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# Subcommittee on International Trade, Trade Disputes and Investment of the Standing Committee on Foreign Affairs and International Trade

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**EVIDENCE**

## Tuesday, April 12, 2005

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## Chair

**Mr. John Cannis**

Chair: Mr. John Cannis

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● (1540)

[*English*]

**The Chair (Mr. John Cannis (Scarborough Centre, Lib.)):** I'll call this meeting to order.

I'd like to start off by welcoming our guests, both from Vancouver and here in Toronto, who have come to visit us, the subcommittee on international trade. Gentlemen, welcome.

I'll introduce our witnesses. From Sandwell Engineering Inc. we have Mr. Richard Fraser, who was going to be with us via teleconferencing, but we are fortunate to have him present here with us. Mr. Fraser, thank you for being here.

From Westport Innovations Inc. we have Mr. Phil Hodge, vice-president. Welcome.

And from Ballard Power Systems Inc. we have Mr. Stephen Kukucha, director of external affairs and government business development. Welcome.

I have an order for speaking. We'll start with Mr. Fraser; then we'll go on with Mr. Hodge; then we'll conclude with Mr. Kukucha and then will go to questions of ten minutes.

I will say in advance, ladies and gentlemen, that we anticipate having voting bells around 5:30 or 5:45, so if we could stick to our timelines for presentations and questions, we'll move forward.

Before I do that, I would like to ask the committee to think for a moment about a funding request we had put in as a committee to do some travel. The liaison committee has just recently notified the clerk that they've allocated some money, not all, which will permit us to do part of our hearings. Seeing that we've done the west—I know Ted is looking at me—I'd like to suggest, for your thoughts, maybe doing Halifax, Montreal, and Toronto. If there's some discussion on that, if not now....

I see Julian has a big smile. I'm only conveying to you what information has been given to me for discussion.

With that, Mr. Fraser, the floor is yours, sir.

**Mr. Richard Fraser (Vice-President, Corporate & Project Development, Sandwell Engineering Inc.):** Thank you, Mr. Chairman.

I'm Richard Fraser, vice-president, corporate and project development, for Sandwell International Inc. We're definitely honoured to be here, because we do a lot in the international market, so this subject is quite interesting to us.

To give you some context for our comments, Sandwell is a multi-disciplined, multi-industry engineering contractor, based in Vancouver with offices across Canada. We employ approximately 500 people. We've done work in all areas of Canada, but more importantly to this committee, we have worked in over 80 countries around the world and currently have studies or projects in each of the countries that are mentioned as emerging markets—these famous BRIC countries: Brazil, Russia, India, and China. I only found out about that acronym this morning, but now I'm getting up to speed.

Sandwell was founded in 1948 in Vancouver, but dates back through predecessor companies to 1925. We actually were involved in the design of the original Lions Gate Bridge, so we definitely go back a way. Internationally, though, we have focused on ports and marine and on pulp and paper.

Among recent projects of note that we have been involved in, just to give you an idea of our span of action, we did the Antamina port project in Peru, where Sandwell was the EPC contractor for the $100 million port facilities for the Antamina mine. We did an expansion of Hammersley Iron's Western Australia port recently, in a joint venture with an Australian contractor. We were involved with the owner's engineer on the Greenfield mills pulp and paper project in Indonesia. This was a billion-dollar project, and it was the first pulp and paper project undertaken in Indonesia on a non-recourse financing basis. We're quite proud of that one, because we actually managed, despite riots and everything else, to get the thing built.

Lastly, currently we're involved in the structural and seismic design of the first two offshore oil platforms to be placed in the Sakhalin islands in Russia. The first one is already in place, the Molikpaq, and the second one, the Orlan platform, is currently in Korea and will be deployed, I think, in June.

Firms we compete with for our international work include companies from the U.K., Australia, Finland, other European countries, and sometimes, but actually, not often the U.S.A.—we don't actually compete head to head with U.S. firms that often.

To assist you in how the government might be able to facilitate our efforts in emerging markets, it might be useful to briefly outline our strategies with respect to pursuing international business.

First, we restrict our international efforts to those technologies where Sandwell has recognized world-class expertise and experience. With the Internet and global shopping, clients demand and expect world-class solutions and are able to access these.

Second, where appropriate we trade on our ability to bring North American technology with Canadian values and Canadian prices, although that has declined a little bit lately.

Third, we try to maintain close contact with various multinational companies that we have provided services for in the past and follow them to new markets. Examples are ExxonMobil, ChevronTexaco, RioTinto, and DHP.

Fourth, we target the private sector—not exclusively, but we find that we can do better with the private sector.

Last, we attempt to do the work to the greatest extent possible in our home offices. This does not mean that Sandwell's operations or presence do not frequently extend into foreign lands. Our key personnel must be comfortable and willing to travel and to relocate as necessary during the implementation phase of the projects.

To do this, we must have state-of-the-art communication and IT tools to facilitate it and we must plan and navigate through the various multi-jurisdictional tax and regulatory issues. That's a big mouthful, but it's a problem.

As far as suggestions for better facilitating Canadian companies' efforts in emerging markets are concerned, we offer the following.

One, keep the commercial counsellors in the embassies plugged in and in the field. We do not expect project-specific assistance, as that is really our business, but they provide very valuable local information. For example, the St. Petersburg office was instrumental in getting us into the western Russia pulp and paper sector, in which we currently have a couple of projects.

Two, help and support EDC in developing facilities to support exporters in emerging markets. EDC has great people and products that are critical to exporters. EDC has recognized and adapted to the new realities of global sourcing and supply chains, and they must be allowed to continue to do so.

One suggestion regarding EDC that could be looked at, perhaps, is some means to get the Canadian banks involved in EDC. I don't have a direct idea for you, but somehow the Canadian banks have backed off international trade, and EDC has gone to the forefront. Somehow to get them both involved, along the lines of NORTHSTAR Trade Finance or some formula such as that, may be an idea to look at.

● (1545)

Three, we need to ensure that Canadian tax policies are competitive and supportive. We're not seeking subsidies or tax exemption but simply recognition that developing and winning international work is a competitive activity requiring significant efforts on the part of exporters. Therefore, a supportive environment on the part of the CRA is useful.

There are some areas subject to improvement. For example, from time to time Sandwell's Canadian companies need certificates of fiscal domicile to avoid the imposition of foreign withholding taxes where we have provided the services entirely from our Canadian offices. These are difficult to access in a timely manner. The foreign tax credit system does not work for project-oriented companies such as ours. We move from country to country year to year, so we are not able to get full credit for foreign taxes. Therefore, we have to gross up our fees to allow for foreign withholding taxes, which is sometimes a competitive disadvantage for us.

Fourth, we need to facilitate from a tax perspective the movement of Canadians to foreign countries and back again and to ensure the taxes being applied are competitive with those of our competitors. The International Tax Services Office of CRA is virtually impossible to contact in a timely manner. This function should be reassigned to the regions, or the office should be made more responsive in order to assist with the deployment of our personnel overseas.

Last, I have what's just a general comment. If we are to be welcome in other countries in a free trade sense, we have to be open to free trade as well. The engineering industry is certainly open. There are no quotas, there are no marketing boards, foreign companies participate freely in the Canadian market, and the end result is that we have the latest technology and the most efficient engineering available to meet Canadian requirements and for us to offer these services to the world. We should be supportive of free trade in other areas of our economy in order to present a consistent message to the world and be taken seriously as a trading nation. Engineers are active internationally and do present a Canadian face and image to the world. Others could do the same if an approach more conducive to free trade was adopted.

That's all I have for you, Mr. Chairman.

**The Chair:** Thank you very much, Mr. Fraser

We'll go to Mr. Hodge. Mr. Hodge, the floor is yours, sir.

**Mr. Phil Hodge (Vice-President, Westport Innovations Inc.):** Thank you, Mr. Chairman.

My name is Phil Hodge. I'm vice-president of Westport Innovations and also sit on the board of our joint venture, which is Cummins Westport Inc. For the benefit of the audience, I'll give a brief description, if you aren't already familiar with either one of those companies.

Westport Innovations is a UBC spin-off company, relatively young, about 10 years. It is a Toronto Stock Exchange-listed company. We're based here in Vancouver, with offices in the United States and also a lab facility in Germany. Westport is primarily focused on the use of natural gas and hydrogen in transportation applications. Westport is one of Canada's fastest-growing companies under the recent Deloitte & Touche survey, and we're also in the top 50 in Canada for R and D spending. So if you had to put us in a particular segment, it would be a research and development company, although we are now making that difficult transition to a commercial company.

