



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Transport, Infrastructure and Communities

TRAN • NUMBER 033 • 1st SESSION • 41st PARLIAMENT

EVIDENCE

Tuesday, May 1, 2012

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Chair

Mr. Merv Tweed

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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 33. Our orders of the day are pursuant to Standing Order 108(2), a study of innovative transportation technologies.

Joining us today in the witness chair from Magna International Incorporated is David Pascoe, vice-president of corporate engineering, the Americas, global headquarters. We also have from Calgary Transit, Russell Davies, manager of transit fleet.

I know that you've been given a little bit of direction about how the committee will proceed. You'll make brief presentations, and then we will move to committee questions. I'm not sure who wants start, but I'll open the floor.

Mr. Pascoe, go ahead, please.

Mr. David Pascoe (Vice-President of Corporate Engineering, The Americas, Global Headquarters, Magna International Inc.): Thank you, Mr. Tweed.

I want to start with the auto industry's biggest challenge, and that is energy use. Right now, the issue is around having a reasonably cost-effective, portable fuel. It's an issue not only with transportation, but in other markets, and it affects the economies of countries globally. The issue is the price of oil. When economies are not really strong, as they grow, the demand for oil goes up. We have issues now with dipping economies into a recession. In my opinion, that's going to be an issue for quite a while to come.

How do we deal with that? Right now, the CAFE regulations from Canada and the U.S. are going to require us, between now and 2025, to use half the fuel to go 100 kilometres. That's really quite an enormous challenge.

If you look, for example, at the Honda Fit of today, which is their smallest car, it's slightly better than today's number. But for 2025 or even 2016, it's far away from what's required. What does that mean for the car companies? It means that companies that may be selling Cadillacs, Buicks, or large-sized sedans, such as Chrysler, Ford, and BMW are going to have to have fuel economy that is significantly better than a Honda Fit or a Toyota Corolla across the board on average.

So how do we get there? Obviously we're looking at things like electric cars, hybridization, and so on. One of our customers who I was speaking to feels that between now and 2025 there's going to be

a \$3,000 to \$8,000 cost per car. What does that mean for the industry? It means that the price of cars is going to go up significantly to the extent that we'll lose a significant number of our customer base who are going to move off of vehicles. It's going to affect top line revenue and bottom line profit for both the auto companies and the supply base. It's going to be an issue.

Obviously we'll do our best to get there. Electric vehicles and hybrids won't be the whole answer. I'm here to recommend that we think more and talk more about natural gas. Natural gas, in the words of Boone Pickens, is cheaper, is cleaner, is plentiful, and it is ours. That applies to Canada, as well as to the U.S.

We're all awash in natural gas because of new means of extraction. We have over three times the known reserves that we had in the past. We've gone up to 140 years of known reserves. Prices are dropping, they have been dropping, and are expected to stay down for the medium and long term. It doesn't require investments in refineries. It's a big opportunity for us. We've all talked about the energy crisis. We've all talked about the price of gasoline. If we said that we had a fuel that cost 10% or 20% less than gasoline, and that you can use the same vehicle-type infrastructure as people are used to with piston engines, then that would be great. We could at least find a bridge to get us to the future, when other technologies can take over.

In 2011, natural gas was 69 cents per litre equivalent to gasoline at the pump. If you pumped it at home, it was 25 cents a litre. That's probably high for a number of reasons, such as the low volume of vehicles that we have here, and the low number of filling stations.

At this time, it's the only real replacement fuel that can be used more broadly across the board. It has the potential to be all that we hope. It provides emission reductions because of the nature of the molecule, which has less carbon. It is cheap transportation energy with enormous reserves, and so on.

In Pakistan, they have 2.3 million natural gas vehicles today and over 3,000 filling stations. In Argentina, there are 1.8 million vehicles that are run by natural gas today and 1,850 filling stations. In Iran, there are 1.7 million natural gas vehicles, and they're an oil producer. They have over 1,000 filling stations. There are a lot of countries that have a million or more. Contrasting with Canada, we have 12,000 vehicles and 80 filling stations across the country.

●(0855)

From 2000 to 2010 we had 30% growth in natural gas vehicles globally, but we had a reduction in North America. So I think we're currently running against the opportunity.

What do we need? We need a network of filling stations, and there are really two things we can do. One is to encourage filling stations at corner gas station centres, possibly by policy. The other is to somehow incentivize the use of home refuelling stations. There is a natural gas infrastructure in place today that feeds many suburban homes with natural gas. A line to the garage, or whatever, for overnight filling would make sense for a lot of people until there's a broader infrastructure in place. We need to build this infrastructure quickly to avoid constantly hitting our heads on the price of oil-based fuels every time the global economy expands. That's my first message.

Second, the call is for technology discussion on the potential for new types of vehicles. We've done studies on electric vehicles. I'm sure a lot of you have heard this before, but in an electric car the battery costs more than the rest of the car. So to make a payback business case for the consumer is really difficult. It takes a lot of fuel savings to pay for that battery.

But as you move downscale to a plug-in hybrid, a strong hybrid, a mild hybrid, a micro-hybrid, and the battery gets smaller, the payback period gets shorter and becomes reasonable. So with a hybrid vehicle you can maybe have a four-year payback. With a micro-hybrid it could be a two- or three-year payback. That starts to make sense for the consumer. If you have a 12- or 15-year payback, the car is used up before you get your money back on your investment in extra technology like the battery.

Looking at that and an alternate industry called electric bikes, and going to small batteries, there is room for classes of vehicles that operate between bicycles, pedelecs, and scooters; and cars called "enclosed three-wheelers" or "three-wheeled pedelecs" that could be more practical for use on the road.

Currently there is no legislation for these types of vehicles, but I think it's going to come. So we need some clarity on legislation for these three-wheelers. My preference would be that they operate as pedelecs. The same way a bicycle can be a three-wheeled bicycle, any bike could be a three-wheeled e-bike.

If you have this type of vehicle you can operate it in at least three seasons. It's low cost. The battery is only a few hundred dollars. You would have reduced congestion and no emissions. If it's a pedelec version it's good for your health. So for small towns, and that sort of thing, this type of vehicle can make a lot of sense.

Today we're just on the cusp of it, with things like the Segway and the T3 Motion, which is the three-wheeled vehicle you see security people using. But if you expand it to something a little bigger, with the battery you could even have a heated vehicle so it's comfortable. We all know we have cold weather from time to time in Canada. If you're doing a small commute, it's a nice, comfortable way to go.

I think there's room for this type of vehicle. We should build legislation around it now, because there are plans in place to bring these vehicles into play globally, and hopefully in Canada.

●(0900)

The Chair: Mr. Davies.

Mr. Russell Davies (Manager, Transit Fleet, Calgary Transit): Thank you, Mr. Chair.

By way of background, Calgary Transit is a division of the City of Calgary. We currently operate just over 1,000 buses in our fleet at the moment, all of which are powered by diesel engines. Our fleet varies in age from some brand new buses that we've just taken delivery of to some that are probably over 25 years old. A fleet of that size at the moment currently uses about 26 million litres of fuel per year to deliver service.

One of the issues we obviously hit up against at the moment is the increasing cost of diesel fuel, plus the volatility of the fuel market as well. This is to such a degree that with our current usage, a small increase of around about 4¢ per litre of fuel adjusts our budget by more than \$1 million per year. That was our first introduction to where our energy problem was in terms of managing our fleet.

On a more social level we were also experiencing problems with emissions from our older buses, and noise pollution from buses running through residential areas and in the downtown area as well, primarily associated with our older fleet.

Just so everybody's aware, in terms of a bus fleet, buses typically sit and idle probably 50% of their duty cycle. So they're only moving half the time; the rest of the time they're just sitting and idling.

These kinds of issues associated with the environment and the noise, as well as the cost issues we were seeing, led us to investigate some alternative technologies. We looked primarily in two areas, hybrid buses and CNG buses.

Our investigation looked at what we first experienced over 20 years ago with CNG, which was marginal success. The buses themselves worked particularly well. The issue we had with CNG 20 years ago was more on the infrastructure side as well as with the fuel delivery system. It wasn't quick enough to be able to allow us to operate a fleet of any significant size, and it was a little unreliable as well in terms of a fleet delivery system. That system ended about 15 years ago, and we haven't really looked again since. But the market and the current environmental pressures we're under have made us look elsewhere.

We did look at a number of CNG installations across North America. We looked at L.A., Atlanta, Boston, and New York. We did do some phone interviews with other agencies. Hamilton was a major one, obviously, that we talked to, as well as some of the other agencies throughout the U.S. It looked more and more as though CNG was the direction in which we needed to go.

In our direct comparisons with an electric hybrid vehicle, there were a number of issues we hit up against. The capital costs associated with a hybrid bus is about 50% premium, so just for ballpark numbers, a regular size, 40-foot bus is usually around the \$400,000 mark. To make that a hybrid bus, it's an extra \$200,000 premium on top.

We did speak to some of the major hybrid manufacturers, BAE as well as Allison, and we did some extensive life cycle costing studies with both of those agencies. The return on investment for those vehicles was in the twelve-year period. With a bus only typically having a life cycle of around 12 to 15 years it didn't make any sense at all to pursue the hybrid option, so the CNG option was the one that came to the forefront, really.

We held a number of discussions with major gas suppliers in Calgary to look at various options. There was a lot of interest from their part as well as on our part, primarily looking at things like long-term fixed price fuel contracts. Obviously the price of the fuel was significantly less and they would work with us on that. There was even some talk about possibly contributing towards some of the infrastructure costs, which was going to be the major driver, or the major barrier I guess for us, to implementing CNG.

As our study carried through, CNG looked to be the direction we wanted to go in. They did hit a barrier in terms of what the minimum size was that we needed to look at in terms of fleet size. It looked as though we needed to get about 150 buses before we could get any cost benefits from the capital costs of the infrastructure as well as the capital costs associated with the vehicle.

This wouldn't necessarily be a simple solution for a small agency, but it's certainly a viable option for an agency the size of the city of Calgary, or city of Ottawa, that kind of size.

