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Chair

Mr. Merv Tweed

Standing Committee on Transport, Infrastructure and Communities

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● (0850)

[*English*]

The Chair (Mr. Merv Tweed (Brandon—Souris, CPC)): Good morning, everyone.

Welcome to the Standing Committee on Transport, Infrastructure and Communities. This is meeting number 38. Pursuant to Standing Order 108(2), we are studying innovative transportation technologies.

Joining us today, from the Canadian Gas Association....

Monsieur Aubin.

[*Translation*]

Mr. Robert Aubin (Trois-Rivières, NDP): I just have a point of order. I am wondering why the motion put forward last Tuesday is not on the proposed draft agenda. I think the debates were not finished. Mr. Coderre is one of the people who wanted to talk about it. As for me, I had an amendment to propose. However, it seems that this issue has been completely removed from the agenda. I would like an explanation, please.

[*English*]

The Chair: Once a motion has been tabled—which was done at the last meeting—it doesn't show up on the agenda again. It simply means that it's live at the table. You can bring that forward at any point you choose. We don't show it as an agenda item after it has been tabled; it's only done when it needs to be presented for the first time. At the end of this meeting, if you want to raise it, you can do so. Or you can raise it now, if you choose. But it's considered a part of our agenda until it's dealt with.

[*Translation*]

Mr. Robert Aubin: Okay, thank you.

If it is possible, I would like us to finish the discussion we began on that topic. It was my understanding that you would give the floor to the members who were already on your list. I think Mr. Coderre was supposed to be the next person to speak.

[*English*]

Mr. Pierre Poilievre (Nepean—Carleton, CPC): Point of order.

Mr. Merv Tweed: Mr. Poilievre.

Mr. Pierre Poilievre: Mr. Aubin does not have the right to simply put it on the agenda. First of all, you can't raise a motion on a point of order. So no.

The Chair: Before I recognized you he did raise a point of order. I addressed his point of order and then he raised his issue as a floor item. He is entitled to do that.

Mr. Pierre Poilievre: He isn't on the speakers list.

The Chair: He initiated the motion at the last meeting, and it can be brought forward to the committee at any time during a committee meeting. That's his right as a member. That's the rule.

Ms. Michaud.

[*Translation*]

Ms. Élaine Michaud (Portneuf—Jacques-Cartier, NDP): I suggest that we discuss the amended motion that was presented at the end of that committee meeting. The witnesses could testify first, but we could set aside a minimum of 15 minutes—perhaps even a half an hour—to discuss the motion at the end of the presentation.

[*English*]

The Chair: Mr. Coderre.

[*Translation*]

Hon. Denis Coderre (Bourassa, Lib.): I think we should hear from witnesses. Therefore, I suggest we postpone this debate. However, we should have the debate at the beginning of the next meeting and deal with the two motions. We have two motions, which must be discussed. We should hear from the witnesses today, but at the next meeting, the witnesses should be informed from the outset that we will begin with the two motions. For now, I suggest that we postpone the discussion of the motion and hear from the witnesses.

[*English*]

The Chair: Actually, it is debatable, because there's a condition that has been applied to the motion. Mr. Coderre has made a motion that we table it to the first item of business at our next meeting. By putting that condition on it, it becomes a debatable motion. If he were to simply end debate, then it's non-debatable.

If there's agreement.... Monsieur Aubin, are you okay with that?

[*Translation*]

Mr. Robert Aubin: Of course.

[*English*]

The Chair: Thank you very much.

We do need to vote on Mr. Coderre's motion, which is basically that we suspend debate and put this as the first item of business at our next meeting.

(Motion agreed to)

Mr. Chair: Thank you.

To get back to our guests, thank you for being here today. Joining us from the Canadian Gas Association is Mr. Timothy Egan, president and chief executive officer; from the Canadian Natural Gas Vehicle Alliance, Alicia Milner, president; and from Compression Technology Corporation, Tim Sanford.

Welcome.

I'm sure you know the routine. I'll ask Mr. Egan if he wants to start, and then we'll move to questions from the committee.

● (0855)

Mr. Timothy Egan (President and Chief Executive Officer, Canadian Gas Association): Thank you very much, Mr. Chairman and members of the committee, for the opportunity to be here.

[*Translation*]

I will make my presentation in English, since my French is not very good, but you may ask questions in French.

[*English*]

I will give an overview presentation on natural gas and natural gas in transportation in Canada. You should all have copies of the slide presentation in front of you.

The first slide talks about the focus of my industry, which is the customer. We are a network of delivery organizations across the country delivering natural gas to 6.3 million customers across the country.

Natural gas currently meets approximately 30% of Canada's end-use energy needs. It isn't well known that it's more than electricity on a national basis. We believe there are significant future opportunities for the use of natural gas in homes and businesses in close integration with alternative energy services, like partnering in renewables; partnering with district energy systems, or in combined heat and power systems for broader use for gas power generation; and most importantly, in terms of our presentation here today, for transportation.

The chart on the right of the slide gives you a breakdown of natural gas use in Canada.

I mentioned that my member companies are the delivery side of the value chain for natural gas in Canada. We have 6.3 million customers, and we estimate that represents about 20 million to 25 million Canadians coast to coast to coast. That gas distribution industry is growing. We also represent transmission companies, manufacturers, and suppliers. You can see a breakdown there of the companies across the country.

The next slide talks about the product and its attributes. Much of what we do is try to explain these attributes to Canadians. There are seven key ones that we highlight. It is a domestic resource. It is abundant. We used to talk about a 30-year supply, but new discoveries give us estimates of more than a 100-year supply in Canada. There's the fact that it is affordable and has continued to be affordable as the price of gas has gone up and down over the last several decades. The price is at historic lows right now, which makes it even more affordable. It's clean. There are fewer emissions than alternative fossil fuels, and because of how it partners with other technologies in its versatile and efficient end use it's very clean.

I mentioned its versatility. It has been a reliable energy source without interruption for decades in Canada. Ultimately, the most important priority is that it's safe. Safety is the first priority for our industry across the country.

I'll go through the opportunities we have identified for natural gas in transportation. First is for on-road heavy, medium, and urban vehicles. The opportunity for natural gas in heavy-duty vehicles is the most significant one. Natural Resources Canada conducted a road map highlighting this opportunity, and it's the focus of our activities today. The life-cycle carbon emission reduction opportunity by use of natural gas in heavy-duty vehicles is 20% to 25%. Increasingly important is the cost-saving opportunity that the fuel option represents. In the right-sized fleet it can reduce fuel costs by 15% to 30%. That number varies so much because it depends on fuel use, type of vehicle, and other similar variables.

The next slide gives you a graphic image of vehicle trends in Canada and demonstrates why we're focusing on the heavy vehicle use opportunity. Heavy truck use in Canada has increased significantly over the last 20 years. It's about 4% of the on-road fleet, but represents almost 30% of on-road GHG emissions. That trend for increased use is continuing, so the opportunity to deliver on affordability and a cleaner emission profile is significant there.

There are other opportunities for natural gas in transportation as well. In the next slide we talk about the use of LNG, or liquefied natural gas, as a marine fuel. This is an opportunity that has emerged very dramatically over the last couple of years. In large part it's a response to the changing supply picture and the consequent affordability. As fleets are switched over when engines retire, the timing is very good for the opportunity for natural gas.

The next slide talks about rail and remote communities. These are two opportunities that are just emerging in our consideration. There are conversations going on with rail companies across Canada about substitution of natural gas as an alternative.

● (0900)

Remote communities are a particularly exciting opportunity, in our view. There are literally hundreds and hundreds of remote communities across Canada's north, as all of you will know. Those communities tend to be fuelled by diesel, which is very often flown in at enormous cost. Oftentimes that cost is borne by the national taxpayer where there is federal assistance. So there is an opportunity to deliver a cleaner fuel option that is much more affordable.

The other point about the gas application, as I mentioned earlier, is its versatility. It can be combined with other technologies, so this offers a chance to bring a variety of different applications for energy services to these northern communities.

Last but not least is the opportunity in homes and in communities. The focus of our work is on the heavy-duty vehicle opportunities, but we do want to acknowledge the long-term opportunity that would exist in lighter-duty vehicles.

In terms of personal vehicles, technology is not the issue. Original equipment manufacturers—that is, the major automotive companies—are bringing product into the marketplace around the world. There is not product in the Canadian marketplace of any significance at this time, but as the conditions continue to change that should change. What we need is to build public interest and Canadian market demand.

I'll mention a couple of leading adopters for you. Those of you from ridings along the 401 may recognize in the picture in slide 10 a truck from Robert Transport, a Quebec-based trucking company, which is in a partnership with Gaz Métro and with Enbridge Gas Distribution for the substitution of natural gas in their trucking fleet. They are ultimately going to 180 trucks, and I believe they're at 50 right now, so it's a significant venture and it's one that's highly visible on a principal transportation corridor in Quebec, *la Route bleue* , the Blue Road, as it's known.

Next I will talk about a couple of leading adopters. There's Vedder Transport, in British Columbia, which is refuelling an LNG-powered truck fleet; and Waste Management, WMI, which is working with FortisBC on a CNG fuelling station. CNG of course is compressed natural gas.

I had mentioned applications in marine, which are detailed for you, for some work that is under way right now for liquid natural gas for ferries in Quebec. This is a new initiative with Gaz Métro, involving ferries crossing at a number of points on the St. Lawrence. The delivery of vessels is scheduled for spring 2013 and 2014. Those of you who are familiar with that part of the country will know that the amount of ferry traffic is very significant across the St. Lawrence, so there are significant opportunities there. It's not exclusively on the St. Lawrence, it's also up the Saguenay River and elsewhere, but it's significant.

A summary of advantages of natural gas: the supply picture is a dramatically improved one that has worked to improve its affordability; the safety record is extraordinary and a first priority for the industry and an ongoing priority; the environmental advantages I've already highlighted; and of course the natural gas pipeline infrastructure is one of the hidden jewels of the system.

I mentioned the 6.3 million customers. What that represents is an extensive distribution system already in place across the country. That distribution is on the back of the highway system of the natural gas industry, which is the pipelines that are distributing this product right across the country. That infrastructure is an enormous national asset, which we can better utilize as we go forward in trying to drive our better energy use.

