M-23

ISSN 1180-436X

Legislative Assembly of Ontario

First Session, 41st Parliament

Assemblée législative de l'Ontario

Première session, 41e législature

Official Report of Debates (Hansard)

Wednesday 23 March 2016

Journal des débats (Hansard)

Mercredi 23 mars 2016

Standing Committee on the Legislative Assembly

Natural Gas Superhighway Act, 2016

Comité permanent de l'Assemblée législative

Loi de 2016 sur l'autoroute du gaz naturel

Chair: Monte McNaughton
Clerk: Trevor Day

Président : Monte McNaughton
Greffier : Trevor Day

Hansard on the Internet

Hansard and other documents of the Legislative Assembly can be on your personal computer within hours after each sitting. The address is:

Le Journal des débats sur Internet

L'adresse pour faire paraître sur votre ordinateur personnel le Journal et d'autres documents de l'Assemblée législative en quelques heures seulement après la séance est :

http://www.ontla.on.ca/

Index inquiries

Reference to a cumulative index of previous issues may be obtained by calling the Hansard Reporting Service indexing staff at 416-325-7410 or 416-325-3708.

Renseignements sur l'index

Adressez vos questions portant sur des numéros précédents du Journal des débats au personnel de l'index, qui vous fourniront des références aux pages dans l'index cumulatif, en composant le 416-325-7410 ou le 416-325-3708.

Hansard Reporting and Interpretation Services
Room 500, West Wing, Legislative Building
111 Wellesley Street West, Queen's Park
Toronto ON M7A 1A2
Telephone 416-325-7400; fax 416-325-7430
Published by the Legislative Assembly of Ontario

Service du Journal des débats et d'interprétation
Salle 500, aile ouest, Édifice du Parlement
111, rue Wellesley ouest, Queen's Park
Toronto ON M7A 1A2
Téléphone, 416-325-7400; télécopieur, 416-325-7430
Publié par l'Assemblée législative de l'Ontario

LEGISLATIVE ASSEMBLY OF ONTARIO

ASSEMBLÉE LÉGISLATIVE DE L'ONTARIO

STANDING COMMITTEE ON THE LEGISLATIVE ASSEMBLY

COMITÉ PERMANENT DE L'ASSEMBLÉE LÉGISLATIVE

Wednesday 23 March 2016

Mercredi 23 mars 2016

The committee met at 1300 in committee room 1.

NATURAL GAS SUPERHIGHWAY ACT, 2016
LOI DE 2016 SUR L'AUTOROUTE DU GAZ NATUREL

Consideration of the following bill:

Bill 76, An Act to encourage the purchase of vehicles that use natural gas as a fuel / Projet de loi 76, Loi visant à encourager l'achat de véhicules utilisant du gaz naturel comme carburant.

The Vice-Chair (Mr. Jack MacLaren): We'll call our meeting to order. My name is Jack MacLaren. I am Vice-Chair of the committee, and this is the Standing Committee on the Legislative Assembly. We're here to hear presentations today on Bill 76, An Act to encourage the purchase of vehicles that use natural gas as a fuel.

ENBRIDGE GAS DISTRIBUTION INC.

The Vice-Chair (Mr. Jack MacLaren): Our first presenter is from Enbridge Gas Distribution. We have Malini Giridhar—did I say that right?

Ms. Malini Giridhar: That's right.

The Vice-Chair (Mr. Jack MacLaren): —who is vice-president of gas supply and business development.

You have five minutes, Ms. Giridhar. If you'd like to go ahead.

Ms. Malini Giridhar: I want to thank the committee for taking the time to consider legislation that will enable Ontarians to benefit from the environmental and economic benefits of natural gas.

You may not know this, but Enbridge was the first to introduce natural gas vehicles in the province of Ontario in 1975, at the CNE. Since then, we have built up a fleet of over 650 vehicles; that's about 75% of our fleet. To give you an example of its benefits, we saved over $1 million in fuel costs in 2015 and we reduced GHG emissions by about 3.25 million kilograms of CO_2.

We see the economic and environmental benefits of natural gas transportation, but that's not very common in Ontario. There are certainly a few fleets that have converted. The city of Hamilton has converted its buses to natural gas. We know that the region of Peel and Toronto are looking at taking their refuse trucks and converting them to natural gas, and we know of a few trucking companies that have also converted.

But this is not as widespread as it ought to be. There are over 200,000 trucks that are registered in Ontario. If we got 5,000 trucks to convert to natural gas, we would have a life cycle reduction on GHG emissions of one megaton, and we want to reduce GHGs by about 15 megatons by 2020. That's a big number when you consider it's 5,000 trucks out of the 200,000 trucks we have in Ontario.

It's not surprising why the reductions are so significant. We've estimated that there would be an up to 20% reduction in GHG emissions just from using natural gas instead of diesel, but in fact, if you use renewable natural gas, which you would get from your green bin program or landfills, you'd reduce emissions almost down to zero. So that's a big opportunity for emissions reductions.

There is a big need for emissions reductions in Ontario. The transportation sector alone accounts for up to 34% of GHG emissions, and it's the fastest-growing source of emissions in Ontario.

Just as impactful as the environmental impact is the economic impact. Natural gas is between 20% and 40% cheaper than diesel. Even with today's low diesel prices, adopters of natural gas will save money. When you think about this, reduced transportation costs for Ontario would be of significant economic benefit for Ontarians. It's particularly important because our neighbouring jurisdictions are adopting natural gas transportation at a much higher pace than we are.

There's a reason for this. Not only do they see the environmental and economic benefits of natural gas; they have also reduced the barriers to adopting natural gas for transport. What are these barriers? These barriers are basically, first of all, the very high cost of purchasing natural gas trucks—that's a problem for a lot of fleet operators; there's also a lack of refuelling stations that would make it convenient to refuel. There are myriad other barriers, such as weight restrictions that prevent them from carrying the fuel they need for their distance of haul.

But other states and provinces have moved ahead, and we need to do that too. When you look at the states that are our neighbouring jurisdictions—Michigan, Ohio, Illinois, New York and Vermont—they all have incentives and they all have programs that look at providing refuelling infrastructure. When we look at our Western

Climate Initiative partners California and Quebec, they also have these programs.

Bill 76 is a very good start, but we also need to make sure that we can get this dialogue going about the benefits of natural gas transportation for the industry in general. We would like to work with the government to make sure that happens.

The Vice-Chair (Mr. Jack MacLaren): You have 30 seconds.

Ms. Malini Giridhar: Thank you very much for your attention. I'm done.

The Vice-Chair (Mr. Jack MacLaren): Very good. Thank you, Ms. Giridhar.

We'll now have three minutes of questions from each of the three parties as we go around. We'll begin with the Progressive Conservative Party: Mr. Bailey.

Mr. Robert Bailey: Thank you, Malini, for being here this afternoon. I've got a couple of questions. I want to ask them quick, and then my colleague, I know, has one.

You mentioned British Columbia and some other groups that are already there. They are far ahead of Ontario on both renewable natural gas and natural gas vehicles and fuelling stations. In a few short words, why is that the case?

Ms. Malini Giridhar: In the case of British Columbia, their natural gas industry regulator has been quite forward-thinking in terms of enabling the utility there to take these on. For instance, FortisBC is able to have the natural gas transport program as well as a renewable natural gas program, which allows them to offer a seamless service at a cost that makes sense for adoption, as well as administering an incentives program for trucks.

Mr. Robert Bailey: Okay. My colleague has a question.

Mr. Steve Clark: One of the things you've just talked about were those incentives. Can you just, again, highlight the jurisdictions that are practising this? And do you think that's the biggest barrier we have in Ontario for not providing this as well?

Ms. Malini Giridhar: That is definitely a very significant barrier. My understanding is that a natural gas truck could cost up to $60,000 or $70,000 more than a diesel truck. Having to outlay that kind of cash for fleet operators that generally don't have access to a ton of excess cash is a problem. But refuelling infrastructure is also very important, because it doesn't enable it otherwise.

Mr. Robert Bailey: If I've got time for one more here, just to get this on the record, you mentioned that natural gas is clean and it's carbon-free. Can you explain to the committee and myself how renewable natural gas can be clean, if it's just another source of methane?

Ms. Malini Giridhar: What renewable natural gas allows us to do is to just recycle what is existing methane that would otherwise contribute to GHG emissions. The amazing thing about it is that you actually prevent those GHG emissions and you capture them to fuel trucks. That's the benefit.

Even if it wasn't methane and it was just carbon, which is less effective from a GHG perspective, you're still displacing what would otherwise be a release of carbon into the atmosphere.

Mr. Robert Bailey: I've still got a—

The Vice-Chair (Mr. Jack MacLaren): You have another minute.

Mr. Robert Bailey: Okay.

The price of natural gas is very low right now, but so is oil. I know that you don't have a crystal ball, but can you give us an idea of where you think the price of gas could be five or 10 years out? We'll all run out and invest in the market.

Ms. Malini Giridhar: I'm not sure that I can offer a number, but we know that North America has reserves that will last us another 100 years plus. Certainly, with the modern technology, we are able to really produce natural gas at very low rates. We expect natural gas prices to remain very competitive well into the future.

The Vice-Chair (Mr. Jack MacLaren): Thank you.

We'll move to the NDP. Mr. Mantha.

Mr. Michael Mantha: I'm just wondering where my friend Mr. Bailey thought that you had a crystal ball into the future, because I sure as heck would want to find out where you get all that information.

Ms. Malini Giridhar: I wouldn't be working for Enbridge if I had that crystal ball.

Mr. Michael Mantha: No, no.

In your comments, you ended by saying that this was a good starting point and that there needed to be a lot more discussions. There's a provincial component; there's a federal component.

Do you have a sense that it's time we bring the two levels together to have a wholesome discussion? Because this can't happen from one level without the other one coming along. Is there someone you are having discussions with—maybe federal cousins—in regard to an idea, an avenue, other incentive programs, innovation that is coming from that perspective?

1310

Ms. Malini Giridhar: That's a great question. We quickly scanned the budget from yesterday and we noticed that there's almost $60 million for alternative fuels for transportation, which include natural gas. That's a good start as well. We totally believe that we need that kind of dialogue. In fact, through our industrial associations, we're trying to do that and have the conversation both at the provincial and federal levels.

It's absolutely necessary as well to tap into innovation, because that's what allows us to lower the cost of adoption even more.

Mr. Michael Mantha: With this being available in other jurisdictions, in those other jurisdictions, is it isolated in certain areas or is it provided on a broad spectrum, covering several communities or the entire province? Let me make you the point. In southern Ontario, we have the ability—lots of travelling. But in northern Ontario, we have long distances and a lack of infrastructure. Would it be as efficient in northern Ontario as it is in

southern Ontario, comparing to other jurisdictions that already have this program in place?

Ms. Malini Giridhar: First of all, I think the gas utilities in Ontario, both Union Gas and Enbridge, can have province-wide programs that could be made available in both southern and northern Ontario, because there is gas available in many parts of northern Ontario as well. Having said that, I think where we would really make a start is where we have the longest distance of haul for trucks and where we can have the most effect immediately. You might phase it in, but we absolutely need it across the province.

Mr. Michael Mantha: One last quick question, and pardon my ignorance: With present trucks, will this new LNG vehicle require the individual to have special certification or licensing of any kind in order to operate these transports? Will they be required to go through some testing or will they be required to buy special insurance? Will they be required to do anything over and above what is presently there?

Ms. Malini Giridhar: I'm not actually able to answer that question competently, but I'm thinking that we have a subsequent speaker—

The Vice-Chair (Mr. Jack MacLaren): Time's up, but finish your answer.

Ms. Malini Giridhar: —who may be able to.

Mr. Michael Mantha: Let me know who that person is so I can ask the question.

Ms. Malini Giridhar: Yes, I think it will be the gentleman from CNGVA.

Mr. Michael Mantha: Look at how nice the Speaker is, letting us have our own conversation.

The Vice-Chair (Mr. Jack MacLaren): Thank you. We'll now go to the Liberal Party: Ms. Wong.

Ms. Soo Wong: I want to go through the slides that you shared with us, your handout. On page 8 of your slides, you indicated that Illinois and Ohio provide incentives towards purchasing. Can you share with the committee what kinds of incentives we are talking about?

Ms. Malini Giridhar: I don't have the exact dollars that they provide, but I can definitely get that.

Ms. Soo Wong: That would be helpful. You also made a statement in this particular slide: "Alberta updated infrastructure regulations to allow for increased weight allowances." What are we talking about in terms of weight allowances? How much of an increase?

