters in our stores in various regions across the country. These meters allow us to track and benchmark electricity consumption on an hourly basis in real time. We've implemented key performance indicators that enunciate utility consumption variances to our business. When these issues are identified, we dispatch our control technicians to investigate and repair the issues in our stores.

We have been investing in energy efficiency. In the area of lighting, the retail lighting business is going through a transformation. We are moving from filament arc and gas lamp platforms to digital ones. lt's a very exciting time to be in the lighting business and we've been very actively converting our stores. We started with our refrigerated case lighting, followed by our exterior parking lot lighting, store ambient lighting and task lighting.

Another area we are focusing on is converting our open refrigerated cases to closed-door cases. We support a retail business with an extensive focus on perishable food. Our merchants' first instinct in putting a barrier between our customers and the product is that it would be an impediment to sales. This, thankfully, is an emotional debate that we are finally starting to win. The reality of it is that putting doors on our refrigerated cases has a substantial environmental and energy benefit. We've been very active in this space. We've converted our open frozen cases to doors. We are in the final stages of converting our dairy cases to doors and we remain active in this area.

On building energy management, we've been installing energy management systems in our stores for decades. We have over 50,000 active sensors pushing real-time temperature readings to a Loblaw control call centre. We can remotely monitor and change set points associated with our store lighting, HVAC and refrigeration through our national maintenance help desk. As these control strategies and systems became more complex, we recognized as a business the need to make supermarket energy management a core competency of our business. We developed refrigeration technicians who were already employed by Loblaws and developed their expertise in the area of controls throughout the country. These individuals ensure our control systems are optimized and operating consistently to drive the most efficient operation in our stores.

Our in-house controls experts and remote monitoring capabilities allowed us to launch in 2017 a nationwide recommissioning program in our stores' building energy management systems. We leveraged our own people and third party contractors to survey every store in the network and recalibrate the control system set points within the stores and make modifications and identify issues where we need to upgrade.

● (1210)

In the area of demand response, we are actively working with a number of electricity utilities across the country. We have installed systems that allow us to instantaneously reduce lighting and HVAC loads in multiple facilities. We work with utilities to reduce our electricity demand during system peak periods, and many of the utilities are advancing in this area.

In the area of renewable energy, we have installed over 70,000 photovoltaic panels on the roofs of our stores and warehouses. We continue to work in various regions throughout the country to investigate opportunities to advance renewable energy initiatives.

In the area of electrical vehicles, we believe that electrification of the transportation sector is coming. We recently hosted the installation of 10 level 3 EV charging stations in British Columbia. These chargers will have a place in the future. They are fast chargers and they are surprisingly electricity intensive. As these expansions and rollouts begin, we think it's very important that the system operators understand the electrical intensity of these charging stations, and that they look towards controlling them to ensure they do not become an impediment on the entire electricity system.

We are seeing the benefits. Since 2011, which was our baseline year, we have recognized 26 quarters of year-over-year electricity intensity reductions. We have reduced our absolute electricity consumption for our network of corporate stores by 21%, which translates to about 400 gigawatt hours.

What's next? We continue to work with our merchants on the adoption of refrigerated doors on cases. We're very hopeful that all of our refrigerated product will ultimately be stored at retail stores behind doors.

In the area of machine learning and the Internet of things, the next steps in the evolution of building energy management control systems, in our opinion, are to leverage variables from the external environment to recognize patterns with respect to energy consumption to control energy-consuming devices. Variables such as power demand, electricity pricing and temperature could be applied and improved upon on an ongoing basis. These tools can then modify and adjust equipment operation to balance energy consumption over the entire day. The machine learning can also take advantage of opportunities in the external environment variables, such as low electricity prices, system demand and low ambient temperatures.

These systems would trigger equipment to consume energy during more opportune times and remain idle when the electricity demand is high. This could be done in the area of cooling and heating.

We are actively testing energy storage initiatives. We have a store that has installed the lithium ion battery system, and we are working with an organization that is developing a thermal storage application, which we're very excited about putting into our stores.

In conclusion, seldom can we identify initiatives where we believe everyone benefits. Investment in energy efficiency generates high-skilled jobs, has a positive impact on the environment and reduces utility costs. If the utilities manage these resources properly, they will improve the effectiveness of the utility systems throughout the country.

Thank you for your time. I would be happy to take any questions, if and when it's appropriate.

● (1215)

The Chair: Thank you very much.