Some of the barriers we have—and I know my colleague Alicia Milner will get into these a little bit more—are refuelling infrastructure, upfront capital costs, and codes and standards. We are working on these in various ways.

I'll start from the bottom up, on codes and standards. The work with the NRCan round table has been a significant first step in an effort to make sure that the conditions are in place for the market to evolve. That work continues, and NRCan is to be applauded for the efforts they've undertaken there.

On the upfront capital costs, when you think about moving to natural gas as a transportation fuel, you think about the fuel, you think about the vehicle technology, and you think about the infrastructure. We're there on fuel. In some instances, particularly for heavy-duty vehicles, we are there on the vehicles. The issue is whether the refuelling infrastructure is in place. Those early market leaders I identified are helping to put that infrastructure in place, but we have more to do there.

● (0905)

We should also think about this as a continental opportunity. I know that Alicia Milner is going to reference that as well.

With respect to the role of the gas distribution utility, we have a great national asset in our delivery pipeline infrastructure. We have significant history in delivering natural gas. And we have the ability and interest to partner and invest in new ventures as we go forward.

The last slide is a snapshot, which I'll talk about. I'm happy to give you more information on it at a later date. ETIC stands for Energy Technology & Innovation Canada. It's a new venture we've started at the CGA to stimulate investment in demonstration projects for new applications of natural gas. We believe that the key to long-term energy and environmental sustainability is to drive efficiency and innovation. Utilities are leaders in doing that, and through ETIC we hope to do that more. Transportation is one of the four areas in which we're doing that. The others are integrated community energy systems, the use of renewable natural gas, and industrial processes.

I just want to highlight that venture as something I would be happy to get all of you more information on at a later point.

With that, Mr. Chairman, thank you very much. My apologies, but I'm fighting a cold.

The Chair: We'll go to Ms. Milner.

Ms. Alicia Milner (President, Canadian Natural Gas Vehicle Alliance): Thank you for the opportunity to be here today to talk to you about natural gas vehicles. I'm here representing the Canadian Natural Gas Vehicle Alliance. We're the national not-for-profit trade association that advocates for greater use of natural gas for both economic and environmental benefits.

With my remarks, I'll address the question of natural gas use for personal vehicles, including home refuelling. I'll comment on barriers, market development timing, and how we see light-duty fitting together with the industry's near-term focus on medium- and heavy-trucks and buses, which committee members will recall was the focus of the deployment road map, and I know you've heard that from a number of witnesses. Finally, I'll close with three recommendations to the committee members regarding how to encourage more use of natural gas in transportation.

Before talking further on the personal side, I'd like to just take a moment to talk about transportation generally.

Transportation is a large consumer of energy. It uses about one-third of all energy used in Canada. But unlike every other sector of the economy, it's uniquely vulnerable because it relies on one energy source to meet of 98% of energy needs, and that's crude-oil-based fuels. Of course the renewable fuel standard is going to change this, given the ethanol and biodiesel mandates, but we're still in a situation where we've seen little change in energy use and no choice for the consumer, despite more than three decades of investment in alternative technologies and fuels.

Looking at the opportunity with natural gas, the real critical question is how we can be successful in transforming the market. How do we ensure that any changes are sustained in the marketplace as we move forward?

Right now in Canada, we've got about 12,000 natural gas vehicles. That represents one-tenth of one percent of the total vehicle population. In the U.S., the penetration for natural gas is also about one-tenth of a percent: 120,000 vehicles out of more than 240 million vehicles.

Why in North America are we lagging behind, when we've seen such tremendous growth for natural gas in other markets globally? First, it's important to understand that most of the growth in the global natural gas vehicle market has involved after-market conversions, which we've had in North America for more than three decades. The reasons the after-market approach has not taken off here are cost and the lack of a broader system to support consumers. A typical natural gas vehicle conversion costs between $7,500 and $12,000 in North America. There are fewer than 15 certified conversion shops in all of Canada and no shops in many provinces and territories. Now, don't get me wrong, the technology performs very well, but the consumer is left without a support system, which can be very problematic, based on our experience in the industry.

After-market conversions certainly work for some high-mileage fleets and for certain consumers who have a payback of less than three years. Following my remarks you're going to hear from Tim Sanford, who is going to talk to you about how a small Ontario business is making this work in their local community.

If after-market conversions are not the primary strategy, how can we get natural gas vehicles for personal use? The single biggest enabler of natural gas for personal vehicles, which can also open the door to home refuelling, is having a choice of factory-built vehicles. Right now there are only two factory-built vehicles that will soon be available in Canada. Both of these vehicles, from General Motors and Chrysler, are pickup trucks that will be sold to commercial fleet owners. In the U.S., GM also offers cargo vans, and there's the natural gas Honda Civic that Tim mentioned. But the Civic only operates on natural gas. It's a dedicated vehicle. Given that in Canada we've only got 41 public stations, this would be a challenging vehicle to own in Canada.

The question of imports, then, if we want to import other natural gas vehicles, really shifts to offshore markets—like Italy, for example. But then we're talking about a lot of changes needed to the vehicle and a lot more complexity to comply with Canadian standards, given that we're fairly harmonized with the U.S. in this direction.

If factory-built light-duty vehicles are the key for the personal transportation market, why aren't the automakers producing more models for sale in North America? In a word, it's infrastructure. They need to see a strong build-out of public stations, as well as home refuelling options. They also need to see a market opportunity that involves Canada and the U.S. Canadian production volumes alone are not enough to justify the investments that would be needed to bring more natural gas vehicles to the market. As corridor fuelling stations are built for heavy trucks, this could provide a renewal of infrastructure to fuel personal vehicles. For example, a Highway 401 service centre that offered liquefied natural gas for trucks could also have a separate pump to offer compressed natural gas for passenger vehicles.

With respect to home refuelling, there's a major initiative under way in the United States involving natural gas producers, utilities, and the U.S. Department of Energy to develop a next-generation home refueller that would have higher output, lower cost, and a longer operating lifetime. You may have seen that GE and Chesapeake recently announced a collaboration to bring such a next-generation home refueller to the market by mid-2013.

● (0910)

The final enabler we see is having the capacity to support vehicle owners and to execute projects in an efficient and cost-effective way. With heavy truck and bus fleets, there are already more than 50 models of factory-built vehicles available with full dealer, parts, and warranty support. And with the current road-map work, industry and government are already jointly addressing the technical barriers and ensuring harmonization with the U.S. where possible. All this capacity-building work is going to ultimately support greater adoption in the personal vehicle market.

We believe that personal natural gas vehicles, including home refuelling, are coming and are coming on a scale that will be accessible to all Canadians. In the meantime, the work that is under way to develop the market for medium and heavy trucks and buses provides an important foundation to support the future use of personal natural gas vehicles.

In closing, we'd like to make three recommendations regarding how the committee can assist and encourage greater use of natural gas in transportation:

First, highlight the role that natural gas vehicles can play in Canada as an innovative transportation technology within the committee's upcoming report.

Second, engage the automakers and seek their input on what is needed to create the right conditions for the manufacture of factory-built natural gas vehicles for sale in Canada and the U.S.

Third, collaborate with the United States, through the clean energy dialogue, to establish north-south natural gas trucking corridors. This infrastructure can become the backbone of a much greater infrastructure build-out that will support personal natural gas vehicles.

Thank you for your interest.

The Chair: Thank you.

Mr. Sanford.

Mr. Tim Sanford (Director of Sales, Compression Technology Corporation): Thank you very much for the opportunity to speak.

My name is Tim Sanford. I'm with the Compression Technology Corporation. We're based in the Toronto area. We're the exclusive distributor of the BRC FuelMaker compressor line across Canada. We are the home refueling people that you would see for compressed natural gas.

If I could direct you to the screen, I have a presentation I'd like to walk you through. It's a little more visual and I can explain as we go through the presentation itself.

To give you a bit of an update and overview of the different markets and the compression around those markets, you can see the large public and private stations that are available. They tend to service very large fleets, whether it's trucks, buses, waste haulers, or many cars on natural gas that are available. Then we look at the small to medium-sized private stations, which would incorporate fleets and hockey arenas. We have about 250 hockey arenas. Ice resurfacers are powered by natural gas and we refuel them right in the ice resurfacer room at the hockey arenas. The forklift market is a large market here in Ontario. We have about 150 plants that operate their forklifts on natural gas. Then, obviously, we have the home refueler, which is aimed to supply fuel to passenger vehicles in your garage, right at home.

The Phill product will be launched here in Canada in the fall of this year. The Phill you can see on the garage is the size of a payphone. It tees into the existing natural gas line at your home, compresses the natural gas, and fills the vehicle. It was formulated and designed around vehicles such as the Honda Civic, to be able to fill that up overnight while you're sleeping. It has a gas detector as well as a small exhaust fan built into it for safety purposes, and it allows you to fill your vehicle right in your garage at your residence.

The next item you can see is the VRA, the vehicle refueling appliance. This has been available since the late 1980s and is used primarily industrially, but it has been used worldwide for residential refueling. You can see it sits on a patio stone, so it's roughly two feet by two feet. It tees into your natural-gas line. This compresses natural gas, fills a vehicle, and produces about the equivalent of three litres of gasoline per hour. The Phill unit is around one litre of gasoline per hour.

What are some of the home refueling obstacles we've seen in the past that are being overcome and have been overcome? As mentioned by my two colleagues, it is the availability of OEM vehicles. We're starting to see more vehicles worldwide—about 20 in Europe, Honda Civic in the U.S., and we'll be starting to see pickups available here in Canada over the next little while. The availability of OEM vehicles is crucial to the growth of home refueling.

The cost of after-market conversions referred to earlier by Ms. Milner.... Regarding costing, you were looking in the past at $7,500 to $12,000. It's starting to be reduced a bit and we're starting to see some costing around the $5,000 mark. What we have been working on is to roll in the cost of the conversion as well as the cost of the home refueler into a financing package to make it a little easier and affordable for the homeowner.

Enbridge Gas in Ontario has a rental program in place under which you can rent a home refueler—the VRA that was shown in the second picture you saw earlier—for around $100 a month. The important point about that is that the price differential between natural gas and gasoline is now significant enough to warrant the conversions and to take a look at some form of rental program. In the past, when gasoline was selling at around 90 cents per litre and natural gas at your home was 50 cents, the delta itself was very tight. Now we're looking at a spread of approximately a dollar. It's $1.30 per litre for gasoline, and natural gas is around 30 cents a cubic metre delivered to your home, so we're starting to see the economics coming into play. The availability of OEMs is going to be crucial in the launch of this product and the success of the home refueler.

