House of Commons
CANADA

Legislative Committee on Bill C-30

CC30 • NUMBER 007 • 1st SESSION • 39th PARLIAMENT

EVIDENCE

Monday, February 12, 2007

Chair

Mr. Laurie Hawn

Also available on the Parliament of Canada Web Site at the following address:

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● (1735)

[*English*]

The Chair (Mr. Laurie Hawn (Edmonton Centre, CPC)): Folks, we will call the meeting to order. I know we're grabbing lunch. Just go ahead, and we will kick off.

We have a couple of administrative items to deal with before we get into the witnesses and the rounds of questioning. This is a working meeting.

We have two items of business to take care of before we get into the meat of the meeting. The first one is to adopt the second report of the subcommittee, which you all have, which lays out the witnesses on the air pollution panels for February 13 and February 15. You have it in front of you. It's as discussed.

Mr. Godfrey is the mover.

(Motion agreed to) [See *Minutes of Proceedings*]

The Chair: The second item is on the budget. The motion is that the proposed budget in the amount of $65,300 for the period of February 1 to March 31, 2007, be adopted, and that the chair present the said budget to the Board of Internal Economy.

It is moved by Monsieur Lussier.

(Motion agreed to)

The Chair: Thank you for that.

This is a working meeting. Those who feel the need to further graze or slake their thirst, feel free to get up and do that. No slacking going on here—slaking is okay.

I want to welcome our witnesses today: from the Canadian Chamber of Commerce, Nancy Hughes Anthony and Michael Murphy; from Greenpeace Canada, David Martin; from the National Round Table on the Environment and the Economy, Alexander Wood; and from Simon Fraser University, via teleconferencing, Professor Mark Jaccard.

Professor Jaccard, can you hear us?

Professor Mark Jaccard (School of Resource and Environmental Management, Simon Fraser University): Yes, I can. Can you hear me?

The Chair: Yes, you bet. I just want to make sure we're all on the same frequency here.

Witnesses, many of you have probably testified at these things before. We give each witness about ten minutes. Please try to keep to that, or a little bit less, if you can.

We'll run through all the witness testimony, and then we'll open up the floor to questions, which will go to the opposition party first, then the government, and then back and forth until all members have had a chance to ask their questions.

Without further ado, I will ask Nancy Hughes Anthony, president and chief executive officer of the Canadian Chamber of Commerce, to make some opening remarks. Ms. Hughes Anthony, the floor is yours.

Mrs. Nancy Hughes Anthony (President and Chief Executive Officer, Canadian Chamber of Commerce): Thank you very much, Mr. Chair, and thank you very much, members.

It's a great pleasure for us to present our views on Canada's Clean Air Act today.

As many of you I'm sure know, because you have chambers and boards of trade in your ridings, the Canadian Chamber of Commerce is the largest advocate for business in Canada. On behalf of our members, once again we thank you.

The Canadian Chamber of Commerce recognizes that climate change is a serious and complex global issue that requires effective short-, medium-, and long-term strategies and actions.

The international community is engaged in a variety of processes to determine the most appropriate future framework for international cooperation on action to address the greenhouse gas challenge. This provides an opportunity for Canada and other countries to refocus the domestic and international climate change issue to a discussion of effective actions to improve energy efficiency while still meeting the energy needs of the economy. In addition, a concerted international effort is needed to develop the technological solutions required to bring greenhouse gas emissions under control over the long-term.

Industry is part of the solution. Many members of the Canadian chamber have already taken actions to reduce energy use and slow the growth in greenhouse gas emissions. We are committed to further efforts.

We have been encouraging our members for many years to participate in and to enhance their commitments to programs such as the Canadian Industry Program for Energy Conservation, CIPEC. We've also partnered with Pollution Probe to develop a primer on climate change for SMEs.

I've asked the clerk to distribute copies around the table to you today.

[*Translation*]

This document is available in French and English.

● (1740)

[*English*]

This describes two smaller enterprises, the challenges of climate change, and the actions they can take individually to contribute to reductions in greenhouse gas emissions. This is very often a neglected segment of our economy when we discuss these issues, and I would encourage the committee to make sure that small and medium-sized enterprises are considered.

I'd also like to give an example of progress that has been made in manufacturing in Canada, a sector that gets so much attention when it comes to greenhouse gas emissions. While increasing production between 1990 and 2003 by 48%, manufacturers reduced their emissions by 7.4%. The large final emitter component of manufacturers reduced emissions by 20%. This represents a 38% reduction in emission intensity. One of the key lessons learned from this data is the important connection between investment and emission reductions. We need to encourage that investment in technology.

While we continue to take action to slow the growth of GHG emissions, there's no doubt that new technologies will be the key to the large-scale emission reductions needed over the long term. As you know, Canadian industries are currently developing new technologies and fuel sources, but many initiatives are only at the pilot stage and will have to be scaled up to full projects and programs to prove successful. Examples to these technologies include recovery of oil from drilling muds, utilization of gas from oil refining that would otherwise be flared, and improved animal waste management.

Given the importance of energy to the economy, new technology such as clean coal and carbon capture and storage deserves significant attention. A longer-term focus is necessary to support full development and commercialization of these technologies and to undertake the necessary research into other potential breakthrough technologies.

[*Translation*]

The business sector is part of the solution and is always quite prepared to continue doing its bit by playing an active and committed role.

[*English*]

Specifically on the question of targets—I know they are the subject of discussion for this committee today—Canadian industry supports the setting of responsible targets, along with an effective compliance regime. However, any targets, whether short-, medium-, or long-term, must be realistic and reflect the fact that Canada has a very energy-intensive economy with increasing energy exports. Also, in the case of industrial investments, it will be critical to look at investment cycles to ensure that we deal adequately with capital stock turnover realities.

Targets for industry should ramp up over time, recognizing that technical limitations are faced by most firms and that arbitrary short-term targets can divert capital from investments that have the potential for greater reductions in the long term. The key will be to closely integrate the targets with the capital stock turnover cycle so that new investments are timely, affordable, and most likely to have the double benefit of productivity and environmental improvements.