• (0905)

So a proposed solution originally was to modify one of our existing facilities to make it CNG-compliant and procure 200 CNG buses. We were fortunate that since there were a number of projects aligning at the same time for building rehabilitation as well as fleet replacement, it made sense at the time.

We were looking to get longer term fuel price stability. There were significant improvements, in terms of reliability, that we were expecting to get. Current diesel buses, so you're aware, have a significant amount of equipment on the post-exhaust processing side to reduce emissions. None of that is actually necessary with a CNG bus, because it's the cleanest-burning carbon fuel that we have today.

In addition to reducing emissions, the CNG engine is considerably quieter than the diesel engine. The numbers we've seen from Cummins Westport indicate that the CNG engine is around 10 times quieter than a diesel engine, so you can imagine that if a bus is sitting and idling, which is the main issue, I guess that bus will be quieter sitting there. The road noise, when it's moving, would be pretty much identical, but as the bus is sitting and idling, that quiet time becomes a significant environmental issue in terms of social impacts in some of the more residential and built-up areas.

Obviously, as David mentioned earlier on, gas supply is plentiful. We've certainly heard there's fuel availability for over 100 years based on current usage, and that's without finding any more gas. So

in terms of availability of the fuel, I don't think it's an issue. It's local fuel as well, so there were benefits that we were seeing everywhere. This is not to say that we didn't hit any obstacles. There was public perception about safety. There were concerns about whether or not CNG vehicles can operate in cold weather. There was concern about how many vehicle suppliers were actually available, from a bus supplier perspective. So there were some legitimate concerns.

To try to address some of those concerns, we revised our plan slightly. We revised and expanded it, so we're no longer doing a small conversion of a facility plus 200 buses. We've now decided to progress and build a brand new bus maintenance and storage facility capable of supporting 400 buses. That will be a CNG-compliant facility, so we will be transitioning to 400 CNG buses out of that facility as well.

We're currently with P3 Canada to develop a procurement model for the facility alone. We're hoping for an opening date of somewhere around 2015. That's obviously a little far in the distance, so as a prelude to that, and to try address some of the concerns that we were receiving, we've decided to run a trial of the CNG technology as a proof of concept, so we are procuring six CNG buses this year. The request for proposal was actually closed yesterday and we expect to see probably three of them around October and three of them in spring of next year.

Both major bus suppliers from Canada were the two agencies we targeted. They were New Flyer Industries out of Winnipeg, as well as Nova Bus out of Montreal. We've been working with both those groups to supply the buses. We will be trialing them to see how they work in cold weather. We will be using them as a communications tool for members of the public, and we'll be using them as a familiarity tool for our operators, for our mechanics, and for staff in general.

We intend to run the trial for about 18 months, so we're hoping to run it through two winters. We had an exceptionally mild winter this year, so it wouldn't have helped us in some ways. But we're hoping to get some cold weather simply to prove that this concept works.

In terms of barriers that we face at the moment, I guess our biggest issue is the infrastructure costs needed to convert from a diesel fleet to a CNG fleet. The issue isn't necessarily buying a CNG bus. There is now a premium associated with a CNG bus of about \$50,000, but the problem is the infrastructure needed. You need to have significant compressor stations, you need to have significant natural gas storage, and you need to have gas lines of significant pressure brought to the facilities. Those costs are probably the biggest barriers we face right now and that capital cost is probably the biggest barrier to smaller facilities. It's something that probably the City of Calgary is working with, which is why we're looking at a P3 model, but assistance is always needed in projects of that scale when you try to transition from one technology to another.

• (0910)

If we were looking at recommendations here, I think we do need, as an agency, some support for transitioning to a more green fleet-type technology and certainly to alternative fuel methodologies. Maybe there are some interest-free loan schemes that could help with these initial capital costs that could be paid back over time from the fuel savings. There are a number of areas where we could be working with the federal and provincial governments for these more green technologies.

I think there also needs to be more promotion of CNG as a genuinely viable alternative fuel. We see a lot of commercials on TV. We see lots of commercials in newspapers about electric vehicles, about hybrid vehicles. Certainly, for the larger vehicles, there doesn't seem to be the payback that makes it a valid technology, whereas CNG really does provide a solution that is available today. It just requires some infrastructure development.

Thank you.

The Chair: Thank you.

Ms. Chow.

Ms. Olivia Chow (Trinity—Spadina, NDP): Thank you for taking the time to come here. I first learned of your project, Mr. Russell Davies, from your mayor. He's been out there saying we need to do this.

Let me just ask about financing. I am quite familiar with the repayable loan fund. The City of Toronto had the Atmospheric Fund, which is a grant upfront, but repayable after you make energy savings. That's how a lot of the buildings, including the TD Bank's about 20 years ago, started being retrofitted. Because they saved energy, they then paid back the City of Toronto.

The FCM has the green fund, which again is a repayable loan fund. Can you lock in fuel price for 30 years? What's your assumption on that? For how long can you lock in your natural gas price?

Mr. Russell Davies: We haven't had any formal discussions with any of the gas suppliers yet, but we comfortably think a five- to ten-year window should be achievable. That's compared to diesel right now, where really all anybody is willing to lock in to is a six-month contract and possibly up to a year.

Ms. Olivia Chow: Have you done a business plan that's all inclusive? Both the capital and the operating costs per bus are extra. Right? You said there would be \$50,000 extra, but that's only for the bus. Then, there is the fuelling station and the garage and all of that. What do you think is the payback period? Is the payback period 5 years, 10 years, or 20 years? This means that if there is an available loan fund of some kind, what is the payback period?

Mr. Russell Davies: For the smaller study we did of around 200 buses when we were going to convert a facility, we did do a detailed costing of that, and the payback period of that was around six years.

Ms. Olivia Chow: Was it that fast?

Mr. Russell Davies: That was based on a fairly conservative fuel model as well. If the natural gas prices stay as depressed as they are today, or possibly even lower, then obviously that period becomes shorter again. We haven't done that study for the bigger facility, of a

new facility, plus 400 buses. Obviously, with the more buses or more vehicles you have, you expect that payback period to become quicker.

Ms. Olivia Chow: The longest period of the payback period is six years, assuming 200 buses. You are aiming for 400 to 500 buses, so I assume it would be faster. Does that include the building of the garage? Or is it just that?

Mr. Russell Davies: In the initial study it did include the capital cost associated with retrofitting an existing building. As I say, we haven't done a detailed costing study of a new facility yet because we are still working with P3 Canada to see exactly how much our capital costs would be with a new facility. We certainly expect no longer than 10 years as a worst case in what we're looking at right now for a payback.

Ms. Olivia Chow: Are there other cities in Canada that are also doing the same thing in looking at natural gas buses? You had mentioned Hamilton. Are there others?

• (0915)

Mr. Russell Davies: Hamilton already operates a natural gas fleet, but that's an older fleet. There have been significant changes in the CNG technology from about 2007 when Cummins Westport developed a new engine, which made the vehicles more comparable in terms of performance, in terms of reliability to a diesel bus. So there are other agencies. We know Edmonton is looking at it as well. We believe there are other agencies within B.C. that are also operating natural gas vehicles and looking to expand as well.

Ms. Olivia Chow: Are you talking about the provincial building code? The federal government sets the standards or has a policy base. It's the provincial government that sets the building code. So with respect to the lack of building codes, is that primarily a matter of federal or provincial jurisdiction?

Mr. Russell Davies: I was a little unclear about who had jurisdiction over it. There was little guidance on a CNG maintenance facility of the scale that we were looking at. Natural gas is available in houses and homes and the building code is quite clear, but it becomes different when you go to a large-scale maintenance facility for something like buses. It became problematic trying to determine what needed to be modified and what didn't when we were looking at retrofitting, which was one of the factors that led us to say that we were going to build a new building. But even when we look at the new building, some of the codes are not clear.

Ms. Olivia Chow: So to summarize, there's no legislation or building codes. There really isn't any repayable loan fund. Even if it's a payback period of five to 10 years, the slowest would be 10 years.

What about the fuelling? I heard from Mr. Pascoe that there are not enough stations around. Does that affect the buses?

Mr. David Pascoe: My discussion was more about automobile fuelling stations.

Ms. Olivia Chow: What about buses? Is that a problem?

Mr. David Pascoe: I think buses are probably easier to manage. When you have fleets you can get really high utilization of your fuelling stations. They have known routes and you can manage your fuelling that way. With cars, you have such a broad area to cover that it's much more difficult to manage.

Ms. Olivia Chow: Mr. Davies, fuelling is not a problem for you, because it's a fleet, right?

Mr. Russell Davies: We fuel our own vehicles. We use our own fuelling stations, but we need to have things like high-pressure gas lines brought to our premises. These things are currently not there, so there are infrastructure costs.

Ms. Olivia Chow: That's huge.

Mr. Russell Davies: Yes, and there are high-pressure gas lines as well, which are sometimes difficult to route through residential areas. There may be coding against that, but we're not sure. We know that high-pressure gas lines are needed. Otherwise, at the fuelling facility, you need to build extensive compressor stations because you need to compress the gas to a significant level, around 3,000 psi, to enable it to be a viable fuel. So the higher the pressure of the gas you have brought into the property, the less compression you need, and the lower the operating costs.

Ms. Olivia Chow: Would you include that as part of your capital costs?

The Chair: I have to move on.

Monsieur Coderre.

[*Translation*]

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

Thank you, gentlemen.

My first question goes to Mr. Pascoe. I am going to play the devil's advocate.

If we go by what a number of people say, natural gas is the best thing since sliced bread. If it gets set up, they say, everything will be fantastic. So why don't we have it already? Is it because of some vested interests? Is the petroleum lobby that strong, for example?

Being able to use natural gas would be fantastic. But would that mean that a number of garages and facilities would be lost? It would have a big economic impact. People would also be forced to change their way of doing things. In that sense, there could be losers from an economic standpoint. On the one hand, individuals might perhaps come out ahead, but on the other, and more widely based, a large number of interests are at play.