Today our sales are really all through our joint venture, which is Cummins Westport Inc. Cummins Westport Inc. is a fifty-fifty joint venture, and that is with Cummins Inc. Cummins, if you're not familiar with it, is the world's largest maker of diesel engines. It is based in Columbus, Indiana, with a worldwide network in over 130 countries. Today Cummins Westport focuses on the sale of natural gas engines to essentially the transit markets—transit buses—also selling into trucking and into garbage and other urban use. That joint venture is based in Vancouver also, with sales offices and sales people around the world.

Today the crown jewel for the Cummins Westport sales is the city of Beijing. That's where I have been very involved in the last few years. Most of my comments today really will be focused on the Chinese market. Although Cummins Westport is involved in many different markets selling engines, the Chinese market and to a lesser degree the Indian market are really the two primary international markets. In the city of Beijing, Cummins Westport today has sold over 2,500 natural gas bus engines. So if you have had the opportunity to visit Beijing, almost all of the natural gas engines that are operating today in Beijing are from Cummins Westport.

Through Cummins Westport, we are setting up local production facilities, so this is actually working with local manufacturing partners in the countries of India and China to produce these engines on a local basis. From our standpoint, from a strategic standpoint, we see no other way to compete on an ongoing basis in those markets. To date all of the engines that have been sold into those markets are imported engines, but we really don't see that as a long-term, sustainable, and viable strategy.

As I mentioned, where I have spent the most time has been in the country of China. I have been there over a dozen times in the last couple of years, very regularly dealing with many different levels of government and dealing a lot with the Canadian people who are on the ground there—in the consul offices and in the ambassador's office. I preface all my comments with the statement that I've always been thoroughly impressed with the quality of people who have been hired in the country of China and in some of the other countries I've dealt with. From a support standpoint, I would encourage the ongoing resource allocation on the trade side and in the consul offices.

The one comment or possible criticism I would make would be that I find that in many of the markets, and especially in the Asian markets—and I've done some work in Japan also—the relationships are a very, very important part of doing business. I'm sure everybody has heard that cliché before, but it really rings true, especially when you're dealing with policy issues, and dealing with, as we are, a transition from an existing industry trying to push it along to an evolutionary change. So we have to spend a lot of time with policymakers, with environmental protection people, with city officials, with provincial officials, and at the state level with national officials. Having commercial officers, consuls general, and ambassadors, who have already existing relationships, is a very important part of assisting us.

● (1550)

We do what we can. We have people on the ground, we have staff in these countries, but the government-to-government connections cannot be underestimated or understated, especially in a country like China.

My comment is that quite often many of these people are just finally climbing the learning curve in their particular market area, and these are very different. To do business in Guangzhou versus Beijing versus Shanghai versus Ürümqi versus Hong Kong.... Those are extremely different markets, every one of them. The people who are on the ground in those particular markets quite often get moved out. I understand for some of them it's at their own free will—they want to broaden their experience—and that's understandable. However, some of those people, I know, would have preferred to have stayed on longer. I think we're remiss, and it's a mistake to move those people out just for the sake of rotating the staff through, because I can tell you that in a three-year term, they would spend at least 18 to 24 months just getting up the learning curve. So when they're the most effective is in that last year. As I say, it's a shame that we often rotate them out, because I think in many cases Canadian companies would be much better served with a long-standing person guiding that relationship at the government level.

With respect to the other comments I would make, one would be around the relationship base. We spend a lot of time, effort, and resources hosting delegations from many countries around the world, and also sending our own people across, leading delegations, participating in trade missions, participating in various government initiatives. Some, I think, have had more success than others, but what I would say is the one place where you can say money was never misspent is on building those relationships and spending face-to-face time. So I would encourage any initiatives or funding support involved with having delegations visit Canadian companies on our soil. I would say that if I had to choose as to which is the most important—us visiting them or them visiting us—I would choose the latter. I think having them see the facilities, see the people, spend some time with them, both in a business sense and in a social sense—in other words, the lunches, the dinners—are all a very integral part, in my opinion, of doing business there.

These are expenses that I know a lot of smaller companies would have a tough time undertaking by themselves—the bigger companies have budgets for that. But if you're looking to help companies that are trying to make that transition, I suspect co-funding or some type of support would be welcomed. Although they may not realize it, it would probably be some of the best marketing dollars they could spend.

Finally, I have a broad comment, and maybe Mr. Kukucha will touch on the same issue, but there's been a lot of talk in the Canadian government recently about the knowledge economy. I personally am a big advocate of that philosophy. I think this is where Canada can really provide a competitive advantage. The question, and I realize it's a big challenge, is how do we properly support such an initiative?

I think Mr. Fraser previously talked about EDC. EDC is a great organization. I can tell you that the people there are fabulous. I've spent a lot of time with everybody at EDC, from the most senior levels right down to the local level. But I can also tell you that we've never done anything with EDC. The reason for that is because they're export-focused, and today we are a technology company that is selling ideas and selling technology, and that doesn't fit the EDC model. We tried very hard to work with them, but the reality is, for companies like us—and I would consider Westport Innovations to be a very good example of a company that is in the knowledge economy and is providing environmental solutions to the world—that particular program, for instance, just doesn't fit our model. I don't really know if there is one in place today.

We get a lot of support from the National Research Council, the IRAP program. We have received support in the past from TPC. Those programs, I think, are more designed to support technology and R and D companies than companies that are exporting, which is clearly what EDC's mandate is.

I think that would conclude my comments. I welcome any questions you might have about any of the various topics and issues that I addressed.

Thank you.

● (1555)

**The Chair:** Thank you, Mr. Hodge. I'm sure you're going to have plenty of questions in a couple of minutes, so we'll go to Mr. Kukucha.

Mr. Kukucha, please.

**Mr. Stephen Kukucha (Director, External Affairs & Government Business Development, Ballard Power Systems Inc.):** Thank you for the opportunity, and thank you, Phil.

I'm going to focus my comments on three specific areas: targeting why the opportunity is significant for us; looking at some of the challenges; and then talking specifically to some of the opportunities to partner with government.

I think it's important to acknowledge that Ballard is at the very beginning of trying to penetrate the emerging markets we're targeting, as are most of the people in the fuel cell and hydrogen sector. A lot of my comments are going to be generic enough that they'll be applicable to all the companies in our space.

Here's a little background on Ballard to start. We are the world-leading developer and manufacturer of fuel cell technology and products. We have major auto partners, Ford and DaimlerChrysler, as shareholders. In a product perspective, there are approximately 160 fuel cell cars and buses on the road around the world. We're a supplier to six of the top ten automakers in the world presently. Our focus in markets is going to be on improving that technology and improving fuel cell stack design and manufacturing.

One of the reasons emerging markets are so exciting for us is that we're going to be targeting markets that have a high volume potential, that have strong socio-economic forces driving their product adoption, and that have strong government support and government funding. Today, some of those primary markets are in emerging markets for the automotive sector, and in places such as Japan for co-generation.

My comments are going to mainly focus on China and India, which are the two economies we're looking at. The reason our technology solution is good for these economies is that we're providing a zero-emission power-generation product that's twice as efficient as most internal combustion engines, and it's based on materials that are easy to manufacture, so that, in distinction from the internal combustion engine, we need a much smaller manufacturing footprint to create fuel cells to displace internal combustion engines, either for power generation or the automotive market.

Let me address fuel cells and their performance to date and where we are, because I think it's critical to let you know the progress we're making and why we think we're going to be able to penetrate some of these markets sooner rather than later. Last year alone we had up to a million kilometres in fuel cell vehicles travelling the roads around the world. We currently have product in over 20 countries. Next year we're targeting about two million kilometres in fuel cell vehicle performance.

We've hit some significant milestones recently with regard to performance. Simultaneously, in one fuel cell stack, we've reached performance of having the vehicle start in up to minus-20-degree temperatures, which is significant for automobile performance; we have over 2,000 hours of fuel cell performance; and we've reduced our platinum coating catalyst in the product up to 30%, which is a significant driver for cost reduction.

What we've done is take those metrics and parameters and project them out over 10 years, based on our technology road map, and to date we're projecting that we are going to have commercially viable technology, based on the U.S. Department of Energy's targets for commercialization, in 2010, which is significantly better than most people have expected for penetration into the automobile sector. We're quite excited about that.