● (0915)

How can the Government of Canada assist the growth of home refuelling? Home refuelling needs more visibility. We need to encourage and mandate the use of alternative fuel vehicles in federal fleets. Leading by example would help the homeowner take a look at a product that is viable and extremely convenient.

We need to encourage the provinces to recognize alternative fuel vehicles through the use of HOV lanes, for example. I've driven in Phoenix in the past, where HOV-lane access, because of alternative fuel vehicles, was permitted. This is just a perk that you receive by having an alternative fuel vehicle; it's not a financial gain, but at the same time, it is a convenience.

Reduced vehicle registration fees and exemptions from emission testing are other items that might help encourage people to convert to natural gas.

Also we're finding that interprovincial harmonization of vehicle conversion and station infrastructure standards would be of tremendous benefit. For example, across Canada right now, if we were to look at converting a vehicle over, the cylinder that goes into that vehicle may only be certified for Ontario. You might have to have that tested for other provinces. That becomes a cost and a hindrance to the whole industry. So recognizing testing done in other provinces, through harmonization, would help in lowering some of the costs.

As well, if Transport Canada could look at accepting the potential of foreign vehicle testing to help promote vehicles to be imported into Canada, that also would be of tremendous benefit.

I appreciate the opportunity to speak. Thank you.

● (0920)

The Chair: Thank you very much.

[*Translation*]

Mr. Aubin, go ahead.

Mr. Robert Aubin: Thank you, Mr. Chair.

Good morning, distinguished guests. Thank you for joining us. You have surely broken records this morning in terms of the information you managed to provide in 10 minutes. It is very impressive. It brings many questions to mind. Unfortunately, our time is limited, so I will try to cover the three main issues I am especially interested in.

My first question is probably for you, Mr. Egan. Two figures from the very beginning of your presentation have stuck with me. You think that we currently have a guaranteed 30-year supply in natural gas. We are talking about a 100-year potential supply, as you said immediately after, when it comes to natural gas sources. I assume that we may be talking about transforming biogas.

I would like you to elaborate on your thoughts regarding this 30-year supply and the potential 100-year supply. Does that include, for instance, massive development of shale gas across Canada?

[*English*]

Mr. Timothy Egan: Thank you for the question.

Just to clarify, what I had said was that we used to talk about 30 years of supply; we now talk about more than 100 years of supply. The reason we talk about more than 100 years of supply is that unconventional supplies across North America have come into the marketplace.

Yes, that does include shale gases. That's part of the unconventional supply. Those are being developed extensively right now, as you know, in western Canada, in British Columbia, and opportunities exist for significant development in Alberta as well. Eastern supplies have not been developed at this time. As you know, in the province of Quebec there is a study under way on the advisability of developing the shale gas resource in Quebec, and so too in New Brunswick; studies are under way about the development of the resource there. Significant shale gas supplies, or very closely related formations, are occurring in the eastern United States, in the Utica and Marcellus shale basins.

So those are part of that new assessment, yes.

[*Translation*]

Mr. Robert Aubin: Is this 100-year perspective based on current consumption figures, or is there a growth assumption in terms of natural gas consumption related to that 100-year supply guarantee?

[*English*]

Mr. Timothy Egan: It's based on current consumption levels. However, there are a couple of things to consider. Domestic consumption, for instance, has dropped in the last eight years by well over 10% because we've become more and more efficient in our use of natural gas. Countering the prospect of more market share is the reality of more efficient use. Those don't balance completely evenly, but that is part of the calculus. The assumption is on the basis of current market share.

We're always somewhat cautious when we talk about how much prospective gas there is. When we used to say there was 30 years of gas, we would say that every year. We'd say it every year because more and more of the resource is identified and then more reserves are created. There's a difference between reserves and resources.

As the market price changes up and down, there is more work done on identifying resource and the picture continues to improve. I suspect that in ten years we will still say it will be 100 years. Even if demand continues to go up, I think we'll still be saying it. It's because as demand increases and prices change, producers respond and new resources are identified. The fundamental story is that there is an incredible amount of the resource available.

The last point I'd make is that we talk about conventional resources. Those are the ones we've been using for a long time. The unconventional resources are the shales, the tight gases, the coalbed methanes we've started to recover more recently.

Then there's a third resource base, which is hydrates. We don't even talk about hydrates at this point, although there was an announcement a few weeks ago by the Secretary of Energy in the United States on the prospects for hydrates, and both the Japanese and the Norwegians are doing extensive work on it. The numbers on hydrates run into the hundreds and hundreds and hundreds of years.

Our concern is not on the resource side; it's on the use side.

● (0925)

[*Translation*]

Mr. Robert Aubin: My next set of questions is directed more at Ms. Milner, since it's about vehicles that can be converted. I am especially interested in vehicles used by the average consumers I represent.

A few years ago, I taught geography and was interested in all kinds of green vehicles. When the time came to buy a new vehicle for myself, I did not go green. That's because, in terms of the economy, not only were there no savings to be made, but buying that type of vehicle would not even be on par with buying a conventional vehicle. We are talking about conversion costs from $7,500 to $12,000. Does that allow me to choose the vehicle I want, or do I lose a lot of space by adding a tank in the conversion process? How many kilometres per year are required for this conversion to pay off?

[*English*]

Ms. Alicia Milner: Mr. Sanford can probably speak to this question better than I can.

You definitely have to be a high-mileage driver. That was a big part of the reason when we did the road-map work, we looked at.... You know, in the past we tried to do it all with natural gas and transportation in Canada. If it had wheels, we were going to do it—on road, off road, whatever. There was a lot of money lost: a lot of government money, a lot of private sector money, and a lot of hard learnings that this is not a one-size-fits-all fuel.

You have to find the niche where it works. The main driver there is the cost of the station, whether it's at the home level or the public level. But you're right in terms of small vehicles—even actually on the heavier ones: the target is still the higher-mileage vehicles.

To give an example, if you want a natural gas garbage truck, that's a very expensive vehicle. The diesel truck itself is about $300,000. If you want a natural gas truck, it's going to cost about $35,000 to $40,000 more. It's about 10% more. But the payback on that truck is in about the three-year to four-year timeframe. It's a working vehicle and it's fixed to a route, so it's much easier to calculate the true payback on that vehicle.

I take your point on consumers. In terms of our perspective, we think this is coming, but we think for consumers it's still not there yet. What we see in Europe, where there's a lot more experience, mostly with Fiat in the lead, is that the natural gas vehicles have now come into line with the cost of a diesel vehicle. But it does take time and it takes scale. Are we there yet? No.

The Chair: Thank you.

Monsieur Coderre.

[*Translation*]

Hon. Denis Coderre: Thank you very much.

This is a very interesting issue because it is pragmatic. We feel that we may be at a crossroads of what has happened and what should happen, but we do have some perspective on it all. There are photos and examples available. That helps us better understand that something is becoming a reality. Unless I am mistaken, regardless of the government's assistance, that is where things stand.

[*English*]

It's getting there. We have it.

[*Translation*]

What you basically want is for the government to provide some more incentives in order to change the consumer culture, to make people understand that there are other ways to consume. From your perspective, natural gas is the solution of the future. It is not the only solution, but it should be one of the options. That is my understanding of your statements, Mr. Egan.

[*English*]

Madam Milner, Mr. Sanford, enjoy yourself. It's okay.

Voices: Oh, oh!

Hon. Denis Coderre: I gave you half an hour more now, since we don't have any motions, so let's talk.

Ms. Alicia Milner: I think everyone on this panel would agree that, yes, we do see now that we're at a turning point with this fuel coming back into transportation, as you say. It is going to happen. I think the question for Canada is whether we want it to happen in a one-off way. For instance, we have Robert in the east and Vedder Transport in the west and now some St. Lawrence ferries. That's fantastic. What comes with those projects is significant capital investment, and of course jobs involved in making that equipment and installing it.

I think the big question is whether we want this to sort of gradually happen, or do we want a more concentrated buildup of this infrastructure, similar to having other infrastructure built?

We do not see any role for the government in infrastructure. We know that there's a lot of private capital that's ready to move into this market, but the conditions have to be right. In that context, we do not see that the consumer market is right. As I mentioned, we see that as a next phase. We really do see that we have to get going first on the trucks and buses. We have to address those capacity issues, which we're working on right now. And we need to create the right conditions for that private sector investment. It will happen gradually.

I'll give you another example. The other interesting opportunity here is marine, particularly in the Great Lakes and on the west coast. We know that investment in an LNG facility can serve both heavy trucks and marine. But right now a lot of the players are sort of waiting to see how the pieces are going to fit together. Natural gas in marine, in particular, has significantly lower emissions compared to the very high sulphur fuel used in the vessels now on the Great Lakes and in the St. Lawrence.

● (0930)

[*Translation*]

Hon. Denis Coderre: Exactly. We don't need government investments in infrastructure. I do have some questions about that, as we also have a role to play in ensuring that municipalities get involved as well. In my opinion, we have a role to play in the existing infrastructure program.

The government's primary role is to harmonize our standards with the international ones, especially in the north-south corridor. Another role of the government is to incite consumers to invest by providing them with another option when it comes to purchasing a car. Is that what you are recommending today?

[*English*]

Ms. Alicia Milner: No, we are not asking the government to incentivize consumers. What we've learned in the past is that the time has to be right. The three legs of the stool are the factory-built vehicles, a model to get infrastructure to the market, and capacity to support the end-users.

For consumers, we don't have that one big leg, which is the OEM vehicles, so there is no ask in the space related to consumer vehicles. We think you have to focus on the bigger vehicles, on the trucks and buses, and then build it from there. That's the foundation.

Mr. Tim Sanford: Just to go back to that earlier point on how many kilometres you would have to drive to make this worthwhile economically, you're looking at roughly 35,000 kilometres per year. So yes, it is a more heavily used vehicle.