Mr. Noseworthy or Ms. LeGresley.

Mr. Andrew Noseworthy (Assistant Deputy Minister, Clean Technology, Department of Industry): Thank you, Chair.

My name is Andrew Noseworthy, and I am the assistant deputy minister responsible for clean technology with lndustry, Science and Economic Development Canada. With me today is Gemma LeGresley, acting director of the clean growth hub.

We are here today because energy represents the largest input cost for most companies and industries in Canada; therefore, energy efficiency is important to economic and industrial development.

Our comments today will differ somewhat in their context from those of Mr. Schembri, because our specific interest in coming here to talk about energy efficiency is not around energy as an input to industry. Rather, we'd like to talk about what our office does, which is to work specifically to support technology firms that are advancing new products and services related to energy efficiency.

Energy efficiency is part of a group of technologies commonly known as clean technology, which also includes technologies that reduce carbon emissions and improve air and water quality. Over the past several years, the government has placed great priority on the rapid scale-up and commercialization of clean tech, and it has provided a number of supports to businesses pursuing projects in this area.

Global demand for clean tech is rapidly growing, and the global market for clean tech is expected to grow to $2.5 trillion by 2025. Globally, successive studies have shown that clean-tech sales are growing faster than world economic growth, with double-digit growth in many key markets. The International Energy Agency, or IEA, estimates that the global market for energy-efficiency products is about $231 billion, or about 10% of this amount, and it's also growing.

ln this context, budget 2017 allocated $2.3 billion to support clean-technology development, with funds principally targeted to support commercialization and scale-up. Tied to this, the Business Development Bank, or BDC, and Export Development Canada, or EDC, were given a mandate and new resources to strengthen their work in this area, and Sustainable Development Technology Canada, or SDTC, had its core programs recapitalized. New funding was also provided for specific programs in NRCan and other federal departments, which I understand have been or will be witnesses before you.

The government has also created a new office, called the clean growth hub, as a whole-of-government focal point to help clean-technology companies and projects access federal programs and services. The clean growth hub consists of a physical office, which in fact is just across the street from here, and a virtual connection that is co-hosted by ISED and NRCan and in which the staff of 16 federal departments and agencies are collocated. We have assembled what is in effect a large, multidisciplinary federal clean-tech team. While staff are collocated, they remain employees of their home organization, and our objective is to leverage existing knowledge, expertise and working relationships across the federal system, not duplicate them.

The specific purpose of the hub is to act as an easy access point, or no wrong door, for clean-technology companies seeking to navigate federal programs and services. The idea of the hub was proposed by the First Ministers Working Group on Clean Technology, Innovation and Jobs, which held extensive consultations with industry. The hub in fact engages very closely with provincial governments as part of its work.

We opened the hub's doors on January 18 of this year. Since that time, we have had direct engagement with over 670 clients, and our website has had over 19,000 hits. We are seeing both clients and interest from all across the country, from all aspects of industry, and from tech companies in all stages of development. Companies with a specific focus on energy efficiency are one of our largest client groups, representing about 17% of the people we've seen through the doors to date. This noted, we're also seeing many other clients who have projects or technologies that improve energy efficiency, but who do not codify their work as energy efficiency.

For example, Westport is a Vancouver-based engine technology company that converts diesel fleet engines to natural gas under a joint venture with Volvo. The company's technology can save 30% to 40% of fuel costs over the life of a vehicle, but Westport wouldn't see itself as an energy-efficiency company. In fact, it would identify itself as a transportation technology company.

● (1220)

Similarly, Rockport Networks Inc. is developing a technology called autonomous networking with support from SDTC. While some may see this project as aligned with the digital technologies sector, it is projected that this technology could reduce power consumption by data centres by 33%, a third, which is a significant innovation given that data centres are projected to be consuming nearly 5% of the world's total electricity by 2025.

These projects I think demonstrate the importance of taking a broad view on energy efficiency in the design and implementation of federal supports to business. While it's still very early days in the life of the hub, our early experiences with clients have yielded a few observations that may be helpful to you.

First, our experience is that access to capital is a critical and pervasive issue for virtually every company that we see. Consistently, companies tell us that they continue to face challenges in obtaining project financing from private sources, and that is happening in all sectors, in all parts of the country. In this context, they see government support for commercialization and scale-up as quite important.

Secondly, we are seeing an increasing number of clients who are looking for assistance in other areas, like help with market development strategies or regulatory issues.