An integrated approach to dealing with both energy and the environment that provides for fair contributions from all regions and segments of society is needed if we want to adequately address both climate change and clean air. It must include a dialogue with Canadians about their own responsibilities and must develop measures that adequately address the consumer contribution.

We agree that the targets for greenhouse gas emission reduction should be based on emission intensity, where emission levels are compared with the level of output of the firm or sector, rather than on absolute emission levels. This ensures that companies are not penalized for growing their business even when they achieve significant environmental improvements.

I have two other points, quickly, Mr. Chair. One is on the issue of equivalency. We support the approach in Bill C-30 whereby regulations are not needed when existing provincial regulations have an equivalent effect. This ensures that industry initiatives to achieve further environmental improvements are not thwarted by overlapping and possibly conflicting regulations. You will agree, I'm sure, that we need only one regulator in each jurisdiction.

Finally, with respect to the notice of intent to regulate that was tabled in conjunction with Bill C-30, a number of principles were listed as guiding the development of industry regulations. The Canadian chamber would like to emphasize our support for these principles, and we hope they will continue to be the foundation on which regulations will be built. I don't need to repeat these principles. Some of them are ones that we feel are very positive—for example, maximizing environmental gains through a multi-pollutant approach; having some flexible compliance mechanisms; and, certainly, promoting investment in the development and deployment of new technologies. If these principles are followed, we believe the resulting regulations will enable us to make measurable improvements to the health and environment of Canadians, while promoting sustainable economic growth and competitive Canadian enterprise.

● (1745)

[*Translation*]

We would like to thank the committee members for giving us this opportunity to provide you with our comments.

We would encourage you to consider an integrated approach that accounts for energy and environmental issues fairly and equitably.

[*English*]

As one final thought for the members as you proceed with your deliberations, once again I encourage you to avoid artificial targets and instead keep foremost in your mind that in dealing with climate change in particular, we need to take into account the energy and economic realities of the country.

I'd be very happy to answer any questions you might have.

Thank you, Mr. Chair.

[*Translation*]

The Chair: Thank you very much, Ms. Hughes Anthony.

The next witness is David Martin, from Greenpeace Canada.

Mr. Martin, the floor is yours.

[*English*]

Mr. David Martin (Greenpeace Canada): Thank you, Mr. Chair and members of the committee.

You should have before you a submission from Greenpeace entitled "Targeting Climate Change in Canada". I would also like to note that you have received a letter dated January 22, with recommended amendments to Bill C-30 from eight different executive directors of environmental groups. Our presentation this evening addresses climate change issues, but Greenpeace would like to adopt those submissions that are in those amendments.

As drafted, Canada's Clean Air Act targets no greenhouse gas reductions before 2020, and only sets a distant and, in our opinion, inadequate target for reductions by 2050. The notice of intent calls for emission reductions of between 45% and 65% from 2003 levels by 2050. Just to put that in perspective, Canadian greenhouse gas emissions in 2003 were 754 megatonnes. That means that by those targets, we would come down to between 264 and 415 megatonnes in 2050.

Reductions of emissions are usually calculated, as you know, against a baseline of 1990. As a signatory to the Kyoto Protocol, Canada committed to reduce emissions to 6% below 1990 levels by 2008 to 2012, so our target for 2012 is in fact 563 megatonnes. In order to prevent dangerous climate change, Greenpeace calls on Canada and other industrial nations to meet their Kyoto commitments as the first step, and then to target further deep reductions of emissions relative to 1990 levels: 30% by 2020, and 80% by 2050.

Why these levels? These levels are science-based targets designed to prevent, in the words of the Kyoto Protocol, "dangerous climate change" by keeping the global average temperature increase as far below two degrees Celsius as possible.

In terms of the actual levels of carbon dioxide equivalent in the atmosphere, pre-industrial levels were at 280 parts per million, and the current level is up to 430 parts per million. The Stern review concluded that the greenhouse gas concentration should be limited to a range of 450 to 550 parts per million. The environmental community thinks we should be targeting it at the lower end of that range. Just so you understand the implications, it's thought that the planet could reach 550 parts per million as early as 2035. At that concentration, there's a 77% to 99% chance that the average temperature increase will exceed two degrees Celsius. It's widely accepted that temperature increases of more than two degrees Celsius will dramatically increase the risk of serious and irreversible climate change impacts.

The longer we delay those emission cuts, the faster they're going to have to be reduced. That's just simple mathematics. We have only a short window of opportunity, so it's vitally important to start reducing immediately.

With regard to intensity-based targets, the notice of intent states that "the Government intends to adopt a target-setting approach based on emissions intensity". Emissions intensity is a measure of greenhouse gases emitted per unit of economic activity. Unfortunately, these intensity-based targets can be used to misrepresent progress—or the lack of progress—that's being made. Canada's greenhouse gas intensity measured in megatonnes per billion dollars of gross domestic product has actually decreased—that is, improved —14% between 1990 and 2004. However, this improvement has occurred largely spontaneously as a result of energy efficiency improvements, at the same time that the absolute levels of greenhouse gas emissions have increased 27%. Therefore, Greenpeace rejects the use of intensity-based targets and supports the use of absolute targets for greenhouse reductions.

● (1750)

What about Canada's climate crisis? Despite making a commitment to the Kyoto Protocol in 1997, Canada has had only three plans: one in 2000, another in 2002, and finally the 2005 project green plan in April 2005.

The early plans relied primarily on voluntary actions instead of effective regulation, incentive programs, or market-based programs. Thus, greenhouse gas emissions were not reduced. We know that by 2004 emissions had risen to 758 megatonnes, 27% above the 1990 level and 35% above our Kyoto target. This places Canada among the worst countries in the world in emission changes since 1990. Canada ranks fourth from the bottom among the 41 industrialized nations known at the annex 1 parties. This is a worsening of Canada's ranking since 2005, when it was sixth from the bottom.