Ms. Malini Giridhar: Again, I'm not a very technical person, but we could provide that too.

The issue, again, with the weight allowances is that those restrictions prevent the necessary amount of fuel from being on the truck.

Ms. Soo Wong: Okay. As well, you made a comment here in the third bullet dealing with the province of Quebec announcing that they will subsidize the purchase. What amount of subsidies are you talking about?

Ms. Malini Giridhar: Again, I don't have the details of that particular—

Ms. Soo Wong: Okay. My last question, through you, Mr. Chair, is what role do you see the Ontario government or yourself, as a utility company, playing in this private member's bill? Obviously, your sector supports this particular private member's bill. We heard about it last week and now we're hearing it again this week. So what role do you see your sector playing in terms of this particular piece of legislation?

Ms. Malini Giridhar: Are you thinking about our support for the legislation?

Ms. Soo Wong: More than just support. I mean, everybody supports. What does that really mean?

Ms. Malini Giridhar: Again, we think addressing the weight limitations is very important. It's also very important to reduce the cost disadvantage to procuring natural gas vehicles. This legislation addresses both of those things, so that's an excellent start.

Beyond the legislation, we also want to engage in a dialogue with all the industry participants: the engine manufacturers, the ones who provide the refuelling infrastructure, the government, and the fleets that would adopt this infrastructure and the technology. We think we can play a facilitation role across the chain. We find that whenever utilities have been able to do that, we can drive market adoption because we can drive the cost down. We can do the facilitation role and often even the subsidy disbursement. Like in BC, Fortis has played a role in making those incentives available to trucking companies.

The Vice-Chair (Mr. Jack MacLaren): You have 15 seconds.

Interjection: I know. I'm going to turn to you.

The Vice-Chair (Mr. Jack MacLaren): All right. Thank you, Ms. Giridhar.

Ms. Malini Giridhar: Thank you.

ENVOY ENERGY

The Vice-Chair (Mr. Jack MacLaren): Our next presenter will be from Envoy Energy, Mr. James Ro.

Welcome, Mr. Ro.

Mr. James Ro: Thank you.

The Vice-Chair (Mr. Jack MacLaren): You have five minutes. You can begin when you're ready.

Mr. James Ro: Good afternoon, everybody. Thank you for the time. My name is James Ro, president and founder of Envoy Energy. I'm also the owner of an Ontario-based CNG infrastructure developer called ComTech CNG. We're the ones that built and now maintain the GAIN Emterra CNG station in Mississauga.

By way of background, I spent most of my career in investment banking on Bay Street, advising companies on mergers, acquisitions and raising growth capital. I entered the CNG industry in Ontario one year ago when I acquired ComTech CNG, along with a high net worth investor. I wanted to be involved in the industry because I saw the growth in station infrastructure happening in the US and felt that it was just a matter of time when Ontario would catch up, especially due to the fact that Highway 401 is arguably the busiest highway in North America for the transportation of goods between the US and Canada.

I formed Envoy Energy two months after acquiring ComTech CNG because I realized that the industry was missing a turnkey solution provider that takes an education-first approach. As you can see on slide 1, Envoy has been able to collaborate with industry experts in different areas to provide a one-stop-shop solution for fleets, a CNG toolbox, if you will. Today, I'll be speaking to you about CNG infrastructure and how to potentially accelerate the adoption of CNG in Ontario.

Slide 2: Envoy takes an education-first approach because in order to achieve CNG adoption I strongly believe that you have to go through this adoption curve starting with education. However, the critical next step is allowing fleets to test the performance reliability costs savings of CNG, and that can only be achieved by our demonstration program which I will quickly explain in the next slide. If fleets are going to convert from diesel, their largest or second-largest operating expense, to try to gain a competitive edge, the financial and operational risks have to be mitigated.

Slide 3: Envoy has invested in the first demonstration program in Ontario that involves two dedicated CNG trucks and two mobile refuelling stations. This allows us to offer fleets a CNG truck and fuelling for a two-to-four-week period. We launched this demonstration program three months ago and we are currently dealing with the largest fleets in Canada.

Slide 4: CNG as a vehicle fuel is proven and adopted around the world with more than 16 million natural gas vehicles in 80 different countries. The top right chart shows the top 10 countries around the world that have adopted CNG. Please note that this is 2012 data. North America is approximately 1% of the global natural gas vehicle market.

Slide 5: According to Natural Gas Vehicles for America, there are approximately 1,750 natural gas stations and 153,000 natural gas vehicles in the US. As you can see in the pie graph, there's a balanced mix between light-, medium- and heavy-duty vehicles.

In the next five slides I will show you maps of compressed natural gas stations in the US from major infrastructure developers. The first one on slide 6 is Clean Energy's map, the largest CNG player in North America. Over the last eight years, Clean Energy has grown their network from 170 stations in 2007 to 570 stations in 2015.

Slide 8 shows a map of TruStar's CNG stations. Note the cluster in the eastern region.

The next slide is a map of Trillium stations. The next slide—here's a map of GAIN stations. Again, note the cluster in the eastern region.

Finally, a map of ampCNG stations. There's a widespread CNG station network that exists today in the US, all clustered around the US and Canadian border.

Slide 11: This slide shows you most, not all, of the CNG stations in Canada today: approximately 25 in total, of which 15 are in Ontario. The vast majority of these are private stations. If you assume that there are approximately 1,750 natural gas stations in the US, and Canada is one tenth the size of the US, one could assume that Canada has the potential for 175 CNG stations.

In closing, CNG is not a one-size-fits-all solution. Low diesel prices, the Canadian dollar and the premium for CNG trucks are making the business case for CNG less compelling. Today, it costs approximately $60,000 more for CNG versus a diesel truck. The cumulative, incremental cost for 1,000 CNG trucks is $60 million. To build CNG infrastructure to meet that fuel volume would cost less than $30 million. So premiums for the CNG trucks are a large cost and a long payback period to overcome.

1320

If there is meaningful CNG demand, I know that third-party financing could be available for CNG infrastructure. However, to get third-party financing for truck premiums is very difficult, and I think that is where the government can play an important role in reducing the cost delta between CNG and diesel trucks. Thank you.

The Vice-Chair (Mr. Jack MacLaren): Thank you, Mr. Ro. We'll now go to questions, starting with Mr. Mantha of the NDP.

Mr. Michael Mantha: Mr. Ro, did you get through everything that you wanted to get through?

Mr. James Ro: Yes.

Mr. Michael Mantha: Are you sure?

Mr. James Ro: Yes.

Mr. Michael Mantha: All right. I've got a question. I need you to help me out. You talked about financial risks and mitigating that.

Mr. James Ro: Yes.

Mr. Michael Mantha: Give me a bigger picture of what you mean by that.

Mr. James Ro: There's an investment to realize on any fuel cost savings. That comes from getting over the truck premiums, depending on how many trucks are in your fleet that you want to convert. You've got to figure where you want to refuel, whether it's on-site or at publicly available stations along your routes. There are building modifications for when you service a truck: It has to be natural-gas-compliant with the proper methane detection and ventilation, etc. There are a lot of pieces to the puzzle that need to be addressed. For any fleet owner to make that upfront investment, they'll think twice about it.

Mr. Michael Mantha: So that investment, within the context of the bill as it is written right now—is there enough there? And if there's not enough, what would those incentives look like in order to attract greater investment into this industry?

Mr. James Ro: I've been speaking to a lot of fleets and they all talk about de-risking. That certainly means from a financial perspective. If they're going to invest, for example, $60,000 more per truck on a CNG vehicle, they need to be sure that there's going to be a benefit at the end of the road.

Further to that, they can't afford to have any disruptions to their operations. If their truck runs out of fuel and it stops along the highway, that's a cost to get it towed

back to the service bay and spend time in the service bay. That's opportunity cost. So there are all of those things that need to be addressed.

Mr. Michael Mantha: Presently, from what I'm looking at here—20 to 25 stations that are there—you couldn't operate a fleet consistently, presently, throughout the province in each and every one of the jurisdictions? Whether you're in northern Ontario, western Ontario, regardless of where you are, right now, if I'm looking at this as far as the locations, it would be very challenging for you to accomplish that.

Mr. James Ro: Yes. All those stations that are listed there—you can't even access the vast majority of those sites because they're private stations for return-to-base fleets, solely for their own purpose. So there's no public access.

Mr. Michael Mantha: All right. Thank you.

The Vice-Chair (Mr. Jack MacLaren): Thank you, Mr. Mantha. We'll go to the Liberal Party: Mr. Ballard.

Mr. Chris Ballard: Welcome, and thank you for your presentation. There's lots of good information here.

Just a question that—maybe someone has answered it already. A fundamental question: Why is this gas, this fuel, less expensive than diesel?

Mr. James Ro: Because in 2009 there was a shale gas boom in North America. Overnight it increased the domestic supply of natural gas when demand hasn't really—it remains stable. So it's classic supply-demand. I think since then, to today, that really increased the price delta between oil, diesel and natural gas.

Mr. Chris Ballard: Obviously, the cost of that raw product is lower. Is natural gas taxed at the same rate as other fuels in terms of excise taxes when it comes to transportation?

Mr. James Ro: No, not today.

Mr. Chris Ballard: So that might have something to do with it as well.

Mr. James Ro: That's right. Definitely.

Mr. Chris Ballard: So we're looking at a number of areas that you'd like to see government step in and subsidize: trucks, infrastructure for fuelling, and excise tax.

Mr. James Ro: Yes.

Mr. Chris Ballard: Okay.

Mr. James Ro: And then one thing to point out: You can fix natural for five years. Not only do you get a cost advantage for fuel, but you can also fix it over five years and get stable fuel costs. You get the certainty. For a fleet owner, that's important

Mr. Chris Ballard: Good. Thank you.

Ms. Daiene Vernile: James, thank you very much for coming and presenting this afternoon. My home riding is Kitchener, and I've had a chance to visit the waste management in Waterloo. It's a great installation there. So you are looking for support to reduce your costs.

When I look at this map of the States, how much support did you receive in the United States for your installations there?

Mr. James Ro: I'm just Ontario-based, so I wasn't involved in any station build-outs in the US. But my understanding is—and I don't know the details—that the infrastructure growth in the US was predominantly driven by various government incentives for vehicles.

Ms. Daiene Vernile: So you were getting incentives in the US.

Mr. James Ro: No, I'm just a purely Canadian player. I'm Ontario-based, so I have had no involvement in the US. Those are just snapshots of CNG infrastructure for various US players.

Ms. Daiene Vernile: It would be worthwhile to know what kind of supports you are getting in the States to make that comparison for what you are asking for here in Ontario.

Mr. James Ro: Right.

Ms. Daiene Vernile: How about comparisons to other Canadian provinces?

Mr. James Ro: Well, as you can see on, I think, the second-last slide, there's not—

Ms. Daiene Vernile: BC, Nova Scotia, Manitoba, Quebec—

Mr. James Ro: Yes. So 60% of the stations today, the major stations, reside in Ontario. There is no government support in Ontario. I know BC does have some incentive money for vehicles. Quebec does as well: 30% of the vehicle premium to a maximum of $15,000. That's what's available in Quebec—

The Vice-Chair (Mr. Jack MacLaren): Time.

Ms. Daiene Vernile: Thank you very much.

The Vice-Chair (Mr. Jack MacLaren): We'll move to the Conservatives. Mr. Bailey?

Mr. Robert Bailey: I was looking for my partner. He's gone, so I guess it's up to me. Anyway, thanks, James, for coming here and presenting.

A couple of things I wanted to get on the record: When I first drafted this bill, the idea was—I went to a natural gas seminar. It was in Quebec City, and they showed the map of the lower 48 states, and they also showed the province of Quebec. Ontario was a big blank portrait with nothing there. I said, "We need to build this infrastructure along the 401, at least the 400-series highways, for those trucks." I found out that Robert Transport comes into Toronto every day, probably, to the food terminal and back. Those vehicles are powered with LNG today. So my idea was—and I'm glad the other people brought up about the tax structure, because if industry's going to move to this, we've got to leave that tax window alone. It's not a spot for government to move in and take over that revenue just because these gentlemen and ladies would think about converting that. So I want to get that on the record. The GST—the HST portion was just on the difference in the price to help purchase these vehicles.

I've had industry come to me—and maybe you can speak to that, James. Industries came to me and said they are willing to build these refuelling structures. The infrastructure will follow, but they need direction from

government before they convert those fleets, as you said. Maybe you'd like to comment on that.