In this context, some of you may be aware of the work of the economic strategy tables which were established by government last year. These tables were chaired by and comprised of industry leaders. They were challenged to set ambitious growth targets, identify sector-specific challenges or bottlenecks and lay out actionable road maps to achieve growth.

One of these six tables was specifically dedicated to clean tech. It, along with the other tables, delivered its final report to Minister Bains in September. The clean-technology economic strategy table, or CTEST, as it became known, provided a detailed *diagnostique* on clean-tech industries in Canada, and made a number of proposals on what is needed to further strengthen Canada's capacity in this area.

While the table's work was focused broadly on clean technology, much of its commentary, I suspect, may be of value to those looking specifically at energy efficiency technologies.

The work of CTEST and the other tables is quite insightful, thought provoking and, in some cases, provocative. The government is currently studying the reports and the related recommendations. This body of work might also prove useful to this committee as it continues its deliberations.

I hope my observations have been helpful to you, and we'd be pleased to answer any questions you may have.

Thank you.

The Chair: Thank you very much.

Mr. Tan, you're going to go first.

Mr. Geng Tan (Don Valley North, Lib.): Thank you, Chair.

My question is for the Department of Industry.

From the report I'm reading right now, I found there are almost 300,000 Canadians working in the sustainable energy area, mostly in the clean-technology or clean energy area.

The transition to clean technology is a great opportunity for Canada to build an innovative governing economy, with increased employment, and to also make healthy communities.

As ADM, do you believe that Canada is capable of developing a world-class, advanced energy system with the best use of Canadian technology or clean energy?

● (1225)

Mr. Andrew Noseworthy: Certainly, sir, I believe we're already on the path of seeking to do that.

With regard to my background, I've been in various governments throughout my entire career. I've focused most of my career on energy development issues, and I've worked specifically in clean tech for two years. In the time that I've worked in clean tech, I've probably seen about 400 companies. I'm shocked every day, in an inspirational way, by the stuff that I see coming in the door.

These are people who are doing things in an extremely novel, interesting way, who have products that have significant potential to be transformative of what's happening in the sector. Not only am I seeing technologies that are unique and focused on environmental outcomes, but I'm seeing things happen in our traditional resource sectors, including the petroleum sector, related to energy efficiency that are truly impressive.

Mr. Geng Tan: Recently the government launched Efficiency Canada, and some witnesses have mentioned that already. By 2025, Efficiency Canada envisions a country where energy efficiency is improving by at least 2% per year, which is a very ambitious goal.

In your opinion, what actions are needed by the government, together with other Canadians and also international partners, to make Canada a global leader in this energy-efficiency agenda to achieve that goal?

Are there other good examples of the best practices in energy-efficiency policy internationally?

Mr. Andrew Noseworthy: As an industry department, we tend to look at things from the perspective of commercial outcomes. Our view is that achieving commercial outcomes is critical to the success in policy areas like energy efficiency and the reduction of carbon emissions.

When I take a look at the challenges that I've seen facing companies coming through the door on the technology side—and I appreciate this committee may be more focused around issues related to technology adoption, and I respect that, and that is not my forte—my sense is, sir, that catalyzing those companies to grow not only to meet Canadian market demand, but global market demand, is quite critical. There's a shocking consistency in what we're seeing in the needs of those companies. Not surprisingly, they need access to capital.

In this particular area around clean technology, energy efficiency being a part of that, generally speaking, private sector investment has been more limited than we've seen in other technology sectors, like the information technology sector, largely because the timeline to return for clean technology is longer than it would be in, say, the IT sector. Access to capital is always an issue in this space.

There is no question that skills development and skills capacity is an issue in this space. Again, as an industry department, we tend to look at that issue from two perspectives. Clearly there's a need for STEM skills and capacity in engineering in that space, but increasingly, sir, we're seeing the importance of making sure that our companies have good business skills, that companies have a CFO who actually knows how to grow the company when you get to that point when you're about to hit international markets.

Market penetration is important. Having a thoughtful approach to market development in this space is extremely important. Out of all of the companies that I've seen in the course of my time in this work, I can't recall one company that was completely dependent on the Canadian market space. In fact, virtually every company that I see and deal with is export oriented. Helping those companies access markets, recognizing some of the real challenges around IP protection and access in key markets, is really important.

Mr. Geng Tan: Thank you.

This question is for Loblaw.