The reason emerging markets are exciting for us is due both to the capabilities they have and their markets. The challenge for us is going to be how to penetrate them. The markets are large in size and scope. The sheer size will allow product sales and JV opportunities and opportunities to partner, such as Westport has with local companies, to penetrate the markets.

Sometimes, in some circumstances, from a market perspective their performance requirements are less stringent. I take India as an example, with their three-wheelers. They need less product performance than you would, say, in an internal-combustion-engine car that's going on the roads here in North America or Europe.

In a capabilities perspective, both India and China have a lot of fundamental R and D capabilities and material science activities that may be able to help us drive the cost down on our products as well, which is quite exciting. We're going to be looking at partnerships in all those areas, both in India and China, to see if we can get to a place where our success can be driven faster by accelerating the commercialization of both fuel cells and hydrogen technologies.

● (1600)

On some of the drivers there, for example, the transportation growth in China is significant. There's such a rising demand for energy that energy security in both countries, but I'd say mainly China, is driving a lot of their policy and government action at this stage. Plus, they're starting to see the political ramifications and the economic costs of the pollution that's being produced, whereas today in the developed world—and I look at North America and Europe—there's less demand and less drive from those perspectives because there's a comfort level with incumbent technologies, and the industrial players have a very strong position in maintaining those to date. So we see our early markets very much as being in places like India and China. It's going to be one of the best chances for our success moving forward.

It also meets their needs. For example, if you look at some of the things in India that are happening, they have four to six hours of blackouts daily and they have energy needs to deal with those. China is in the marketplace worldwide gobbling up oil reserves in an attempt to address some of their energy security needs. We can help manage some of those issues for them.

Here are some statistics to back up why we think it's an important market. China is now the third-largest auto manufacturer in the world. In 2001 they were the seventh. They are growing rapidly. There's a challenge that their roadways and infrastructure may not support that rapid growth, but that's where our technology, both fuel cells and hydrogen, can play a significant role, because one of things we can do.... You've seen this in the telecom sector in China. They've chosen to leap-frog, to a certain extent, the hard-wired infrastructure in telecom and move straight towards cellular. With fuel cell and hydrogen, we're seeing some desire to potentially look at hydrogen infrastructure in a major way and move towards alternative sources like natural gases, as Phil's company is addressing, and move away from oil as a primary source of motive power for the transportation sector. Their needs and our opportunity are dovetailing quite nicely, so we hope to take advantage of that.

There's also a desire, in China specifically, if you look at some of the things with the 2008 Beijing Games and the 2010 Shanghai World Fair, to showcase both technology and a desire to move into alternatives. So we think those are going to be key drivers. I can only point to the recent announcement between the Chinese and Indian governments to show that they're prepared to collaborate in some of these opportunities.

To get to the challenges, those are very clear reasons to be there, but what are some of the challenges in accessing that market? The biggest one for us, because we are a technology company—and to point that out, Ballard was one of the top 10 technology spenders in Canada last year, with over $100 million in R and D spending—is we have a significant position, both in our patents and the technology we're producing. To put it bluntly, intellectual property and the protection thereof is going to be one of our critical drivers in how we enter the marketplace.

Two-thirds of all of the imitation products right now made worldwide are coming out of China. We have to be concerned with the potential for reverse engineering. India is a little more protective. There's a little more of a basis of the rule of law there and a democratic history, which in a market-based system you can rely on. Those two markets right now are also looking for commercial-ready technology, whereas right now we are not quite there. We have good hours of production on some of our current technologies, but again, we're going to be a few years until we can provide products that are the same power production and/or reliability as incumbent technology. That's going to be a potential challenge.

Government support also seems to be fairly strong in both India and China, but we need to validate that. As Phil has talked to, relationships are going to be critical. We need to prove out that government support to ensure they're committed to transition and potentially leapfrog. We have a role in demonstrating that we can do that. I'm going to come back into that in my recommendations in just a moment.

As a new player in these two markets, another concern that we're just going to start to address is some of the intangible costs and intangibles around decision-making in those two markets. That's probably a nice way for saying there are many things that we're not sure about on how decisions are made there and there are many stories about how decisions are made that we have concerns about. So we have to be cognizant of that.

When it comes to partnerships with government, and the Canadian government specifically, on how you can assist us in those things, I would agree with the comments that both of the previous speakers have made with regard to consul service. Our initial interactions with them have been very positive.

● (1605)

We think we need as an industry to collaboratively get our act together before we come to the government with a desire to partner in a large exercise in China and India, and we're on the path to doing that right now. But some of the considerations you may want to think of are these. The Canadian government, we believe, should pick some winners in these emerging markets, natural gas technology being one, hydrogen and fuel cells being another. Focus on those opportunities where we have the best opportunity to grow our domestic sector, based on innovation and based on the knowledge economy, which we want to focus on.

**The Chair:** We've lost our connection. We'll have to redial.

Can you hear us at all? Are we back?

● (1610)

**Mr. Stephen Kukucha:** We're here. Can you hear us?

**The Chair:** Yes, we're okay.

Go ahead, please.

**Mr. Stephen Kukucha:** The other point I was going to touch on was IP. Somehow we need to find a way to help protect intellectual property, beyond the scope of what's being done now. I don't know whether that would be through bilaterals that go beyond the current protection offered or somehow enhancing the principle of the rule of law in countries such as China. This may only come with an increased trading relationship, where there's mutual risk on both sides, but any assistance that can be provided there would be beneficial.

We'd also love the government's support in helping to partner with industry to help facilitate the relationship with the Chinese and Indian governments to lay the groundwork for specific initiatives to follow.

We need to help convince both of these governments that this technology is one that can be transformative and that they can rely on to leapfrog some of the current infrastructures they could put in place.

Some specific initiatives that could fall into place there include continuing to fund joint market assessments through CIDA and initiatives such as that; helping to do cost-benefit studies, in collaboration with industry, to convince China and India that this is a technology solution that will help them meet their needs and can be more beneficial from a cost perspective—all of these things can help us accelerate our penetration; and helping make available expertise, either existent within the Canadian government or external to it, that knows these markets.

We're working with some consultants today—for example, a former Canadian government senior bureaucrat by the name of Ercel Baker, who's been very helpful in China particularly. Making those resources available for industry can be helpful.

Another initiative would be partnering with the Chinese government to help advance their sophistication and thinking around these policy and program areas. There is serious help that can be provided to help them look at technology roadmaps, to help them transition their energy economies, to look to specific partners and projects to engage industry, and to help put funding programs in place domestically for them that make sense to help both domestic Canadian industries but also their local industries.

The other thing we can do is use the domestic policy and programs we have in Canada to help facilitate our corporate and market penetration. I look at a few things we can do. We need to do a better job of showcasing our technologies here domestically, so that we can show the Chinese and Indians that, quite frankly, this stuff works. It's the example of shoemakers wearing their own shoes. They want to have a confidence level that they can take this technology and move it into their domestic markets.

Finally, we can use some of the existing Canadian programming today to help take our technologies overseas. We have demonstration funds in place at the Canadian government for fuel cells and hydrogen which, if we get international demonstrations, will help us showcase our products and help us penetrate those markets.

These are small changes, to a certain degree, but I think they'd be very helpful in allowing us to get where we need to go.

I'm over the time, but I appreciate the opportunity to present to you, and I look forward to answering any questions you may have.

**The Chair:** Thank you, Mr. Kukucha, for that presentation.

We'll start our questions with Mr. Ted Menzies.

**Mr. Ted Menzies (Macleod, CPC):** Thank you, Mr. Chairman, and thank you very much to our three presenters, one in-house and two through high tech. It's wonderful to be able to do this.

First of all, I should make one statement clear, and I don't think there's any conflict of interest.

Phil Hodge, you may not recognize the name, but you may. My son actually works for your company, so it's wonderful to finally meet you. He speaks very highly of you. I'll quit sucking up after that. It's wonderful to hear that story, the good-news story. He's been involved very much in the Isuzu project, of course originally on the Cummins joint venture. Probably I'm fortunate, as I'm a little more up to speed on some of your technology, more so than the rest of the committee. But it's all a good-news story. I certainly don't want to focus just on Westport, but I wanted to make sure the rest of the committee knew that I had no part in getting your name on the list. It just happened to be there. And thank you to my comrades for allowing that.

I'd like to ask a question of all three of the presenters. How does the Canadian dollar affect your competitiveness in the world markets you're dealing in?