Mr. James Ro: I absolutely agree. I don't think there's a CNG industry today for vehicles in Ontario. The market's still developing. In order for there to be a robust, big industry, you need demand, and government incentives to reduce that cost dealt out with CNG trucks will be a catalyst for that. So if there's big demand, I think the industry will take care of itself, from infrastructure to building up modifications—the whole execution of CNG infrastructure.

Mr. Robert Bailey: If I've got a second, if you could speak to the point that, as I understand it, truck traffic is less than 3% of the traffic on our highways, but contributes up to 30% of the greenhouse gases, so this would be a dramatic improvement for a society like ours. We say we're moving to a cleaner and better environment, so would this go some way to doing that?

Mr. James Ro: Yes, absolutely. With CNG, to make it work, to build that business case, you need throughput; you need volume. To focus on high fuel consumers would make a lot of sense and make, actually, everything work. The class-A truck market is the right transportation sector to focus on.

Mr. Robert Bailey: Thanks, Jack. I'm done.

The Vice-Chair (Mr. Jack MacLaren): Thank you, Mr. Ro.

UPS CANADA

The Chair (Mr. Monte McNaughton): Our next presenter will be UPS Canada: Ms. Cristina Falcone, vice-president of public affairs. Ms. Falcone? You have five minutes, and you can begin when you like.

Ms. Cristina Falcone: I want to thank the committee for considering what we feel is important legislation to bring Ontario forward in its vision to motivate innovation and investment in carbon reduction technologies and supply chains.

UPS Canada is encouraged by Bill 76, as it is a substantial first step in supporting cleaner transportation across Ontario. The transportation sector is now the second-highest source of carbon emissions in Canada and the highest source of emissions by sector in Ontario. I think all of our transportation industry colleagues agree that this is not a category our sector wants to be leading in. Like this government, we realize the time for action is now.

1330

By working in partnership and sharing the transition costs, UPS believes we can reach our emissions goals together. UPS has always been an early adopter of innovative technologies. In the early 1930s, we introduced electric vehicles into our fleet. Today, we operate one of the industry's largest private alternative fuel and advanced technology fleets, made up of more than 5,000 low-emission vehicles.

Around the world on any given day, UPS is testing out new technology in its global fleet, including all-electrics, electric hybrids, hydraulic hybrids, propane, compressed natural gas, LNG and biomethane. Since 2000, our alternative fuel and advanced technology vehicles have logged more than 500 million miles in the US, Germany, Canada, the Netherlands, Chile, Thailand, Hong Kong, South Korea, Brazil and the UK. We're happy to share what we've learned with the Ontario government.

In our experience, the majority of UPS investments in low-emission vehicles have fallen within the US or international jurisdictions that offer funding to offset investment costs. For example, in the fall of 2015, UPS announced the deployment of 18 electric, zero-emission delivery vehicles to the Houston-Galveston area in Texas. The truck purchases were the result of a partnership with the US Department of Energy, local governments and non-profits.

In BC, the province is offering incentives for companies to invest in alternative fuel vehicles. As a result, UPS has been in discussions to implement a possible program to utilize 60 CNG in-city package cars for use in BC.

UPS would be interested in expanding its fleet of low-emission vehicles here in Ontario, should there be similar commitment and collaboration between government and industry. While there are initial transition costs, UPS believes that once we clear that first hurdle, there will be significant economic and environmental benefits for both our industry and the province.

As you have heard from previous speakers, natural gas represents a cleaner alternative to traditional fuels, especially diesel, for medium and heavy trucks, trains and ships. It is a significantly less expensive and more stable source of fuel, with considerably lower carbon emissions than other transportation fuels. Most importantly, we know it is a stable investment for our industry and government.

California has already made strides with programs like the wildly successful Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project. This is a unique program that helps to speed the early market introduction of low-carbon hybrid and electric trucks and buses. It addresses the biggest barrier to the purchase of medium- and heavy-duty advanced trucks: the high incremental cost of these vehicles in the early market years when production volumes are still low.

Programs like the HVIP in California not only help the transportation industry make the financial jump to low-emission vehicles; they help all consumers by encouraging greater purchase of low-emission vehicles in early market years and bringing overall prices down.

In closing, Bill 76 promotes an important step in positioning Ontario as a leader in greening Canada's transportation industry. I can assure this committee that UPS is committed to operating more sustainably for our customers, the environment and the communities we serve around the world. We look forward to supporting this government and the committee in any work going forward to ensure a cleaner transportation sector in Ontario, reaching our emission goals together.

The Vice-Chair (Mr. Jack MacLaren): Thank you. We will begin the questions with the Liberals.

Ms. Eleanor McMahon: Thank you very much for coming today. Who doesn't know the brown truck, right?

A question for you: We had conversations today and last week about incentives that other jurisdictions are offering to the industry. You mentioned the HVIP in California. Can you tell us more about that?

Ms. Cristina Falcone: This is a voucher incentive program that encourages the purchase of hybrid electric buses and vehicles, but we would recommend a similar program for any type of low-emission vehicle. It's really an up-front credit; in fact, it can be built right into the manufacture so that credit is pre-set per vehicle and offered up front to the purchasers at the time.

In terms of a simplification and a motivator, this would be a preferable choice for our industry, although we do feel that any incentive is a step in the right direction to help balance that financial investment. You'll see an alignment. When you take a look at the map of the US and where certain states are partnering with industry or have programs that use vehicle vouchers, you do see an alignment with investment from the industry.

Ms. Eleanor McMahon: Two quick questions: Can you highlight which US states are doing it well, and second, have you had any conversations with manufacturers to form a bit of an alliance to have a conversation with government about how you could work it? Because you have a huge fleet, I imagine.

Ms. Cristina Falcone: We do. Actually, just this month on the 15th we announced another $100-million investment that we're going to be making in the US, partnering to build fuelling infrastructure, which we'd be interested in doing here in Canada as well. We provided our input into the federal budget on that because we do see the Ontario-Quebec corridor as an opportunity.

But just as propane infrastructure wasn't developed years ago when we started to put those vehicles on the road, that's where we stand right now in terms of fueling infrastructure for LNG and CNG. We would be interested in even partnering on that.

The states where we're going to be putting 380 CNG vehicles in the US and building 12 fuelling infrastructure are Texas, Tennessee, South Carolina, Missouri, Arizona, Nevada, Georgia, Colorado and Pennsylvania.

Ms. Eleanor McMahon: Interesting. Thank you.

The Vice-Chair (Mr. Jack MacLaren): Okay, thank you. We'll go to the Conservative Party and Mr. Bailey.

Mr. Robert Bailey: Did they still have some time left?

The Vice-Chair (Mr. Jack MacLaren): They do.

Mr. Robert Bailey: Okay, I think somebody wanted to ask a question there.

The Vice-Chair (Mr. Jack MacLaren): Oh, you do.

Ms. Eleanor McMahon: Chair, forgive me. My colleague Granville Anderson would like to ask a question. Sorry, Mr. Chair.

Mr. Granville Anderson: Thanks for presenting here today. You're expanding your fleet, I heard you say earlier. Where are these vehicles built, mostly? Do you know?

Ms. Cristina Falcone: I'd have to check in with our procurement group right now, because mostly investment has been in the US.

Mr. Granville Anderson: In the US?

Ms. Cristina Falcone: They're in the US, but we do feel this is an important opportunity for the Canadian market. We do like to source locally if we can.

So, we aren't—and I didn't address that one question. I mean, we do have relationships with the manufacturers here, and the work is just starting. We just started putting our thoughts together and we submitted this white paper. I don't have it today, but I can follow up by sharing it.

We're starting to talk with others in the gas industry and we will be grouping with manufacturers to have these discussions because we've always told the story in the US as an economic story, which it is. In each market, we look at where we can support locally. We'd like to do that. It's just a matter of what makes sense financially as well.

Mr. Granville Anderson: Yes, because I'm wondering in the local economies—

Ms. Cristina Falcone: Yes.

The Vice-Chair (Mr. Jack MacLaren): That would be time.

Mr. Granville Anderson: Thank you.

The Vice-Chair (Mr. Jack MacLaren): Now we will move to Mr. Bailey.

Mr. Robert Bailey: Thank you, Mr. Chair, and thank you, Ms. Falcone, for presenting today. I only have a couple of questions. If this fuel and the infrastructure would have been available here—and this tax incentive, or whatever kind of incentive—UPS in Ontario probably would have made the same investments in their new fleets that you did in the States. How many trucks would you have here in Ontario? Some 50,000 maybe?

Ms. Cristina Falcone: Yes, we've got a number, but we try to map out where we want to make the conversions. We would probably phase them in over the next couple of years.

I handle public affairs for Canada and I would love to be able to tell the story in Canada. In fact, we are a leader in our percentage of total fleet on low emission because we did a lot of investment in propane with the brown trucks on the road, because Ontario had the green fleet program years ago. That's when we made the biggest transition. And then it has kind of reached a plateau.

We're looking for some sort of program so that we can now take that next step on the tractors.

Mr. Robert Bailey: I have another question, too. I think I've got a minute here. You've obviously, I guess in the States—that's the only thing that we can go by—noticed a cost difference in the fuel going to natural gas, or CNG. So now, the big question if I was a customer—those costs, I imagine, are passed on to the customers, like in lower prices compared to someone that's your competitor that's running on diesel or gas. Would those savings be passed on?

Ms. Cristina Falcone: We operate on a fuel surcharge index, which is just based on the fuel that we purchase. That's adjusted quarterly, and everything is based off of that. But we do receive more frequent requests from our customer base to report back on what we're doing for sustainability. So it's not only important for us. We started sustainable because it made financial sense. I mean, years ago even we measured down to the number of kilometres that we drive, but it's becoming more demanding.

Mr. Robert Bailey: The reason I ask that is that I heard people in the larger fleets saying that they were being pushed by—well, we know who they are: Walmart, Costco and the big grocery stores. They want fleets to go to LNG or CNG to keep the cost down so they can keep their costs down to their customers. I'd assume that your industry is probably the same.

The only other question I have is—because this was asked last week—for a driver or operator, there wouldn't be any difference in operating a natural gas vehicle versus a diesel or a gas; it would just be minimal training?

1340

Ms. Cristina Falcone: There is some training, and so we would request, if possible, assistance with the training, mainly with the shop upgrades; there's an investment there to be made. But it's not a huge leap in terms of training.

Mr. Robert Bailey: Okay. Thank you. That's all I have.

The Vice-Chair (Mr. Jack MacLaren): We will now move to Mr. Mantha of the NDP.

Mr. Michael Mantha: Coming from a northern riding, there are a lot of people who really look at their choices as far as what they're doing. We've seen the cost of electricity jump up, so people are looking at other options, but they're doing it in a very responsible way.

I'm going to bring up the F-word: fracking. People are concerned about going to gas, because it's cheaper, yes, but are we going down the avenue that we want to go? Is it going to be as environmentally friendly as we believe? Are we going to recognize what is happening within the gas industry? Because the price of gas right now is cheap because of the abundance of gas that is available through fracking, right? So some of the people are challenged, making those decisions, weighing "Should I do it? Should I not do it?" They want to be responsible.

As UPS, a corporate entity, how do you see your footprint? How do you see making this a responsible decision for you that—yes, by converting from diesel and going towards the gas, there's less emissions for sure. But are we considering the impacts that it may have environmentally?

Ms. Cristina Falcone: Well, we always look at the situation from a long-term scenario. Like I said, we made this recent investment, even into CNG. But we are testing different fleets globally and our long-term objective would be to move to renewable natural gas.

The good thing, what we like about CNG and LNG, is that it's scalable and ultimately zero emissions. We do see this as a transitional technology. The good thing about it is once that investment is made, it is scalable up. That investment is there, and eventually we can move to a renewable natural gas format, which again lowers the impact from a sustainability perspective, and then on to zero emissions, as we've made that evolution in the US.

Mr. Michael Mantha: Which basically answers my second question. As the good corporate citizen that UPS is, have you looked at the alternatives? What if, due to global pressures that are going to be put on the F-word, which is fracking, they may change from that technology or they may change from extracting the gases that way? What other avenues have you looked at, considering?

Ms. Cristina Falcone: On the RNG side, we were encouraged by the federal budget announcement yesterday to allocate funds for investments into electric infrastructure. We'd like to continue that dialogue and how that can be done right down to the provincial level, because for in-city driving, that's an opportunity.

We run what we call a rolling laboratory fleet, and we're testing out technologies globally. Certain types of energy work better in different markets. Propane works well in the cold, for example. Electric is not at the point where it can work for the heavy trucks yet. But we're continuing to test and roll out.