The former Liberal government did a dismal job of fighting climate change, but their 2005 project green plan laid the foundation for positive action to fight climate change in Canada. In our opinion, it would have allowed Canada to meet its Kyoto commitment by a range of measures. The Clean Air Act as drafted would take Canada even further backwards in the fight against the climate crisis.

In our opinion, Canada's Kyoto target is achievable. While the government has not withdrawn from the Kyoto Protocol, lack of aggressive action will mean an effective abandonment of our commitment. The Kyoto target has been falsely characterized by the government as unachievable or unrealistic, and it is neither. However, Canada must be prepared to spend money.

The government's first budget in May 2005 slashed climate change spending from $4 billion to $2 billion over the following five years. If we need money, this is the time to create a green fund, a carbon tax similar to that of Quebec, by taxing fossil fuels. Determine the size of the fund by the amount of money required to meet our targets. The design of that fund should be a top priority.

It's scaremongering to suggest that Canada's Kyoto commitment would result in “economic collapse”. Sir Nicholas Stern, head of Britain's government economic service and the former World Bank chief economist, put that fear to rest last fall when he said that the cost of not acting against climate change will be immeasurably higher, typically amounting to about 20% of global gross domestic product per year, whereas the cost of action to reduce greenhouse gas emissions can be limited to about 1% of GDP per year.

Last month, Greenpeace released a global energy blueprint to 2050. It confirmed the findings of the Stern review and emphasized that the world can have its cake and eat it too. We can have clean, safe, renewable energy while improving efficiency, enjoying economic growth, and phasing out dirty and dangerous energy sources such as coal and nuclear power.

We were very glad to hear Mr. Baird say before this committee that the era of voluntary compliance is over. Now is the time for mandatory emission reductions for big business, starting in 2008. These targets should be designed to achieve a Kyoto-level cap for the commitment period. Industry should do its fair share. Since they produce 50% or more of emissions, they should be responsible for at least 50% of the reductions.

Canada also needs automobile efficiency standards matching or improving those of California. We need incentive programs for green energy and conservation to be expanded, and Canada needs a million-solar-roof program for solar hot water.

We need to improve the economic playing field and level it out by eliminating direct and indirect subsidies for fossil fuels and nuclear power. Start by eliminating the 100% write-off for tar sands under the accelerated capital cost allowance. The tar sands produce five times as many greenhouse gas emissions as conventional oil.

We can also stop the subsidies for Atomic Energy of Canada Ltd.; $20 billion is enough to have wasted on this dirty, dangerous, and expensive technology. Nuclear power can't solve climate change, and it will actively prevent investment in more cost-effective green energy alternatives.

● (1755)

We also think you should set the market to work with a truly effective emissions trading system. Put tough emission reduction targets in place for each industry. Don't place a ceiling on the cost of emission credits, and don't allow industry to avoid the true cost of their pollution by paying into a technology fund, as suggested in the notice of intent.

It's also vitally important to make this trading system international. Industry should be allowed to purchase offshore credits—not so-called hot air credits, but credits for investment in green technology and other meaningful greenhouse gas reducing activities.

Finally, I'd urge you all to remember that Kyoto is not just about a 5% global reduction in greenhouse gas emissions by 2012. It's an unprecedented international movement, starting with greenhouse gas reductions by the developed nations, but bringing in the developing nations in the subsequent Kyoto periods. It's the integration of those burgeoning economies into a climate change regime that is so vitally important to preventing a global catastrophe. China, India, and Brazil have already committed to the process, and we can't allow it to falter.

Canada has never before shirked its duty in either wartime or peacetime. I don't think Canadians are quitters, and we have to deliver on our Kyoto promise. We believe that these priorities should be reflected in the upcoming budget. Together we can do it a year at a time. Starting at a level of about 800 megatonnes, a 50-megatonne reduction per year from 2008 to 2012 will bring us to our Kyoto target. So let's get going.

Thank you.

The Chair: Merci, Monsieur Martin.

Now, from the National Round Table on the Environment and the Economy, we have Mr. Alexander Wood, acting president and chief executive officer, for ten minutes or less.

[*Translation*]

Mr. Alexander Wood (President and Chief Executive Officer, National Round Table on the Environment and the Economy): Thank you, Mr. Chairman.

I would like to thank the committee members for providing the National Round Table on the Environment and the Economy with this opportunity to present you with our views on the issue at hand.

At the outset, I would like to apologize for not bringing the documents that I would have liked to have with me today. We had problems with translation and producing these documents, but they will be available from the clerk as soon as possible.

[*English*]

My testimony today, Mr. Chair, is going to be of a fairly general nature. I'm going to talk about work the national round table has done on the issue of long-term targets for the country, specifically with reference to an advisory note the national round table released this summer on how Canada could achieve a 60% reduction in its GHG emissions by 2050 while still meeting the energy needs of its growing economy.

I'll also talk a bit about the fact that the round table has been asked under Bill C-30 to provide some advice to the government on a number of matters. That's an issue I'll discuss later, but just to say at the outset that our response to that is being developed right now, so I'm not in a position to comment too much on the specifics of that advice as yet.

Over the years, the round table has provided a number of reports related to the subject before the committee. We've done reports dealing with GHGs in transportation, we've done reports on domestic emissions trading, and we've done reports on the use of fiscal policy when it comes to energy and the need to decarbonize our energy system.

Our signature work in this area is a report that was issued in June 2006 called *Advice on a Long-Term Strategy on Energy and Climate Change*. That piece of advice to the government, requested by the previous government, was an analysis that we undertook using a model of stabilization wedges that had been pioneered by some Princeton professors. As I said, what we did, essentially, was lay out a long-term scenario by which Canada, through a series of technology measures and energy efficiency measures, might in fact reduce its emissions by 60% while maintaining economic growth in the context of a growing population as well.