[*English*]

Mr. David Pascoe: A big part of the reason it doesn't exist has to do with how we built up our infrastructure in the country over the last 100 years. We have diesel and gasoline stations. To move to a new fuel costs money and the question becomes: who's going to pay for the new infrastructure?

I think the oil-based companies are probably happy selling oil-based products. They have their own infrastructure that they've paid for already. If we turn around and tell them that they have to set up natural gas at a portion of their filling stations, it means they have to make a new investment. Doubling up an investment in fuel stations is the same as having two sets of telephone lines or two sets of cable. For them, it's not a logical, easy step.

I think if we look at the situation that we're in, in Canada and in the world, with regard to the future of oil, we have to start doing something now to take the pressure off. I was talking to somebody from India who said they were going to set up 50 new international airports in the next several years. Each of those airports is going to have 100 or 200 airplanes associated with it, and they'll all spend 75% of their time hanging in the sky and have to be fueled. If you go to China or Brazil, with all the expansion that's happening, the pull on oil is becoming greater and our capacity to deliver is not really growing. It's going to become a huge issue. We have to find an alternative.

I hope that answers your question.

● (0920)

Hon. Denis Coderre: I agree with that, but the issue is that there's a lot of interest at play here.

So okay, we want to make it happen. What we need is probably a public-private partnership, of course. So we have the industry on one side, but we have the issue of the capital cost, as Mr. Davies mentioned.

This is for both of you. What should the role of the federal government be? Should it be based on policy? Should there be a new infrastructure program? What kind of partnership do you feel the federal government should get involved in? And then I'll ask Mr. Davies.

Mr. David Pascoe: Thank you.

I think one area we need to encourage or incentivize is home refuelling, because a big part of the infrastructure is already there. It's a cheap way to get started, and it's a way to get the ball rolling. There are home refuellers out there. I think there are new types coming that will be even less expensive and that will make a lot more sense from the point of a personal business case for owning a refueller and a natural gas car.

As well, in my opinion, there needs to be some legislation or a requirement so our fuel providers will, for starters, have a certain small percentage of fuelling stations that have natural gas available. Whether it's done through encouragement or law or whatever—I'm not a policy-maker—there needs to be something there to make it start happening.

As I mentioned before, we have examples globally of countries that have a big natural gas infrastructure in place, and it works. We need to start doing that.

Mr. Russell Davies: I can't speak too much for the residential areas, but in terms of larger vehicles, if we look at the U.S., they have significant federal support for new green vehicle procurements. I believe at the moment that green buses in the U.S. are funded by the federal government to the tune of around 80% of the value of the bus. That's one of the reasons, I think, that hybrid technology in the U.S. is being pushed very hard, because it's essentially funding the battery technology market.

With regard to new vehicle procurement, I think there needs to be a greater stress put on green vehicle funding. I believe the U.S. federal government has done something on this and that it is now at the stage where 25% of the buses procured in the U.S. next year will be CNG based.

I think the incentive they are providing to the vehicle buyers is that if you buy green technology it will benefit you and you will be able to transition your fleet a little more quickly.

Hon. Denis Coderre: I would like to talk a bit about our "smart regulation" and the issue between Canada and the United States, because of course when we're talking about procurement, we're talking about a commercial relationship. Are there any issues between Canada and the States related to the parts or to the procurement as a whole that we should improve?

Mr. Russell Davies: I don't see any barriers there right now actually. That's certainly not anything we've experienced.

In terms of the buses, there are only really four major bus manufacturers in North America, two of which are in Canada, so that's been okay for us.

• (0925)

Mr. David Pascoe: I don't see a big problem with procurement issues coming back and forth across the border with the U.S. on that. I'm happy that there are companies in Canada that are involved, such as Westport. I hope Westport is successful. But to answer your question, I don't see a big problem.

Hon. Denis Coderre: Do you believe that if we are among the best in the world, if we have that residential fuelling, it will have an impact on the infrastructure itself in that we'll have more cars? If we have more cars, are we going to have a problem in cities, because now you can have your own little fuel section? Do you believe it will have an impact on public transport or that people will have an opportunity to buy more cars instead, and then you might have another kind of problem even if it's supposed to be clean energy?

That's another good question.

Mr. David Pascoe: It is a good question. The question is whether we will have more cars because we make it more economical or easier to own cars. There are a hundred ways to limit the number of cars that people drive. Should one be that fuel is too expensive? I think the answer is no.

What we need to do is make vehicle ownership reasonable for those who need to own vehicles, because certainly a lot of our infrastructure today is built up around owning cars. I live in the suburbs, and if I look at life without an automobile, my quality of life would go down an awful lot, just in trying to get around. Even using public transportation in the suburbs is difficult because of timing and the distance to bus stops and the cold weather, etc.

I think we need to make owning a vehicle as simple and reasonable and inexpensive as possible for those who need it. If we need to limit cars, that should be done another way, not because of fuel prices or because of something that's out of our control.

The Chair: Monsieur Poilievre.

Mr. Pierre Poilievre (Nepean—Carleton, CPC): I was expecting to hear about Magna's lithium battery, and I didn't hear a lot about that. Is there a reason?

Mr. David Pascoe: That's another interesting question. I took care of Magna's lithium battery activity in North America for about a year and a half when we were launching that. Right now we're in a development phase, so we've happily set up a new factory in Canada. It's a pilot facility and we invested about, I believe, \$30 million setting that up to develop new battery chemistries.

Magna's strategy at this point is to work on electric vehicles and plug-in hybrids. I would say Magna E-Car Systems—which is a joint venture with Stronach and Magna, thus the company—they want to do EVs and PHEVs. That's their strategy. That really is the most difficult place to play from a battery perspective, and that's why we set up a pilot facility to develop a new next-generation chemistry to ensure that we have something that's going to be economical and competitive performance-wise, or better than what's out there today.

Really, if you look again at batteries, they are suited for power applications like hybrids where they can be taken off-line if they're too cold, or they can be managed in a way that you don't demand energy from them when they don't really want to give it. Batteries are kind of like people, right? They have a personality and you have to treat them properly. With electric vehicles, you only have one choice, that's to use the battery, and if you want to go, it has to give you the effort. There are certain times—

Mr. Pierre Poilievre: But how long do you expect it will take before these lithium batteries become economical compared to gasoline?

Mr. David Pascoe: That's a very good question. I've been around the world. I've been to Japan—

Mr. Pierre Poilievre: Excuse me, but I'm very tight on time.

Mr. David Pascoe: Okay, I'll give you a quick answer.

The answer is that—

The Chair: Excuse me, I just have to stop you. I have a point of order from Ms. Morin.

[Translation]

Ms. Isabelle Morin (Notre-Dame-de-Grâce—Lachine, NDP): The mike is off.

[English]

The Chair: I've lost mine too.

Sorry about that. Go ahead.

Mr. David Pascoe: I've been around to a lot of battery companies, and our own, and right now the answer is that nobody knows.

● (0930)

Mr. Pierre Poilievre: But you seem to be more optimistic about natural gas and its capacity to match or exceed the economy of gasoline and diesel. Is that true?

Mr. David Pascoe: Natural gas on the short and medium term has a much bigger potential to be broadly applied. So electric cars will see a small percentage of the vehicles—a very small percent—and natural gas can potentially be a larger percent and have a bigger impact.

Mr. Pierre Poilievre: Is Magna building natural gas engines?

Mr. David Pascoe: Magna today does natural gas, but only at prototype level, such as natural gas fuel tanks. We've done a natural gas vehicle. We can do the integration. We can do the valving and plumbing and so on. So we know how to get involved with it. We believe it's a big part of the future, so we want to participate.

Mr. Pierre Poilievre: Natural gas is something that Magna will be doing, natural gas vehicles?

Mr. David Pascoe: Yes, we want to participate.

Mr. Pierre Poilievre: The Decoma is your engine?

Mr. David Pascoe: Decoma does trim. We have a power train group that does power train. We have Magna Steyr. Most of our development activity was done at Magna Steyr.

Mr. Pierre Poilievre: Okay. On to the city of Calgary. When does your pilot project come into place?

Mr. Russell Davies: We expect to take delivery of our first CNG vehicles at the tail end of this year.

Mr. Pierre Poilievre: How long will that last?

Mr. Russell Davies: Probably 18 months. We want to run it through two winters to make sure we address our cold weather concerns.

Mr. Pierre Poilievre: You've anticipated for a larger purchase of, I think, 200 vehicles. Is it 200 or 400?

Mr. Russell Davies: Our original study was on 200, but we are building a facility that can cope with 400.

Mr. Pierre Poilievre: Okay, so 400, and you expect to pay out in six years, 10 years max. Correct?

Mr. Russell Davies: That's our estimate right now, yes.

Mr. Pierre Poilievre: That seems like an exceptionally good payout. The question I have is, why would you need any additional help to achieve that?

Mr. Russell Davies: It's the initial capital cost upfront. You need to be able to build the fuelling infrastructure.

Mr. Pierre Poilievre: That said, businesses make investments upfront all the time and they often expect payouts that take much longer. They make enormous capital investments upfront. Presumably a very well-financed and large organization like Calgary Transit, backed by a city and ultimately a creature of the Province of Alberta, one of the wealthiest jurisdictions in the country, would have access to the capital to make that kind of investment, if it made business sense.

Mr. Russell Davies: We are looking at a P3 model for the facility, as I mentioned, which is the biggest part of the infrastructure. In terms of other advanced funding available from the city, I guess we have to fit within the budget of the rest of the city demands.

Mr. Pierre Poilievre: I guess what I'm saying is that there should be no incremental demand from the city. In fact, you should be going to the city and saying you have good news that you're going to be costing less. Presumably, if your plan pays for itself in six or ten years and then thereafter presents an annual cost savings, there should be no need for any additional money. Capital can be funded by debt, which is what businesses do every day.