Right now, we see CNG and LNG as the transitionary mechanisms for today.

The Vice-Chair (Mr. Jack MacLaren): Time.

Mr. Michael Mantha: Thank you.

The Vice-Chair (Mr. Jack MacLaren): Thank you, Ms. Falcone.

CANADIAN NATURAL GAS VEHICLE ALLIANCE

The Vice-Chair (Mr. Jack MacLaren): Our next presenter will be from the Canadian Natural Gas Vehicle Alliance: Mr. Bruce Winchester, the executive director.

Hello, Mr. Winchester.

Mr. Bruce Winchester: Thank you, Mr. Chair. Honourable members, I'd like to thank you for the opportunity to appear before your committee to talk about and outline Ontario's natural gas transportation opportunity.

The Canadian Natural Gas Vehicle Alliance is the national association representing Canada's natural gas vehicle industry. Our membership includes natural gas distributors; manufacturers of vehicles, vehicle equipment and fuelling equipment; research and development; innovators; engineering service providers; fleet operators; and natural gas vehicle enthusiasts. Our mandate is to promote the adoption of natural gas vehicles in Canada. We support safety through the development of codes, standards and training, research and innovation, both within our member companies and research universities. In partnership with the government of Canada, we've engaged in outreach to encourage vehicle adoption.

Transportation is a crucial industry in Canada. It employs almost one million Canadians and is a $70-billion-per-year industry. The second-largest source of greenhouse gas emissions and other air pollutants comes from this sector. In such a vast country as Canada, finding cost-effective, low-emission transportation is an enduring challenge, but it's one where natural gas can play a critical and crucial role.

Ontario is a central junction point in Canada's national transportation network. Ontario's 400-series highways are part of North America's busiest transportation corridors, linking interconnected enterprises in a global economy. As an economic sector, Statistics Canada tells us that it is a $23-billion-a-year industry with over 119,000 heavy vehicles and 30,000 buses.

This sector accounts for the largest portion of Ontario's greenhouse gas emissions, and, within that, heavy vehicles account for the biggest proportion of that. That means that Ontario should be focused on encouraging the adoption of low-emissions technologies like natural gas. Bill 76, the Natural Gas Superhighway Act, is a shining example of our legislators rising to this challenge.

MPP Bob Bailey is to be commended for introducing this legislation as a private member's bill. PM bills have been at the forefront of significant legislative changes in Canada, and when they enjoy the kind of multi-partisan support that I see here today, this is the kind of situation where we have an opportunity for a significant win.

The proposal focuses on one of Canada's key transportation corridors. It recognizes the need for higher weight restrictions—and that accounts for the properties of natural gas as distinct from diesel—and it provides some modest tax relief associated with the higher capital costs of buying alternative-fuel vehicles. But what it would do is make a significant contribution to Ontario keeping transportation costs low and also reducing the associated emissions.

As this committee has heard and will hear from others, natural gas vehicles are a proven technology. Cummins Westport, which is a joint venture of North America's leading truck engine manufacturers, builds three different engine sizes and supplies to all truck, bus and refuse vehicle manufacturers. Cummins Westport has developed three generations of natural gas engines, always incrementally improving on the performance of the last generation.

Agility Fuel Systems and Luxfer Canada have been providing natural gas fuel tank solutions to equipment manufacturers and innovating and extending the ranges of vehicles as they go.

Finally, Westport has developed a variety of vehicle technologies, including the high-pressure direct injection system, which has been referred to, in some of the LNG tractors.

Ontario-based fleets owned by leaders like Emterra Environmental Waste Management, Progressive Waste and the Hamilton Street Railway are, as we speak, running on natural gas. On Ontario's 401 highway, heavy trucks owned by Quebec-based firms like Robert Transport and CAT are, as we speak, running on natural gas.

This committee has heard and will hear from others who will understand the economics of natural gas markets, and we've heard a fair bit about it. The bottom line is that even with today's petroleum prices, natural gas can be delivered to vehicles at a competitive price.

Like many novel technologies, the key here in getting those economies of scale is to have large volumes of trucks adopting it. If you can imagine matching the performance that we see at the 180 cardlock facilities that dispense diesel—if we could match that level of throughput, the price of natural gas fuel could be significantly cheaper than diesel, even today.

Traditional diesel fuel trucks, unlike natural gas vehicles, have fairly high emissions characteristics, and this is—

The Vice-Chair (Mr. Jack MacLaren): You have 30 seconds.

Mr. Bruce Winchester: This is an important thing to keep in mind when we have an opportunity to reduce as much as 50 tonnes per year with a truck, and that is nearly double the emissions that you'd see, for instance, from a Tesla passenger car.

We believe that this bill has laser-like focus on the right set of vehicles to deliver significant environmental gains for Ontario, and we enthusiastically support it. I look forward to your questions.

The Vice-Chair (Mr. Jack MacLaren): We'll go to questions with Mr. Bailey.

Mr. Robert Bailey: Thank you, Mr. Winchester. I can't say I'm neutral on this, so I've got to say thank you very much for your comments.

Based on your experience in other provinces and US states, which jurisdictions are leading? Maybe we know this from some of the other—but in your opinion, which jurisdictions are leading in the natural gas transportation file?

Mr. Bruce Winchester: I'll tell you about the two Canadian jurisdictions, which are Quebec and British Columbia. You ought to pay a lot of attention to Quebec. I refer to Quebec-based fleets that are coming into Ontario. Adjusting the weight restrictions, looking at ways to increase the infrastructure, will go a long way to deal with those fleets that are coming into Ontario, currently running on diesel. We'd like to see them running on natural gas, and I think you have an opportunity there as well.

Mr. Robert Bailey: You talked about Robert Transport coming into Toronto every day and returning. This would start out at least as a minimum for the 400-series highways for delivery of groceries and delivery of all kinds of freight to different sectors.

1350

There was a map handed out earlier. If I look at that map of the United States, the lower 48, and in Quebec where we have this infrastructure already in place—like I said, I've had people approach me from the industry. They're willing to build the infrastructure. So I think it's the old, "Which comes first: the chicken or the egg?" I think here in this case, we need to encourage these fleet

owners to make that conversion and then the rest will follow. Would that be—

Mr. Bruce Winchester: The legislation is a great first step, but the reality is, and as we presented to the federal government just a few weeks back, we're suggesting investment both in the incremental costs of vehicles, just the part that relates to natural gas, not the whole price of the vehicle, and in some of the incremental costs associated with building compression and cardlock facilities. You've got to remember that gasoline retailers don't have a very large margin and don't have access to a lot of capital. Helping them out by making those investments in compression so they can service these CNG or if they opt for LNG vehicles would go a long way. We saw $62 million in the federal budget. This bill could go a long way to help Ontario get its share of that money, by making that change on the weights and showing that it's a natural-gas-friendly jurisdiction.

Mr. Robert Bailey: I think we're always interested in that in Ontario: getting some money from the federal government. Thank you.

The Vice-Chair (Mr. Jack MacLaren): We'll move to Mr. Mantha of the NDP.

Mr. Michael Mantha: One first question I have to ask you: Did Mr. Bailey put you up to saying all those nice things about him?

Mr. Robert Bailey: We've never met before.

Mr. Bruce Winchester: I've never met Mr. Bailey before, but, Mr. Mantha, I'll say some nice things about you. As I mentioned, this kind of initiative can only go forward with multi-party support. We really appreciate that all of the legislators are working together. So you're all to be commended. Don't worry about that.

Mr. Robert Bailey: Put it on your Christmas card.

Mr. Michael Mantha: I'm glad you're here. I wanted to ask you a question in regard to licensing. The drivers who are going to be operating these vehicles: What is the additional cost or what is the specified training, licensing—anything and everything—that would be expected for the truck drivers, from an industry perspective or from a driver's perspective? Are there any additional costs that are tied to this?

Mr. Bruce Winchester: I'm glad that you've asked me that question. As an organization, we've worked in partnership with the federal government to develop training courses for drivers in dealing with refuelling LNG and CNG. Those will be available in video form to any fleet that adopts, and to any cardlock stations. We provide that for free.

We also are working with Canada's college sector to ensure that vehicle technologists and inspectors are given an opportunity at college-level certification and training to deal with maintenance and repair of these vehicles. The maintenance costs of these vehicles are not greater than diesel, and some would argue they are less expensive than diesel. There are some differences. It's important to know those differences. We have worked with the federal government, and our member companies are actively building those courses. We're making them available for free to Ontario's college sector. I invite them to take advantage of that.

I guess the other thing I should mention while I mention colleges is that we've got a network at the University of Toronto that is doing some cutting-edge research on the next generation of engine technologies as well.

For northern Ontario, I'll point out that there's a company called Lockerby Taxi in Sudbury—I don't know if that's near your riding because I don't know where your riding is—

Mr. Michael Mantha: My riding is northern Ontario.

Mr. Bruce Winchester: Oh, way northern Ontario. Sudbury doesn't count, at least for your purposes, but Lockerby Taxi is in the process of converting to CNG for their taxi fleet. As you may or may not know, the only natural gas vehicle available in the passenger vehicle segment actually rolls off an Ontario assembly line in Oshawa. It's an Impala that's available equipped from the factory with both natural gas and gasoline capabilities. If you were going to look at that for a personal vehicle, it would be a bit challenging to refuel it right now, but we're working on it.

Mr. Michael Mantha: Being responsible for the groups that you represent, you're already looking at the what-ifs. Right now, this is what's going to answer the question as far as reducing emissions. I'm sure you're already considering, "What if this doesn't pan out?" What is the next step?

The Vice-Chair (Mr. Jack MacLaren): Time, Mr. Mantha.

Mr. Bruce Winchester: That's a great question. There was a group of people with Pollution Probe yesterday who are looking at this very question in Ontario: deep pathways to get to near-zero carbon emissions in transportation. Natural gas is a great start. We're at 17% on a life-cycle-basis reduction in emissions—which accounts for fracking, by the way—but we could do better. Theoretically, you could get 30% reductions just on conventional natural gas, and then there's the whole issue of renewable natural gas, which takes solid waste that we can't do a lot about and turns it into a gas we can use.

The Vice-Chair (Mr. Jack MacLaren): Mr. Winchester—

Mr. Bruce Winchester: Sorry, I apologize.

The Vice-Chair (Mr. Jack MacLaren): We'll move over to Ms. Wong from the Liberals.

Ms. Soo Wong: Your organization is an advocate for the natural gas industry. Last week, witnesses came forward and I had asked a similar question: Has your organization looked into concerns that were raised last week about the potential damage to the roads, as well as the infrastructure, with this particular type of gas?

Mr. Bruce Winchester: The fuel itself doesn't pose any real danger on the infrastructure side. The bill proposes a modest increase in weightings. I'd point out that Canadian weightings on highways are much higher. In western Canada they're almost double what's allowed in Ontario. I think you've got a long way to go before this

weight increase will have a real negative effect on existing infrastructure that you have in Ontario. It's worth considering. It's an important point. So far, we've not seen natural gas contributing to increased wear and tear on infrastructure.

Ms. Soo Wong: Okay. I think my colleague may have some questions for you.

Mr. Chris Ballard: Great. Thanks for the presentation. Lots of good information. Whenever anyone comes to us, any organization or group, and says they have a great idea, I'm always looking for the total business case. What I'm hearing so far, and correct me if I'm wrong—I know there are concerns out there about weight increase for vehicles and the impact that will have on roads and bridges. I'm hearing about a need for government funding for infrastructure and government subsidy for fleet. At the same time, I haven't seen it explicitly, but I would imagine that continuation of waiving any fuel excise tax—are those the four areas that you see that the industry as a whole is looking at? Am I missing anything, because we need to wrap our minds around the whole picture—

Mr. Bruce Winchester: It's all about tipping points, really. It's a new, novel fuel, and we're comparing an industry like diesel that has had 100 years to develop all of their supply chain. They know what they're doing.

We're not trying to reinvent that. We're trying to use as much of that as we can. The real challenge is that you go to a fuel company that has got a cardlock station and say to them, "Hey, why don't you put a natural gas compressor on there?" They say, "That would be great, but I don't have $4 million or $5 million upfront for investment." They will recoup that investment over time, no question. But to get those first few fleets out there, to get 400, 500 or 1,000 vehicles running up and down those heavy highways, and maybe if we want to get some vehicles in northern Ontario, we might have to build some locations in some out-of-the-way places, is going to require a little bit of money. But again, it has got to be a partnership between government and the industry. When I made a submission to the federal government, who I figured had a little bit more money than Ontario to spend on us and a broader reach—

The Vice-Chair (Mr. Jack MacLaren): Time.