To provide the right context, our analysis violated just about every principle of scenario planning, as our consultants reminded us regularly. We did one scenario, and you're never supposed to do just one; you're always supposed to do more than one. You're never supposed to do an odd number because people think you're suggesting the one in the middle. We did just one, and it does have some important messages and some important lessons have emerged from it. Those, generally speaking, are that it can be done in terms of meeting our energy needs while substantially reducing our long-term emissions. If it is to be done, it has to start now in terms of the policy response required. It will require all available technologies and all available energy efficiency opportunities to be realized. There is no silver bullet when it comes to this question. It presents a massive energy technology and energy efficiency technology deployment and uptake challenge. That is the message we want to carry forward.

In terms of the particular focus of this committee, the basic message I would like to offer is that whatever decisions are taken about short-term targets need to be set in the context of a long-term framework and a statement of a long-term objective. It's no coincidence in the minds of the round table members that the most successful of the OECD economies when it comes to meeting or substantially reducing emissions of GHGs is the U.K. We see that as proof of the necessity of setting in place a long-term target and a long-term framework for approaching this issue, as the U.K. has had for a number of years.

Turning now to the Clean Air Act notice of intent, I won't go too much into the details of what's being requested at the round table, as I assume members are familiar with that. Essentially, we have three separate issues before us: advice about national ambient air objectives in the long term; advice on national emission reduction targets in 2050; and criteria on air contaminants in specific sectors—and I can remind the members what those sectors are if it's required.

● (1800)

On greenhouse gases, here I'll use the specific language of the notice of intent, because I do want to be precise. The round table has been asked to provide advice on emission reduction targets for 2020-25 for specific sectors. I can identify these sectors, if required. This advice should be based on a recognition of the outlook for Canadian economic growth and the government's intention to build on an emissions intensity approach, with targets that are ambitious enough to translate into a fixed cap on absolute emissions.

The second piece of advice sought on the GHG side is advice on the national emission reduction target that should be adopted, within the range of 45% to 65% from 2003 levels, by 2050. Of particular importance, obviously, are the scenarios by which Canada could in fact meet the target that, as we are going to be suggesting to the government, should be the one to adopt.

There are a couple of things to note here. One thing that we know is going to be very difficult in terms of the basic research we need to conduct is this transition period that clearly will occur between 2010-15 and 2025, when, as is anticipated in the act, there is this transition from an intensity-based target approach to an absolute target approach. It's an issue that needs considerable thought and to which we will be devoting considerable research resources.

The second point I'd like to make is on the question of that long-term range, the 2050 range. Obviously it's consistent with the approach or the research that we've already undertaken, looking at that 60% number, the number that we've already provided our advisory note on. I should be quite clear on that. The round table was not advocating that particular target when that advisory note was put out. That was a nominal target chosen for research purposes, but we now have, from a research perspective, the beginnings of an approach towards meeting the requirement to actually come up with advice on a particular number.

Just to wrap up, Mr. Chair, as I said at the outset, we have been given this piece of work under the Clean Air Act notice of intent. The timelines are fairly short for the round table. We have been asked by the government to provide advice in the form of a preliminary report by the spring of this year, with a final report to the government by the fall. We are right now in the course of developing the research agenda, the basic methodological approach that we're going to use.

A large part of this is still to be discussed with the members of the round table. We're meeting with them later this week to walk them through our suggested approach. So I may not be able to give you a clear sense of what the round table members themselves are feeling about this question right now, but I'll try to answer whatever questions you might have.

Thank you.

● (1805)

The Chair: Thank you, Mr. Wood.

[*Translation*]

We will now hear from our last witness: Mr. Mark Jaccard, a professor at the School of Resource and Environmental Management at Simon Fraser University.

[*English*]

Mr. Jaccard, welcome again. We can see you fine; you're looking marvellous.

The floor is yours, sir, for ten minutes.

Prof. Mark Jaccard: Thank you very much.

I'll focus my comments on greenhouse gas emissions with respect to the Clean Air Act. I have provided some slides. I'm actually going to refer to just one of them, and that would be the third slide, entitled “History of Canadian targets, policies, emissions”.

Do you all have that page?

The Chair: Yes, we do.

Prof. Mark Jaccard: All right, I'll speak to that, then.

The first point I want to make is that we're learning something about the use of the word “targets”. That is, one can talk about targets quite loosely, and those targets may not mean a lot in terms of what actually happens in the economy and what actually happens to emissions. I'm pointing that out simply because when I hear some of the other witnesses just now, or politicians in general, or the media, or interest groups talking about targets, I immediately get a little bit edgy and nervous, and curious to see what someone will say next in terms of how we actually achieve those targets.

I wanted to just make the point that discussions about targets in the absence of very specific, compulsory-type policies that are strongly linked to those targets are highly suspect. I think we need to start getting that into our discourse and not be as loose with terms like “targets”. In my view, for our discussion, what we've learned is they have to be linked to the actual policies.

What I'd like to report in the few minutes that I have is on what we're learning from a lot of independent research around the world that I'm engaged in with other independent experts from academia, from government, from various institutions about policy effectiveness, how to link targets to policies, and therefore some things to watch out for that I want to alert the committee about.

If you look at the overhead, what you see on the bottom in red are the different targets that Canada has set at various times. What you see on the top of the line are the policies we enacted that we said would get us to those targets. Of course, the line you have going up shows the actual emissions and what they've done over that timeframe.

It was hard to argue in 1992 or 1993 what might happen with various types of policies looking at the Canadian data, but now we have the advantage in 2007 of looking at data and experiences in Canada—the example I'm showing you here—and in other countries around the world with their ability to link policies that actually are effective in achieving the targets they set. So there are a couple of points I want to make about that, some of which are hopefully very obvious; nonetheless, I think they bear repeating.

The first point is that voluntarism does not work when we're talking about something that is as profound a technological change as dramatically reducing greenhouse gas emissions. By voluntarism, I mean policies that are primarily subsidy based or providing information: television advertising, labelling of products, small subsidies, large subsidies, those kinds of things.