Your company has a plan to reduce your carbon footprint by 30% by 2030. This is a great goal and is also very good for your company's profit. It is a great contribution to our effort to address climate change.

When we talk about energy efficiency, we try to think globally but act locally. Is it possible for Loblaw to help Canadian municipalities, especially the small cities where you have stores, to use their resources more efficiently, and even to reduce their carbon footprint? How can you transfer your experience and your know-how to help the local community and the municipalities?

● (1230)

Mr. Mark Schembri: Our experience is specific to the area of supermarkets. We're in the heat removal business. As part of the refrigeration process, we're rejecting heat from our stores, and generally it's rejected outside. We've worked with various developers on concepts where we would have a small district energy project where the heat we would be rejecting from our stores would be hosted in a larger development. That was one way we've looked at it.

We also look at the carbon intensity of the various regions where the electricity is consumed. We try to focus on those areas where we will see the greatest impact on carbon reductions as a result of the composition of the electricity generation supporting that region.

Mr. Geng Tan: Okay.

How's my time?

The Chair: Yes, you're done.

Next is Mr. Schmale.

Mr. Jamie Schmale (Haliburton—Kawartha Lakes—Brock, CPC): Thank you very much, Chair.

Thank you, witnesses, for coming forward. We do appreciate the time you have given us.

My friend from Loblaw, just out of curiosity, do you know the difference in your hydro bills from, say, the province of Ontario compared to others? How does that add up?

Mr. Mark Schembri: Ontario has the most expensive electricity rate structure of the provinces. Ontario class B accounts, which is the majority of our accounts, is around 15¢ a kilowatt hour, and in the flanking provinces, like Quebec, it would be about half of that. Alberta was a region that deregulated its electricity system around the same time as Ontario did. They stayed the course and our prices in Alberta have dropped. They're coming up of late. But, generally speaking, Ontario is by far the most expensive electricity rate class when you're a class B consumer.

Mr. Jamie Schmale: I'm from Ontario. Absolutely, I know the pain.

Those costs that you are incurring through increased hydro, I'm guessing you'd pass along to consumers. You'd almost have to.

Mr. Mark Schembri: Generally speaking, the cost to our business would ultimately transfer to the cost of goods—

Mr. Jamie Schmale: —which makes life more expensive.

Mr. Mark Schembri: —which makes the cost of goods higher.

Mr. Jamie Schmale: Just out of curiosity, would the carbon tax hurt you as well, and cause you to increase the cost of food that is trucked in?

Mr. Mark Schembri: We're not classified as a direct emitter, so I don't know if the cost would translate directly to us.

I believe that the government has to do something in the area of carbon reduction. What format the provincial and federal governments take...I don't know what's the best way to do it, but I do believe that as a country we should be looking toward a carbon reduction strategy.

Mr. Jamie Schmale: Yes, so I'm assuming—you might not have the figures in front of you—that those that truck in your supplies would potentially pass on the cost, which you then would have to pass on, on top of everything else you're facing.

Mr. Mark Schembri: The supermarket business in Canada is very competitive. At the end of the day, businesses have to make money to stay in existence. We try to manage these cost increases in every way we can. Energy efficiency is one of the ways we try to reduce our costs. As a result of that, energy efficiency in Ontario, because the costs are higher, becomes a greater focus.

Mr. Jamie Schmale: Absolutely.

I would also argue that what you are doing, in terms of making your operation more energy efficient, you were doing before the carbon tax.

Mr. Mark Schembri: We've been actively involved in energy management for the 30 years I've worked at Loblaw.

● (1235)

Mr. Jamie Schmale: That just makes good business sense. You did that because it made sense. It was able to keep you competitive. You didn't need the next great big government program to help you do that. Is my understanding correct?

Mr. Mark Schembri: We work in a merchant business. Energy management initiatives compete for capital against merchant opportunities. As a result of that, if the returns recognized from energy-efficiency projects are not better than the merchant opportunities, the capital will be directed to merchant opportunities.

Mr. Jamie Schmale: How much time do I have?

The Chair: You have lots of time.

Mr. Jamie Schmale: How much is lots, just out of curiosity? Your lots and my lots may be different.

The Chair: You have three minutes.

Mr. Jamie Schmale: If you had the choice, if the government were to come forward with some plan moving forward, would you prefer a tax credit for energy efficiency or a government program that you have to apply to, and maybe if the government deems you are worthy of getting some of your money back, they'll be able to give that to you?