Mr. Bruce Winchester: So we asked them to fund both the vehicles and the infrastructure to get over those tipping points.

The Vice-Chair (Mr. Jack MacLaren): Time. Thank you very much.

Mr. Bruce Winchester: I was trying to give them back their time. Sorry, Mr. Chair.

The Vice-Chair (Mr. Jack MacLaren): Thank you very much.

ONTARIO TRUCKING ASSOCIATION

The Vice-Chair (Mr. Jack MacLaren): Our next presenter will be the Ontario Trucking Association, Lak Shoan.

Mr. Shoan, you have five minutes and can begin when you're ready.

Mr. Lak Shoan: Thank you. Good afternoon, and thank you for having me here today. My name is Lak Shoan, and I'm here on behalf of the Ontario Trucking Association and our membership to speak in support of the Natural Gas Superhighway Act.

The Ontario Trucking Association is one of the largest associations in all of North America. Our membership includes the largest publicly traded companies and also the smallest family-owned businesses. We represent all segments of the trucking industry, ranging from for-hire carriers, private carriers, intermodal and supplier members. We've been the voice of responsible trucking in Ontario since 1926.

The government of Ontario has identified the prevention of climate change as a major environmental and economic priority. It has announced its commitment to introducing measures to reduce greenhouse gas emissions, including the introduction of a carbon cap-and-trade system. The transportation sector has been identified as a major contributor to greenhouse gas emissions, accounting for 36% of the province's emissions in 2013. Heavy-duty diesel vehicles are responsible for more than 25% of these emissions, or roughly 7% of Ontario's total emissions.

1400

The trucking industry's economic and environmental goals are more aligned with society's goals and the government's objectives than ever before. From a trucking perspective, the best way to reduce GHG emissions is through improved fuel economy. Fuel represents the second-leading component of operating costs, next to labour, for fleets. The industry has a natural incentive to increase fuel economy and, in doing so, reduce GHGs.

The trucking industry is going green, and that trend will continue to move forward in the future. Carriers have already invested billions of dollars in aerodynamic devices, such as fairings and side skirts, new tire technology and engine improvements to reduce GHG emissions. Investing in natural gas would be a logical progression in adopting less-carbon-intensive technologies.

In the short term, the greatest potential for a fuel transition in Ontario would be through class 6 to 8 trucks, employing engines operating on natural gas, due to engine availability and reliable technology. Electric vehicles and hybrid technology for heavy trucks will not be available in the near to medium terms, and there are no other truly viable alternatives to diesel in the industry other than natural gas.

There are a number of market barriers impeding the use of natural gas in the industry today, most of which revolve around the issue of risk. In order to create the impetus for fleets to shift towards natural gas, the risks associated with this shift need to be greatly minimized, making sense from both an economic and logistical standpoint. Barriers to entry into the natural gas market include the lack of distribution and refuelling infrastructure in Ontario, the higher cost of capital compared to

conventional diesel vehicles, and regulatory barriers, such as tank weight allowances.

Clearly, infrastructure development is crucial to the success of natural-gas-powered fleets in the province. A network of refuelling stations along the 400-series highways and parts of northern Ontario would need to be built in order to make regional and long-haul applications both logistically and economically viable. Developing strategic partnerships with the gas industry in order to assist in the building and planning associated with infrastructure would be very important.

The broader usage of natural gas and similar type technologies has been slowed by the incremental cost of purchase. For example, the purchase price of natural gas trucks to comparable diesel trucks would come with the additional cost of $60,000. There is currently no incentive for carriers to take on the additional risk, with the current price of diesel being stable and the value of the Canadian dollar being where it is currently. Incentives to cover the spread between natural gas and diesel trucks would help de-risk the market and drive throughput into the industry.

The opportunity for Ontario to adopt these cutting-edge technologies is great. Some Western Climate Initiative members, including California, Quebec and British Columbia, have taken aggressive steps forward in promoting alternative fuel technology through various programs, tax incentives and grants.

From a regulatory standpoint, a weight exemption of up to 2,000 pounds to offset the increased weight of natural gas tanks would be required from a business perspective, to ensure carriers can make this technology viable without operating at significantly reduced costs. Without these changes, trucks are limited in their Canadian and cross-border operations.

In short, fleets in Ontario are ready to make investments which make economic sense, supported by strategic infrastructure and incentives to drive down the price of technology. The technology is tested and as reliable as ever before. It's available, more environmentally friendly than diesel, and proven to be successful in other jurisdictions across North America.

We are excited about the possibilities and the potential that natural gas could provide to our members, the trucking industry, and the pivotal role we will play in reducing road freight emissions in Ontario—

The Vice-Chair (Mr. Jack MacLaren): Time. Do you need much more?

Mr. Lak Shoan: Nope, just a little bit more.

The Vice-Chair (Mr. Jack MacLaren): Okay. Go ahead.

Mr. Lak Shoan: —providing a clean, cost-effective and reliable option to diesel.

I would like to thank the committee for their time this afternoon, and I look forward to your questions.

The Vice-Chair (Mr. Jack MacLaren): Thank you. We'll have our first question from the NDP. Mr. Mantha.

Mr. Michael Mantha: Did you get through it all?

Mr. Lak Shoan: I did, thank you.

Mr. Michael Mantha: You're good? Great.

A simple question: Why the heck aren't we doing it in Ontario, then?

Mr. Lak Shoan: Fleets need the incentive to make the purchase of natural gas. Right now, the delta between a diesel engine and a natural gas engine is $60,000. Fleets aren't going to take the risk in terms of putting that money up front. Diesel right now is something that has been traditional in the industry. It has been used for as long as the industry has been around. Moving from diesel to natural gas would be a change, but the biggest impediment would be the cost, the $60,000 that is between the diesel engine and the natural gas engine.

Mr. Michael Mantha: You talked about other incentive programs in other jurisdictions such as, I believe, British Columbia. What do those look like?

Mr. Lak Shoan: In terms of British Columbia, I believe there is a big cover, up to 100% of the conversion costs for class 8 trucks. In Quebec, it's up to $25,000 for class 8 trucks, as well. So those are two of some of the comparable programs in terms of natural gas.

Mr. Michael Mantha: The $25,000 in Quebec is equivalent to what, as far as a ballpark percentage?

Mr. Lak Shoan: In terms of—sorry?

Mr. Michael Mantha: Versus the BC model of 100% coverage. That $25,000: What is it the equivalent of in Quebec?

Mr. Lak Shoan: I wouldn't be entirely sure in terms of the actual numbers. I know that in Quebec, it is up to $25,000 in terms of the coverage for class 8 trucks for natural gas.

Mr. Michael Mantha: You talked a little bit about regulatory barriers preventing you—or that those changes would need to happen in upcoming legislation. You talked about the weight of your specific vehicles and what they can carry. Can you help me out, just so I can understand that a little bit better?

Mr. Lak Shoan: Yes. The natural gas tanks are an additional 1,500 to 2,000 kilograms. That would come at the cost of additional payload, so it would affect the bottom line of carriers who are using natural gas technology. That would be a major impediment in terms of losing the cost per load on the carriers.

Mr. Michael Mantha: Again, pardon my ignorance. The additional weight on them is because of?

Mr. Lak Shoan: The extra weight of the tank itself and carrying the fuel.

Mr. Michael Mantha: Oh, okay. All right. Thank you.

The Vice-Chair (Mr. Jack MacLaren): Thank you. We'll move over to the Liberals. Ms. McMahon?

Ms. Eleanor McMahon: Thank you for coming.

Mr. Lak Shoan: Thank you.

Ms. Eleanor McMahon: This is very interesting. Has the industry done any economic impact studies? You've talked about the $60,000 cost, and I'm thinking that on a fleet, for example, if you're a large operator—what you're trying to tell us is that that is a cost the industry is not eager to absorb.

So have you done any economic impact studies? Because I know that some of your members have invested in side skirts, for example, that are about $3,000 a pop. I'm assuming that somewhere, someone has done an economic impact. Have you guys invested in that? Have you got a sense?

Mr. Lak Shoan: Currently, we haven't done a lot of economic impact studies in terms of the extra $60,000 cost. Members are making a lot of investments into different green technologies such as side skirts and fairings.

But looking specifically at natural gas and how to cover that $60,000 threshold, we haven't done a ton of research on that as of yet.

Ms. Eleanor McMahon: De-risking the purchase of technology: How do we help the industry do that in the context of trying to get you to use more environmentally sensible fuel choices? Because if it's not $60,000—have you met with the manufacturers of engines, for example, and had a conversation on how you can lower costs?

Mr. Lak Shoan: In terms of the engine manufacturers, I can't speak specifically to that. In terms of our membership, the major issue would be the cost that's involved and the lack of infrastructure currently present in Ontario.

In terms of the infrastructure, it's my understanding that it can be built if we have the necessary throughput and the necessary volume of trucks that are on the road.

In terms of the carriers that we represent, definitely the cost delta, the infrastructure and the tank weight allowances would be the three major factors.

Ms. Eleanor McMahon: If you look at other jurisdictions around North America, given that most of your fleets travel internationally, I would assume, can you tell us about some places where this is happening and it's working?

Mr. Lak Shoan: I know that in California they have a fairly robust natural gas program and alternative fuel program. In Quebec, they also have a natural gas program that provides up to $25,000 for class 8 trucks. There are also incentives in the state of New York offered for natural gas and other alternative fuel technologies. In terms of British Columbia, FortisBC has a very robust program there, as well. Those are some of the other jurisdictions that offer these types of programs in North America.

Ms. Eleanor McMahon: Thank you, Mr. Chair. I don't know if any of my colleagues—

Mr. Granville Anderson: I have a quick question along the same lines. If you haven't done a cost analysis, as you said—there's a big difference in price between natural gas and regular gasoline.

Mr. Lak Shoan: Correct.

Mr. Granville Anderson: Wouldn't you be able to recoup some of that cost by purchasing a natural gas vehicle versus a conventional vehicle? If so, how much of that cost—okay, if you want some kind of subsidy—

The Vice-Chair (Mr. Jack MacLaren): Time. Good question.

Mr. Lak Shoan: Saved by the bell, I think.

Mr. Robert Bailey: Do you want to answer that?

Mr. Lak Shoan: Sorry, if you would just finish off the question.

1410

Mr. Granville Anderson: I'm just saying that if you could say a figure, that $20,000 versus $60,000 would offset the differential over five years or whatever time frame; I don't know the life expectancy of a truck.

Mr. Lak Shoan: Yes, in terms of the life expectancy of the truck, another big issue is going to be writing off the truck and the depreciation. If people buy these engines in these trucks right now, there's little to no value because the market is not present for natural gas trucks. That would definitely be another issue that's going to be coming to the forefront. Taking a look at exactly that $60,000 question would be another thing we'd have to investigate a little bit further on our end, I think.

Mr. Robert Bailey: Okay, I'll jump back in here now.

The Vice-Chair (Mr. Jack MacLaren): Mr. Bailey.

Mr. Robert Bailey: I was letting him finish there. I don't have a lot of questions. I've heard a number of them.

Other jurisdictions in Canada and the United States are much further ahead on converting to natural gas. Maybe you can just encapsulate some of the reasons for that. Was it the incentives? I heard you mention the incentives. And what do you think the major fears in your industry are about converting to natural gas—that the government might get cold feet down the road and back off? Would that be a concern in the industry? Do they need to see that the government is in this too, that they've got skin in the game, a favourite term that a lot of people use? Is that—

Mr. Lak Shoan: I think truckers in general are very risk-averse. They've been very traditional in the way they've been doing things for decades. I think that's the case for everyone I've really talked to. For them to make the leap going from diesel to natural gas, there really has to be a very strong business case. That business case definitely revolves around where the price of diesel is compared to natural gas and what the prices of these trucks are compared to regular diesel trucks.

Mr. Robert Bailey: Is my time up yet?

The Vice-Chair (Mr. Jack MacLaren): You've got another minute, Bob.

Mr. Robert Bailey: Okay. Anyway, I really appreciate you coming in today and talking about this. If you've got some things to close, I don't have any more questions. Is there something you'd like to say?

Interjection.

Mr. Robert Bailey: It looks like Daiene has one.

Ms. Daiene Vernile: I've got a question.

Mr. Lak Shoan: Sure.

Ms. Daiene Vernile: Forgive me if this seems obvious, but you represent 70,000 men and women who work in trucking. Is there great support for truckers to convert over to this kind of energy, or are they stuck in their ways?