I also want to point out that to the extent that policies have been very focused on energy efficiency, there's an additional challenge. I can talk to this later in questions if someone wants to speak about it, and I have a slide on it that I don't have time to talk about right now.

Research from electric utility programs over 25 years in the United States and from government programs in Europe, Canada, and elsewhere is indicating that energy efficiency is much more expensive than its advocates would have us believe because of differences in risks of the new efficient technologies and the length of paybacks from those technologies. Energy efficiency is much more difficult to achieve from a policy perspective, because when you're giving a subsidy it's hard to sort out who was going to make an efficiency investment in the first place.

Then, finally, when you improve the productivity of energy in your economy through energy efficiency actions, we talk about small rebound effects where people might actually demand more of a service if it becomes cheaper, such as heating and so on. I think that's small and is dwarfed by a larger rebound effect that I and several international researchers are very interested in right now, which is that general productivity gains in energy lead to a plethora of new energy-using technologies that are all around us.

So if you were to ask me if I thought that Canada would use dramatically less energy 40 years from now, even after having made a concerted effort to do so, I would be very skeptical of that potential.

● (1810)

What that tells me is that from a policy perspective, we need to be focusing increasingly on emissions, rather than on energy efficiency. When you do that, there will be energy efficiency gains that come from that. But when I hear people say we should work on efficiency first, and then we'll turn to the more difficult question of emissions, that, to me, is part of the explanation for the figure I just showed you, which represents a huge gap between the targets we set and what actually happened with the policies we used. Those policies shown in green along the top were all primarily dominated by subsidies and information programs, so there was a voluntary approach.

What I also want to point out is that advocates of renewable energy will argue that if subsidies are provided for renewable energy and removed from fossil fuels, very soon renewable technologies will beat out fossil fuels, so that's a good policy approach.

I would argue that the evidence does not support that. The evidence tends to support that as long as fossil fuels, which are a very rich and in many ways wonderful form of energy, can use the atmosphere as a free waste receptacle, we are going to see that innovations will continue to find ways—developing a backyard patio heater that burns propane, or whatever—of using fossil fuels to provide new services that you and I can't even imagine right now, but which will emerge over the next 10, 15, 20 years.

This leads me to the point that our policies have to be of a compulsory nature. They can be designed in ways so they don't have huge economic impacts in the short term, and that's where I would put my effort, on that design side. But those policies have to be something that constrains people in a regulatory way or through financial penalty from using the atmosphere as a free waste receptacle.

All other discussion about targets and voluntarism and energy efficiency should be dwarfed by our policy focus in that particular area. What this means is that all sorts of subsidies are probably not as important. So when people talk about super-funds and getting government to spend more money, I'm not convinced of that.

When it comes to policy design, we're now in a conundrum in Canada. We're looking at a large final emitter policy that would have a cap-and-trade character to it, which is something I support, but which would only apply, then, to about half of the economy. So we may be heading down a road where—and I heard people say we really need industry to cover its load—I would argue that we're going to end up with industry perhaps cutting emissions with the LFE program, depending on how it's designed, and if it doesn't have too many escape clauses, but the rest of the economy will continue to follow the same trajectory unless we get those kinds of signals out to consumers.

To do that, for example, the large final emitter program would actually go further upstream and would be a program not looking at emissions from industrial facilities, but instead one that looked at the carbon content coming from the fossil fuel sector, and charging for that. Otherwise, the large final emitter program would have to be tied to strong similar types of policies affecting the transportation sector and affecting the building sector, including everything that's inside of buildings, such as appliances and so on.

I have some proposals that are well recognized around the world, and that various governments and countries are starting to implement now, for how one would get there, but I won't talk about the details of those right now.

This can mean that when we look at the wedges of emission reductions that Alex Wood was just talking about from the preliminary study that the national round table did, one showed a considerable amount of energy efficiency being the way to get to deep greenhouse gas reductions in Canada over several decades.

I just want to alert you to the fact that there is research out there that suggests that such energy efficiency, when you get down to its cost and policy constraints, could be much more difficult to achieve, which means we need to be focusing right now on forceful policies to get the signal out there that you can no longer emit greenhouse gases. And those policies need to be coming into place right away with this act.

Thank you. I'll conclude there.

● (1815)

The Chair: Thank you very much, Professor. We appreciate that.

We've got a little over 68 minutes, so we'll get in 68 minutes' worth of questions, and without further ado we will turn it over to Mr. McGuinty, who is splitting time with Mr. Godfrey for the first seven minutes.

Mr. David McGuinty (Ottawa South, Lib.): Thank you, Mr. Chair.

Thank you very much, guests and witnesses.

Thank you, Professor Jaccard. It's good to see you on TV again.

Professor Jaccard, I wanted to go to your remarks about the importance of making sure that whatever compulsory measures you're recommending, for example, and I want to come back to that in a second, ought to be considered in a larger policy context. One of the challenges we're facing now, as a committee, is that the government is actually announcing policy decisions as we undertake this work as a committee. Just last week, the Prime Minister announced new standards for vehicles by 2011. Today he reannounced our government's partnership fund, with $1.5 billion apparently split, somehow, between clean air and greenhouse gases—we're not sure how yet; that's to be defined.

I'm a little concerned about the government's being off and running, with the Prime Minister making announcements on policy. And I guess I want to get now to the concept of how this policy the government is announcing is going to actually come down to targets. We've had no announcement from the government on immediate, mid-term, or long-term targets of any kind. So I want to ask you about what compulsory measures you think would take us on the right trajectory. You've talked about constraining people in a regulatory way.

The second question I want to put to you is about the target. The only witness here today who actually gave us a target was Greenpeace, and they told us that they'd like to see the country be bound by the target under Kyoto. What target are you recommending for the people of Canada?

Prof. Mark Jaccard: Thank you.