What would you prefer?

Mr. Mark Schembri: On incentive programs, our preferred approach is performance-based incentive programs. Incentive programs driven into your rate structure, in my opinion, are a way utilities reduce the risk associated with administering these programs. It would reduce the overhead that the utilities spend on delivering these programs. I think it would ultimately get to where the system operators want to get to, which is managing on-peak electricity reductions. We want to focus on when we're using electricity as opposed to how much electricity we're using.

Mr. Jamie Schmale: Okay.

How much time do I have, sir?

The Chair: You have just under two minutes.

Mr. Jamie Schmale: That's perfect.

You're a larger company. What do you typically look at for your return on investment, in terms of timeline?

Mr. Mark Schembri: Our company's hurdle rate is, generally speaking, an IRR of around 16%.

Mr. Jamie Schmale: I'm very sorry, witnesses, but I have to move this motion.

I do have lots more questions; however, I will wrap up at about seven minutes to give Richard his time as well.

The Chair: Will you be about seven minutes?

Mr. Jamie Schmale: No, I'm going to wrap up at about 10 minutes to, maybe, to give Richard his chance.

The Chair: Okay.

Mr. Jamie Schmale: Witnesses, we'll just be a second.

The motion states, “That, pursuant to Standing Order 108(2), the Standing Committee on Natural Resources, in light of the Federal Court decision to overturn the approval of the Trans Mountain Expansion on August 31, 2018, and in recognition that the economic ramifications of this decision reach far beyond the provincial border of Alberta, the Standing Committee on Natural Resources immediately invite Dennis Darby, the president and CEO of the Canadian Manufacturers and Exporters and chief representative on the Ontario Council of Manufacturing Executives, and Jocelyn Bamford, from the Coalition of Concerned Manufacturers, to appear before the committee to inform the members of how the court's decision may affect future investment in Ontario's manufacturing sector, its supply chain, and the impact on jobs and growth for Ontario's manufacturing firms; and that the meeting take place no later than November 18, 2018; that the meeting be televised; that the committee report its findings to the House; and that, pursuant to Standing Order 109, the committee request that the government table a comprehensive response to that report.”

Richard, I don't know if you've missed it, but I'm going to wrap up so that you have time to do your questions.

The Chair: I'm sorry, Mr. Schmale. I was just reminded that we have the meeting ending at 12:45 because we have committee business to deal with. I don't know if that changes what—

Mr. Jamie Schmale: Oh, did we?

The Chair: Yes. I don't know if that changes what you're about to do.

Mr. Jamie Schmale: I have about a minute. Oh, shoot.

I'm sorry, witnesses. Sorry, Richard. I have seven minutes.

Do you want to dismiss or will I go until wrap-up?

The Chair: Witnesses, it looks like we're not going to have any more questions for you this morning. I apologize for that. Mr. Schmale has introduced a motion which, it looks like, is going to consume the balance of our time this morning.

Mr. Marc Serré: Mr. Chair, can we have these witnesses back for questioning?

The Chair: I don't see any reason why we couldn't do that. Subject to their availability, of course, we'd be happy to do that.

We will ask you to leave so that you don't have to—

● (1240)

Mr. Jamie Schmale: It's going to be pretty amazing.

The Chair: You're welcome to stay and listen to Mr. Schmale, but you're free to leave, and I would encourage you to do so, frankly.

Voices: Oh, oh!

The Chair: I will express our gratitude on behalf of all the committee. We will try to have you back. Thank you.

I'm sorry, Jamie. Go ahead.

Mr. Jamie Schmale: Thank you, Chair.

The most important economic decision made by this government this year—and perhaps history will show the most important economic decision, period—is the decision surrounding the Trans Mountain pipeline expansion.

This project, which twins the existing 1,100-kilometre Trans Mountain pipeline between Strathcona County, Alberta, and Burnaby, B.C., would create a pipeline that increases capacity from 300,000 barrels per day to 890,000 barrels per day. If built, the expansion would ensure that the Canadian oil industry can reach new markets by expanding the capacity of North America's only pipeline with access to the west coast. If built, the project would inject $7.4 billion into Canada's economy during the construction phase. If built, oil producers would see $73.5 billion in increased revenues over 20 years. All three levels of government would see a share of $46.7 billion in additional taxes and royalties from the construction and 20 years of operation.