I've been in this industry 22 years now, and this is the highest level of interest I have seen. When we look at the deltas between the two fuels, we have the most prime conditions for people to convert their vehicles to run on natural gas. With the availability of natural gas, if there were a way we could receive more OEM vehicles, and the federal government could promote it, it would be a tremendous benefit. More choice out there would align itself with the growth of this marketplace, most definitely.

Mr. Timothy Egan: As an industry, we don't say natural gas is the answer to everything. We say right fuel, right place, right time. There's a place in our energy economy for a host of technologies and a host of fuels. We think that the consumer should have as much choice as possible. We think that the changes in natural gas supply and consequent changes in affordability should present a significant opportunity for consumers.

What can government do to facilitate that? There's an educative role for government. There is a codes-and-standards role, because many of those are set nationally. Even if the federal government may not have a role, there are significant provincial standards. There are municipal issues. There's a need for bringing the three levels of government together to talk about how those things can be addressed. There's also, I think, a continental dimension, because the transportation market is so integrated between Canada and the United States.

Hon. Denis Coderre: When we talk about the standards vis-à-vis Europe, you're asking to have kind of a normalization. How's our standard in Canada in comparison with the others? Do we have to lower our standards? Do they have higher standards? There's an issue of what we mean by a standard.

Secondly, *j'ai une question un peu néophyte*, a question like back to the future.

● (0935)

[*Translation*]

Is waste conversion, whose goal is producing gas, part of the strategy going forward? We do not need to dig holes; we can convert waste. There is plenty of gas in Montreal. You will not have any trouble obtaining waste.

Could recycling be part of a green approach? I remember the Miron quarry, which contained some biogas; it was appalling. Is that also part of the gas-related strategy?

[*English*]

Ms. Alicia Milner: We are harmonized with the U.S. on vehicle emission standards. Transport Canada has its own requirements but will recognize the American standard for purposes of compliance. Continentally, it is well harmonized. But if you look at Europe, it's very different. Even the structure of the emissions standard is different in Europe.

Mr. Timothy Egan: On the waste question, I had to burn through this presentation very quickly, but I did make one quick reference to renewable natural gas, which includes methane recovered from waste disposal facilities, from landfill. There's significant work under way in Quebec to do that. Gaz Métro is active in this area.

We have recently created and will be launching at the end of this month a road map on the use of renewable natural gas. It will look at what needs to be done to bring more natural gas into the system. You're absolutely right: it's a source of methane, and natural gas is methane. So long as the means are there to keep it as clean as the methane coming out of the ground—it's often less clean—then you can put it into the system and it can be a key part of the mix.

The Chair: Thank you.

Mr. Poilievre.

Mr. Pierre Poilievre: Thank you very much for the excellent testimony today. We appreciate it.

If I wanted to purchase a Honda Civic natural gas vehicle today, what would stop me in Canada?

Ms. Alicia Milner: You'd have to do what a couple of utilities have done: you'd have to buy it from an American dealer and bring it across the border. As soon as you do that you void the warranty. You'd also have to meet Transport Canada's requirement for daytime running lights, which a dealer here could do. And you'd have an odometer that's in miles. The main risk for you as a consumer is that you void your warranty, because that's how the OEMs work.

Mr. Pierre Poilievre: What would stop a local Honda dealer from selling the natural gas Civic in Canada?

Ms. Alicia Milner: My understanding is that all the dealers have a contract with corporate. They would have to have in their dealer agreement that they're able to sell the vehicle, and they would have to staff up to be able to maintain them in parts, etc. There's a whole suite of things, but they have to have that contract with corporate.

Mr. Pierre Poilievre: Is that an issue internal to Honda, or are there regulatory obstacles that render it so?

Ms. Alicia Milner: It's strictly a commercial issue with Honda.

Mr. Pierre Poilievre: All right.

Are you aware of any hybrid gasoline-to-natural-gas vehicles that the major car companies are contemplating, other than the two trucks, the GM and Chrysler trucks? Are they hybrid?

Ms. Alicia Milner: No, they're not.

Mr. Pierre Poilievre: They are strictly natural gas?

Ms. Alicia Milner: Yes. They are bi-fuel. They will start on gasoline, switch over when the engine reaches the right temperature, and then operate on natural gas.

Mr. Pierre Poilievre: Can they run exclusively on gasoline?

Ms. Alicia Milner: Yes, they can. That's where maybe it wasn't clear. The Honda Civic, being dedicated, can operate only on natural gas. Typically, bi-fuel is the way you go.

Mr. Pierre Poilievre: This is the problem. If I want to install a home refuelling system and run my vehicle principally on natural gas, in the existing Canadian distribution environment I can do that as long as I have the option to switch over to gasoline when necessary.

For example, in an average week I could fuel my car with natural gas at my home, drive myself to work and back and wherever else, and always be able to refuel at home without the necessity of relying on a public filling station. But if I decide I'm going to drive to Saskatchewan to visit family, I cannot guarantee I'm going to find natural gas stations all along the way. As a consumer, I would need to have the possibility to run on gasoline as a bridge fuel until the infrastructure for the distribution of natural gas is broadly in place.

Why don't you see that happening? Why aren't the OEMs recognizing the need to bridge between gasoline and natural gas by offering a hybrid product?

● (0940)

Ms. Alicia Milner: I think they're starting to get there, now that we see availability from GM and Chrysler. Ford is also working with Westport to offer a product. I think it's coming, but for them it's strictly about cost: *x* amount to engineer the product, *y*amount to manufacture it, and they've got to make sure they're going to sell enough units to make that worth their while.

Now that they are seeing interest in the producer community around North America, I think they are starting to see sufficient interest. But the other thing is that these guys work in thousands of vehicles manufactured per month. They don't want to talk about hundreds. This is the other challenge with the automakers: getting to that zone where, to them, the numbers make sense.

Mr. Pierre Poilievre: Economies of scale.

Mr. Sanford, I have a question for you. Would it make sense for your company to approach the OEMs and discuss a package for the consumer that would include a natural-gas-powered vehicle and an installed home refuelling station, at an all-in-one price? Potentially, it would be financed over a defined period, and perhaps include the natural gas retailers in a fixed-price contract that would survive over the duration of the financing, so that the consumer could really price in the cost of a natural gas vehicle, the home refuelling station, and have a constant price over a five- or ten-year-period to show the financial benefit, guaranteed.

Mr. Tim Sanford: It's an excellent point, and we've been addressing that with a couple of the gas utilities, and potentially approaching Chrysler, for example, GM or Ford—the OEMs—on that specific topic.

It's funny, I go back to our success in the forklift market. We have roughly 3,000 or 4,000 forklifts operating in the greater Toronto area. What we've done there is to work with the forklift dealers to convert forklifts to operate on natural gas, and supply the refueling stations through a financing package. It makes the economic case very, very strong. Workers benefit from the health and safety benefits in emissions, and the company benefits as well from an economic savings that is very substantial.

In this case, we're looking at approaching the OEMs to ask for their assistance through their financing mechanism. So when you purchase your vehicle, in the trunk, for example, would be the fill. You simply take that home and any local HVAC contractor could install that; it's a simple installation. But by having that rolled into the financing package with the vehicle, now you're looking at something that may be much more affordable because it's done through a monthly payment.

On the fixed rate for natural gas, that is something the homeowner could look into with a gas marketer or the utility, to lock in the rate for a length of time so they're guaranteed a price over three to five years, say.

Mr. Pierre Poilievre: I think they need to have that price predictability, because the average consumer is not a commodity economist. You might tell them that natural gas prices are lower and there are 100-year supplies and so on, but that doesn't really mean a lot to someone who sees natural gas as having a mercurial price behaviour, as they see their gas bills differ from year to year, etc. The simpler you make this for people, the better it is. If you're asking them to go to their natural gas retailer and negotiate a contract, it's just not going to happen.

Now, imagine this: I walk into my Honda dealer and the dealer sits me down and says, "Listen, we have this whole package for you, it's all on one sheet, one piece of paper. Here's the cost of your natural-gas-capable vehicle, here's the cost of your home-installed filling station, for which we will arrange installation, here is the agreed price over a five or ten-year period with Enbridge for your natural gas, and we roll it all into one price. You sign on the bottom line, you buy your vehicle, and when you have this vehicle at home we will have your filling station installed, your price set, everything is finished, you just have to drive the car." That is the kind of simplicity that would compel a motorist to take the risk of early adoption.

● (0945)

Mr. Tim Sanford: I agree fully with that. I previously experienced this with a fuelmaker myself, in California, when I was working with Honda dealers. We had a program in place through the U.S. in some specific states, California being one, where the actual Honda dealer would provide the turnkey service, just as you've stated there.

Mr. Pierre Poilievre: What was the outcome of that?

Mr. Tim Sanford: It was very successful. However, there were some incentives, so I can't tell you if it was just related to the turnkey package or whether it was incentive-related. I'm sure the two came together.

The Chair: Thank you.

I would suggest, as a former automobile dealer, that we wouldn't want to take all that other responsibility on. Our job is not to market gas or installations; it's to sell cars. I think it's a great idea, but I don't think the consumer is there. I think the example would be the electric car. The consumer is not there yet, no matter what you do for them.

Mr. Holder.

Mr. Pierre Poilievre: The technology is not there with batteries. The technology is there and the economics are there with natural gas.

Mr. Ed Holder (London West, CPC): Thank you, Chair.

I'd like to thank our guests for a very compelling presentation and discussion so far.

I think the debate between the chair and the parliamentary secretary is more about price point, quite frankly. I think that becomes the issue for the consumer. If I could interpret what Mr. Poilievre said from my perspective, just make it easy for the consumer. That's what we're talking about. I don't think I would be suggesting that the car dealer has to sell the package. I think if they want to sell a vehicle that incorporates this kind of technology, the package has to be there just to make it easier to use.

I have several things, and I'm going to work through this if I can, please.

First I have a quick question for Ms. Milner. This is my ignorance, so you're helping educate me. When you mentioned before about the need to have natural gas and gasoline for those times when.... I would never drive to Saskatchewan. No disrespect, but it's just a little farther than I would want to drive in a vehicle. But you noted the importance of having both fuels, how it would be important if you had that. I presume you need two tanks. The weight of a tank is fairly significant without the fuel in it, so I'm just wondering what impact that has on efficiencies and all, and how practical that really is. I guess it's the only way to do it, but can you just briefly comment on that?