The reason I'm asking these questions is that we've been burned as governments—all three levels. Whenever there is an exciting new fuel source that comes along, we're approached by organizations that say they have an amazing idea. It's a great business opportunity and no one will invest their own money in it, so they need other people's money.

We have wind power in Ontario, which has driven power prices through the ceiling—they've gone up again today, killing jobs in the manufacturing sector. We have other fuel sources that were promised for automobiles, which are now proving uneconomical despite massive front-end subsidies from taxpayers.

If these are good investments, why don't they pay for themselves, capital cost included?

Mr. Russell Davies: I can't speak for the detail of the city debt, but if we were to procure 400 buses—for argument's sake—even if they weren't CNG, that's still a commitment of around about \$160 million. It's not that the city isn't putting money into the investment that's needed. It's just that there is an additional amount needed for the CNG premium that, for the moment, is difficult to find on top of our existing budgets.

Mr. Pierre Poilievre: Is there not a way you can shift some of the operating savings into your present day capital budget in order to finance it on a cost-neutral basis?

Mr. Russell Davies: I think essentially that was one of the recommendations I was making in terms of saying maybe we can get something along the lines of an interest-free loan that ends up getting paid back out of our operating budget. That's kind of the model that we're....

Mr. Pierre Poilievre: The Government of Canada has offered some financing through the economic action plan. I'm not sure exactly how that carries forward, but for capital costs, again, the problem with interest-free loans and government-issued loans is that they are ultimately subsidies. The cost of money is real, and the opportunity costs—we have to borrow it. We have a federal deficit, so we'd have to pay for that money.

Again, if this is a good business decision, it should pay for itself, right? It shouldn't need a subsidy.

• (0935)

Mr. Russell Davies: That seems to be easier to say than to achieve sometimes.

Mr. Pierre Poilievre: I realize; that's my problem. We keep seeing these ideas. We're told they're such great business concepts, and then they all lose money—other people's money.

We're trying to look for ways here that transportation innovation can fund itself because it is meritorious enough to do so. How do you respond to that?

Mr. Russell Davies: In essence, we're doing that now. We are trying to move ahead with a CNG facility. We are trying to move ahead with transitioning to 400 CNG buses. We are making a commitment to do that within the City of Calgary, and that is being done at the moment without any federal assistance.

We are doing that.

The Chair: I'm sorry I have to interrupt here.

Mr. Holder.

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

I just want to stay on that same line. I was doing a calculation. It looks to be.... Mr. Davies, is that about \$40,000 per bus?

Mr. Russell Davies: The CNG premium?

Mr. Ed Holder: I'm looking at \$160 million for 400 new buses. I just did a quick calculation.

Mr. Russell Davies: It's \$400,000 for a bus.

Mr. Ed Holder: Oh, it's \$400,000. I missed a zero. That's not a small number.

I guess I'm asking the question. It's interesting. When you talk about the interest-free loan, if you got that, if the federal government were in a position—which it isn't, in my view—to do that, we pay interest on all the monies we borrow, and I think that's the whole focus toward moving to eliminating the deficit and then ultimately tackling the debt. Why would there be an expectation—I say this respectfully—that we would pay the interest but you wouldn't?

Can you help me understand that a little bit?

Mr. Russell Davies: Part of it would be our commitment to the environment. The city is taking the risk at this point in terms of adopting a new technology. It's not that the funding is coming exclusively from the federal government; the money is still coming from the city, essentially, and there is a level of risk that we're adopting here. There are environmental benefits that come from it.

They benefit everybody, as well as the whole supply chain of the industry that would benefit as well.

Mr. Ed Holder: I respect that. When you look at CNG, from everything I've read it's cleaner, it's quieter, there's less maintenance, and presumably the vehicle would be more reliable. I look at all those as positives. I look at your payback and think that if I could make that, as somebody who was in business for over 30 years before taking on this role in politics, it would be pretty—I don't want to say “easy”—saleable to financial institutions. You could tell them that they can bank on this.

The advantage you have coming from—did my colleague say the wealthiest?—maybe not the prettiest but the wealthiest province in the country—

Some hon. members: Oh, oh!

Mr. Ed Holder: —is that you certainly have the provincial government, and as has been stated, the cities are creatures of the province. I'm not sure what's left of the heritage fund at this point, but I would say to you that there are some opportunities to make your case there, and if that's what you need to do, I certainly wish you well.

I want to go back, if I can, but thank you for that.

Mr. Pascoe, you made some comments about the number of filling stations we have. I just did a quick calculation. You can't trust my zeroes anymore, obviously, but when I did a quick calculation.... You made reference to there being 1.8 million vehicles to 1800 filling stations in Argentina. I think that's 1000 vehicles—it's probably 10,000 now, based on my zeroes—for every filling station. You have Pakistan, with 2.3 million vehicles for 3,000 filling stations; that's 7,660 for every filling station. In Canada there are 80 filling stations to 12,000 vehicles.

That's 150 to one; actually, our ratio is excellent. One might make the argument that there may not be enough of them, but I would say that of all the countries you've referenced, ours has the best ratio of filling stations to vehicles.

But I have a more critical question for you. You seriously referenced the need for more stations, but you also talked about home refilling stations. We've had earlier testimony talking about the safety of filling stations. Do you have any concerns, in your experience as an engineer, based on what you have studied, to suggest that home filling stations would be safe? I'm not worried about reliability. Safety, I think, is the biggest concern any of us on this committee would have.

• (0940)

Mr. David Pascoe: First on the question about the ratio of filling stations, I think part of the challenge in Canada is that we have such a vast land. In Toronto, for example, I think they have one filling station. That puts it into perspective. If you own a vehicle and are on one side of Toronto but have to drive halfway across to fill up, and then go home, it makes no sense, does it?

So right now, we're still in a position that doesn't make sense, at least with regard to the spread of filling stations across our nation.

Mr. Ed Holder: Could that, then, be solved by this notion of home filling stations? Do you see that as part of the resolution?

Mr. David Pascoe: I do. I think it is definitely part of the resolution. It's a way to deploy filling stations, because even if we start to put them at corner gas stations or whatever, they won't satisfy everybody's need, and there will be people who want a natural gas vehicle who will say that the station is still too far away for them.

Mr. Ed Holder: Could you talk to the safety issue, then?

Mr. David Pascoe: To my knowledge, there are a number of deployed home filling stations today, and I believe they are safe. I think that if there are issues, there are ways to deal with them. For example, if there are issues—and I haven't done a deep dive on the safety with respect to these, other than to know that they're deployed already—you could put the station on the outside of the house and have the car in the driveway, rather than put it in the garage, if there's some issue about gas collecting, or something like that.

I think that in an outside situation it's quite safe.

Mr. Ed Holder: I would want to have more information on that. Obviously I think this committee would, before making any kind of recommendation that way. If this makes practical sense, and frankly, is safe—that being the key piece here—then it would be something we might like to look at.

Mr. David Pascoe: I'd like to get that information for you. Should I send it in to you?

Mr. Ed Holder: Sending it through the committee chair, I believe, would be appropriate—to the clerk, directed to the chair.

Thank you.

You also made some reference to electric bikes and you talked about the three-wheelers. You spoke in terms of needing clarity around legislation.

Could you help me understand a bit more what you were thinking of in terms of that, sir?

Mr. David Pascoe: There are a few public examples out there. GM has had some cars coming out that look like futuristic bubbles and that sort of thing. I don't think these vehicles will look quite like that or like Jetson-style vehicles, but there is a class of vehicle that is being talked about a lot and that is probably going to come out in the next couple of years, which has a pedelec-type of drive that is 300 watt-hours. It costs a few hundred dollars for the battery.

If you guys have never driven a pedelec or electric-assisted bike, you should try it, just to understand this vehicle. There are 20 million a year of this type of vehicle sold in China, a lot sold in Europe, and not so many in North America. But here is a class of vehicle that is coming, which is going to want to find its way to the market. The legislation around this class is really not well defined. You could argue that it's an electric bike, but I'm not so sure that the police or the legislators or whoever will view it that way, and it should be clarified. There needs to be clarification.

Mr. Ed Holder: It's fairly clear right now. You may disagree, but I think they're treated exactly as bicycles today. It's not that bicycles have any privileges on sidewalks. They're expected to be on the right side of the road, but they can drive in the bike lanes and all of that. You may not like the legislation, and many of us may have differing opinions on it, but it's not that it's soft on it. It's simply treated as a bicycle.

I don't know whether you have any comment on that.

Mr. David Pascoe: I want to make sure, because when you put a bubble around something and have heating inside and maybe windshield wipers.... If it's going to be treated as a bicycle, that's great.

The other area that I would like to have—

Mr. Ed Holder: I'm just saying that when we get there with these, when they become the mode, if you will.... The ones we're all familiar with right now are the two-wheelers that you see. You start by pedalling and then let it go, the pedals flip up, and it becomes effectively like a motorcycle, but it's still treated as a bicycle legislatively.

Mr. David Pascoe: Yes, that's true for those.

The thought is: how long does it take to put legislation through for something that is this different, and when should we start? If Magna or GM or some other company does developments on these types of vehicles and the vehicles are ready to go, how long does it take to get legislation through?

That's why I'm raising this as a point. We need to make sure that we're aligned from a timing perspective, and that we don't do development and then have to not launch production because we're waiting for legislation.

● (0945)

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

Mr. Aubin, welcome.

[Translation]

Mr. Robert Aubin (Trois-Rivières, NDP): Thank you, Mr. Chair.

Welcome, sir. Thank you for your very enlightening expertise.

First of all, I would like to make some comments to Mr. Davies, and please do not think they are an attack. Far from it.

In your recommendations, you say that “support is needed for attempts to develop a green fleet approach“. Our first problem—and this is not a criticism of you—is that, unfortunately, that concept is poorly defined. Everyone is claiming to be green these days. The technology of natural gas buses is less polluting than diesel, but it can't really be said to be green. As an approach to public transit, it is less polluting. Could we agree on that?