According to the Conference Board of Canada's estimates, the project would, if built, create the equivalent of 15,000 construction jobs and the equivalent of 37,000 direct, indirect and induced jobs per year of operations. Direct construction workforce spending in communities along the pipeline route is estimated to be $480 million, should the pipeline ever get built. Overall, the project would generate, if built, more than 800,000 direct, indirect and induced person years of employment during the project development and operations.

A few weeks ago, the National Energy Board laid out the next steps for its review of the Trans Mountain pipeline expansion project's efforts on the marine environment. Federal government departments had until the end of October to present evidence, while other indigenous, industry and environmental stakeholders will have until November 20 to file their submissions. The final cost of the government's Trans Mountain purchase is expected to be released some time this month.

However, the government still doesn't have a plan to get this project built. Getting the Trans Mountain expansion built should be the Prime Minister's top priority. Instead, he spent $4.5 billion of taxpayers' money and still can't tell workers when construction will start or when this important project will be completed. That's quite a big concern on this side, Chair.

It's not just concerning for this committee, which, considering the amount of taxpayer dollars that have been sunk into buying the project, has yet to address any of the issues raised by members of this committee to examine the report on one of the largest investments of public money in recent years. It's not just concerning for the Canadian workers and families who depend on these jobs to put food on the table. It's not just concerning for the communities up and down the construction route that depend on the revenue generated by the economic activity that the expansion represents. It also concerns Canadians and business sectors from coast to coast, and one of those sectors impacted is the manufacturing sector right here in Ontario

I'd like to take the opportunity to read an excerpt from an article written by Chris Varcoe which appeared in the Calgary Herald on May 24 of this year. The headline is “Moody's warns of economic consequences of Trans Mountain failure”. At that time, committee members may recall that Canadians were unsure where this government would land on TMX, whether they would kill the project outright, find a buyer, nationalize it, or provide the certainty that TMX was really looking for so that it could finish the project for themselves. The article states:

> Federal Finance Minister Bill Morneau has offered to provide...to Kinder Morgan on any further political uncertainty created by the B.C. government. The federal backstop would be available to a third party if the pipeline company decides to withdraw.
>
> While the federal offer is welcome, there are more [problems] ahead on the file that's already as politically complex as quantum physics.
>
> “Although this (promise) eases some of the related credit risks, the federal announcement lacks detail”—

That's all in the Moody's report, and that was six months ago. Unfortunately, we're still lacking details. The article continues:

> Cancelling the federally approved venture would increase transportation costs for Alberta oil, forcing more crude to move by rail.
>
> It would cut into provincial revenues “at a time when the province is already forecasting a prolonged period of deficit and rapidly rising debt,” the report states.
>
> In his spring budget, Alberta Finance Minister...projected $8.8 billion in red ink this year and another $20.6 billion of deficits before the province sees a balanced budget in 2023-24.

That is based upon achieving success on the pipeline front.

● (1245)

Chair, are we wrapping up at 12:45?

Obviously, I have so much more to say, and I know everyone wants to hear it.

The Chair: We'll have to wait 12 days to hear it.

Mr. Jamie Schmale: It's going to seem like forever, because the suspense will grow.

We on this side have continued to ask the government to look into this study, based on the impacts it has right across the country, yet they continue to shut down debate. On this side of the House, the frustration continues to grow. We will take their decision to adjourn debate as a vote of no, that they do not want to actually address this issue or take it forward to start getting answers.

The Chair: Before we go to Mr. Serré, I assume you're aware that Jocelyn Bamford, who is referred to in your motion, is actually listed as one of the witnesses in the study we're doing right now.

Mr. Jamie Schmale: That's wonderful. Thank you.

The Chair: So she will be here. There's a small victory.

Mr. Jamie Schmale: Maybe we can hear from her twice.

The Chair: Mr. Serré, you have the floor on the motion.

[*Translation*]

Mr. Marc Serré: I move that debate be now adjourned.

[*English*]

The Chair: Do you want a recorded vote Mr. Schmale?

Mr. Jamie Schmale: Yes.

(Motion agreed to: yeas 6; nays 3)

The Chair: We're moving to committee business. We have budgets we have to deal with. Do you want to present them?

The Clerk of the Committee (Ms. Jubilee Jackson): I sent these budgets by email last week. They're for your approval. I'll have them distributed.

If you could suspend, we'll move in camera.

The Chair: We'll suspend and move in camera.

[*Proceedings continue in camera*]