● (1615)

**Mr. Richard Fraser:** In the past, when we were competing in some places, that slight discount factor helped, but it's not really the issue. Sometimes we just have to tailor our offering to make it fit the budget. The 67¢ dollar might have helped, but an 85¢ dollar is not going to kill us. It's the ideas that you have. That's our view.

**Mr. Ted Menzies:** You're able to hedge, though, to cover fluctuations.

**Mr. Richard Fraser:** We don't actually formally do that. We have done it from time to time on certain issues. It's the difficulty in knowing when your cash flows are going to happen. We could do that. We just did a job in Russia, which we contracted for last year at 79¢, and we're pleased to see the dollar go down to 81¢ because that will help us. But as far as selling overall, I don't think it's really an issue. If it went to $1.50, maybe that would be another matter, but the range we're talking about, it's not an issue.

**Mr. Ted Menzies:** Okay, thanks.

Any comments from the other two?

**Mr. Phil Hodge:** I'll make a brief comment.

I think from Westport's standpoint, all of our sales today are through, as I mentioned, the joint venture, Cummins Westport, and all of those sales today are really made in U.S. dollars. To the extent that the Canadian dollar strengthens, that hurts us. Now, that being said, because today all of our engines are manufactured in the United States, our costs are lower. So they tend to offset each other. I would say there is really no major impact either way. Where we get gains, we also get losses, so they tend to offset each other.

**Mr. Stephen Kukucha:** Just briefly, we're TSE and NASDAQ listed as well and we've got a global supply chain. For us it's really a question that on the sales side, again a stronger dollar slightly hurts us, but we have such a global footprint and we have significant cash reserves. Because we're spending about $100 million on R and D annually and we're losing about $80 million, with $300 million in the bank we've got a fairly significant hedge strategy to ensure that we don't get hurt too badly by any fluctuations. Again, a slightly weaker dollar helps sales, but we try to protect our best against fluctuations.

**Mr. Ted Menzies:** Okay, thank you.

For all of you research and development seems to be a big part of your businesses. Are we turning out students, shall I say, educated people, who are adequate for your needs, and are you getting adequate support from the Canadian government for research and development? I know there are SR&EDs available. Are you able to utilize those? What else can the Canadian government be doing as far as research and development to back your types of industries?

**Mr. Stephen Kukucha:** Why don't I start off with that. That's a very good question, thank you.

On the student question, let me address that one, because it's probably the quickest. Fuel cells have largely been industry-driven from an R and D perspective, so we are now in the process of backfilling the university system with engineers and physicists and chemical folks and setting up programs, and we've found the government's been helpful in helping to establish that.

But frankly, from an R and D perspective—I'm going to preface this—we need more support. There's insufficient support at the federal level for the R and D work we're doing. There are SR&ED credits, but let me talk to that challenge. We have $400 million to $500 million in banked SR&ED credits we can't take advantage of, because we're not a profitable company, nor are we projecting profitability for the next number of years.

There are currently no programs or very insufficient programs at the federal level, and I'm meaning approximately $5 million annually is being spent to support industry in that R and D at the federal level. That's just not allowing us to keep a competitive advantage compared to companies in other jurisdictions. The U.S. government spends over $200 million annually to support these kinds of activities—about half of that is going towards labs, half of that is going towards industry—and we have no programming in place at the federal level that even comes close to addressing that. We've been in active discussions with the Canadian government about that, and this is not a surprise. We're hoping that will be addressed through either programs or other policies.

We put forward an innovative approach in the last budgetary cycle to try to address this. We suggested that flow-through share treatment be provided to investments in fuel cell and hydrogen R and D, which would drive private sector investment back into the sector and allow the Canadian government to avoid a massive programmatic spend. We anticipate we need over $1 billion in spending in the next 10 years, and that level of spending for R and D is just.... We can't credibly ask the Canadian government to spend those kinds of dollars, so flow-through shares allow us to leverage the private sector to do that.

To date, we've not received a positive response on either flow-through shares or increased programmatic spending in R and D. So, quite frankly, I would suggest that's the most critical challenge facing our sector in our relationship with the Canadian government today.

● (1620)

**Mr. Phil Hodge:** I'll just add a couple of comments to Steve's comments.

I did touch on this in my initial speech, which was that today Westport has received support in the past from the Canadian government. I'm not one of the detractors of the TPC program. I think that type of program does have a place. I would question the repayment methods. And I know that particular program gets a lot of abuse because it has such a low repayment factor, but for a company like Westport, which has received its support, the repayment comes at a time right when you probably most need the funding, in the sense that you've done your R and D, but now to commercialize that R and D, that's when you need to spend your marketing dollars and set up the commercialization plans, and that is a very capital-intensive venture.

So the one comment I would make is I think there could be a better policy and hopefully, as Steve alluded to, a broader and more well-resourced program that could enable companies that are making R and D investments to.... I'm not against the idea of paying back that money at all; I would just try to look at what's the best way for those companies to pay them back without penalizing them, because everybody's talking about going to commercial production. Everybody wants to get to the commercial markets, but you don't want to set up a situation where you strangle those companies after having supported them, because I think in some ways you're making the program detrimental to its initial purpose.

Just to briefly address the employment and human resources, that's a very good point. From Westport's standpoint, we spend a lot of money on recruiting and retaining and looking for very specialized engineers. About 90% of our work staff is engineers, so we have a very sophisticated work employment group and we really have attracted people from all around the world. Some of that is because there hasn't been enough of that exact talent in Canada.

But that being said, I think the Canadian programs, and especially out in the west coast here, where we do have a bit of a cluster of alternative energy companies.... I think the local universities have done a commendable job at trying to produce those resources, but I suspect that as these companies, like ourselves and Ballard and many others in the sector, grow up, the supply will not meet the demand. We will continue to need to recruit at an international level to get the kinds of engineers that will be needed to really bring these products to market.

**Mr. Stephen Kukucha:** If I could just build on Phil's comments really quickly, let me give two concrete examples.

On the TPC dollars, we've been a beneficiary in the past, but Ballard hasn't received any significant federal funds for the last six years. We've been very grateful for what we've received in the past. It has helped us get where we are, but we haven't been accessing them for a while.

Take the U.S. example. What the United States does is it provides grants to companies to innovate and invest. They'll give companies 80¢ of a dollar spent, so it's an 80-20 cost share, and they're grants, so you don't have to pay them back. So all of our competitors in the U.S. are accessing extremely beneficial rates of government investment. In Canada we have a payback structure through TPC, but to echo Phil's comments, the payback comes too early, so that it hamstrings companies at a certain time.

I'm not opposed to paying it back and ensuring the Canadian government gets value for its investment, but it needs to be tied to a longer commercialization date. To echo my last point, because of the money being spent to innovate by companies like ours, there's a significant risk to the future viability of companies like ours to continue to innovate at the rate we are, unless this issue is addressed in a relatively timely fashion.

● (1625)

**The Chair:** Thank you.

We'll go to Monsieur Paquette.

[*Translation*]

**Mr. Pierre Paquette (Joliette, BQ):** Thank you, Mr. Chairman.

Thank you for your highly factual presentations. They will serve as food for thought as we carry out our study of emerging markets.

My first comment is directed to Mr. Fraser. Could you expand on the problem you alluded to, namely the fact that the tax credit system is not working, specifically in your experience because you do business in several countries? Could you explain to us what some of the system's shortcomings are? What should we be doing to address or avoid these problems?

I'd also like to ask the other two speakers if they too are encountering the same problems.

[*English*]

**Mr. Richard Fraser:** The problem with the tax credit system is you have to have consistent revenues in a country to redeem your taxes year to year. We're a project-oriented company, so we move from country to country, and the only way you're going to get 100% of the taxes back is if you have the same revenues the next year. I'm not a tax expert, but this is how it was explained to me. What happens to us is in the foreign tax credit system we get cents on the dollars, not dollar for dollar, and it's just an anomaly in the tax system as to how they let you claim the tax credit.

[*Translation*]

**Mr. Pierre Paquette:** What are you getting on the dollar, given the system's shortcomings?

[*English*]

**Mr. Richard Fraser:** It varies, I think I would say, right from 20¢ to 100¢, depending on our activity in the different countries. If they're consistent year to year, I think you get pretty close to 100%. If we had it in 2003 and we were still making the same revenues in 2004, we could claim the credit and we'd probably get a full refund in that case, but most often we're in a country for a year to do a project and we're on to the next one. That is the basic problem with the tax credit system.

[*Translation*]

**Mr. Pierre Paquette:** Have the other two presenters also encountered problems with the Canadian tax system in the course of doing business? In your opinion, what are the problem areas? You seem to be faring better than Mr. Fraser.