You've raised the question about the government coming out with policies while it's also engaged in the whole process of this act. I only want to make one comment here, and that is that in some senses, with different minority governments, if there are areas where the previous Liberal minority government had moved with some progress, and we have some evidence of the direction to go, I would be interested in the government moving on that, where possible. I'm thinking of the large final emitters program. I hate to see us get bogged down. Likewise, I had some regrets that the vehicle emissions policy was voluntary. If that one could be shifted, I would be happy about that.

I take your point, because I've just been hearing these announcements myself. I'm very keen to know how, for example, the ecotrust policy, I guess it's called, or something like that, differs from the subsidy programs I was just engaged in critiquing when they came out under the guise of Project Green, which I'm sure you're familiar with. It took us some months, but we analyzed Project Green by simulating the subsidy side of that policy—the climate fund, and so on—and we were rather skeptical about some of the impacts that were being suggested. So I'm intending to subject the new policies to the same kind of analysis, and I'd like to know what kind of analysis has already been done before jumping out with that.

You also asked me about the kinds of policies one should use. I don't want to take a long time to answer, but I'll just direct people to the fifth slide in the group you have before you. It says “Policy package of market-oriented regulations”. Number one is what I call a carbon management standard. One could call that an upstream cap-and-trade system, which I described earlier. Number two, a vehicle emissions standard, which is what California has and what Arnold Schwarzenegger is moving ahead with, I would apply widely across the transportation sector, and ultimately even think about it for air transport, which may involve biofuels or various things. The building standard is a way of carrying that over, as well. Again, it would take a fair bit of time to describe those in detail, and I don't want to go too far. But I can come back to those.

Finally, you asked me about the target and the analysis I've been engaged in, and that would be the final slide. My group also did some work, some of it for the national round table and some of it independent of the national round table, looking at how Canada could get those very deep reductions by 2050. In doing that, we still see that this could be very expensive, so it's important to understand that a target for the United Kingdom and what that might cost can be very different from a target for Canada. In Canada, a country with higher rates of economic growth and population growth and an expanding fossil fuel industry, it can be much more expensive to turn that around.

I hope I've answered the three questions you've asked.

● (1820)

Mr. David McGuinty: You didn't answer the last question. What is the target you're recommending for the country?

Prof. Mark Jaccard: I'm not recommending a target for the country. What I'd like to provide to the country are the marginal costs of different target levels. The target you see in the diagram in front of you says that we would have to shift toward a carbon tax or its equivalent through regulation of about $180 per tonne of carbon dioxide. We'd have to get to that by about the year 2020 in order to have our emissions fall by about, I believe, 60% from where they are today or 80% from where they would be in the future.

I'm an expert on analyzing what the costs of abatement are. Then someone has to mix that together with the environmental evidence of the impacts, and I'm not prepared to do that.

Mr. David McGuinty: Can I ask our guest from the Canadian Chamber of Commerce, Ms. Hughes Anthony.... Forgive me, I don't have my glasses. It's good to see you again, Nancy.

I just wanted to ask you what you think the position is right now of most Canadian industries. You've been at this for some time. You participated in our former government's issue tables. I dare say you had a hand in crafting the green plan that was eventually announced by our government.

Can I take it as a matter of record that the Canadian Chamber of Commerce has never supported the Kyoto Protocol?

● (1825)

Mrs. Nancy Hughes Anthony: If I may respond, Mr. Chair, no, I don't think that's true. I think what you say is very accurate, that the Canadian chamber and many other business organizations all joined in when the protocol was signed in 1997 in many round tables, discussion groups, various kinds of consultation mechanisms that were organized by the government, trying to come to some collective conclusion about what kind of plan should be there.

That was 1997. That's ten years ago. We have wasted ten years in discussion and tables and plans and all kinds of things. I think in the interim Canadian business has become very aware of the issue of greenhouse gases and has in many cases taken a number of initiatives.

At the point at which we were asked—I think it was probably around ratification time, in 2002—whether we could support the Kyoto Protocol, we were forced to say that we didn't think Canada would be able to achieve the targets and timelines that we'd signed on for in Kyoto without very serious damage to the economy. I think that's certainly still our position today.

But is our membership attuned to the issue of reducing greenhouse gases? Absolutely. So I would want to stress that there's a lot of effort being made along that line, and what I've said today is that we certainly feel our members would agree with the setting of targets along with an effective compliance regime. So I'll put that on the record again.

The Chair: Just before we go on, for the folks in the back, there are extra sandwiches up here, so feel free to help yourselves.

[*Translation*]

Mr. Bigras, it's your turn.

Mr. Bernard Bigras (Rosemont—La Petite-Patrie, BQ): Thank you, Mr. Chairman.

Today we are examining Bill C-30, which deals with targets. Over the next few weeks, the government will probably be announcing, as part of its fight against climate change, targets for the industrial sectors which it feels to be quite audacious. However, in its notice of intent on October 16, 2006, the government was clear that its targets would be intensity-based. Consequently, greenhouse gas emission reduction indicators must take production into account. However, the Kyoto Protocol does not give any consideration for intensity-based targets, but rather the absolute value of the reductions.

My question is for Mr. Martin in particular. Have you done any projections regarding the gap that will be created between the intensity-based targets and those based on the absolute value as provided for in the Kyoto Protocol? To what extent will the method that the government is proposing to use push us further away from the Kyoto objectives?

[*English*]

Mr. David Martin: Thank you for the question.

Let me put it into perspective by talking a little about Alberta. Alberta is where the intensity-based emission targets started, through the Alberta government's climate plan in 2002.

I think the plan underlines the fact that intensity-based targets are simply a way of deflecting attention away from the need for real absolute decreases in emission levels. Alberta's intensity targets are for reductions of 16% by 2010 and 28% in 2020, but these targets would allow absolute increases of emissions of 34% in 2010 and 38% in 2010. That's what they're predicting.

I think it shows that the intensity-based emission targets are misrepresentative, false, and ultimately not useful. We need absolute levels of reduction. It's how we can best understand the environmental imperative and the fact that the targets I was talking about, the 30% reduction by 2020 and the 80% reduction by 2050, are based on science.