[English]

Mr. Russell Davies: That's correct. There are emissions from a CNG bus—

[Translation]

Mr. Robert Aubin: As I listen to you, I get the impression that we are being presented with this technology as a required transition, a faster transition, that will eventually lead us to the use of energy that would in fact be totally green, like the electric car or public transit that runs on electricity.

My first question goes to Mr. Pascoe.

In your experience, could you tell me when the first completely electric vehicle, with a range of 500 km, will be available at a price the average consumer can afford, that is, the same as a current vehicle?

[English]

Mr. David Pascoe: That's an interesting question.

Today, electronic vehicles struggle to get to around the 100-kilometre range. What we've seen as we do work on batteries is that with lithium-ion technology, nickel metal hydride, lead acid, and so on—but nickel metal hydride is the premium one right now—as you add energy into a battery, because to get more range you need to have more energy in a given space, you challenge the safety aspect of the battery. Today we're at 140 or 150 watt-hours per kilogram, and to get to 500 kilometres you'd have to be at roughly 750 watt-hours per kilogram to have the same size of battery in a vehicle, which is already quite large. For all known battery—

[Translation]

Mr. Robert Aubin: I have to interrupt you because I have very little time and I have a lot of questions. Could you give us an approximate number? Do we have to wait 5, 10, 15 or 20 years before electric vehicles are standard?

[English]

Mr. David Pascoe: There's no horizon, as far as I know, for an electric car that goes 500 kilometres. For electric cars as a high volume, it would be, in my opinion, greater than, let's say, 10 years, probably greater than 15 years. In the near and medium term, probably just a few per cent of the vehicles will be electric cars.

[Translation]

Mr. Robert Aubin: The American government, for example, is investing \$25 billion in an electric transportation fund. Do you think that the Canadian government is doing enough? Should we be putting our efforts into that area, or should we have a transition period where we move to natural gas?

[English]

Mr. David Pascoe: What I think regarding investment in electric vehicles is that it's good to look to the future, because if we're going to get there one day we have to make some investment. It's really a bit of a calculated risk, because we don't know when we're going to get to having broad-based, high-volume, across-the-board electric vehicles. But if we don't start, we won't get there. A certain amount of investment makes sense.

In the short and medium term, we have to look at things such as natural gas that have the ability to be more broadly applied and that, given a certain amount of funds from people buying vehicles, can provide more broadly applied fuel savings or emission savings.

[Translation]

Mr. Robert Aubin: Thank you.

My next question goes to both Mr. Davies and Mr. Pascoe.

Mr. Davies, in your presentation, you said that we have natural gas reserves for about 100 to 140 years. Are those conventional gas reserves or do they also include shale gas?

[English]

Mr. Russell Davies: From what I understand, that's shale gas development. The 100 years is based on what's available today. From all the information we've received so far, the reserves far exceed what we know we have today. That 100 years is very pessimistic, almost.

● (0950)

Mr. David Pascoe: It is. We were at 40 years of known reserves about 12 to 15 years ago. With the fracking and the shale gas, it's gone up an awful lot without really finding a lot more gas.

The Chair: Mr. Toet.

Mr. Lawrence Toet (Elmwood—Transcona, CPC): Thank you, Mr. Chair, and thank you to our witnesses.

I have a question, and will start with Mr. Pascoe. I'm going to be fairly blunt, because I had the perception on this from your conversation today, and as Mr. Poilievre said, I thought we'd hear a lot about battery technologies. I'm going to be pretty blunt with my question.

I get a sense that you've lost confidence in the battery technology, especially when you gave us a window of 10 to 20 years down the road. There's been a lot of research dollars invested in this over the years. We talk about innovation and change. When I was a young boy, and that was a little while ago, battery powered vehicles were the big talk back then. We're a long way from that time, and yet we're still looking far away to the horizon.

Is there a loss of confidence in this technology actually being the future?

Mr. David Pascoe: What I want to express here is that I think there are still lots of places for batteries to be used sensibly in vehicles. It's mainly in the hybrid area. In the electric vehicles right now, batteries can be used, of course, but there needs to be additional development in order to be broadly applied.

For example, for a hybrid vehicle, the payback on your capital investment, which is your battery and other electric attributes of the vehicles, is only about four years as a consumer, which is pretty reasonable. That uses battery technology. Batteries can be applied to automobiles sensibly, with a good payback, with today's technology.

With electric cars it can be applied, but only on a smaller basis until we get the battery technology ahead. The outlook for that, in my opinion, is uncertain. There's an awful lot of research going on. It could be soon. It could be a long way off. The answer is, I don't know, and I've spoken to a lot of people. I don't know.

Mr. Lawrence Toet: That comes back to some of the questions that were directed to Mr. Davies regarding the investment and innovation investment. We've seen a lot of investment happening. As had been alluded to, my background is in business. You talk about a business case where you can make the case for a six-year return, 10 years at the worst, but that includes the development of a facility. Six years is the actual bus payback period, and you've indicated that you may see that quite a bit sooner than the six years.

I was in an investment intensive industry for a long time, an industry that was driven by innovation, where we had new technology which, within several years, would be out of date. We did a lot of investment every year to keep up with that. We were not driven by governments. It was an industry that wanted to see change and wanted to innovate.

Can you rationalize for me why we would need to be able to do that? To me, that's a great return as a businessman, if I could return my investment in six years, and then going forward, it would actually be a great savings. From a business aspect, I'd have a hard time making that case of going to somebody and saying, I actually need your help to do this.

Mr. Russell Davies: As was mentioned, we have started down that path as the City of Calgary, independently. We have a certain amount of our budget available for new vehicle procurement, which we are earmarking now for CNG bus procurement. We are looking at the P3 model in terms of building the facility. We have been doing it on our own already.

As I mentioned, the majority of the 400 buses that would be CNG would be replacements for our 25-year-old buses. There's a significant amount of investment still needed to be able to deal with the other 600-plus expansion buses that we're going to have. By the time this project is completed, there probably still will be 1,000 buses that we will need to do something with. As I mentioned, at \$400,000 a bus, there's no way that even as a fairly sizeable department within the City of Calgary we could get that level of investment.

Mr. Lawrence Toet: You indicated that the lifetime of a bus is about 12 years, so you're looking at those investments over the next 12 years, whatever the scenario would be. Whether they'd be completely conventional buses or CNG buses, that's an investment, and if I understand right, you're adding about \$50,000 per bus for the CNG conversion. Really, in the big picture, even at 1,000 buses the additional investment for CNG is not huge.

That brings me back to the building. You talked about having your building completed by 2015. When do you intend to start on that building process?

• (0955)

Mr. Russell Davies: The P3 application will be submitted in June this year.

Mr. Lawrence Toet: But when do you actually hope to be able to start building?

Mr. Russell Davies: I'm unsure, to be perfectly honest, what the P3 approval timeline is. The reason our timeline of 2015 can be so aggressive is that we already own the land. We have land identified, and it's already transportation land within the city of Calgary.

Mr. Lawrence Toet: I guess I'm looking at the fact that you want to start your testing in early 2013. You're looking to do an 18-month test and you want to get through two winters. That leaves your building and infrastructure aspect a pretty short winter to be ready by 2015, unless you're going to start building before you've actually completed your testing cycle.

Mr. Russell Davies: We need to build a bus facility anyway, but we're going to make this facility CNG compliant and allow it to do CNG fuelling. If the trial works out unfavourably, there is minimal risk in terms of the actual building changes that need to be made.

The Chair: I have to stop you there.

Mr. Sullivan.

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

Mr. Pascoe, you started your speech earlier with a suggestion that we have to reduce the fuel consumption of our vehicles by about 50% within the next 10 to 15 years. We also have to reduce our carbon dioxide emissions by 75%. The two are sort of interrelated, but we're never going to get to 75% if all we do is move to natural gas. Is that correct?

Mr. David Pascoe: That is probably correct. If you wanted to look at it as having to move to pure electric cars, I don't think we're going to get there on an economic basis. But you could look at the natural gas as part of the mix, because it certainly is better than diesel or gas by 20% or 25%.

Mr. Mike Sullivan: In terms of the goal of reducing our greenhouse gas emissions, natural gas is merely a stopgap; we have to find some other way. Either people don't travel, or they travel in Calgary's natural gas bus fleet rather than their personal cars, or they travel in electric vehicles that are theoretically zero emission. But to get there we have to take provinces like Alberta and wean them off coal. Am I right?

Mr. David Pascoe: That's correct, we would have to do some very severe things to get to a 75% reduction. I think in Canada we have a pretty good energy mix with regard to electricity generation, so we would significantly reduce carbon dioxide emissions by movement to pure electric vehicles. The challenge in going to pure electric is the price to the public. What we're seeing out there now is that the OEM automaker planning volumes on electric vehicle sales aren't being realized—in Canada, in the U.S., and in other countries like China, which had a big electric vehicle plan—because the take-up by the public is not as big as one would have hoped. That's because the on-cost of the electric vehicle is still a little bit prohibitive for a number of people. So economically, the challenge back to you would be how do we get there in a way that people can afford to buy these vehicles en masse, right?

Mr. Mike Sullivan: So liquefied natural gas hasn't been in either of your discussions. I'm assuming that's because it's prohibitive.... I know that there are trucking firms that are trying to do this.

Mr. David Pascoe: I think liquid natural gas could make sense for larger vehicles—trains, ships, and trucking. You have to manage it, really, because one of the challenges when you go to liquid is that you have to cool it down to extreme cold temperatures. So in a car, if you can imagine, you drive to the airport, you fly away for a week, and the whole time the tank is warming up. It has a vent, and now you're venting fossil fuel, which is a really strong greenhouse gas, into the atmosphere, and it's not really the right thing to be doing.

Mr. Mike Sullivan: I understand.

But the infrastructure is the issue. You said earlier that you want to move to CNG vehicles, but right now there isn't a refuelling infrastructure out there. So the suggestion is that we create a refuelling infrastructure, either through home refuelling or through mandatory provision, but it's temporary. Electricity is the ultimate refuelling is it not? It's there in every home, as far as I know.