[*English*]

**Mr. Stephen Kukucha:** Just to echo the point I made about the SR&ED credits, and our inability to access them for SR&ED investments, again you can either modify the SR&ED tax regime to allow companies that are not profitable to access those credits or you can move to a flow-through share mechanism to allow us to pass those to investors in the R and D activity. Again, it is a significant barrier to our ability to continue to innovate.

**Mr. Richard Fraser:** I wouldn't add any comments other than those the two speakers have already.

[*Translation*]

**Mr. Pierre Paquette:** I see.

Mr. Hodge, I'd like you to expand on your comment concerning Export Development Canada. Obviously, this program is geared to promoting Canadian exports. It doesn't quite jibe with your company's profile or, from what I understand, correspond to the type of business that we're looking to develop in emerging markets, notably China.

What type of program or organization should we be looking at? Export Development Canada has, I believe, already given itself a mandate to promote Canadian exports and in particular, exports of manufactured goods. What type of program or organization do you feel would best ensure the growth of your business?

● (1630)

[*English*]

**Mr. Phil Hodge:** Thank you for the question.

From a Westport standpoint—I won't go into great detail, but you have to understand the business model a little bit—we really aren't a manufacturing company. We're a research and development company. We produce technology. That technology has to go into a product. From our standpoint, we don't make engines, and we have no desire to. Our strategic plan is not to build manufacturing facilities for engines. Our partners have those facilities. Westport partners today with Cummins, with Isuzu, with BMW, with Ford, with MAN, which are all very large international companies that have production facilities all over the world. Hopefully, our technology will show up in products that they sell. None of those companies have manufacturing facilities where they're producing engines in Canada. So there is no product, per se, that's leaving the Canadian borders and showing up in China or India.

That really is what the EDC mandate is about. I have no quarrel with the EDC mandate. I think the EDC does an excellent job at what its mandate is. It's just that Westport's business model is not caught by that mandate. The net is just not large enough. The reason for this is that we are not exporting any particular product. There may be small pieces, components, that come out of our facilities, but the production is going to be on a mass scale out of existing facilities in China, India, the United States, Germany, and Brazil. What we will provide them with is the IP and the know-how and the trade secrets to enable them to make their products better and more efficient and more environmentally friendly.

So from my understanding of the EDC programs and product offerings, we don't have one today that fits well with that model.

I don't know if Steve would have any additional comments.

**Mr. Stephen Kukucha:** I'd echo Phil's comments, actually.

[*Translation*]

**Mr. Pierre Paquette:** I totally agree with you. However, what type of program do you need to see in place to support your efforts to export technology and know-how? Do any such programs exist elsewhere? What benefit would there be to our society in promoting this kind of program?

I would have liked to hear your views on the subject, because if we do business with China and India, the reason will partly be to export Canadian technology. I don't know if you would care to share your views on this matter with us.

[*English*]

**Mr. Phil Hodge:** I think I would make a couple of comments, although really they'll be repeating what some other people have already said, and what I may have said earlier.

If you're going to build a knowledge economy-based industry, you have to then determine, in my view, how we increase that knowledge. I think support could come from the government level, in terms of research and development, in the form of ideas that Steve had brought up, on tax reform or on different ways to package tax deals, and I also think there could be programs that support research and development on a more user-friendly basis.

To echo Steve's comments, Westport today, surprisingly enough, receives a substantial amount of funding from U.S. governments. All of our testing facilities are here in Vancouver, with Canadian employees, but the U.S. government mandate is broad enough to say, “We recognize new technology, and if it's being developed outside our borders, that's fine, as long as it's advancing”. So we receive money on a more favourable basis from south of the border than we do in our backyard. I think that echoes Steve's comments.

**Mr. Stephen Kukucha:** Absolutely.

**Mr. Phil Hodge:** So that's a big thing. To the extent that other government funding is available, any time we look at government funding and whether or not we should apply for it, we look at what the sharing will be. That's a key part of it. I mean, we do not want to take on projects where we receive 20% of the funding and we have to pay 80% unless there is some strategic other benefit, or some other funding available. We are trying to reduce our burn. That is a huge focus.

The mantra that Westport has been walking now for a couple of years is “the path to profitability”, and we've made great progress, but the only way we can make that progress is to quit taking on spend that isn't fully funded. Our partners have to fund it or government has to fund it. We're fortunate that we get support from both of them, but really, it impacts which programs go forward when the government has said, “This is important to us”....and quite often it's not the Canadian government that's telling us this; it's the Chinese government, it's the U.S. government. That's fine, but from a Canadian government standpoint, if we want to continue to build the knowledge-based companies that are going to produce the product that we're going to then export to the world, I think you have to support the R and D work that's happening in Canada. And today I don't think that's being supported.

● (1635)

**Mr. Stephen Kukucha:** Perhaps I could just boil it down to three quick points. First, allow us to innovate by supporting R and D spending—this is Phil's point—through whatever mechanism works. Second, allow existing programs to have an international scope. So whatever programs you have in place, allow us to take those dollars, and instead of demonstrating it here, demonstrate it in the market we need to look at. And third, make functional the current programming that you have in place. There is some question about some of the functionality of the programming. It's not competitive with other jurisdictions, and it's bogged down in competing jurisdictions.

For instance, for the fuel cell hydrogen sector, the government committed $215 million in October 2003. We're very grateful for that. The challenge, though, is that they then took that $215 million and put some in Industry, some in Natural Resources Canada, some in Sustainable Development Technologies Canada, and some in TPC. They scattered it out among so many different agencies that have different program terms, different program application dates, different requirements for reporting, that it was somewhat dysfunctional. To echo Phil's point, the efficiencies in applying for those dollars just are not there, when you can get easier dollars somewhere else.

If you could look at those three issues, I think that would be the best thing that could happen to our sector.

**The Chair:** Mr. Paquette.

[*Translation*]

**Mr. Pierre Paquette:** Earlier, Mr. Fraser was telling me that he does business with Export Development Canada. I would have liked to hear his assessment of the support he receives from EDC. Does he feel that it is adequate? Could that level of support be increased?

[*English*]

**Mr. Richard Fraser:** As far as EDC is concerned, we have been using them for as long as I've been in the business. They've been very good. Where could they be improved? They are quite market-oriented. The people are very good. They understand most of our issues. If we're going to expand in the brick sector, in the emerging markets....

EDC follows trade, to be fair to them, and 80% or 90% of our trade is with the U.S. If you want them to pursue the emerging markets, you have to get them to lean a little bit more in the emerging markets, and have a little bit offset on that.

Again, my only other suggestion on EDC is that the banks have virtually pulled out of the international market. Twenty years ago, the Royal Bank was a major player, and had people all over the world. Now they don't. EDC has filled the vacuum. I'm not sure, but I think the delivery system would be more efficient if somehow the banks got involved.

**The Chair:** We'll go to Mr. Eyking now.

**Hon. Mark Eyking (Sydney—Victoria, Lib.):** Thank you, Mr. Chair.

I have a couple of varied questions, and there's nobody in particular I'm pointing to for answers. I'll just ask the questions and you can answer them accordingly.

We talked about EDC already. Somebody mentioned Northstar. I had the opportunity to go to China with the Prime Minister and with the many companies that went with us. Northstar took me to a couple of companies they did business with in Shanghai. They seemed to have a different model from EDC—better hands-on, I guess, or better risk-taking—and they seemed to have a partnership.

That's one thing, and I guess the other thing is our services, or what we have on the ground, in these countries. I'm wondering if you could give me some comparisons with, say, countries like Australia, or our other competitors out there. What better services do they provide on a government basis? Are they more proactive, and do they have better services on the ground that we can look to as models?

You mentioned research and development. I don't know that much about it, but I often hear about these research chairs that the universities have. You hear about all these universities getting this money for research chairs. Could it help your companies, or is it too far-fetched? Are they not in the real world? Is there too much bureaucracy to apply to them?

I'll start with that.

● (1640)

**The Chair:** Mr. Kukucha.

**Mr. Stephen Kukucha:** I have a brief comment to make and then I'll pass it over to others. Mine is going to be related to the research chairs.

As I referred to in my comments, the university system is really backfilling industrial capacity right now. I think there are good things, in that they're going to focus university research on some of the breakthroughs we need in materials for both hydrogen and fuel cells to really hit commercial volumes. One of the challenges with industry is it takes extra dollars to invest in those research chairs, and dollars are scarce right now. That would be the one comment I'd make.