I understand Mr. Jaccard is not addressing that, but it is what's being addressed by the world community, the Intergovernmental Panel on Climate Change, and others. It's why we need absolute emission reductions, not intensity-based targets.

Thanks.

● (1830)

[*Translation*]

Mr. Bernard Bigras: My second question is for Ms. Hughes Anthony.

You told us that you were hoping to see Canada adopt an integrated approach based on the fact that both energy and the environment must be taken into consideration. I fully agree with you. However, the most recent report released by the Commissioner of the Environment and Sustainable Development teaches us a great deal about the type of policies that we should be adopting in Canada.

Ms. Gélinas clearly stated that as soon as the provinces produce, distribute and consume, they must, as a matter of course, be involved in all climate change policies because this is where, to a large extent, the decisions are made.

What role do you believe the provinces should play in Canada's policies to fight climate change? Do you feel that the best way to improve our greenhouse gas emission reduction record is to put the provinces in the loop, to tell them clearly that greenhouse gases must be reduced on a territorial basis and that they must reach an objective?

Inevitably, we may wind up with an interconnected east-west energy policy, I agree, but the reality is that the decisions are made in the provinces and production occurs in the provinces. If the provinces are not in the loop, we may wind up repeating the sad history that we all know today.

Mrs. Nancy Hughes Anthony: I will ask my colleague, Mr. Murphy, to answer.

[*English*]

Mr. Michael Murphy (Executive Vice-President, Policy, Canadian Chamber of Commerce): Thank you, Mr. Chair.

I'll only make a couple of quick comments here.

I think when you're looking at public policy development and planning in terms of dealing with climate change, it strikes me that you have to bring a whole lot of stakeholders into the picture. One we have been arguing about for some time now is on levels of government other than the federal government.

Clearly, if you accept our premise that energy and economic questions have to be part of the discussion, you need to stop talking about this question strictly from a silo perspective, if you want to put it that way, which I think we did too much of for too long and right from the get-go.

Provincial governments need to play a very significant role here. I don't mean in terms of looking at some of the specifics that might occur on things like provincial equivalency agreements, for example, which we think would be very important in terms of dealing with regulations in the right context, but it's also in terms of the fundamentals of making sure we make good decisions in Canada.

There's an issue with respect to the roles that provinces play in the energy area. Many of our members deal with provincial governments today. If you look at the two areas that are involved here from the standpoint of Bill C-30 in terms of both air emissions and GHGs, provincial governments are an important stakeholder.

Throughout the process, we've been arguing there's a list of people who you need to make sure are engaged sufficiently from a policy perspective. Provincial governments are right up there at the top of the list, I would say.

[*Translation*]

Mrs. Nancy Hughes Anthony: If I may, I would simply like to add the following. If I understand correctly, Mr. Bigras, you're suggesting that we have territorial objectives or targets. I can't see how that would work, because the energy resources are scattered throughout the country. It is by chance that Quebec has electricity and Alberta has natural gas.

Mr. Bernard Bigras: Don't natural resources come under the jurisdiction of the provinces, Ms. Anthony?

Mrs. Nancy Hughes Anthony: That is right.

[*English*]

The Chair: I'm sorry; we're going to have to cut it off there.

[*Translation*]

Mrs. Nancy Hughes Anthony: We nevertheless need to have a Canada-wide plan.

Mr. Bernard Bigras: Yes, that is true.

[*English*]

The Chair: Thank you very much.

We'll move on to Mr. Cullen for seven minutes.

Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP): Thank you, Mr. Chair.

Thank you to our guests.

Ms. Hughes Anthony, how many members are in the Canadian chamber? How many members do you have in your organization?

● (1835)

Mrs. Nancy Hughes Anthony: Over 350 local chambers of commerce are members. We have slightly fewer than 1,000 individual corporate members, and about 65 industry associations representing various kinds of industries are also members of the chamber.

Mr. Nathan Cullen: When we're talking about regulations for the largest final emitters, the biggest polluters in the country, it is bandied about when you ask government how many there are, but there are usually fewer than 50. You can even narrow it down to some of the biggest and most polluting. Since we're talking about the economics of this proposal and the recommendations we want to insert into this bill—I think you're satisfied with it, but many are not—has your organization costed out the potential economic harm to the small and medium-sized businesses if the climate continues to warm?

Mrs. Nancy Hughes Anthony: We've not done that costing. We're not a scientific organization, but that's one of the reasons—

Mr. Nathan Cullen: I mean economic costing, not scientific.

Mrs. Nancy Hughes Anthony: No, we've not done it, but that's one of the reasons we partnered with Pollution Probe on this modest document. We have a very large concern that there has been a lot of emphasis over the past number of years—the planning period—on large final emitters, and that's fine. I know that under the previous government there was a process through which many of those large final emitters were in a very active dialogue with the government, but in our view the whole question of small and medium-sized businesses has not really been raised. Many SMEs don't even think of this as an issue that will impact them one way or the other.

Mr. Nathan Cullen: Do you believe it will?

Mrs. Nancy Hughes Anthony: I think it important for that dialogue to begin. That's why, as I said, we put together with Ken Ogilvie of Pollution Probe at least the beginnings of some kind of document to say we have to think about this, and you have to think about this.

Mr. Nathan Cullen: I come from a rural part of the country where there is a lot of reliance on forestry, and the chambers of commerce in my region are absolutely desperate with worry over what's happened to our forests in northern British Columbia. The economy is being absolutely hammered.

When we had the forestry executives and some of the researchers who worked for them in front of the committee and asked if there was a correlation between climate change and what's happening with the pine beetle epidemic, they answered with total certainty that there was.

If we look at the Stern report and at this question of economic pain—because I think your organization has made an association toward the economic pain of honouring our Kyoto obligations—are there not two sides to this argument? The second side would be that the potential for economic harm to the small and medium-sized businesses in particular in our country is equally as grave if we don't act.