Ms. Alicia Milner: There is a weight impact. Typically for a consumer we hear the weight and the payload issue is much bigger on trucks, of course, where volume and payload matters to them. One of things we find too in the more evolved markets, like in Europe, is that the OEMs will have a gasoline tank on there but they'll engineer it down to be a very small gasoline tank. That helps offset the weight you're adding with a natural gas fuel system. Right now in North America we're just sort of having both the normal size. However, I'm not sure if it's the GM pickup or Chrysler, but I believe one of them is going to scale down the gasoline tank.

Mr. Ed Holder: In terms of litres of capacity, what might that be?

Ms. Alicia Milner: I'm trying to remember with the North American OEM product. I think it's maybe about 10 or 20 litres for the pickup truck.

Do you know offhand?

Mr. Tim Sanford: It's in around the 20 litres.

Ms. Alicia Milner: Yes. It's about a 20-litre tank.

Mr. Ed Holder: That would be painful for Mr. Poilievre to go all the way to Saskatchewan with a 10- or even a 20-litre tank, I'm thinking. He needs to stop a lot, for different reasons that I'll let him comment on.

A voice: That's on the record.

Mr. Ed Holder: First I have a question for Mr. Egan. I think there are a couple of costs. There is the conversion cost, and I've heard you say $7,500 to $12,000. Is that the number I heard you quote, or was it perhaps Ms. Milner? If you stand by that as a range, $7,500 to $12,000, what would you imagine the cost to be if it were in general production, if an OEM were producing this and it wasn't a conversion, so it was just part of the vehicle itself? What would you guess the cost to be?

● (0950)

Ms. Alicia Milner: I can tell you that on the GM and Chrysler pickup trucks, they're both going to come in at about a $9,000 premium. Pickup trucks these days are fairly expensive vehicles, so that's 20% to 25%.

Mr. Ed Holder: Where did you get your $7,500 figure?

Ms. Alicia Milner: Sorry, that was for conversion.

Mr. Ed Holder: Why would it be cheaper for a conversion than to install it from the outset?

Ms. Alicia Milner: Probably, for one, because on these pickup trucks they're adding a lot of fuel capacity. It has more to do with the design of the pickup truck. The $7,500 to $12,000 is a range, and it depends on your engine size and how much fuel capacity you put on the vehicle.

Mr. Ed Holder: It's a big range, but I appreciate your point.

So there's that cost, whether it's a conversion or right out of the plant. The second is the cost of a home fuelling station, and I go to you, Mr. Sanford. Those are very nice pictures. So what would it cost the consumer in London, Ontario? That's where I'm from, the tenth-largest city in Canada, so we have a good population. What I'm wondering is, if it were popular in London, Ontario, what would it cost in my city for you to install in my garage, presumably, and hook up to my natural gas?

Mr. Tim Sanford: The fill unit itself, when it launches, is going to be in the $5,000 range.

Mr. Ed Holder: You mentioned $5,000, so that was referring to the home station.

I have $7,500 to $12,000 for the vehicle and $5,000 for the home fueling station.

I just sold my house a little while ago. Can I take that with me?

Mr. Tim Sanford: Yes.

Mr. Ed Holder: So I own that. Would you rent it to me, like my heater?

Mr. Tim Sanford: Currently you would have to purchase it. We are working on a financing package.

Mr. Ed Holder: Forgive me if I just focus on Ontario for a second. How many home fuelling stations do you have in Ontario?

Mr. Tim Sanford: I'd have to check with Enbridge, because a lot of it has been done through Enbridge Gas, but you're probably looking at around the 400 to 500 mark, as an assumption.

Mr. Ed Holder: I come from the insurance business, and we get paranoid about risk. What's the insurance implication of having a home filling station in your garage?

Mr. Tim Sanford: That's a good question. It's classified as an appliance, so—

Mr. Ed Holder: It's like a toaster.

Mr. Tim Sanford: Exactly. It requires the same CSA approval, and it's very safe.

You mentioned London. We have all the hockey arenas in the city of London operating their ice resurfacers on natural gas, so the ice resurfacers all refuel right in the ice resurfacer room at the arena with an indoor refuelling panel.

Mr. Ed Holder: No disrespect, but I was just at an event in Fanshawe Conservation Area, where a young man was killed driving a Zamboni some years ago. I don't know if that Zamboni was on natural gas or what the fuel was that he had in the vehicle.

Mr. Tim Sanford: That's an excellent point. That's what spurred the city to convert to natural gas. It was gasoline-powered.

Mr. Ed Holder: I appreciate your clarifying that, because I think it was a fumes issue in a closed room that caused that tragedy.

Mr. Tim Sanford: That's correct.

Mr. Ed Holder: That's why I asked.

There are no legal implications either. I talked about the insurance side. What I'm trying to get at here is, if it's a portable unit, you get rid of the issue we talked about in terms of filling stations, because every home or whatever number of homes are filling stations. I'm sure there are going to be some volume benefits as this becomes more profitable.

In London we have a very large taxi group, Aboutown Transportation, that runs on propane—all their taxis run on propane. Why natural gas versus propane? I'm not asking you to compete against the industry, because I think one of you said “right fuel, right price, right time”. That was you, Mr. Egan.

Why natural gas versus propane?

Mr. Tim Sanford: I believe in the taxicab market a lot of it had to do with the lower cost on the actual conversion of the vehicles themselves. Propane was a little bit lower in cost.

The range of propane was probably a bit of an advantage for the vehicles. Propane is a little bit more costly than natural gas, but there's a little more range and availability of propane stations throughout the city of London.

● (0955)

Mr. Ed Holder: You see, where—

The Chair: Thank you. I have to move on.

Mr. Ed Holder: Okay. Thank you very much.

The Chair: Ms. Morin.

[*Translation*]

Ms. Isabelle Morin (Notre-Dame-de-Grâce—Lachine, NDP): Thank you.

I would like to know whether companies or distributors are interested in selling natural gas vehicles directly, without a conversion being necessary.

Owing to a lack of time, I would not be interested in buying a conventional vehicle and going through the conversion process. At first glance, I feel that's a waste of time in my life. I wanted to know if anyone was interested in selling those vehicles directly. I know they can be bought in the United States, but we must go through customs controls to bring them back to Canada. Once again, I think that is a waste of time.

Mr. Sanford provided some recommendations for encouraging people to use natural gas vehicles, but I do not see anything about simplifying the process or encouraging distributors to sell natural gas vehicles.

Do you know whether any of them are interested in doing that? How do you mean to encourage them? What approaches are you considering?

[*English*]

Ms. Alicia Milner: I guess I would go back to my earlier comment that looking broadly across Canada, we don't think the time is right for consumers.

That said, there will be small groups—for instance, a plumber or an electrician who drives a lot of miles—who will be motivated to go out of their way for fuel and be willing to go through the hassle of having their vehicle converted for that fuel savings. Definitely there will be that part of the market, and I think that's where Mr. Sanford's company has been successful, in finding those high-mileage drivers.

For the average consumer, though, I completely agree: I don't think we have all the pieces yet to offer this to the consumer in Canada. As mentioned, having those factory-built vehicles is a big part of it. We do see that this is coming.

To go back to the truck and bus example, that's something that is extremely powerful there. All those manufacturers have their own dealer networks. The beauty of that.... For instance, in the Robert project in Quebec, that particular dealer I believe covers half of the province for truck sales for Peterbilt. There are many fewer channels to go through to provide the product. In that case, the manufacturers have made it very simple. Their sales representatives can go in, just select the natural gas product, and it will get properly built at the factory, delivered, and all the rest of that.

So I think it's a question of timing, but yes, understand that right now those are a lot of challenges for the consumer.

[*Translation*]

Ms. Isabelle Morin: Could you tell me when those vehicles will be available to consumers?

[*English*]

Ms. Alicia Milner: Yes. I would like to say that within the next three to five years I think is extremely realistic. The other thing we haven't mentioned this morning that we see as also encouraging is that we're starting to see more of the companies involved in the energy industry, the natural gas producers, trying to encourage their own employees to use the fuel. Some of them are offering incentives —better parking in the company parking lot, even free fuel for a year.

So we need some of these little steps first, to help fill in the spaces, before it starts to be close to the consumer, but the timeframe of three to five years I think is very achievable in North America.

[*Translation*]

Ms. Isabelle Morin: Thank you very much.

I will move on to Mr. Sanford.

In your slide titled “How Can the Government of Canada Assist the Growth of Home Refuelling?”, you talk about the need for more visibility. With regard to that, you recommend “encouraging or mandating the use of alternative fuel vehicles in federal fleets”.

The Directive on Fleet Management: Executive Vehicles, says the following under item 5.3.3:

> Executive vehicles must be:
>
> a. hybrid-electric, if available from the manufacturers;
>
> b. factory-equipped for natural gas, propane, or E-85 ethanol fuel, if available from the manufacturers, where fueling infrastructure exists or is planned; or
>
> c. factory-equipped with a 4-cylinder conventional fuel engine [...]

What do you want to change? Those characteristics are already being promoted. They are included in accepted vehicles. I don't see how more could be done. Do you want those characteristics to be mandatory? I don't see how your recommendation could be applied. You talk about encouraging or mandating the use of vehicles, but that is already being done.

● (1000)

[*English*]

Mr. Tim Sanford: Yes, I realize it is in the act. However, we haven't seen it being promoted with the end-user on the federal fleet side. There has been some traction, but not a tremendous amount of traction. If we are hoping to lead by example, then we have to maybe have a bit more of a concentrated effort in trying to implement it into the fleets themselves.

So yes, I understand it has been written into the act. However, we still haven't seen that being implemented into the fleet yards, for example, for any on-site refuelling or use of vehicles themselves. It could be education, and maybe some of the private sector could assist with educating some of the fleet managers, for example.

The Chair: Merci.

Mr. Watson.

Mr. Jeff Watson (Essex, CPC): Thank you, Mr. Chair.

Thank you to our witnesses for appearing today.

I find your interventions, particularly some of your recommendations, to be very practical and very pragmatic. Of course the big issue if we're talking about light-duty vehicles is the expected sales point, if you will, for an automaker.