They're focused on pre-commercial research as well, which doesn't help us get into these emerging markets right away. Even though there's investment in university chairs pre-commercial, the very big gap I've been talking to and Phil's been addressing is in the industry-led R and D activities in supporting industry's innovation of the technology. That's where there's a gap in programming, which we're hoping can be addressed.

As to the other questions, I don't have any comments per se.

**Mr. Phil Hodge:** Maybe I'll add a couple of comments and I'll let the last speaker add to that.

I have a couple of things on the questions you asked. One is on the comparison of on-the-ground support. I have a unique position because I have been able to watch the U.S. and the Canadian support. The reason for that is because our joint venture is 50% Canadian and 50% American. We've had very good support from both sides. We've had President Bush stand in front of a natural gas engine in Beijing and tout what a great idea it was and what a great partnership, and we've had the Prime Minister recently drive one of our buses in Beijing. We've had very high-level support from both governments.

With respect to on-the-ground support, I'd say the Canadian support is second to none that I've seen, and I would include the U.S. in that group. One of the reasons is that I get the sense, from just a pure resources standpoint, we have a fairly large—and again, please take my comments mainly focused on China—group of people working, probably as many commercial officers as the United States, but obviously Canada has a lot fewer companies, and therefore I think the Canadian companies are getting better service on a per capita basis.

What's interesting is when you're in Beijing—and maybe you've seen some of this if anybody's been travelling—where I see our greatest competition is not from the U.S, which a lot of people find ironic, but it's actually from the European countries. They come in in a very organized and packaged way. When they come to the city of Beijing to talk Olympics or when they go to Shanghai to talk World Expo, they have all their sectors. The recent Team Canada type of exercise is a good exercise, but the Europeans come outside of just industry. They come with government. The phrase I would use is packaging the Canadian story better.

CIDA is a very good example. CIDA is doing a lot of very good things in China, but we don't package that. In other words, we don't say, “Mr. Prime Minister, look at all the great things the Canadian government is doing and here's industry also that wants to participate in your economy”. They are independent. So I don't know if we fully get the credit for some of the very good humanitarian and various other causes that we support. I know for a fact that many of the European countries do use that. They come in and say, “Of course, we'll support the tsunami relief. At the same time, I'd like to introduce you to a bunch of the companies that would like to help support that.” A little bit more integration at the government level I think is welcomed.

For most of you who have been involved in business, this would be second nature to you—it's not our first instinct to call government when we need to negotiate a contract or when we need to do a deal. I can tell you that having sat through many negotiations, it's rare that we would ever think of having the government sit at the table. I can also tell you that in the last two years I try to involve the government in almost all of our relationship-building in China. The reason is because the Canadian government has a high credibility factor in China. Any government has a credibility factor, but the Canadian government has a particularly good relationship with the Chinese government. I always encourage Canadian companies when they're going there to not dismiss that fact.

Having presence in China through our commercial officers, our consuls general, our ambassadors is very important. It's important that they be there to help be the liaison between industry, because quite often we are dealing with the government. The state-owned enterprises in China in the automotive and the energy industry are still the predominant companies.

● (1645)

**The Chair:** Go ahead.

**Mr. Richard Fraser:** I'm a personal friend of Scott Shepherd, although we don't do much work with him, so I can't be touting his company. But Northstar seems to have a model comprised of the banks, EDC, and his own company. He has merged these together and seems to be getting it together. While we have the banks and EDC, I don't see where they're really working together. Obviously either the Bank Act, the market, or the big five drive them to do domestic business and not international business, and we are a trading nation.

**Hon. Mark Eyking:** When I was travelling in India and China, I heard that EDC did not take as much risk. With EDC and the banks, unless it's a sure bet they won't go, and that's not what's required out there. You have to go out on a limb a bit. It's a hard one, because somebody may say that EDC made a billion dollars, but you can make a billion dollars if you don't go out there and risk anything. I think they're looking at reviewing the whole way they're doing it.

You mentioned aid and trade, and how important it is. When I was in Syria last year trying to help Petro-Canada, we saw that the French government was very involved in showing Syria how much aid they did in trying to make this petrochemical deal. The Europeans are very good at mixing together.... It's something you have to be careful about, but it's a point well taken that our trade department, CIDA, should be looking at countries and focusing on how they can put them both together.

I have another question about Russia, because it's supposed to be one of the emerging economies. I would just like to know a little bit more about it. Is it truly an emerging economy? What percentage of growth do you see happening in Russia? If you took out the oil—I know there's big oil potential—and maybe compared it to the other East Bloc countries, like Czechoslovakia, Lithuania, and what not, how is that whole area looking for us as a potential market?

**Mr. Richard Fraser:** We're in Russia in pulp and paper. Russia has the largest softwood resource left in the world. It's a relatively undeveloped market. There are pulp and paper mills there, but they're woefully in need of upgrading. On what we're providing, it sounds like a basic pulp and paper process, but it's basically environmental upgrades.

We're working right now for a company called Neman Pulp and Paper in the part of Russia just above Poland. They're looking for significant upgrades, so we have a contract there to provide some basic engineering and technology components, such as controls, valves, motors, and that kind of thing, to upgrade their mill. So that's an interest in Russia on the pulp and paper side.

On the port side, because we're sort of resource-oriented, there are just so many parallels between Canada and Russia. We're also very strong in the Arctic. We have been in the Sakhalin Islands for almost ten years, working for Exxon and other people who are developing those offshore platforms. We will translate our Canadian Arctic gas experience from the seventies and eighties over to there.

So that's our interest in Russia. I could use a little more EDC support there, and I'd like to see them take a little more risk. They're nervous because they never know who they're dealing with in Russia.

● (1650)

**Hon. Mark Eyking:** That's sometimes the sense we have—that Russia could be a risky place to put money into. We know there are some challenges in China too, but Russia seems to be more on the list of....

You don't sense that there? You can pick the right partners if you do your homework?

**Mr. Richard Fraser:** We're selling services and equipment, we're not making an investment in the country per se, so that's a little bit different from my colleague.

We want to make sure we get paid, so you certainly have to pick somebody who is viable, can pay you, and has serious intent to do a project and not just talk about it.

**Hon. Mark Eyking:** You mentioned you're also in Indonesia in the pulp and paper business. There were some stories out of Indonesia that people were going in there and not replanting trees...environmental loss.

When we go into these countries as Canadians, how do we operate? Are we given a kind of rule book to go by, or do we use the same rule book we use in Canada? How does it work in these countries like Indonesia and Russia?

**Mr. Richard Fraser:** In Indonesia, we have had a continuous presence for about twenty years. Quite frankly, the tax and regulatory authorities might be a big lengthy, but you can get through them; to us, they are transparent.

With the one project I mentioned we were involved in, Musi, we certainly did everything above board. That project is working. As far as I know, it was the only successful non-recourse-financed project in Indonesia, and as far as I understand, that mill is still operating properly. In fact, some of the banks in Indonesia who have taken over some of the defunct ones have invited or asked us for our advice to get the mills up and running again.

So we think Indonesia is a good market. It's a lesser-developed country, but you can get things done there without doing things....

**Hon. Mark Eyking:** The other part of the question I had was about the growth rate in Russia and East Bloc countries. I know they will probably not grow as fast as China, or maybe India, but how do you see them comparing? Do you see them taking off, especially Russia, or is it just that the infrastructure and systems are a little too—

**Mr. Richard Fraser:** Wild west?

**Hon. Mark Eyking:** Or something like that, I don't know. Do they have a long way to go?

**Mr. Richard Fraser:** I think they could change quickly, and I would put my bet on Russia. Will they be ahead of China and India? That's hard to say, but Russia has the capability, because they've got the resources and the knowledge, but they need to get their governance and the financial institutions together, which are easier to turn around than some of the other things. I guess that's how I'd put it, Mark.

**Hon. Mark Eyking:** Yes, sure.

**The Chair:** Great, thank you.

Madam Jennings.

**Hon. Marlene Jennings (Notre-Dame-de-Grâce—Lachine, Lib.):** Thank you very much for your presentations.

I just have a couple of questions, and one for Mr. Stephen Kukucha. One of the points you made that I found quite intriguing was that in areas where Canada is either the world leader or one of the world leaders in new technologies, it should be doing more to actually showcase those technologies domestically in order to provide a visible public platform for the international world.