Mr. Lak Shoan: For some of them, they are kind of stuck in their ways. I think the biggest thing is to make the business case. If you can make a business case that impacts your bottom line and they're going to be able to save a lot of money, they're definitely going to be all for it. If we can show them that moving to natural gas is going to be financially successful and is going to be better for their bottom line, they'll definitely see the business case for moving towards natural gas.

Ms. Daiene Vernile: But there is that amount that you have to pay up front, right, to make the conversion?

Mr. Lak Shoan: Correct.

Mr. Robert Bailey: I'm done, Mr. Chair.

The Vice-Chair (Mr. Jack MacLaren): Good question, Bob.

Thank you very much for your presentation.

Mr. Lak Shoan: Thank you.

CAT INC.

The Vice-Chair (Mr. Jack MacLaren): Our next presenter will be by teleconference call; he can't be with us. It is a man from CAT Inc. His name is Mr. Daniel Goyette and he's president of CAT.

Mr. Goyette, are you with us?

Mr. Daniel Goyette: Yes, I am.

The Vice-Chair (Mr. Jack MacLaren): Hello. My name is Jack MacLaren. I'm the Chair. The procedure here will be that you start with a five-minute presentation, and then we'll have three minutes for each of the three parties to ask questions of you. If you're ready, you can begin now.

Mr. Daniel Goyette: I am ready. Good afternoon, everybody. I'm sorry I cannot be there in person. I will do my best in making that through a conference call.

My name is Daniel Goyette. I'm the president of CAT. We are a transportation head office here in Quebec. We have terminals throughout Quebec, Ontario and the US. We run a fleet of 350 tractors. We run from Quebec and Ontario all the way down to Mexico, and also on the east coast all the way down to Florida. We're primarily in international transportation; the majority of what we do is OEM for original equipment for the automotive industry. We just transformed a third of our fleet into natural gas. I want to make it clear that it's compressed natural gas: CNG. All of these trucks were OEM-purchased, so it was all installed at the factory. It's an OEM product; it's not a retrofit product.

We have 40 of these trucks on the road right now, out of 100. They've all been delivered here in Quebec. We just started the process of putting them on the road starting January 1, and now we have 40 on the road. We did our evaluation for the last two years. The main thing we had done was to find the right partner in regard to the fueling station, in regard to the truck supply and maintenance, and the right package for the financing of the business because, as you all know, the natural gas aftermarket is not there, so we worry about being able to bring a company on the market—a company called Ryder—but there are other companies out there that are prepared to do the same thing.

Currently, out of the 40 trucks that are running throughout North America, not one of them has run out of gas and not one of them has had any issue with the product itself. Actually, right now, all of our drivers that are in these trucks are telling us that if they had the option to go back to driving a diesel truck or to stay with natural gas, they would stay with the natural gas. So everything is really positive.

When it came time to buying these trucks, and you look at the grant—I heard the gentleman before me who said that in Quebec it's $25,000. Actually, it's 30% of the extra cost for natural gas. So if the extra cost of buying a new truck is $50,000, there's a $15,000 grant that we have in Quebec. They're saying that they're going to increase that, but this is what we have today.

In the US, they do have a federal grant right now. It is applied at the pump. It doesn't get applied by the state; it's applied at the pump. Any station throughout the United States, every time we have a truck pump natural gas, we're getting 50 cents per gallon at the pump. So, basically, if the natural gas goes for $1.50 per gallon, my supplier of natural gas will bill me $1. So they already have that 50 cents, which is about 30% of the total cost right now for natural gas.

Another issue that a lot of people are talking about is the weight. The US already passed the 2,000-pound extra, so these trucks can run up to 82,000 pounds gross in the US. As you know, when you run international, the maximum weight in the US—with some exceptions like Michigan—is 80,000 pounds gross for the tractor-trailer and cargo. Now we can have 82,000 to offset that 2,000 pounds extra.

For us, because we are an international carrier, it doesn't bring any issue in Quebec and Ontario because with the same configuration of equipment we can have 88,000 pounds in Ontario or in Quebec with a five-axle tractor-trailer. So the weight for international movement is not a burden because it's already in place.

As you know also, in regard to weight, these engines that are available for class 8 trucks—and I'm only talking about class 8 because that's what we have—have been rated for 80,000 pounds. So if someone wants to have 88,000 pounds with these engines, these engines are not built for that. So, right now, this is the technology that exists on the Cummins 12-litre engine. I know there are other products there for retrofit, but we're not there yet.

Do I still have time?

The Vice-Chair (Mr. Jack MacLaren): You have 30 seconds.

Mr. Daniel Goyette: One question people brought in is, "What's the big fear?" The big fear actually is—in Quebec and Ontario right now, we don't have road tax on natural gas. Everybody says, "Wait. When we're all there, we're all going to be taxed." My answer to that is, "I don't have it now, so I'm going to live with that fear."

The other big thing is having more information for companies that want to go to natural gas, because I went

through this in three years. For someone who never touched it, it's a long way to get there. But with some help, they can understand the principles.

The Vice-Chair (Mr. Jack MacLaren): Thank you, Mr. Goyette.

We will start with questions from the Liberal Party now. Who from the Liberals? Ms. Wong? No, Mr. Ballard.

Mr. Chris Ballard: Thank you very much for joining us by phone today. I appreciate you being here.

We've heard numerous times over the past couple of days that natural gas engines are often more expensive than their diesel counterparts. What did your company do to address those additional costs?

Mr. Daniel Goyette: When you buy a new truck with a natural gas engine, it's not more expensive. You have less exposure to the truck. You have less components around the engine. What is more expensive is the tank package. The tank package costs about $50,000, but if you remove the tank package and you buy a brand new truck with a brand new engine, it's not more expensive.

1420

Mr. Chris Ballard: Okay. How did your company deal with that, then? Whether it be the engine or the tank package, the overall price, we're told, is higher.

Mr. Daniel Goyette: It is.

Mr. Chris Ballard: So how did your company deal with that in the trucks that you bought?

Mr. Daniel Goyette: When we did our ROI—yes, the truck we bought, we paid $200,000 for it and a regular diesel truck was $150,000, but we were able to spread out the amortization on the truck. The tank package had a 20-year value compared to the truck only having maybe a 10-year value. So we were able to stretch it out, but we do have an extra cost per month per truck. It's about $1,000 per truck per month.

Mr. Chris Ballard: Okay. And that cost is made up because of the lower cost of fuel or maintenance?

Mr. Daniel Goyette: Yes. The lower cost of maintenance: I would say that we don't have enough expertise at this point to say it's going to be lower, but for now it doesn't look higher. So we use the maintenance as is, compared to diesel, and the difference is all about the cost of natural gas.

I have to tell you, I was pretty happy on December 23 when the US federal announced 50 cents a gallon because actually the natural gas, including the cost of the truck, was higher. With that 50 cents and what we pay in Quebec and Ontario right now, we're on the positive side, including the cost of the truck, but that's not putting in the infrastructure of our shop that we spent three quarters of a million dollars to upgrade, or the network. That's also including the grant that we have from Quebec.

Mr. Chris Ballard: So from your perspective, this is a good deal, provided the government doesn't come along and put an excise tax on fuel?

Mr. Daniel Goyette: Exactly.

Mr. Chris Ballard: Okay. I don't have any other questions. Do you?

The Vice-Chair (Mr. Jack MacLaren): There are only nine seconds.

Mr. Chris Ballard: It's only nine seconds—

Interjections.

The Vice-Chair (Mr. Jack MacLaren): So we go to Mr. Bailey.

Mr. Robert Bailey: Thank you, Mr. Goyette, for coming by teleconference today and testifying. I only have one question. We've heard so much today—it's getting confusing, all the numbers. A little different question for me: Have you received a positive response from your customers that you ship to when you tell them that your trucks are powered by either LNG or natural gas? Is that a positive for your customers that they're contributing in some small way to the environment?

Mr. Daniel Goyette: It is. Every time we talk to them, they're happy to hear that we're on natural gas—mainly on the US side; not in Canada. The Canadian customers that we have are still evaluating the positive side of that. We don't get paid more because we have natural gas. We may have more recognition, but again I'm only in there since the last three months.

Mr. Robert Bailey: Yes. Okay. When you finally made that decision—I think you said you moved to this position over three years. What was the initial or key reason that you started to switch a third of your fleet—I think I wrote down "a third of your fleet"—to natural gas or CNG? Was it just somewhere you thought the market was going and you wanted to be there? I suppose it was a combination of things—cost. Could you tell us a little on that?

Mr. Daniel Goyette: When we did the ROI on the trucks and oil was $80 to $100 a barrel, it made sense for us to go. Everybody didn't want to go because of the chicken and the egg. There were no stations, so nobody was buying trucks; nobody buys trucks because there's no stations. That's why we had to go with 100 trucks and at least having the two stations in our main corridor, one in Montreal and one in Toronto. The station that Emterra has on their site: That's part of our partnership with them. So now we have the corridor covered between Quebec City all the way to Detroit, and then the US is not an issue.

So when we looked at the whole network and we went to 100 trucks and having the grant from Quebec, and we were paying, at the time in the US, $4 a gallon for diesel and we look at the gas, it was like half the price. The other thing about natural gas compared to diesel is that when you look at the cost of natural gas, only 20% of that cost is the gas. The rest is all transportation. So when people say, "The gas would go up like diesel," gas may go up, but it will never go up like diesel. Diesel will follow the barrel, but it represents only 20% of your total cost. The total cost that I have—we have a 10-year guarantee from our supplier that that's not going to change.

The biggest thing is the original investment. The infrastructure for us is good. Can it improve? Yes, we can build more. But I'm talking for CAT. At CAT, we have it 100% covered and we don't have any issues.

The Vice-Chair (Mr. Jack MacLaren): Time's up.

Mr. Robert Bailey: Okay. Thank you, Mr. Goyette.

The Vice-Chair (Mr. Jack MacLaren): The next question will be with Mr. Mantha of the NDP.

M. Michael Mantha: Bonjour, monsieur Goyette. Comment ça va?

M. Daniel Goyette: Ça va très bien, et vous-même?

M. Michael Mantha: Moi, ça va extrêmement bien. Je veux vous souhaiter une belle Semaine de la Francophonie.

M. Daniel Goyette: Merci beaucoup.

M. Michael Mantha: Il va falloir que je retourne en anglais parce que mes collègues sont en train de me regarder comme des chevreuils pris dans les lumières d'un transport.

M. Daniel Goyette: Oui.

Mr. Robert Bailey: What did he say?

Mr. Michael Mantha: I just wanted to ask you: You talked about certain individuals or companies having a fear of jumping towards natural gas. Can you elaborate a little bit more on what that fear is?

Mr. Daniel Goyette: Right now, in Quebec and Ontario, the provincial tax on natural gas is totally different than on diesel. The fear is, when we all are going to move to natural gas, everybody will bring that tax in, so we're going to have tax. If I go to the US side, in some states, I have no tax, and in other states, I have tax. So it's not taxed the same way all across, but in Quebec and Ontario—I don't know the other provinces because we don't go to other provinces. But one of the fears is—anyway, that's what people were telling me. We decided to go because it's the early bird, and we didn't have a fear.

Mr. Michael Mantha: You talked about your price margins, particularly on the 10-year guarantee that you have on gas at the present moment. If we were to add a tax on that gas and you would compare the gas versus diesel, how close would your margins be?

Mr. Daniel Goyette: Right now, as we speak, if you look at the costs of natural gas compared to diesel—I have a chart. Everything is per mile for us. We have about a 10-cent-per-mile difference on natural gas cheaper than diesel. If I bring that in per gallon, I don't have the number, but it will be an increase.

Mr. Michael Mantha: It would be an increase. Okay.

C'est bon pour moi. Merci beaucoup, monsieur Goyette, d'avoir participé aujourd'hui.

M. Daniel Goyette: Plaisir.

The Vice-Chair (Mr. Jack MacLaren): Thank you, Mr. Goyette.

Mr. Daniel Goyette: You're welcome.

AGILITY FUEL SYSTEMS

The Vice-Chair (Mr. Jack MacLaren): Our next presenter will be Agility Fuel Systems: Steve Whaley. Mr. Whaley, you have five minutes. You can begin when you're ready.

Mr. Steve Whaley: Good afternoon. I'm feeling very responsible because, from all the discussions today, the two biggest topics are the additional incremental cost of running on natural gas, and most of that is with our equipment that goes on these trucks, and the other is, we are the ones who add the weight to these vehicles to do so. So I have my Kevlar vest on and I'm getting ready to go.