I suspect we're not at that critical point yet; otherwise, they'd be building these vehicles in big numbers. It costs on average anywhere in the range from $1 billion to $5 billion to develop a single light-duty vehicle in the auto industry. That's a huge amount of development cost, so there has to be an expected return.

The Canadian market for light-duty vehicle sales is just under two million units a year, and we're about 9% of the North American market. I'm not sure that if we change much here it's going to influence the OEMs' decision to produce light-duty vehicles for market sales. I think largely they'll be driven, as it's always been, by what's happening in the United States.

Having said that, you're recommending that we talk with the OEMs. I'm not sure of what we're hoping to obtain from them, because it will be a purely economic decision about whether they have a market for it or not.

Have you had discussion with any of the OEMs? Have they indicated any barrier other than whether they expect to get the return for their developmental cost?

Ms. Alicia Milner: We have talked with the OEMs, and we work quite closely with GM.

I'm not sure if you're aware, but General Motors has their global gaseous fuel development centre in Oshawa, so they do this work here in Ontario. Part of it is that they also watch for signals from government. Yes, it's economics, but also it's understanding where things are shifting and whether they see that governments are going to get more serious about support for a given alternative.

I think that's another thing that goes into the mix, and I think the number of electric vehicles is very telling in that regard. Partly it's a new and innovative technology, but they're also seeing strong signals from government, and that supported the decision they've made internally.

Mr. Jeff Watson: What government support are you recommending then? What does the government need to do to send the signal to them to do this? Largely, there are two overwhelming considerations. One is price point for the consumer. In Canada, consumers tend to favour much lower cost alternatives and more simple alternatives than the American market. The second is the cost of abatement of new technologies for the OEM.

What support are we supposed to offer that will make 9% of the North American market a little more attractive for them?

Ms. Alicia Milner: I don't think "support" is the right word. Right now we have the Canadian Automotive Partnership Council that Industry Canada has. I would ask committee members whether this subject has been discussed with that group, with all the OEMs around the table. I don't know the answer to that.

Mr. Jeff Watson: Neither do I, actually, but that may be a good topic.

You mentioned north-south trucking corridors and the clean energy dialogue. Is that for the benefit of the trucking industry at this stage, as opposed to consumers?

You say the consumer market is not there. What are you looking for—fuelling stations along the 401? What are you talking about there? What about private money? You said private money is sitting on the sidelines with this kind of infrastructure. What do they need to leap into it?

● (1005)

Ms. Alicia Milner: As to the infrastructure for trucks on the corridor, this is a truck issue entirely. The bigger issue there, though, is a competitive one for Canada. By the end of this year, there are going to be 72 truck stops with LNG. A year from now, there will be 150. These are already funded and there have already been announcements made in the U.S. There is a lot of north-south movement of trucks and movement of goods. It will put the trucking fleets in Canada at a relative disadvantage if these trucks are operating on fuel that's 30% less expensive. So that's a competitive threat on the trucking side of things.

Mr. Timothy Egan: You referenced the clean energy dialogue, and I want to highlight the fact that—

Mr. Jeff Watson: She referenced it; I was just confirming what she said.

Mr. Timothy Egan: The clean energy dialogue does not talk about natural gas at this point, right? The focus of the dialogue on energy between Canada and the United States has not factored in natural gas. We think that's a shortcoming. It may be understandable given some of the history. But the changes in the marketplace, the supply picture, and affordability dictate that this needs to be part of the dialogue. We think that this will stimulate a lot of discussion, and that the OEMs among others will take notice of it.

Mr. Jeff Watson: The choice you presented was whether this would be happening suddenly or gradually. What's the upside to its happening suddenly? What's the downside to its happening gradually? If we were to do nothing in the short term, literally nothing, you say it's coming anyway. What barriers would we ultimately have to face as the technology becomes more available and more affordable to the consumer? What would we eventually have to face if we did nothing in the short term?

Ms. Alicia Milner: I think this is about opportunity and opportunity loss. We can leave it to the market, but we think it's going to happen.

I'll give you the example of Shell's investment in Alberta. They're spending $250 million to build an LNG facility west of Calgary. They're doing that to support the transportation market and they're going to use that fuel. They will be able to move it by truck and rail to support our western corridor, and they will also sell into other markets, like drilling rigs and stationary engines.

I think the question for the committee and for Canada is how many more of those investments there will be and how we can encourage those investments to happen in the next three to five years rather than the next ten to fifteen.

I mentioned the marine market. That could be a bit of a pain point. To comply with the emission standards coming in 2015, the shippers will either have to add scrubber technology, though there's not enough capacity to get the ultra-low-sulphur diesel they'll need for marine, or they'll have to go to LNG. The challenge with LNG is that they need it at certain points and they need 100% certainty that it will be there. Their timeline on vessel modifications is a minimum of 18 months, and it's usually longer than that.

That could be one area where there are some challenges. We're seeing Transport Canada starting to work with them very closely on how we facilitate this so that the shippers don't hit these crunch points. But on the onroad side, it's really about investment stimulating that private sector investment and shortening the timeframe it's going to happen over.

The Chair: Thank you.

Mr. Sullivan.

Mr. Mike Sullivan (York South—Weston, NDP): Thank you.

I'm going to start with marine. The Canadian Gas Association's document said that liquid natural gas reduces SOx by 100% and particulates by 100%. How do we get zero particulates out of a natural gas engine?

Mr. Timothy Egan: I have to go back and look at the technology. We're getting this information from some of the marine users right now.

I was going to comment on measurability, but go ahead.

Ms. Alicia Milner: You have to understand that baseline fuel is 5,000 parts per million sulphur. Onroad now is 15. Natural gas traditionally has had a very strong advantage on particulate emissions. It was one of the reasons California encouraged the use of it way back when. I think measurability is maybe part of the issue here, but natural gas definitely has inherently lower particulate and NOx emissions.

● (1010)

Mr. Mike Sullivan: But not zero.

Ms. Alicia Milner: It comes down to how you can measure it. Yes, I take your point on that.

Mr. Timothy Egan: But it does go to measurability, though. You're right, ultimately there's no zero, but the point is—

Mr. Mike Sullivan: No, but I was wondering, for example, if you were ignoring PM.1 and PM0.1 in creating this number of 100%, and you're only dealing with PM10. If that's what's going on, I wanted to know where those numbers came from.

The marine regulations that you're talking about that are to be enforced in 2015, are those applicable on the oceans, or only on the lakes?

Ms. Alicia Milner: They'll apply to the Great Lakes as of 2015, and it's a 200-mile perimeter on the east and west coasts already. What happens with the big transocean shippers is they have two fuel systems. As soon as they come into that ecozone, they'll switch it over to the cleaner fuel. As soon as they're out of it, they'll switch it back to the bunker.

Right now in the Baltic Sea, it is an environmental—

Mr. Mike Sullivan: It's all within the 200-mile zone.

Ms. Alicia Milner: It's also a zone like this. No, no, the whole thing. But that's what's coming in the Great Lakes. They will have no options. So for the short sea shippers that stay within that inland water, they will have to either add the scrubber technologies, go to a lower emission fuel, or if they can get the fuel supply.... Up to now, of course, the price of natural gas couldn't compete. It hasn't been able to compete in this market. But now fuel or technology costs...it's got to go up to comply.

Mr. Mike Sullivan: I was interested to know whether or not the transoceanic folks are actually going to carry two fuels, and I guess they are, which is strange.

Essentially, it's regulation that has driven the potential adoption of natural gas as a fuel because of our interest in clean air and of our interest in reducing carbon dioxide emissions. Is natural gas merely a stop-gap? In other words, we have to reduce our carbon dioxide emissions by 75% by 2050. Carbon dioxide is 23%. So either we reduce our transportation by 80% by 2050 and use natural gas, or we find another technology.

Do you have some ideas?

Mr. Timothy Egan: As I understand the question, you said it's regulation that's driving the consideration of natural gas as an option. I'd actually say that it's regulation that has driven the search for alternatives to diesel, but it's the affordability of natural gas that's presenting natural gas as an alternative. That's the fundamental change, as we see it.

Mr. Mike Sullivan: I'm aware the big rail companies are looking at liquefied natural gas because they can carry a tank of it behind the locomotive. It's more efficient for them to carry their fuel that way than it is to carry a tank of urea, which is what they have to do to scrub the particulates out of their exhaust to meet tier-four standards. So there's a big struggle happening. Some of them are actually going to use the urea systems, but I understand there are some discussions going on with CN about creating a fleet of natural-gas-powered vehicles that—and correct if I'm wrong—could actually go across Canada twice on one tank.

Mr. Timothy Egan: I don't know what the range is, but you're correct that the conversations are under way, looking at natural gas as an alternative, using LNG, as you say, tanked on the train.

Mr. Mike Sullivan: Is there a similar potential on the Great Lakes, that the regulations are going to drive them into LNG rather than scrubber technologies, as is suggested, rather than the urea?

Ms. Alicia Milner: Yes, I'd say very strongly.

In terms of working with Transport Canada right now, they recognize.... They did a study a year ago on the alternatives for compliance and what the alternatives were going to cost the shippers. The high-level conclusion on alternative fuels—and they looked at biodiesel and renewable-based other alternatives—is really only LNG to be able to get there. There are a lot of changes in that area, a lot of questions around bringing the pieces togther to bring that fuel into the market, since it is a new market.

I would mention also that in Quebec the primary driver for the ferries was carbon reduction. Of course some of the other benefits, like affordability, etc., were great, but they did that as part of a whole environmental initiative as they upgraded the ferries.

● (1015)

The Chair: Thank you. I have to stop you there.

Mr. Richards.

Mr. Blake Richards (Wild Rose, CPC): Thank you, Mr. Chair.

Thank you all. It has been a really interesting discussion so far, and I'm looking forward to hearing a little bit more in some of the questions I have. I have a whole series of questions, so I'll get right into it.

My questions are for Mr. Sanford and Mr. Egan mainly, so I'll start with you, Mr. Sanford, on the home refueling. Ms. Milner, if you have anything to add, please feel free to do so.

In terms of the home refueling stations, I guess I'm trying to understand them a little bit better, so I'll start with a couple of questions. What sort of lifespan does one of these home refueling stations have, and what issues have there been with them in terms of typical malfunctions? Do they need to be repaired, and what happens when they do need to be repaired?

I'll start with those two questions.