I understand that Ballard Power Systems is a world-leading developer and manufacturer of fuel cell technology and that you will focus mainly on China and India, which you explained quite correctly and well. How do you think the Canadian government can assist the use of the technologies your company is developing—and you, Mr. Hodge, the technologies that Westport Innovations and Cummins Westport are developing to actually showcase here in Canada? I'd like some concrete examples.

Secondly, there was a suggestion on Canada finding some way to improve intellectual property protections when our companies go into these emerging markets where the judicial and legal frameworks and systems may not be as strong as we might want them to be. So I'd like to know if you have any concrete examples.... Well, not examples, because we know what's happening in, say, China; we know that a lot of the imitation technologies are coming out of there, or imitation products, based on “stolen”.... I'm putting that word in quotes, so I don't get hit by the *National Post* and *The Globe and Mail* and the *Toronto Star*, etc., etc.

**A voice:** You apologized.

**Ms. Marlene Jennings:** No, I didn't.

So how can the Canadian government be more proactive in finding solutions for better protection of intellectual property when our companies go into these emergency markets? I mean, it makes no sense for us to put in resources and investment to try to open up these markets for our companies if we're not pushing and finding ways to improve that protection.

● (1655)

**Mr. Stephen Kukucha:** Let me take the easier one first.

**Hon. Marlene Jennings:** I thought they were both easy. I'm just kidding.

**Mr. Stephen Kukucha:** The IP one is a little more challenging

Let me boil down the first question about how do you help us demonstrate our abilities into two words—efficient investment. We need the Canadian government to allow efficient investment in order for this to occur. We have some programs that allow us to demonstrate the technology in Canada, but we're stifled by two things.

As I mentioned earlier, it's divided among so many different programs with different mandates, timings, terms and conditions, and reporting requirements that's it's very difficult to access. So that's one challenge. The other challenge is that we have a very Canadian attitude towards delivering program dollars in Canada, in that we seem to tell ourselves, well, the Maritimes should get some, the west should get some, everyone across Canada should get some, as opposed to targeting and focusing in on what will be the best high-value return.

So let me give you a concrete example of what this has resulted in. For our technology, we now have 39 buses around the world. There are 30 in Europe, three in Australia, three in Beijing, and three in the U.S. And we have none in Canada because the investment required is too great of a piece of the overall program. We have a proposal in front of the Canadian government where we have approached three funders, and it's taken a year to coordinate all three funders. We had to get the Privy Council Office involved to help us. And even then, one of the funders, because they had a turnover in staff, made a negative early decision. It's been an extremely horrible process, to put it in frank terms.

So we're just not making it easy for companies, whereas in the United States, they've invested. They have 135 fuel cell vehicles going on the road. I participated in an announcement in Washington, D.C., ten days ago with the Secretary of Energy. They have consolidated all government programming in one agency, the Department of Energy, and this has allowed them to bring the infrastructure piece and the vehicle piece to the table under one agency, which has made it possible for them to demonstrate 135 vehicles in five different settings. In Canada, we've been very lucky. We have five vehicles coming to Canada, to Vancouver, so that's a success story; but we're just not doing it effectively and efficiently. I'd urge you to help with, or look at, this issue.

On the IP side, I've got to be honest, I don't have concrete suggestions, aside from creating better relationships and trying to find some bilateral means of protecting or indemnifying companies' investments, but I don't know if that's realistic. I'd really be eager to hear what Phil has to say. They've been in the market longer than we have.

**Mr. Phil Hodge:** Maybe I'll pick it up then from the IP protection side.

When I speak to the legal authorities in China, they tell me that the IP protection is there; it's the enforcement they have the issue with. I think that's going to get much better. Is it going to get better quick enough for Canadian companies, and what can we do to accelerate that process? That's a fair question. But I can tell you that today there is much more money being spent in China on their own IP. Before, they relied on the foreign direct investment and the companies from around the world to bring them technologies and bring them things in. Therefore, they didn't really have a vested interest in how to protect that intellectual property. That's changing.

Our personal model is to work with very strong partners in the Chinese market. We recently announced the deal, for instance, with Yuchai in which we're looking at bringing our technology into their engine platforms in China. Yuchai has about 80% of all the transit buses. All the engines made in China come through their factory. By working with them, we hope their weight and their presence is going to provide some IP protection for our own intellectual property. It's going to be in their best interest to protect that intellectual property because we are going to share the profits with them. We're not looking at bringing all of the profits of those products back outside the country.

There are different models. As Steve alluded to, I don't think there is an easy solution. It's not just China; they just happened to do it much more efficiently than many other countries.

On the second point, about the Canadian demonstrations, it is a bullet that I often dodge. Quite often, when we're sitting at a very formal luncheon or supper when I'm in Shanghai and Beijing—and I've had this question many times, and at times with ministers of the Canadian government present—they'll ask, “How many of these engines are in operation in Canada?” It's always very difficult to say, “This is good for you but it's not particularly good for us because we don't have environmental problems”. It's a very difficult issue to say that you should lead the world in technology leadership and support Canadian companies in that quest, but that, no, the Canadian government has not chosen to follow that same lead.

I would echo Steve's comments that if we really are going to sell our knowledge and our IP to the world, we're going to have to show that we believe in it ourselves. I can tell you that not just in the automotive area, which Steve and I are probably more focused on, but on a much broader scale, Canadian companies have very strong environmental technologies, biotechnologies, etc., and we really need to show a commitment to those industries.

The United States has chosen to do it probably because they felt a need to improve. In our case, it's around air improvement. That's typically what drives the move to natural gas. Some area, jurisdiction, or country has said, "Our air has to improve. We cannot have diesel fumes continuing to be such a significant portion." Canada doesn't yet seem to think we're at that point. If you talk to any one of those agencies, and we work very closely with the South Coast Air Quality Management District, if you could ask them one thing—what would you do differently—they would say, "The steps that we are taking now we would have made before." Now they're mandating that you have to use the most advanced technology for auto. You have to use natural gas or have a path to move to hydrogen or both. Those types of steps are being put in, but as all of us know who've travelled to Los Angeles, the horses have left the barn, to a degree. They're doing the best they can, but those steps should have been taken ahead of time.

I worry that the Canadian municipalities are not recognizing that and are not willing to make that investment for the future, today.

● (1700)

**Hon. Marlene Jennings:** Would you say on that particular issue the federal government has a certain responsibility in taking the lead and if necessary educating our municipal governments and our public transit authorities in urban areas to seize these new technologies Canada is a world leader in—environmental technologies, for instance, and transit—and to develop mechanisms that would encourage the take-up by our city governments to use those technologies and showcase those technologies? Do you think that's a role of not only the federal government, but do you think the federal government has a role in doing that?

**Mr. Stephen Kukucha:** Let me quickly answer: Yes, but.... Absolutely, I think those are great objectives and goals. There are two caveats I'd put on that. The first is to be targeted. You do not need a ubiquitous adoption of fuel cell technology in Canada. You need one or two very good demonstrations, and that means incentivizing the end-user and the transit agency.

The second caveat is that with this current project we have before the government I'm learning that transit funding is extremely strapped. It basically comes from governments or the fare box. Investments to date in transit are not significant enough.

There are one or two transit agencies in Canada that were prepared to take on the risk to showcase technology. Luckily, we have one here in British Columbia in BC Transit, but there are very few that can take the risk because they're essentially just trying to scrape by.

So leadership, funding, and a targeted nature of that would be a huge help.

● (1705)

**Mr. Phil Hodge:** The only comment I would echo, since you're focusing on transportation, is that I can tell you the transit authorities around the world typically are the first ones to adopt new technologies. It is not just natural gas or fuel cell; it would be biodiesel, electric, hybrids, and all the various forms of technology.

I personally don't believe there is any one magic silver bullet. I think there is going to be a lot of effort from a lot of different technologies and solutions hopefully driving toward the ultimate, which is to lower the emissions.

I think one of the reasons the transit agencies are quite often the cross bearer for these technology innovations is because government is involved in the transit agencies. The transit agencies are rarely profit-making businesses. They're quite often, in almost all cases, subsidized. So the government to some degree, just like their own fleet usage, for instance, can control that. They can actually impact on what technologies are chosen.

So I think it is the easiest place to start. Once it is shown as an economical solution, and that is the key—every one of these has to be an economical solution eventually—the industry and private users will get on board, but it needs to be proven to them first.

**Hon. Marlene Jennings:** Thank you very much.

**The Chair:** Mr. Menzies has a few more questions that he would like to ask.

We have been very good with timing, Mr. Menzies, so the floor is yours.