Agility Fuel Systems is the largest supplier of natural gas storage and delivery systems for heavy-duty trucks in North America. With over 30,000 systems installed on private and government fleet vehicles, Agility users currently log over 1.8 million miles per yield burning clean, low-cost, domestically produced natural gas. We have six facilities across North America, including our engineering with research development here in Canada.

We recently opened a North Carolina facility in October of last year to keep up with customer demand. This facility boasts over 200,000 square feet of the industry's most state-of-the-art manufacturing technology capable of producing 12,000 fuel systems per year. We are providing the lightest, highest capacity per inch of vehicle space and the fastest-filling fuel systems the industry has to offer. Although we manufacture both CNG and LNG systems, 85% of what we produce is CNG, and that percentage is growing. Through our engineering resources, we can supply configurations behind the cab and alongside the frame rails. These engineering solutions can accommodate ranges from 17-diesel-gallon equivalent up to 280 DGE.

At Agility, we take safety as a priority and we test our systems beyond all regulatory mandates, with additional bonfire testing that demonstrates cylinder release of compressed gas in a controlled fashion. We utilize side-impact collision studies to ensure that not only the cylinders are safe, but all of the components. We've recently completed a one-million-mile over-the-road test at an independent testing facility to ensure that all mounting brackets, cabinets and structural components withstand the most demanding driving environments and last as long as, if not longer than, the vehicle chassis.

Agility doesn't act alone in providing clean, less costly transportation solutions to vehicle fleets.

1430

Our strategic partnership, such as our exclusive relationship with Cummins, whom you've already heard from earlier this month, maximizes our ability to provide the best service experience for fleet customers. We're in the process of training Cummins distributor technicians across the US and Canada to service Agility Fuel Systems and also stock Agility replacement parts. This important partnership between Agility and Cummins is significant to fleets because it will expedite a vehicle's return to service. In the first eight months of our partnership, we've already completed training at 31 facilities.

Agility's product line of fuel system has been developed to accommodate the most diesel-like experience for fleets, but without the higher cost of fuel, adverse environmental impact and the louder noise. For example, our 160-diesel-gallon equivalent behind-the-cab system, with an integrated fuel management module,

takes up only 35.5 inches of frame rail space, but provides well over 600 miles of range, with the fastest fuel-filling capability the industry has to offer.

This same system can also be configured with two side-mount cylinders to allow for additional fuel storage, providing ranges well over 1,000 miles between fuel stops. This capability does come with the cost of additional weight compared to diesel.

In an effort to not discourage the trucking industry from moving to natural gas, the US has passed a 2,000-pound weight allowance for heavy-duty trucks. Individual states are now proposing and voting on adopting this in their respective states. Six states, to date, have already passed this, with 13 more on the books.

The transportation industry exhibited great success and the full adoption of natural gas in the bus and refuse markets. The over-the-road market is emerging, with companies like Anheuser-Busch and Fiat Chrysler starting implementation this past year with hundreds of tractors, while companies like some of our customers, UPS and Frito-Lay, grow their fleets of natural gas to the thousands.

In closing, natural gas provides the transportation industry with the greatest amount of positive environmental impact in the shortest amount of time, with the highest return on investment. The passing of Bill 76 sends an important message to natural gas station providers, chassis OEMs, engine manufacturers, fuel system manufacturers, parts suppliers and fuel providers: that the government views natural gas as a major solution towards a sustainable and cleaner future for its citizens.

Thank you. I'm ready for your questions.

The Vice-Chair (Mr. Jack MacLaren): Our first question will be with the Progressive Conservative Party. Mr. Bailey?

Mr. Robert Bailey: It'll come around to me that fast? Thank you.

We've heard so much today. I heard you talk about the behind-the-cab fuel facility, and then I'm picturing two side mounts, I guess, as additional—

Mr. Steve Whaley: Much like the diesel environment, yes, the side-mount system.

Mr. Robert Bailey: Okay, I see.

Do you have any local suppliers yet in Ontario that are using your system or are you basically more in the United States?

Mr. Steve Whaley: We have a great deal of what's going on in the United States, but it's growing into Canada, yes.

Mr. Robert Bailey: So whatever we could do, if we were to try to move this along, you would see opportunities. I don't think we're talking about convergence much but actual outright new purchases—

Mr. Steve Whaley: Yes.

Mr. Robert Bailey: That was always what I had in mind with my bill. It wasn't converting fleets. It was actually—which would lead to employment because they would be making new trucks on the assembly lines and adding these fuel tanks.

Mr. Steve Whaley: That's where we're at.

Mr. Robert Bailey: Yes, that's my understanding.

I have a question here: It says, is Ontario behind California when it comes to natural gas? I guess we know it is.

If Ontario is going to partner—and you don't live in Canada, I guess, because I see you're based in North Carolina.

Mr. Steve Whaley: Yes, sir.

Mr. Robert Bailey: It's kind of unfair to ask you, but if we're going to partner with California and Quebec for this carbon thing we're moving towards, this would be a big step, in some way, to move towards helping our fleets convert to LNG and CNG in Ontario, right? Would that be fair to say?

Mr. Steve Whaley: Yes, very much so. I've been involved with all kinds of incentive programs throughout the States on a state-by-state level as well as regional level, and most of those start at about a 50% incremental cost-incentive program, up to 80% and 100%.

Mr. Robert Bailey: Of the difference in the price between diesel—

Mr. Steve Whaley: Yes.

Mr. Robert Bailey: Yes, I think we've heard everything from 30% in Quebec to—someone mentioned the number 25,000, in British Columbia or somewhere.

I don't have anything more. If you've got something you would like to say on my time—do I have a little?

The Vice-Chair (Mr. Jack MacLaren): There's one minute.

Mr. Robert Bailey: One minute. Is there something you would like to sum up?

Mr. Steve Whaley: I'm just ready for the questions.

Mr. Robert Bailey: Okay.

Mr. Steve Whaley: That return on investment one that came up a little bit earlier is a great one. If you just do some of the numbers with a dollar disparity between a gallon equivalent of compressed natural gas and diesel, it gives you, with a truck running about 20,000 gallons a year, about a three-year payback time. That's where your return on investment is. If you have a seven-, eight- or 10-year vehicle life, then you've got the majority of it where you're going to be making money off of it.

Mr. Robert Bailey: That's good. No one has used that number today.

Mr. Steve Whaley: Those are just averages right now.

Mr. Robert Bailey: That's good. Okay. Thank you.

The Vice-Chair (Mr. Jack MacLaren): Our next question will be with Mr. Mantha, of the NDP.

Mr. Michael Mantha: Having been part of the greater discussions and seeing this to fruition in other jurisdictions, and actually participating in those discussions and moving the issue forward, this is where we are in Ontario right now. This is the beginning of a discussion. Where do we need to go to move this in an aggressive way, but also in a prudent way?

Mr. Steve Whaley: What you have in Bill 76 is a great start. From what I've heard, the incentives on the federal level are another great start.

I know the last presenter, who was doing this remotely, was talking about that 50-cents-per-gallon tax incentive that the states have on a federal level. That has been huge. Once those come out—it's an incentive program to get people to jump on board. When they know that they can build that factor in over the portion of time, whether it's a year, two years or three years out, that's a huge risk mitigation from this capital expenditure going into it.

Mr. Michael Mantha: Being part of what has brought you up to where you are now, I'm almost positive that you're looking at what the next one is. Because eventually, maybe, global pressures are going to be putting pressure on the gas industry, which is going to force you to look to other avenues. Do you have any idea of what those other avenues might look like?

Mr. Steve Whaley: As far as other fuels?

Mr. Michael Mantha: As far as other sources, yes.

Mr. Steve Whaley: We are looking at hydrogen. The economics aren't there right now for making that happen. We are in the fuel system business. Right now, the compressed natural gas and LNG is where it's at.

Mr. Michael Mantha: Okay. Thank you.

The Vice-Chair (Mr. Jack MacLaren): Now to the Liberals. Who would have the question? Ms. Vernile?

Ms. Daiene Vernile: Thank you very much for coming and speaking to us today. From your perspective, I imagine we sound like we have the accent. Since we're in government here, I'm going to say that you're the one with the accent.

Mr. Steve Whaley: Even though I grew up in Alaska—

Ms. Daiene Vernile: Is that right?

Mr. Steve Whaley: —so I have some claiming rights of being up north—I've been in South Carolina far too long now.

Ms. Daiene Vernile: I'm very interested in hearing about your rules and regulations there. How is this governed in the States?

Mr. Steve Whaley: As far as what I've heard before—a commercial driver's licence: any difference? No. Insurance: any difference? No.

There is some training that goes on. "Hey, this is a different nozzle at the pump to fill up with." But it's the same card interface that people are used to using. LNG is a little bit more complex than CNG when it comes to that refuelling part of it, but folks learn this very quickly.

Ms. Daiene Vernile: Is there a push and an impetus in the States and support for you to switch over?

Mr. Steve Whaley: Yes, there's quite a bit. I just came from the state of Tennessee, where there was an unheard-of incentive for five counties that were in EPA nonattainment for their emissions. They spent $14 million in five counties to switch those vehicles over from diesel to natural gas.

Ms. Daiene Vernile: Okay. And elsewhere in the States?

Mr. Steve Whaley: Pennsylvania and New York. Pennsylvania has been great for infrastructure. They have another 30 stations that have been incentivized to be built in this next coming year.

AFIG—I just came from a Pennsylvania meeting that was describing the $6 million that is allotted for this coming year, where they'll do 50% of the incremental cost of switching to natural gas as well.

Ms. Daiene Vernile: So there is that money you have to put up front, but ultimately, you're going to see a savings in the end.

Mr. Steve Whaley: Yes.

Ms. Daiene Vernile: Okay. I thank you very much.

Mr. Steve Whaley: You're welcome.

Mr. Granville Anderson: Is there any time left?

The Vice-Chair (Mr. Jack MacLaren): Mr. Anderson, one minute.

Mr. Granville Anderson: Mr. Whaley, thank you for being here.

Mr. Steve Whaley: My pleasure.

Mr. Granville Anderson: Question: In terms of fuel system, you mean it's the tank you're talking about?

Mr. Steve Whaley: Yes.

Mr. Granville Anderson: Okay. What's the life expectancy of a tank? I heard it's something like 20 years.

Mr. Steve Whaley: It is. The cylinders are rated for either 15—but most of them are 20-year lifespan cylinders. At the end of that lifespan, they do need to be discarded, yes.

Mr. Granville Anderson: Okay. Can they transfer from one vehicle to the next?

Mr. Steve Whaley: Yes.

Mr. Granville Anderson: Okay. Thank you.

Mr. Steve Whaley: You're welcome.

The Vice-Chair (Mr. Jack MacLaren): All right. Thank you, Mr. Whaley, for your presentation.

Mr. Steve Whaley: You're welcome. Thank you.

1440

CANADIAN URBAN TRANSIT RESEARCH AND INNOVATION CONSORTIUM

The Vice-Chair (Mr. Jack MacLaren): Our next presenter will be the Canadian Urban Transit Research and Innovation Consortium: Josipa Petrunic, executive director and CEO. You have five minutes and can begin when you're ready.

Dr. Josipa Petrunic: Thank you very much. I think we distributed the presentation files on jump drives. Being in the innovation landscape, I don't deal in paper anymore, so hopefully that works out well for you. It gives you a little bit of background information about the organization itself.

Very quickly, a lot of the colleagues here over the past two sessions have probably talked to you descriptively about what is in existence today and what is possible as integrated technology in fleets. What I'm going to talk to you about is, if we were to start creating an ecosystem in natural gas technologies, what could be the case in the future, and what kinds of jobs and GHG emission reductions could come from that through R&D.

Just to focus, there are two items that I'm going to be talking about. One is the environmental and technological opportunities. I'm sure you've heard a lot about this, but very specifically, of course, CNG is a replacement of diesel propulsion. Also, looking in the R&D landscape, natural gas is a potential hybridization technology—hybridized power trains, where you have natural gas combustion, potentially on a battery-electric or fuel-cell-electric propulsion system. Thirdly, you're looking at potentially making Ontario a test bed for RNG, LNG and CNG research, development and demonstration.

Those are the real environmental and technological benefits. It is very difficult in any sector of the economy, technologically, to create a test bed that is globally relevant unless you have a cluster of actual capacity on the road. That's where I would see this bill in particular starting to create that cluster.

In terms of the technological challenges, there are many, and some of my colleagues behind me may need to put their fingers in their ears right now, as I'm going to outline some of those challenges.