• (1000)

Mr. David Pascoe: That's a good point. It's temporary but it's practical, because in the interim before we have solutions that can be broadly applied... It's going to be probably a long time. It's indeterminate. Even if we get the cost of batteries down to where they need to be for pure EVs, they won't likely be in all vehicles in a short period of time. So we have to have a bridge, and the length of the bridge is unknown.

On the electricity point, it's curious to note that there's an awful lot of new natural gas peaker plants being put up to manage electricity, because it's relatively clean and it's probably the lowest capital cost solution to generating additional electricity as far as setting up a new plant is concerned.

Mr. Mike Sullivan: That's true.

Mr. Davies, you talked about the availability of natural gas, and there's a hundred years of it, but if we converted every vehicle in Canada to natural gas, we wouldn't have a hundred years, would we?

Mr. Russell Davies: That hundred years is based on current usage today, and without finding any more gas at all. And we know that's not a likely scenario.

Mr. Mike Sullivan: But if we were to convert every vehicle in Canada to natural gas, as opposed to oil, would we still have a hundred years of—

Mr. Russell Davies: All indications we've had from the gas suppliers is that they know there is considerably more gas out there but it's just not economical to get it just yet. If the demand increases because of the increased number of vehicles, then they'd be willing to go look for the rest of it. They have no doubts about the availability of gas being sustainable in the very long term.

Mr. David Pascoe: If I can say so, there are lots of other sources of natural gas. In the ocean, there's frozen methane pockets and that sort of thing that probably would provide many tens of years of additional supply if we were to tap into it. These are things that we have to look to in the future.

Mr. Mike Sullivan: It's not economical to go get the natural gas. That reminds me of the tar sands—sorry, oil sands—when they first started, and at that point it was \$30 a barrel to get it out of the ground and the price at the pump was \$9 a barrel. They went ahead and did it anyway with a lot of government support, because the theory was,

once we figure out how to do this, it will get cheaper. So now it's \$9 a barrel to get it out of the ground, and it's \$130 a barrel at the pump. So hurrah for them. I guess the same could be true of the natural gas world, right?

Mr. David Pascoe: Sure it could, yes. The potential going forward is that it's almost a certainty that oil is going to continue to go up in price to the extent that the economy can tolerate it and absorb the new prices. We've made huge strides in natural gas over the last decade or so with the cost of extraction and stuff, to the extent that in terms of a dollar equivalent we're at about \$11 a barrel for natural gas today. During this calendar year, it may go as low as \$5 or \$6 a barrel, and it's expected to remain relatively low for the foreseeable future, so it's an opportunity.

The Chair: Thank you.

Mr. Adler.

Mr. Mark Adler (York Centre, CPC): Thank you, Chair.

Mr. Davies, I'm just curious, you mentioned earlier that you had looked at a number of other jurisdictions. Could you please just go through what your findings were in various other cities, like Boston and New York, etc., and what you learned, good and bad, from those experiences?

Mr. Russell Davies: There's a big difference. I mentioned earlier on, in 2007 a new engine came out from Cummins Westport, so from a bus perspective that was a real step change in terms of performance and in terms of what people saw from CNG buses as a fleet. So for the older buses the performance was okay, fuelling times were never particularly quick, and the engine was so-so. It was okay, but we found that among agencies that were still using CNG and were using the newer engine, it was almost transparent to the operator the type of bus they were driving. In terms of reliability it was certainly comparable, and in terms of operating performance, it was comparable.

Probably the biggest lesson that we learned from speaking to all the other agencies was: don't convert. So really they were saying, don't take a diesel bus now and convert it to CNG; buy a bus that's CNG-ready from day one. The same was true for the facilities as well. Don't retrofit your facilities, build a CNG facility and give the project a chance to work.

• (1005)

Mr. Mark Adler: Which of those jurisdictions that went to CNG told you not to convert? Which ones had that experience?

Mr. Russell Davies: Do you mean who told us not to convert?

New York told us that the costs were very prohibitive. And there were a lot of unknowns. Particularly in Calgary Transit, all of our facilities are probably 30-plus years old. The older buildings meet with older building codes. To do a retrofit now to CNG would be a little problematic.

Mr. Mark Adler: They adopted CNG.

Mr. Russell Davies: In New York they've taken an order of 200 CNG buses, just this year, I believe.

Mr. Mark Adler: Okay. How were they funded?

Mr. Russell Davies: I think the fact that they are willing to order these numbers, on top of their existing fleets, says that they're still comfortable with it.

Mr. Mark Adler: Mr. Pascoe, maybe you could answer this. A number of people have commented to me that when they are looking for a new car, for example, they can buy a traditional gas car or they can go with diesel or they can go with natural gas or a hybrid. The deals on the hybrid or the diesel or natural gas aren't as good, and the costs tend to be higher. There is an offset in terms of what they would save on energy, but they pay more up front.

Could you comment on the cost prohibitiveness of that?

Mr. David Pascoe: Sure. The answer is that diesel and hybrid and natural gas all cost more to make, so the car companies are passing the costs on to the customer with the hope that the customer can connect the fuel savings with the on-costs. The numbers are significant. There's not a good way to absorb that, right?

Mr. Mark Adler: If there is no demand out there, why have these sources of supply that we're calling for to be set up?

Mr. David Pascoe: What I would say is that the solutions for all of our fuel challenges are going to be many. Certainly a downsized gasoline engine and some compromises, such as maybe a downsized car, is probably the most economical or quick and easy-to-absorb solution today, because your capital costs are probably lower. It's an upfront reward rather than an upfront penalty. It's easy for people to understand that. In addition to having lower capital costs, you have lower operating costs, because your fuel is less, and people like that, too.

That is going to happen. If we look to western Europe, where fuel prices are significantly more than they are here, cars are smaller, on average. That's what I expect to see here. Cars will become smaller.

Certainly these other opportunities are all part of the solution. The real answer is that we have to do a lot of things, and we have to get going at it right away.

I'm here to talk primarily about natural gas, because I believe it's an important part of the future that we're not addressing as well as we could. That's why I'm highlighting that one today.

The Chair: You have no time left. Thank you.

We'll go to Ms. Morin, please.

[Translation]

Ms. Isabelle Morin: Thank you very much, Mr. Chair.

You mentioned the cost and said that the consumer will be paying less. Could you tell me specifically how much 40 litres of natural gas will cost when I fill up my car?

[English]

Mr. David Pascoe: When you buy 40 litres, it won't actually be 40 litres. Let's talk about equivalent litres—the equivalent amount of energy in natural gas.

Last year we checked the price at the pumps in Toronto, and it was 69¢ per litre. If you multiply that by 40, that gives you your price at the pump. We made a calculation that if you had your own home refuelling, at 25¢ a litre, that would basically be \$10 for your fill-up. That's what drives the payback. The cost of fuel is a lot lower.

• (1010)

[Translation]

Ms. Isabelle Morin: What are the odds that those prices can be guaranteed to be the same in 20 years? We know that gasoline was cheaper when there was more of it. Natural gas is likely cheaper because there is more of it now. In 20 years, what will happen to the prices?

[English]

Mr. David Pascoe: Twenty years out is hard to predict. I mean, if you're asking me, I would say that on a per energy basis, natural gas will still be a lot cheaper than gasoline or diesel. That's my personal projection, but I'm not an oil industry expert. But what I do know is that we have an enormous and a growing demand on oil. We do not have a lot of ability to pump a lot more out, so the supply is not going to grow so fast and the economics will force the price of oil-based products to continue to rise.

With natural gas, currently, the supply is growing faster than the demand, so there's an enormous downward pressure on natural gas and it's expected to be relatively stable or low, according to articles that I've read, for five to 10 years out. Beyond that I can't comment.

[Translation]

Ms. Isabelle Morin: Mr. Davies, in making your choice, you compared natural gas vehicles with other kinds of vehicles. You put a lot of stock in the fact that they are cheaper. Besides the price, however, what other advantages did you find that led you to the choice of natural gas buses?

Like my colleague, I see that they are a little greener than diesel, but surely not as green as we can get. What were the other advantages?

[English]

Mr. Russell Davies: A natural gas bus will be marginally greener than a diesel bus right now. But the other benefits we get will be that the bus will be quieter, certainly sitting and idling, as I mentioned earlier on.

[Translation]

Ms. Isabelle Morin: The electric bus would have been less noisy as well. Aside from the money saved, why did you decide to focus your study on natural gas rather than on electric buses? Did other factors come into play? Electric buses do not make a lot of noise.

[English]

Mr. Russell Davies: By electric bus systems, I assume you mean hybrid buses. Fully electric buses are being developed, but again they suffer from the same problems as the electric car. There's next to no range on them. Hybrid electric buses still have diesel engines in them. When they run, they still make noise just like the diesel bus. All we've seen from the analysis of hybrid electric buses is that you get approximately a 5% improvement in fuel economy. There's not a great deal more than that. A saving economy of 5% for a \$200,000 premium on a bus just seems a little excessive. Those numbers came from the engine suppliers. One of them was BAE and the other one was Allison.

Those areas just meant that we weren't looking at the hybrid buses much deeper than that. We have done trials. Calgary Transit has hybrid electric vehicles on a smaller scale, for small trucks and cars to see what we get out of those. The numbers are pretty much borne out, really. It didn't seem to be an alternative that was worth pursuing too aggressively.

CNG did provide a bus that was quieter and possibly even quieter than a hybrid bus at certain speeds. It does have maintenance advantages over a regular diesel bus compared to the systems that are on right now. The environmental code means that a certain amount of exhaust processing has to happen with filters and various other systems that are expensive to maintain and expensive to install. They are not needed on the CNG bus.

We did look at an alternative of LNG.

[Translation]

Ms. Isabelle Morin: I have one last question for you.

Among the obstacles you faced, you said that there are perceived problems with safety and with the operation of the motor in cold weather. What are you going to do to address those perceived problems with the public? What is your action plan to convince people that everything really is fine from the standpoint of safety?