**Mr. Ted Menzies:** Thank you. It's great to have another opportunity to ask some more questions.

A couple of you referred to government being there to support you on trade missions. I have just come back from India myself on a trade mission and I was in Brazil also. Is this money being well spent? I would preface this by saying that I think it is. I think there's great potential, and I have heard this from businesses also, especially in China, for example, where protocol is very high and it's very important that someone other than just business leaders—someone from the government—is there to back you up and support you.

What more can we do? First of all, are you supportive of trade missions in their present form, and where do we go from here? Are they effective? Is there something that government can do to support, or should government step back and let industry promote itself in these other countries?

It is a question to all three of you, because you represent different industries.

**Mr. Stephen Kukucha:** Let me comment really quickly. In short, yes, they can be very effective. We've been on one technology mission to China with the National Research Council. Industry Canada was there. They can be effective.

There are a couple of "buts" that I would add to that. One, it would be great if they could be more integrated. In our space alone we have examples of it. Let's take China again. You have four different government agencies doing trade missions. You have Environment Canada, Foreign Affairs, Industry Canada, and NRC all doing different activities and not integrating them to as great a degree as possible. Right now NRCan has done a mission to India, but there are also DFAIT missions.

So integrating the technology in the trade missions so that it is easier for companies to participate would be helpful, and that would allow us to engage more often, because you just can't do everything. We have limited resources and we need to be very targeted in what we participate in.

**Mr. Phil Hodge:** I'll just add to that.

I've been involved in many of the trade missions, and our company has been involved in many trade missions to many different countries. I will speak mainly about my China experience, because that's what I can speak to with the most fluency.

The Canadian flag is a very powerful leader when we go in as a group. The Chinese relationship is a very strong relationship, and hopefully that will continue. Hopefully the government continues to see it as an important market for us, because I believe it may be one of the most important markets after the United States.

The trade missions are an excellent way for smaller companies to be introduced to a new market. Quite often a smaller company will come in and not be able to get access to some of the people that a trade mission will be able to get to.

The problem that companies have is follow-up. The reason for that is the trade missions go on an annual, or maybe even biannual basis. What we have found is that although they opened up a door and we actually had good conversations, the whole key is to follow that up. Quite often Canadian companies, especially the smaller SMEs, don't have those resources. The trade missions can very much show them the opportunity, and that value alone is very important.

As someone who's travelled to China, as one example, the first thing that struck me is how modern the place is. My perceptions of the country were totally different when I went to Beijing or Shanghai and realized the pace of development and where they are at today. I don't think the average Canadian business person fully appreciates that. I would argue that they barely appreciate it.

If the trade missions do nothing but open the eyes to say “boy, I've got to at least think about a China strategy”, then they've served their purpose.

The key then is what's the most effective way to help those companies? Once they develop a strategy—and they need to do that on their own—how do we help them implement that strategy? That's trickier, I realize, but the short answer is I do support trade missions. I encourage other companies, when they ask me if it's worth going on them. I say yes, it is. It is what you make of it to a large degree, but they are worth while.

● (1710)

**Mr. Richard Fraser:** We are big users of the trade missions, but we've a much more targeted market. We're going after the large multinationals that we're already following, or we've already got an established presence in the country and we know basically where we're going.

I will say the Canadian brand is very important; it is useful. As I mentioned in my remarks, in new markets, for example, pulp and paper in western Russia, the St. Petersburg office was very important in introducing us to these people and helping us follow up. It gave us credibility and it gave us the know-how. That was very important.

**The Chair:** Thank you.

Mr. Julian.

**Mr. Peter Julian (Burnaby—New Westminster, NDP):** Thank you very much.

Thank you for coming.

I'm sorry I had to step out to speak in the House, and you may have already answered this question. Following up on Mr. Hodge's comments about EDC, you said that the EDC model doesn't really fit or support your company. I'd like to know to what extent EDC is helpful and to what extent it falls short or is not adapted to the kind of support that you need outside of the country.

I'd like to ask all three of you that.

**Mr. Phil Hodge:** I'll take the first cut at that.

I'm by no means criticizing the EDC program. I hope it doesn't come across that way. The EDC seems to be a very effective program for what it's meant to do, which is to help Canadian manufacturers export around the world. I think it does an excellent job.

Even though we have not participated in any financial program with EDC, I have found their resources, such as market research, to be very useful. We've spent a lot of time talking to the EDC about how the banking system works in a particular country, or how a government approves projects. EDC has had a very good market base.

I can say specifically EDC had a person based in China, Allison Nankivell, who was an excellent resource. She was one of the top resources I have found in China. She's now, I think, been moved back to Ottawa.

Today we're exploring working with EDC in other ways. They have an equity side, for instance. We've talked to them about whether it would be possible to work together on an equity model. If we can set up a model where the Canadian government is an investor in the business we take to China, that will be positive from a strategic standpoint. I also believe from a taxpayer standpoint that would be a good return on investment for EDC, or any other government entity. I think an equity model for our type of business is a very good payback. This is why you'll find a lot of venture capitalists and equity investors are inclined to invest in the technology-type markets, because the risk is higher but the returns can be much higher.

● (1715)

**Mr. Stephen Kukucha:** Really quickly, we haven't.... Sorry.

**Mr. Peter Julian:** Mr. Hodge, just to come back to where it falls short, because you talked a bit about that in your presentation, I'd like you just to go into a bit more detail, if you could.

**Mr. Phil Hodge:** Okay. I did address this a bit, so I'll try not to be repetitive.

The EDC really is focused on the export of manufactured goods out of Canada, as I understand their mandate. Westport is a technology company. We derive intellectual property. We sell our technology ideas and trade secrets and thoughts to manufacturers around the world. There are no engine manufacturers in Canada that have an automotive focus or a focus to bring a natural gas engine to the market. Our products are going to show up in products that are being manufactured in Brazil, China, India, the United States. So that trade flow may go from country to country, but it's not going to go from Canada.

We will hopefully share in the value created by that, and those profits will come home to stay in Canada because they'll support further research and development and technology development. But EDC doesn't seem to have a mechanism or a product that really fits. They're really, for instance, driven by trade receivables. Well, there isn't going to be a trade receivable. We will be taking investments and joint shares in ventures. We will bring technology, and therefore take equity, a royalty, or some other form of repayment.

For us, it doesn't fit what most of EDC's customers would look like.

**Mr. Peter Julian:** Thank you.

**Mr. Stephen Kukucha:** I echo Phil's comments on the technology side and why we haven't been partnering with and utilizing EDC. The fact is we haven't. The majority of our exports on the automotive side have been to the big major automakers, and we just haven't seen the need to use EDC for that.

As we move into China, if we start to send significant product overseas into those markets, we may look to EDC. But without predetermining what strategic path we're going to take, it's probably more likely we'll end up in the same model that Westport's in, with a partnering situation—intellectual property and selling that. Really, it's technology export. The way you help support that, to go back to the previous point, is to help us innovate, help us drive capital into our businesses and help support the R and D we're doing here, which allows us to get into the other marketplaces because of the innovative product we have.

**Mr. Richard Fraser:** We're quite a fan of EDC, as I said in my remarks. Basically, the receivable insurance is important, the insurance for guarantees that we have to put out is important. Yes, we'd like to see them do more higher-risk funding, and it doesn't have to be huge funding. They put huge funding—without using any names—into aerospace. There are huge amounts there. For a very small amount, we could get some of these projects off the ground.

Some of the technology we're selling and the products going into these projects may not even be made in Canada, but it would sure help if we could fund a little bit more in some of the riskier markets. That would be helpful.

**Mr. Peter Julian:** Have you had discussions with them on that?

**Mr. Richard Fraser:** Oh yes. And they're finding different mechanisms for doing it. For instance, in this Russian one they're sort of joint-venturing or co-financing with a Russian bank. I guess they're using the on-the-ground resources of the Russian bank to vet some of these things. They are providing some funding, sort of co-financing. They're doing a deal up here; we're coming in from the bottom. Our client is going into this deal, and we're coming up the bottom and selling with that financing.

Hopefully, it will be concluded shortly.

**Mr. Peter Julian:** Okay. Thank you.

**The Chair:** Thank you, Mr. Julian.

With that, let me just thank all three of you, Mr. Hodge, Mr. Kukucha, and Mr. Fraser, for some very wonderful presentations and responses to the many questions.

I'll ask the members if they could just stay for five minutes to discuss one issue on the travel budget.

Thank you very much. We appreciate your time.

[*Proceedings continue in camera]*