Some of them are, obviously, well-to-wheel analyses that is cropping up, whether it's battery-electric, fuel-cell-electric or compressed natural gas, and CUTRIC works in all three areas in terms of R&D. Well-to-wheel analyses are cropping up, and there is increasing microscopic analysis of where it comes from to where it goes, through the combustion cycle.

There is the constant issue of fugitive emissions, or leakage. These are issues that are not absolute stops to the usage of natural gas; in fact, they are great opportunities.

Through a bill like Bill 76, if you're starting to create an ecosystem where fleets, including both truck and transit, are adopting natural gas technologies, you're creating the platform for really advanced R&D that tries to solve these problems.

We're certainly not alone in Canada. There are loads of companies and fleets out there facing these problems. It has been articulated to me in a few ways by our industry and academic stakeholders as potentially compressed natural gas's, or natural gas's, Volkswagen moment.

If we want to be able to integrate these technologies and gain the GHG reductions and gain the kinds of benefits economically that have been well articulated by my colleagues, we also need to be ahead of the curve technologically, to recognize that we need to be addressing these issues through RD&D initiatives. This bill would start to create that ecosystem in Ontario.

Lastly, I'm just going to summarize some of the areas where our industry and academic stakeholders have said, "Listen, we have shovel-ready projects. If we had the right kind of co-financing and the right kind of ecosystem in place, we could launch projects in this space right now in Ontario." The areas are things like monitoring and tracking real-world emissions, getting out of mathematical modelling and simulations and into real-world emissions. We have loads of different variable analyses as to how many GHGs you're going to save, but a lot of that is based on assumptions embedded in mathematical models. Once you scale up to actual fleets, you have a really great opportunity to put Canada on the map in terms of leading the world in real-world analyses of emissions.

Second, we have the opportunity to create real-time tracking tools for on-board and fuelling site installations. This includes artificially intelligent control systems, so you can take personnel out of controlling the fuelling systems and optimize them in a way that hasn't been done so far.

Thirdly, the areas that we're looking at are things like developing advanced catalyzers and real-world on-board emissions monitoring systems. These are things that fleets require. They ideally require them in compressed natural gas, liquefied natural gas and, in the future, renewable natural gas.

The fourth large area of RD&D that comes out of this is, if we had an ecosystem established, or at least initiated, by virtue of a bill like this—which I would deem to be the very first step in this RD&D ecosystem development pathway—then the next step for Ontario is starting to develop the renewable natural gas landscape. That only really gets initiated once you have a substantive, descriptive integration of natural gas products on the road in the province.

That's where I would see the bill creating an opportunity—it's sort of a little wedge in the door—but the opportunity for RD&D opens up enormously. These are products, services and intellectual property that are needed the world over, in particular if we're truly going to realize the benefits of GHG emission reductions through the integration of these technologies.

That's where I'll leave it. It's a very high-level summary for you, but ultimately, it's suggesting that there's a lot of work to be done in natural gas innovation, and this starts us on the pathway to saying that Ontario could be the globally leading test bed for that.

The Vice-Chair (Mr. Jack MacLaren): Thank you. Our first question will be with Mr. Mantha of the NDP.

Mr. Michael Mantha: Do that again. Holy jeez.

Dr. Josipa Petrunic: Sorry; I talk quickly normally.

Mr. Michael Mantha: That was just a blast of information. My goodness.

Dr. Josipa Petrunic: I'm a fast talker.

Mr. Michael Mantha: Wow. You talked about clusters and how those clusters must look like, because if we're going to go in this direction there are other facets that will have to come in in order to support this industry. Can you elaborate on what those clusters would look like? You talked about some of the research and development that might come out of further providing opportunities for our upcoming university and college institutions. You talked about industry as far as the role that they would play with it. Can you give me a sense of what you would do, what you're envisioning?

Dr. Josipa Petrunic: The types of clusters that we build anyhow through CUTRIC are industry-academic

collaborations, so you're looking at industry members saying, "Listen, we have a problem. We need to solve it. We need to externalize the research and development because we might not be able to afford to do it all internally."

We have a number of projects that have come through CUTRIC in the last year focused on natural gas innovation, where it's an industry member saying they want to work with an academic partner in Ontario or in British Columbia, to design, develop and advance natural gas propulsion technologies or monitoring systems.

As an example, some of the universities that really specialize in this—SFU; University of Victoria; UOIT has some capacity; Waterloo has a little bit of capacity; University of Quebec in Trois-Rivières—so you actually have national capacity in the academic world for monitoring methane emissions, for looking at leakage in the fuelling tanks, for improving the materials out of which the tanks are actually made, for improving and optimizing even the nozzling systems, and for really creating and designing from scratch what a renewable natural gas generation and transportation pipeline network will look like. How do you get it out of the landfill, upgrade it and inject it into a transit vehicle? That has to be designed essentially from scratch. Those are the types of projects that we would be supporting that we would look to see initiated in Ontario.

Mr. Michael Mantha: You mentioned leakage, and that just raises a big red flag with me. What do you mean by "leakage"?

Dr. Josipa Petrunic: I'm going to use the word really generally because, depending on what aspect of the technology, whether it's on-board or off-board you're talking about, in different industries we use different jargon, so I'm just going to use the word "leakage" in general to refer to leaked natural gas in any one of its forms where it doesn't go towards the intended endpoint, which is propulsion. That might mean in the fuelling tank because of the actual materials out of which it is made. It might mean that at the moment of transfer into the fuelling tank there are some emissions. It might mean in the combustion on board the vehicle.

Natural gas is a really clean source of propulsion fuel, on the assumption that none of it leaks or dissipates. It is by definition a gas, and when it does leak and dissipate—let's just use the example of methane. Various numbers are that it is 18 to 20 times more polluting as a GHG gas than CO_2 itself. So if we really want to get to the usage of natural gas as a super-clean fuel, which we can do, we need to be ahead of the curve in recognizing that these issues around leakage do exist. They're real. Manufacturers articulate them. Academics are well aware of them. Better than waiting for some third party—

The Vice-Chair (Mr. Jack MacLaren): Time.

Dr. Josipa Petrunic: —to put a microscope to it, let's just explore and develop those projects now.

Mr. Michael Mantha: Thanks.

The Vice-Chair (Mr. Jack MacLaren): Thank you. Now I'll come to the Liberals: Ms. Vernile.

Ms. Daiene Vernile: Thank you. My kids tell me that it's not that they're talking too quickly; it's that I'm listening too slowly. I'm very familiar with fast talk.

Talk to us, if you will, about success stories that we see in Canada. Where do you see an urban fleet using natural gas that works well and you think can be modelled elsewhere?

Dr. Josipa Petrunic: One of the leading examples in Ontario right now—and I'll preface this by saying that there have been a lot of variable experiences in the past. I'll speak to transit because a lot of my colleagues have spoken to trucking. Hamilton is really one of the leading stakeholders right now. It's a great transit system that is full of a lot of champions around advanced technology.

Where Hamilton, I think, stands out is that they considered natural gas in the past, stepped away from it to consider electrification, and have come back through the hybrid experience to natural gas. They're keeping a really open mind by saying, "Listen, we need to monitor real-world emissions and propulsion output and operational cost reductions to decide if, in three years, we made the right choice."

I would hold up Hamilton as an example of very good, thorough technological analysis and operational cost analysis. They're constantly querying whether the technology is going to work in the way that they think it will work. I would hold it up as a good example of integrating the technology based on operational cost reductions and GHG reductions.

Having said that, they will self-admit—I'm not sure if they presented in the last sessions, but they will admit that they are really concerned because there's not a clear answer for the co-location of the fuelling stations. In an ideal world, if I had a magic wand, we would locate a fuelling station that could serve an 18-wheeler, a heavy-duty lorry, a transit van, a passenger vehicle and a transit bus. Designing that takes some planning; that's a research and development project. But that hasn't been fully figured out, so where Hamilton is right now is as a cutting-edge transit system actively trying to figure that out.

1450

Ms. Daiene Vernile: What do you think is preventing other communities from doing the same?

Dr. Josipa Petrunic: Other transit systems, you mean?

Ms. Daiene Vernile: Yes.

Dr. Josipa Petrunic: The very same challenges that prevent them from adopting electric buses and fuel cell buses. In part, it's unfamiliarity with the technology.

With regard to natural gas technology, it's worse. In fact, I would say there's a harder challenge. At least with battery electric and fuel cell electric, a lot of it's quite new, so the lack of familiarity is just by virtue of the fact that there really aren't these vehicles elsewhere. In the case of natural gas, there were some negative experiences in the 1990s, and those stuck around. There, I would say that it's analogous to hybrid bus experiences, where people expected to get a certain amount of emissions

reduction and a certain amount of fuel economy, and the first generation of those vehicles did not perform at that level. To put it bluntly, that left a bad taste in the mouths of a lot of transit systems. Transit systems, by nature, are hugely conservative—small-c conservative—in terms of adoption and new technology. They don't have R&D budgets, and that makes sense.

For Hamilton to really take a bite out of it and to say, "Listen, we had that experience, and it wasn't great. We're coming back around, recognizing where technology has come"—this is quite innovative, but it's not what the majority of transit systems are in a position to do. They'll be looking at Hamilton to see how it plays out.

Ms. Daiene Vernile: So they have to be a little more liberal, if you will, in order to do that. Thank you.

The Vice-Chair (Mr. Jack MacLaren): Bob?

Mr. Robert Bailey: I'll be honest: You brought up some ideas I hadn't thought of when I drafted this bill, when you got talking about research and how this could be used once the clusters are developed.

I want to put a plug in for Sarnia–Lambton. We've got the University of Western Ontario research park there, and I know they're looking at all kinds of research into biotechnology, and I'm thinking this would be ideal for down there. I'm going to put a plug in down there to contact you.

When we talked about how we want to set an example and we want to sell our technology here, everybody is always talking about trips to China, trips to India, all these trips. This technology would be a great example, if we did the clusters, did the research here, if we want to sell our products and our technology to China, India, the third world, southeast Asia, wherever. Would that be a great example where Ontario could lead? Speak to that, if you could.

Dr. Josipa Petrunic: There are two items, I'll say, and they're quite divergent. Your earlier point, on the technology piece, and how this is maybe opening up new opportunities: I'd like to remind people that frequently there's a stake drawn in the ground, and it's sort of electricity versus fuel cell versus compressed natural gas, as though these are divergent and never shall the twain coexist. In reality, there's a lot of really great optimization opportunities around these hybridized propulsion systems. You need to optimize compressed natural gas systems to be able to even consider those opportunities. That's where I would say some new opportunities around powertrain technology may emerge. But for that to emerge, we actually have to have the ecosystem on the road in Ontario for academics to even start to look at.

The second point is, how can we create a test bed? It is extremely difficult to design and develop and even conceive of advanced monitoring systems for real-world data acquisition optimization when, in your backyard, there are few, or relatively few, fleets using the propulsion fuel. That is a problem in other sectors of propulsion, as well. If this bill were to open the door and allow for more fleets to adopt this technology, it would almost immediately create the capacity for southern Ontario universities to start looking at these systems, applying to NSERC for funding in those systems, and start hiring and developing the highly qualified personnel that is required, as engineers, to create an ecosystem in the future. That's jobs and intellectual property.

Mr. Robert Bailey: To be honest, I never thought of that one, but you've opened up a whole new idea to me and I think it's something that we really should look at. We could reduce our greenhouse gas emissions, which we want to do; we could save industry, through transportation, on the fuel costs; we could provide jobs, as we're building these trucks and motors. So everybody wins in this. Once we create that cluster, and these trucks or vehicles are on the road, then we can start marketing that technology, through the universities—to maybe market our technology, our expertise here in Ontario, around the world. Is that, in a nutshell, what you're saying?

Dr. Josipa Petrunic: Yes, that's precisely how an ecosystem is built. Let's just be honest about it: This is the reality of how you create jobs in a new, cutting-edge technological field. These innovative projects around leakage monitoring, optimization of powertrain, fuelling system location have to happen. So the question is, are we going to support them happening in Ontario? Because they'll just happen somewhere else, and that means that the jobs will be somewhere else. That's the question that I would put to you, looking into the future.

The Vice-Chair (Mr. Jack MacLaren): Thank you, Ms. Petrunic, for your presentation.

That's the close of today's meeting. Our next meeting will be on Wednesday, April 6, 2016, to talk about Bill 111, An Act to amend the Energy Consumer Protection Act, 2010 to eliminate fixed rate electricity contracts between retailers and consumers.

Meeting adjourned.

The committee adjourned at 1455.

CONTENTS

Wednesday 23 March 2016