[English]

Mr. Russell Davies: In terms of safety, we have already seen a number of videos from various CNG suppliers that show CNG tanks on buses that have been shot, that have been set fire to, that have been driven into walls, and there is zero explosion with these things. In terms of safety, CNG in many ways is probably safer than diesel. CNG has a very specific ignition point. It has to have a mix with air of about 5% to 15% for it to ignite. Anything outside those realms, it doesn't do anything. It just disperses into the atmosphere, unlike diesel. If you get a leak in a diesel tank, all the diesel spills onto the floor and mixes within the environment. As for CNG, if it leaks from the tank, it evaporates.

•(1015)

[Translation]

Ms. Isabelle Morin: You can compare the situation with the perceptions people have of nuclear power plants. I can show people nuclear plants that do not blow up, but that still doesn't mean they won't be afraid.

What specifically are you going to do to make people understand that it is safe to have a natural gas tank in their homes?

I am not sure that showing people a bus that does not blow up will help them feel any safer.

[English]

Mr. Russell Davies: I'm sorry. I can't speak to the home fuelling station. That's not an area I've been looking at.

Mr. David Pascoe: That's a good question. I think ultimately there will have to be some education. If Magna gets involved with home refuelling, we'll make sure we start educating people. Home refuelling is an area we think about.

In order for natural gas vehicles to get going in normal automobiles, we have a chicken-and-egg situation. If we make the cars and there's no infrastructure to fuel them, we can't sell them. So we need to do something. Also from a company perspective, let's say home refuelling is on our radar screen. If we get involved we'll make a big point of educating the public on the safety aspects of it.

The Chair: Thank you.

Before I recognize Mr. Holder, has propane ever come into the discussion as an option, particularly for Calgary? If not, why not?

Mr. Russell Davies: I think there are probably more safety issues with propane than with CNG. We tried propane some time ago I believe for smaller auxiliary vehicles, but not on our actual fleet. We can buy smaller buses that are propane powered, but CNG has the benefit, in terms of fuel supply, that you can basically have a pipe come into your facility for fuel, whereas propane, LNG, still has to be delivered by a truck. You still have problems with reliability of the fuel supply. Propane is something we haven't really considered.

Mr. David Pascoe: Propane is a very small constituent of the fossil fuels that are pulled up, so it's not as widely available. If we want to go to broad use, there's simply not enough of it to do that.

The Chair: Thank you.

Mr. Holder.

Mr. Ed Holder: Thank you, Chair. I found this sufficiently interesting that I wanted to have another round, so thank you for the accommodation.

To be clear, Mr. Davies, you're not considering nuclear as an option. I wanted to double-check that's not what you're considering.

Voices: Oh, oh!

Mr. Russell Davies: No.

Mr. Ed Holder: Let the record show our guest said, no.

I thought I heard you talk previously about looking at CNG versus LNG, and I'd like you to elaborate if you can. Was that a comparison you were going to bring to the group? Maybe for my education, could you explain the differences as they relate to your business?

Mr. Russell Davies: Sure. The only difference between LNG and CNG is the level of compression. CNG is compressed to a certain level, and LNG is compressed more to take it to a liquefied state. To keep it in that state it has to be kept cold.

The only reason we didn't really look at LNG is the delivery of fuel. For LNG to be delivered to one of our facilities to fuel our buses it would have to come by truck, the same way that diesel fuel is delivered today. If we use CNG we basically have a pipe in the ground. The CNG is compressed, and we can fill the buses that way. So in terms of a fuel delivery system, CNG is far more effective and reliable.

Mr. Ed Holder: I don't know how long you've been in the busing industry, but it's probably long enough to know that in the old days, when Mr. Coderre was a bit younger and so was I, either the urban myth or the reality was that buses would run twenty-four hours, because it would cost more to turn them off.

What does that mean? I have no idea. Is that an urban legend? That makes absolutely zero sense to me.

Mr. Russell Davies: That doesn't make a lot of sense to me either.

• (1020)

Mr. Ed Holder: In my own city of London—maybe they're wiser in Calgary, I hope not—that's the kind of thing you would hear. They would keep the buses running on a twenty-four-hour basis. So that's not true?

Mr. David Pascoe: I think it's a myth, but it may have stemmed from when trucks are left idling all night. They do that to generate energy for the sleeper cab.

Mr. Ed Holder: It's for the heat.

Mr. David Pascoe: Yes. But it makes no sense to run a bus 24-7.

Mr. Russell Davies: Sometimes a bus will be run or left idling for a long time, particularly in cold weather, because starting it is an issue. That's all. Just firing them up in the morning can sometimes be problematic, and then sending them straight down to service as cold buses. So sometimes they need to be left idling. As far as that being more efficient, I can't say.

Mr. Ed Holder: I think I heard you say it would not be untypical for the vehicles' motors to be running 50% of the time during the day.

Mr. Russell Davies: That's just stopped at traffic lights and transfer points, and those kinds of things.

Mr. Ed Holder: One of the things we heard in previous testimony from AUTO21 is that one of the biggest factors in energy consumption, particularly with directives, was the size of the vehicle and obviously the weight. The weight is reduced very dramatically, as in by half.

For buses, what's the history of that from a weight standpoint? I appreciate size is what it is. We hear about the elongated ones and we even have those in London, Ontario, if you can imagine. They'll put on the little attachment, believe it or not. It's true. Has weight been one of the considerations, and how dramatic is that?

Mr. Russell Davies: The biggest issue with weight on a CNG bus is simply the fuel tank, as I'm sure you can imagine. You've seen the tanks. They're the full length of a 40-foot bus, more or less.

The technology in the construction of those fuel tanks has been improving significantly over the years, to the stage where now the tank is double-walled, but it is made of materials that are considerably lighter than those that were used probably even five years ago.

The overall weight of a 40-foot bus probably increases by about 1,000 pounds or so with a fully loaded fuel tank, compared to a fully loaded diesel bus. There are some weight penalties, but they're offset in terms of the efficiency of the engine and those kinds of things.

Mr. Ed Holder: I think we've made it clear that you may have some provincial options if you're looking for loans and the like, if that's part of your direction. That certainly is your call.

One of the considerations we have is from a legislative standpoint. Not unlike the question asked of Mr. Pascoe, is there anything from the federal legislation standpoint that we might do to support the bus industry in this country? Are there impediments that you see?

Mr. Russell Davies: I'm not really aware of any impediments right now. It's more a lack of guidelines as much as anything else. I sound like a broken record, but there could be more incentives to be able to transition. It is an expensive deal to operate a fleet of 1,000 diesel buses, and to try to transition over is an expensive proposition.

Mr. Ed Holder: I'm glad to say there are some options there as well.

The Chair: I have to interrupt there.

Mr. Poilievre.

Mr. Pierre Poilievre: On the issue of incentives, the incentive would seem to be the price advantage that you described.

If there is a business case for this transformation, why would taxpayers need to help? If there is no business case, why would taxpayers want to help? Those are the questions I ask myself. I think we went through that debate in my first round of questioning.

I want to move on to the issue of the guidelines. The guidelines you're seeking for building codes and so on, they must be provincial or municipal, or are there federal rules that you need clarified?

Mr. Russell Davies: I think on the basis of an earlier discussion it sounds as though they may be provincial guidelines that we're looking for.

Mr. Pierre Poilievre: Okay.

The next question I have relates to electric vehicles. I'll quickly note that in Alberta, electric vehicles might actually be a less environmentally friendly option because of the mix of electrical sources. I don't know the exact numbers, but I know that a very large portion of Alberta's electricity is still coal fired. You'd have to burn coal in order to power the vehicle, which is much dirtier than burning natural gas.

On electric-powered vehicles generally, Israeli CEO Shai Agassi stated at the World Economic Forum that he wanted to create one country that didn't rely on oil for anything. He chose Israel.

He said that the solution for electric vehicles was to have battery swap stations. That is to say, even though there is not a lot of range with electrical vehicles, a car could pull into one of these swap stations and the battery could be changed in under two minutes and then be on its way. In effect, no one would actually own a battery; they would just pay for the use of batteries that they would swap in and out at these stations. Is that a viable option?

•(1025)

Mr. David Pascoe: I'm aware of his idea. I think one of the reasons he's looking at Israel is that the geographic size is a little more reasonable. That's why, if you were to take up the challenge, it might be an appropriate location.

With regard to swap stations, I don't think it has a good chance at all. The reason is that if you go to buy a car, the pile of parts on the floor for a smallish car is maybe \$10,000. If it's electric, now the battery costs probably \$10,000 to \$12,000. So the cost to the car company, which they have to pass on, is now double. If you want to have battery swap stations, now you have to make a third battery to go to the swap station in case you need to make a swap, or at least a certain number of additional.

That capital cost, whether you own the battery or not, ultimately has to pass on to the consumer, because Shai Agassi is not in business to lose money, and neither are the car companies. You're going to end up paying for a car plus two batteries instead of a car plus one battery, if you have a recharging system. From an economic perspective, I can't see it working.

There's another thing with regard to deployment of batteries to swapping stations. On Super Bowl Sunday, for example, when everybody's moving from one part of the country to another, the first 40 guys come in and pick up their batteries, but the rest of the guys moving along in their electric cars, instead of being able to use their front-row Super Bowl tickets, were sitting in the swap stations, and now have to watch it on television. There were no extra batteries at the battery swap station.

Those types of things will cause problems, right?

Mr. Pierre Poilievre: On the home fuelling stations, are there any regulations that need to be changed? I suspect there aren't any regulations period, because it's a new concept. But is there anything at a federal level that we need to clarify on your behalf in order to allow an enterprise like yours, Magna, to construct and ultimately wholesale these home systems?

Mr. David Pascoe: I don't think there are impediments today, because there are, I believe, companies out there selling home fuelling systems today. You can buy them today. We're just looking at potentially entering that business.

Mr. Pierre Poilievre: How much do they cost?

Mr. David Pascoe: Today they're around \$6,000. We see a route to getting it to one half to one quarter of that. Because the volume's low, ultimately it's—

Mr. Pierre Poilievre: Does that include installation?