Mr. Tim Sanford: Perfect. When we take a look at the two home refuelers that were illustrated earlier, the VRA—that's the FMQ-2 model—it has roughly—

Mr. Blake Richards: Pardon me, which one's that? Is that the one that's inside the garage, or the larger—

Mr. Tim Sanford: The larger one on the outside. That's because that's the one that is currently on the market right now, so I can speak first-hand on it.

You're looking at roughly 5,000 hours before a rebuild has to take place on that compressor module. Inside the housing, you actually have four components. There's a compressor module, controls module, electronics module, and the fan.

The operating part of the compressor itself, in the compression module, typically has a lifespan of about 5,000 hours, roughly 15,000 litres of fuel. After that lifespan of roughly 5,000 hours, you would change the compressor module.

Mr. Blake Richards: Talking in terms of the number of refuels for an average-sized vehicle, would you be looking at 3,000 or so?

Mr. Tim Sanford: Yes, in that range. Then you'd be looking at about a $1,500 cost at that point, to change that compressor module to get another 5,000 hours. Hopefully by that time it would have spread out to 7,000 to 10,000 hours. Over the years there has been an increase in lifespan on those compressors, so it's a tremendous benefit at that point.

Mr. Blake Richards: Okay. The smaller units that are inside the garage, they're not really in use right now. Are they sort of in development stages?

Mr. Tim Sanford: We're going through the certification process right now. We're looking for it to be launched sometime around the fall. It's about 6,000 hours for that compressor. However, you're only—

Mr. Blake Richards: You'll get slightly less usage out of that one.

Mr. Tim Sanford: Correct.

Mr. Blake Richards: Less than half, actually.

Mr. Tim Sanford: In that case you're compressing natural gas and producing about one litre per hour, so there's less compression.

Mr. Blake Richards: Okay. That actually leads nicely to the next question I had. I know Mr. Poilievre talked a bit about this earlier, but right now their use would be maybe for a commuter, that kind of thing, for whom this would work well. Someone like myself, who does a lot of driving—I have a large riding—something like this maybe wouldn't work as well if it were your only refueling method.

Is there any work being done in terms of trying to improve the speed or the rate at which these refuelers would work, or is that something that's not possible?

Mr. Tim Sanford: Cost-effectively, no. It's something that has been launched around typical commuters, so they've analyzed the range that's required for the average commuter. In speaking of the FMQ-2 VRA model, you're looking at something that is adequate for the amount of fuel that's typically used by a heavy commuter.

Ms. Alicia Milner: May I jump in on that point for a second? The work I mentioned in the United States, though, is targeting much higher performance parameters in terms of output and then cost per litre dispensed. That does have a significant amount of private sector money behind it, recognizing that we need to take it to the next level to have a broader application in the market.

Mr. Blake Richards: Currently, for a typical commuter car—Honda Civic is the kind of example we hear of most often—we're looking at about 100 miles or so of travel out of a typical overnight refuel. What would we be looking at in terms of what they're doing with the increases they're working on in the United States?

● (1020)

Ms. Alicia Milner: Some of the numbers I have seen were a minimum of four litres per hour. But I think that was sort of the bottom end of the range.

Mr. Blake Richards: It is about four times the rate, so it would be a significant difference. Okay.

Mr. Timothy Egan: If I can, I'll just jump into this.

Recent announcements by the Secretary of Energy in the United States on investment and effort to drive some of this technology forward, which we'd be happy to get before the committee, are a demonstration of the U.S. government's recognition that it's a key opportunity. If we can drive that technology forward, it will make a significant difference in consumer response.

The Chair: Thank you.

You've talked about Europe and the utilization of it there. They wouldn't obviously be high-milers in their travel. Are they getting a tax break, or is there an incentive for them to convert?

Mr. Tim Sanford: The difference there is the differential between the fuels, which makes it that much more cost-effective. Gasoline is much more expensive there than what we would see here.

The Chair: It's strictly the price of the fuel, in other words.

Ms. Alicia Milner: There is heavy taxation on crude-oil-based fuels in Europe.

The Chair: We'll go to Mr. Poilievre.

Mr. Pierre Poilievre: I'm going to defer to Mr. Richards.

Mr. Blake Richards: Great. I appreciate that. It's very nice of the parliamentary secretary to allow that.

I had more questions. A few are related to home refuelling. I have two more along those lines, and then I'll maybe move on to some other questions.

Obviously that cost does make it difficult. I think we were talking about $4,500 to $5,000 for one of those refuelling stations at home.

What about the idea, and it was raised, I think, by you, Mr. Sanford, of a rental? What difference would that make to the consumer, and what would the cost of that be to a consumer?

Mr. Tim Sanford: Thank you for the question.

Enbridge Gas, for example, has a rental program in place. It's $100 a month, roughly, or a little less, including service on the compressors. Anyone who's consuming more, at this point, than the 100 litres per month will have a positive economic case, with the delta being $1 per litre.

Mr. Blake Richards: That might be helpful in terms of the next question, as well.

One of the things that occurred to me was the used vehicle market. Obviously someone who would purchase a natural gas vehicle new, with the home refuelling, could maybe make the case that over the life cycle of the vehicle, if they had it for four to five years, it would come out positively for them. But for someone buying a used vehicle, it may not be such a positive outcome in terms of the cost, especially if they had to purchase the home refuelling station.

I'm wondering if there is any evidence out there on used vehicles. When someone is looking to resell a natural gas vehicle, are they taking a bit of a hit on what they're able to recover? Is it a very difficult market for selling a used vehicle with natural gas?

Mr. Tim Sanford: The used market actually is a very strong market at this point in time. At that point, people have paid for the actual conversion of that vehicle. Consumers receive immediate cost savings, because they are paying roughly the same price they would pay for a vehicle, whether it ran on gasoline or natural gas. They're starting to save $1 a litre, right after the immediate purchase.

Mr. Blake Richards: The idea of being able to rent the home refueller would make that even more attractive, I suppose.

Mr. Tim Sanford: It makes it extremely attractive at that point in time. We're probably fielding, on average, three to five calls a day on home refuellers, just in the Ontario area. Now it's starting to spread across the country. A lot of the conversation starts with talk of used vehicles and whether we know of the availability.

Mr. Blake Richards: Okay.

In your presentation you had four points on what you thought the government could do to assist in the growth of home refuelling. The last couple of points I found most interesting. I'd like you to elaborate on them a bit. One of them was to encourage interprovincial harmonization. It seems to me that you're suggesting that the various provinces aren't recognizing standards in other provinces. That's what I think you're suggesting. You also talked about foreign vehicle testing and our acceptance of it.

Can you elaborate on those a bit and tell me exactly what you're seeking to see happen there?

● (1025)

Mr. Tim Sanford: Yes, most definitely. I'll give you an example on your first question about interprovincial harmonization.

For example, a cylinder that might be used for storage of natural gas in dispensing may be certified and registered for use in Ontario, but it's not registered for use in Quebec. You require different cylinders for that—the CRNs, for example, those numbers—so there you have logistics and cost issues that go along with that.

Mr. Blake Richards: Do we have a number of examples like that?

Mr. Tim Sanford: I'm sure as you go through on the conversion side, as you go on the infrastructure side, yes.

Mr. Blake Richards: Okay.

Mr. Tim Sanford: Going back, your second question was...? Sorry.

Mr. Blake Richards: It was on the regulation that you mentioned on Transport Canada's acceptance of foreign vehicle testing.

Mr. Tim Sanford: Foreign vehicles, yes, most definitely. When you look at OEM availability in Europe, for example, over 20 vehicles are available on natural gas. It would be of tremendous benefit if you could import those vehicles for use, but because of logistics and because of certification you cannot do so.

However, a Volkswagen, for example, a Volvo—

Mr. Blake Richards: Do you know specifically what it is in some of these instances? It would be helpful for us, obviously, to know specifically what barriers, rules, or regulations are preventing that.

Mr. Tim Sanford: I believe it's just Transport Canada approval for that on actual use here in Canada.

The Chair: Thank you, Mr. Richards.

Mr. Blake Richards: Thank you.

The Chair: That completes the first round. I'm going to open the floor up again for another short series.

I know that Mr. Sullivan and Monsieur Aubin have a couple of questions.

Mr. Mike Sullivan: We do.

I just wanted to confirm.... One of the topics we've had, one of the items of discussion, has been the regulatory framework. Essentially, because of what goes on in the middle of the ocean, the default is as dirty a fuel as they can get. Without environmental regulations, we'd all be driving bunker C cars. Am I right? The fuel that's easiest on the pocketbook is not always the best for the environment.

So is it correct to suggest that regulation plays a large part, not just in the price of fuel...? The price of fuel is also controlled by the amount of tax on it, as you've just described with Europe, so regulation and taxation are a large part of what drives people, corporations, and fleet owners to look at natural gas.

Ms. Alicia Milner: I wouldn't say that's entirely true. I think in the marine sector, yes, we're seeing that happening, but on the on-road, not so much. What we've seen with increasingly stringent emissions standards is that the OEMs have designed their products to have lower tailpipe emissions.

Now that we're going to have carbon-based emission standards—we already do for light duty and they're coming for heavy—that will actually create some space for natural gas, because the lower carbon benefit will be recognized. The challenge with it is that it's going to be at the manufacturer level, so they'll have to comply on a full portfolio basis with the standard.

But up to now carbon has not been a regulated emission for vehicles, and on tailpipe emissions, where natural gas always had a huge advantage, on the diesel side now, of course, that has been closed. In the last two rounds of emission standards, diesel has basically gotten more complicated to comply.... Natural gas still has some inherent simplicity, which is an advantage, but yes, I think regulation is a very important driver generally for a lot of societal reasons.

Is it going to assist in a big way in terms of this fuel coming into the market? I don't see it too much. It's going to help. It will be an assist. But there have to be other things. It has to have the economics. It needs to have the other pieces to make that work, I think, on the on-road side of it, for it to be significant.

The Chair: Mr. Egan.

Mr. Timothy Egan: Yes, I could respond to that one.

If there's a regulatory framework in place, the natural gas industry is going to comply with it. So in that regard, yes, you respond to the regulatory framework. But the fundamental affordability of natural gas is not driven by regulation. It's driven by the adaptability of the product.