Mr. David Pascoe: I'm not sure about that. I think probably not.

Mr. Pierre Poilievre: Are they mobile? If someone moves, can they bring their compressor with them to the next home they purchase?

Mr. David Pascoe: They could. They would have to do a new reinstall if they moved it.

Mr. Pierre Poilievre: For most of the natural gas vehicles that would use this, are they gasoline-capable as well, or are they exclusively powered by natural gas?

Mr. David Pascoe: That's a good question.

In North America, the only pure natural gas vehicle I'm aware of that's being sold today is a Honda, I think a GSX or something like that. There are also a lot of pure natural gas vehicles being sold in foreign countries.

I can tell you that our customers, the automotive manufacturers, are looking at natural gas and how we get this out there. They're all working on bi-fuel vehicles, which are gasoline and natural gas.

The Chair: Mr. Poilievre, I have to—

Mr. Pierre Poilievre: So if you fuelled up at home and you're on a long road trip, you could then....

Mr. David Pascoe: Exactly.

The Chair: I'm going to do one more round with just a question, and then we'll move to the motion.

Ms. Chow.

Ms. Olivia Chow: In terms of the timing of the electric pedicabs, the three-wheelers, and all of those other types of electric vehicles—they are vehicles, actually, under the Highway Traffic Act—what would be the timing for legislation? Right now there isn't any. Would it be, for instance, within a year that something needs to be in place so there's no vacuum there?

•(1030)

Mr. David Pascoe: Yes, I think two years would be safe for that type of thing. The ones that I know of that are either being developed or under consideration wouldn't launch before a two-year timeframe.

Ms. Olivia Chow: Okay.

I have one question on Israel. They've discovered natural gas, and my understanding is that they don't have a problem with the battery swap. There are no lineups. They seem to have the system worked out.

Mr. David Pascoe: In Israel?

Ms. Olivia Chow: Yes.

Mr. David Pascoe: Yes, I would say that certainly it's doable, but I would suggest to you that the government subsidies must be tremendous to make it work.

Ms. Olivia Chow: That is the case in Israel.

Mr. David Pascoe: Yes.

Ms. Olivia Chow: Do you know...? You know what? I'll skip that question, because I'll ask it of people who know the situation there well.

Do you know what the percentage of the subsidy is between the private and the public sectors? Because they've established an entire system.

Mr. David Pascoe: No, I don't know the number, but I recall hearing something. Basically, I think the government is paying for half the car, and my guess is that they're probably subsidizing the swap stations as well. I think it's a really heavy subsidy on those.

Ms. Olivia Chow: Thank you.

The Chair: Monsieur Coderre.

[*Translation*]

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

Mr. Pascoe, in Quebec, people really want work to be done on the electric car. Has Magna International started talks with Hydro-Québec? Are discussions going on? If so, what stage are they at?

[*English*]

Mr. David Pascoe: We had discussions with some of what I'll call the subs of Hydro-Québec. I believe there was a battery pack company, and I think Dow Kokam purchased them at the end of the day. We've had discussions at that level about potentially getting technology. Certainly, Hydro-Québec has some great—

[*Translation*]

Hon. Denis Coderre: Mr. Chair, I can often hear chat-chat over on that side. When I ask questions, I expect a modicum of respect so that I can hear the answer.

[*English*]

Sorry about that, but....

Mr. David Pascoe: Certainly, Hydro-Québec has brought some really excellent battery chemistry to bear, and that's being licensed out, I believe. It's the lithium iron phosphate chemistry. That, for hybrid applications, is really very good.

Hon. Denis Coderre: Thank you.

The Chair: Mr. Holder, you have a final question and comment.

Mr. Ed Holder: How lucky am I?

Thank you, Chair.

I would direct this, if I may, to Mr. Pascoe, please.

In your earlier testimony, you talked about the great focus on natural gas and about the big opportunities being there, and I'm a little confused. It may well have been either Mr. Sullivan or Mr. Coderre who brought this up. Where I'm somewhat confused is that I thought you indicated in your testimony that you thought it would be cheaper in the long term with greater usage, and then I thought I heard you kind of equivocate—or it might have been someone else who may have suggested that in fact it may not be the case.

But I'd like to get your best sense of it, because of the great focus today on natural gas and the emphasis that both of you place on the importance of it. Frankly, we're not going to run out, not in our lifetime or my kids' or my grandkids' lifetimes.

But having said that, it is another way to move our vehicles. What's your sense, Mr. Pascoe, of the longer term cost of natural gas with increased usage at the retail level?

Mr. David Pascoe: I'm not sure.... It must have been somebody else who equivocated.

I think it's a cheap fuel now, and I expect it to remain inexpensive. Certainly, the laws of economics will prevail with supply and demand. We're seeing supply increasing faster than the demand today. If we were to accelerate demand to the extent that it exceeded supply, the price would go up, but ultimately it becomes an alternative to fossil fuels. It becomes a new opportunity in the mix, and I think we should use it.

Mr. Ed Holder: Thank you, Chair.

The Chair: Thank you.

Before we move on, I want to thank our guests for being here today. I'm sorry, but we do have a motion that we have to deal with. Thank you. It was very insightful and I'm sure you'll hear from us in the future. We thank you for your time today.

I'm going to take a quick thirty seconds to let our guests leave the table and then we'll come back and deal with the motion.

We will now entertain the motion from Ms. Morin. I understand that everybody has a copy of it. I will open the floor for Ms. Morin, please.

● (1035)

[*Translation*]

Ms. Isabelle Morin: Here is the motion:

That, pursuant to Standing Order 111.(1), the committee invite Mark Wright, the appointee to the board of directors of the Thunder Bay Port Authority, Jennifer Clarke, the appointee to the board of directors of the Prince Rupert Port Authority, Gary Valcour, the appointee to the board of directors of the Oshawa Harbour Commission, Colin Watson, the appointee to the Toronto Port Authority, Jean-Sébastien Harvey, the appointee to the Saguenay Port Authority, Elmer Derrick, the appointee to the board of directors of the Prince Rupert Port Authority, Éric Dupont, the appointee to the board of directors of the Quebec Port Authority and Pierre Rivard, the appointee to the board of directors of the Quebec Port Authority to appear before the committee prior to May 31, 2012.

My reason for making this motion is that we have discovered that the candidates nominated by the government have a lot of ties with the Conservatives. I am not including people who have been nominated for a second time, because it would be too easy for the Conservatives to tell us that the reason is that they gained experience in their previous mandates.

I will start with Jennifer Brunsdale Clarke, who gave \$700 to the riding association in Abbotsford in 2010, \$364 to the association in Burnaby—Douglas in 2009 and \$600 to the association in Vancouver Quadra in 2007 and again in 2008.

Among the large donors are some presidents of Conservative riding associations. There is Gary Valcour, former president of the Conservative riding association in Whitby—Oshawa. There is also the secretary of the Conservative riding association in Jonquière—Alma, who also donated to the Conservatives in past years.

Pierre Rivard is also mentioned a lot. He was the lawyer when Josée Verner, who is a senator now, sought to...

I will say this in English because I have it written down here in English.

• (1040)

[English]

Pierre Rivard was the lawyer who filed the request, on behalf of then Minister Josée Verner, seeking to question the subpoena to appear in court regarding a business partner suing her communications company.

[Translation]

There are a lot of conflicts of interest in these appointments. The Conservative government based its recent campaigns on transparency and open government. The task of members of Parliament is to make sure that good decisions are made. If the government has nothing to hide, it will allow the committee to do its work and it will bring those people in so that we can ask them questions. That is why I am making this motion.

[English]

The Chair: Thank you.

The motion has been tabled. I will advise the committee that we don't have a lot of time, but I'll open the floor now for discussion.

Go ahead, Ms. Chow.

Ms. Olivia Chow: Mr. Chair, if the government has nothing to hide, there's absolutely nothing wrong in bringing forward these eight appointees.

I'm particularly interested in Gary Valcour, because I want to ask whether he wants to work with the mayor of Oshawa and others, because the people of Oshawa are very against the refinery plant. I want to ask Mr. Valcour whether he has the experience to mediate between what the citizens want and what some of the folks who donate a great deal of funding to the Conservatives, such as Tim O'Connor, want. He wants to build this ethanol plant and wants the federal government, with taxpayers' money, to subsidize such a plant.

So there are lots of questions there.

I'm very interested in asking Mr. Elmer Derrick about his approval of the gas pipeline in his area, even though the majority of the chiefs and leaders in the area are very much against it. What vision does he have for Prince Rupert and the port authority there. What kind of

vision does he have for Prince Rupert? Jennifer Clarke is also a big donor to the Conservatives. How do both of them see Prince Rupert? It happens to be a huge port and is a port that certainly can expand. I'm slightly concerned about the size. Does it need to be bigger, with tankers getting bigger? Would Prince Rupert be able to deal with the increasing size of these new tankers that want to come in?

With Prince Rupert, especially, quite a lot of grain is transferred there through CN or CP. What kind of experience are they having in terms of the delivery. Is it on time?

These are all the folks that will be dealing with these port authorities. Under our committee's mandate, we have every right to talk to them about their qualifications and the visions they have for the port authorities they will be serving on or are serving on now. I think it's useful for us to connect with them.

Several are in the Québec Port Authority. Éric Dupont, Pierre Rivard, and a previous failed Conservative candidate, I believe, were appointed there. So there are three. We didn't get that last one, but certainly we should talk to these two and get their vision of what the Quebec port should be. What's the first-year plan and the five-year plan for the Quebec port?

We have eight appointees to these boards, these port authorities. My colleague has documented their relationships with the Conservative Party. They may be very qualified people, but let's talk to them.

Mr. Chair...

• (1045)

The Chair: I have no one else on the list, so I'm going to call the motion.

Ms. Olivia Chow: Are there any other speakers, though?

The Chair: No one has acknowledged.

The question on the motion is on the floor. A recorded vote has been requested by Ms. Chow.

(Motion negated: nays 6; yeas 5)

The Chair: The meeting is adjourned.

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