It goes to my earlier point about right fuel, right place, right time. Certain fuels are particularly well suited for certain applications. Natural gas is one option we have in Canada that as a fuel and a technology is very well suited for a variety of applications. That's what drives its use.

● (1030)

The Chair: Monsieur Aubin.

[*Translation*]

Mr. Robert Aubin: Thank you.

I have two quick questions in conclusion.

First, I am looking at the pamphlet on home refuelling facilities, and refuelling seems to be especially fun, based on the faces of the lady and the gentleman. Actually, I think they may be two men; it's not clear, but it doesn't matter. After 25 years in education, I have already received a few pizzas, but that was not a very serious reprisal.

Are there any safety measures for this appliance? I see that the fuelling hose is outside and could very well be cut during the night. A 12-hour fuelling period is fairly significant. Someone could inadvertently damage the appliance by backing up instead of going forward. It seems to me that there are some safety issues involved.

Second, to wrap things up, have the major gas companies thought about providing clients with incentives in order to lower the cost of this conversion?

[*English*]

Mr. Tim Sanford: I'll take the safety question, if I may.

It's an excellent point. It's classified as an appliance. Your question is if someone were to come and damage the hose in the night. The electronics are based, with safety precautions, within that. There is a sensor that notices a pressure drop. So if at any point there were a cut in the hose, for example, the electronics would sense it and shut the compressor off. An inherent property of natural gas is that it's lighter than air, so it rises and dissipates if there is a leak. Unlike gasoline, it does not sit low and collect.

All the safety features have been built in to allow for both outside and inside refueling of the vehicle.

Mr. Timothy Egan: If I can add on the safety question, these appliances are CSA-approved. There may be supplemental provisions from province to province on the appliances. The utilities themselves are in the business of putting products that have safety implications into the home for use in furnaces, water heaters, cooking, barbecues, and a whole host of applications. Safety is the first priority, and they're not going to put one of these things on the end of their system unless it meets the safety standards they set.

Your second question was on whether utilities would consider participating in such financing arrangements. I think Mr. Sanford noted that Enbridge is doing that right now. The short answer is yes. There may be implications utility by utility as to whether it is permissible under their regulatory framework. Of course all utilities are regulated by a provincial utilities board because they are monopoly utilities in their franchised areas. But there are many programs in place to assist consumers with appliances in which utilities are involved. In fact we're looking at a whole host of other applications to this in order to make it as simple as possible.

As the chairman noted, for the consumer simplicity is key. That's something the utilities are driving at all the time.

[*Translation*]

The Chair: Thank you.

Mr. Coderre, go ahead.

Hon. Denis Coderre: Thank you, Mr. Chair.

I must admit that I am increasingly becoming converted to this new approach. The advantage, both for consumers and decision-makers, is having a range of methods that help improve consumption and have a better environment. However, there are some downsides to this. I will throw you a bit of a curveball. If this approach is as successful as projected, the number of vehicles will necessarily increase. Once it becomes less expensive, people will refuel even more. So there will be more vehicles on the road.

Do you project that this could lead to a rise in vehicle activity and traffic jam issues, at best? We are living in an increasingly urban world. No one needs to tell you that, nowadays, there is an ongoing procession not only of student protests, but also of orange cones. Will the increase in the number of vehicles not create another problem? That's a nice problem for you to have, since you sell cars anyway. But is it a problem you must consider in your discussions with your future allies, such as municipal federations?

Ms. Milner, I see you would like to answer that. Both of you may go ahead.

● (1035)

[*English*]

Ms. Alicia Milner: I thought you were going to throw a different curve ball at us, around what this will do to the price of fuel.

Hon. Denis Coderre: So did I. That's the second one.

Ms. Alicia Milner: That's coming.

Mr. Timothy Egan: I think you speak to a bigger question, which is about the increasing urbanization of society and the challenges posed around it. That's something we're engaged in, in a host of ways. That's why one thing we focus our work on is integrated community energy systems to deliver energy more efficiently overall.

District energy systems, for instance, can be an incredibly efficient way to delivery energy in dense urban areas. Natural gas can be a partner in that. It may actually reduce the consumption of natural gas, which we understand, but it's still part of the picture. The change in the market that is occurring as our society changes and as we become increasingly urbanized has both positive and negative effects on the use of natural gas.

It's a market we're playing in, and we're going to respond to those changes. Fundamentally, we're energy service companies. As consumers have choice and make energy service choices, we're in the business of making sure we can deliver on those choices. We're trying to anticipate the kinds of changes you are talking about and respond accordingly.

My member companies don't make money on the price of gas. That's a flow-through on the bill. They make money on the energy service provision they are providing, so they are constantly looking at how to better do that. I will point out that one of the things we haven't talked about here but that I think is relevant is that there's an increasing integration of energy services—gas and electric—which is part of the response to the challenge you are speaking to. I think that's positive for our society overall.

[*Translation*]

Hon. Denis Coderre: Of course, we have Gaz Métro in Quebec. There has been a cultural shift. In addition to the fact that our electrical network has been nationalized and that electric vehicles have become a trend, there is an increasing number of cultural changes taking place, especially when it comes to home consumption. We are basically headed toward your converter—when it comes to the home—new types of vehicles and cultural change.

[*English*]

Are we at the crossroads? Who is your worst enemy? Is it the people who want to stick to oil, or...? How is the lobby?

Mr. Timothy Egan: We make friends with everybody.

Hon. Denis Coderre: That's the story of my life, but how about yours?

Mr. Timothy Egan: Circumstances change so quickly that we have to make friends with everybody. The fundamental reality is that the energy consumer has an increasing variety of choices available to him or her. As I said, we're in the utility business, in the business of providing energy services. The mix of those services will change.

We're in conversation all the time with electric utilities. In fact, several of my members are themselves integrated gas and electric entities—for example, Manitoba Hydro or FortisBC. Other companies own significant assets in the electricity industry. Gaz Métro is actually an owner of electricity distribution companies in Vermont. This kind of thing is happening all over the place.

Who is our worst enemy? Our worst enemy is the individual, the entity, or—dare I say it—the government that looks at our product and says that there is a good choice and a bad choice, instead of allowing the consumer to make the decision.

The Chair: Thank you.

Mr. Watson.

Mr. Jeff Watson: Thank you.

Just for information's sake, what is the size or capacity of a light-duty vehicle fuel tank for natural gas? What is its fuel economy, expressed as litres per 100 kilometres, in comparison with, say, unleaded gas in that regard?

Ms. Alicia Milner: The total fuel storage on the vehicle depends on how many tanks it has, or if it's conversion, on how much range the customer wants—

Mr. Jeff Watson: Take a Dodge pickup truck, for example.

Ms. Alicia Milner: A pickup truck would probably easily have a 300- to 400-kilometre range. Some might go higher and some might be lower.

Mr. Timothy Egan: That's correct.

Ms. Alicia Milner: Regarding fuel consumption, we always talk about the pricing of natural gas on a gasoline litre or diesel litre equivalent. Natural gas and gasoline have very comparable efficiencies in terms of how much fuel is burned in the engine. So if it's 12 litres per 100 kilometres, it would be 12 gasoline litre equivalents per 100 kilometres. There is pretty much parity on the efficiency side, but you need more volume on the vehicle to hold the same amount of energy. That's the difference.

● (1040)

Mr. Jeff Watson: So what is the size capacity of the fuel tank? You have given me range for driving.

Ms. Alicia Milner: Do you want dimensions?

Mr. Jeff Watson: No. How many litres would it hold? If I have a pickup truck and I have 110 litres for traditional gas, I know it takes two people to install it. I know how that works, coming from the auto industry. Natural gas is new in terms of vehicles, so I'm not familiar with the technology.

Mr. Tim Sanford: Knowing the after-market side, I would say that you're looking at its holding, roughly, anywhere between 20 and 40 litre equivalents of natural gas.

Mr. Jeff Watson: Thank you.

I'll pass the remainder of my time to Monsieur Poilievre, if he has a....

The Chair: Okay.

Mr. Pierre Poilievre: Ms. Milner, you were talking about gasoline litre equivalents and the difference in volume required. What is the precise difference in price today between a litre of gas and a gasoline litre equivalent in natural gas?

Ms. Alicia Milner: At a public refuelling station today, it's about 50¢ a litre. But you should understand that at least 20¢ of that, depending on which province you're in, is a tax difference, because natural gas doesn't have the same level of taxation as gasoline and diesel.

Mr. Pierre Poilievre: What is your recommendation on the excise tax?

Before you answer, the excise tax really is meant as a method of financing the infrastructure people drive on. It's almost that people pay for their use of the roads when they're filling their tank and paying that excise tax. If there's no excise tax on natural gas, those folks who have CNG vehicles would be given a free ride, literally, on our public infrastructure.

From a public policy standpoint, what do you think the excise tax should be, and when and why?

Ms. Alicia Milner: I'm going to partly defer to....

We work closely with the Canadian Trucking Alliance, going back to the heavy side of the market here. We very much concur with their view on this, which is that we all understand that this fuel, if we're successful, will attract taxation. It has to; governments need that revenue, both federally and provincially, for infrastructure.

But the reality is that right now, of that 50¢ a litre there is also a cost structure, because this is really an infant industry. We need the benefit to get into the market. We need to get to a certain scale, and in their perspective, at least on the truck side, that's probably about a seven- to ten-year timeframe.

I think a percentage could be set in terms of percentage penetration. Is it at the 10% level, the 5% level? Where is that threshold at which you tax the fuel?

We think this will come. That said, we also think that natural gas, because it is an inherently lower-cost commodity than crude oil, has lots of capacity to carry tax. What we don't want to see, though, is killing this before it gets started.

Mr. Pierre Poilievre: You would see it being phased in, then?

The Chair: I have to interrupt. The time is up.

I will thank our guests for being here.

I noticed that in one of your comments you talked about regulation across the nation. We all know how difficult that is. I think that's probably going to be one of the biggest challenges: to try to have a regime that applies across Canada, as opposed to seeing provincial governments set them, because each province already has started to set contents. How do you change it after the fact, and how do you bring everybody up to the same level?

Thank you for your day today. We appreciate it.

Committee members, have a nice break week back in your ridings, and work hard. We'll see you on the Tuesday when you get back.

Thank you.

The meeting is adjourned.

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