Mrs. Nancy Hughes Anthony: Of course.

I just don't think it's the time now for us, whether we're politicians, business groups, scientists, or whatever it is, to try to polarize groups and say there's more pain this way or there's more gain this way. We need to get on with it. In this respect, many of us around the table agree that there is science that is very challenging, as was pointed out by the scientists on this panel today. There are signals that need to be given to consumers, there are signals that need to be given to small business, and as we've said very clearly, we accept that some responsible target-setting needs to be done by government. We've heard that loud and clear.

Mr. Nathan Cullen: Let's talk about those targets for a moment—

Mrs. Nancy Hughes Anthony: I don't think we need more studies on the impact of this thing versus that thing; this is the reality, and we all have to pull together on it.

Mr. Nathan Cullen: Is your organization in favour of an emissions trading system?

Mrs. Nancy Hughes Anthony: The membership feels there need to be some flexible market mechanisms.

I don't think there is agreement that an international system that would send money offshore would be particularly fruitful.

Mr. Nathan Cullen: Is your organization supportive of a trading system? If you don't have a policy on it, then you can say so.

Mrs. Nancy Hughes Anthony: I'll just consult with my colleague. I think yes is the answer, but I think it would be a domestic one, as opposed to an international one.

Mr. Nathan Cullen: We don't have to specify. But the concept of an emissions trading system is met with favour by some of your members, at least.

Mrs. Nancy Hughes Anthony: Yes.

Mr. Nathan Cullen: Is such a system possible under an intensity regime?

Mrs. Nancy Hughes Anthony: I don't see why not.

Mr. Nathan Cullen: Maybe I'll pose that to Mr. Martin.

Do we know of any intensity-based domestic regimes that also allow for a trade? Usually the terms “cap” and “trade” are associated. How does one achieve that under an intensity regime?

Mr. David Martin: Don't get me wrong; intensity analysis can be useful. It's an indication of—

● (1840)

Mr. Nathan Cullen: Something.

Mr. David Martin: Yes, of something that's happening one way or another. But if you want a clear definitive analysis of where things are heading, I think they should be based on absolute levels.

Mr. Nathan Cullen: Do any successful trading regimes use intensity-based targets?

Mr. David Martin: I think some of them do.

Mr. Nathan Cullen: Can you name one?

Mr. David Martin: I'm sorry, I can't. But I'd be happy to provide you with information on it.

Mr. Nathan Cullen: Let me turn to Mr. Jaccard for a moment.

The concept of intensity-based targets is getting some play by this government. The Liberal plan, previously, had intensity-based targets.

Is it intellectually honest to talk about intensity-based targets when talking on the other hand about Kyoto obligations?

Prof. Mark Jaccard: Yes. I don't see where you couldn't achieve your objective with intensity-based targets.

You asked about a particular example, and I'm not sure one comes readily to mind, but I've been doing a lot of analyses of these over the past ten years. You could design—and I think we got there—intensity-based targets.

Now, your question was whether that can achieve a Kyoto target. What happens with an absolute cap is that it gives you greater certainty of the environmental outcome. With an intensity target, you would have to set that and perhaps ramp it up over time. You'd have to be responsive over time if you were really trying to hit a hard Kyoto target using that mechanism, because it has greater uncertainty about the emissions outcome.

The Chair: Your time is up, Mr. Cullen. I'm sorry.

Mr. Warawa, for seven minutes.

Mr. Mark Warawa (Langley, CPC): Thank you, Chair.

And thank you to the witnesses for being here.

The two questions I have focus on the technologies we need to clean the environment and more questions on intensity-based targets. I'm going to primarily focus on Mr. Jaccard and Mr. Wood.

Mr. Jaccard, you gave testimony at the committee on Bill C-288. In fact, I asked every witness if we could meet the targets. Every witness, except for one, said we couldn't meet the Kyoto targets.

With respect to meeting the Kyoto targets, you were quoted in the *National Post* on February 9 as saying:

> You would have to destroy one-third of the buildings and equipment in your economy in the next four years to meet the Kyoto target.

And then further on in the article, you are quoted as saying:

> Buying international credits in a four-year time frame is virtually impossible because you have to buy it from someone. Someone somewhere has to have done some greenhouse gas reductions and we have to be able to verify that they did that. That is really difficult.

First of all, is that a correct quote?

The first question concerns the Kyoto target. There is a lot of rhetoric on that. My understanding from your previous testimony is that we've passed that opportunity to be able to achieve it so we then have to find realistic targets based on policy. What technologies do you see us using to achieve targets of actually reducing greenhouse gas emissions?

Prof. Mark Jaccard: Yes, that was a correct quote. On the one hand I'm referring to domestic reductions. My modelling group was one of the groups picked in the national climate change process in 1998-99 to assess Canada's ability to achieve Kyoto. At that time, in running our model we recognized that we would need the equivalent of a greenhouse gas tax of $120 to $150 per tonne of carbon dioxide, and it would have to be implemented in 2000. Even then, it was touch and go if Canada could achieve it in that short timeframe. The reasons relate to capital stock turnover—the long amount of time it really takes to change your emissions.

On the credit trading, I won't give a lot of detail, but the problem is that tradeable permits are like currency: they require a level of trust. We see that happening in Europe today, and it would take much longer to happen on an international scale. I think Canada would mostly be buying credits, if any, from the European market, and we could have a significant upward pressure on that price. I'm also worried that politically it would be very difficult for the Canadian government to send a large amount of money overseas.

You asked about technologies. I would simply say that we have many technologies that could get our emissions down dramatically over a 40-year timeframe or several decades if we started immediately with policies that were compulsory in nature, which is what I'm calling for if we want that. The technologies relate to nuclear power, perhaps, all sorts of renewables, some degree of efficiency, and using fossil fuels with zero emissions through carbon capture and storage. All of those things are viable and would lead to increases in energy costs that were manageable and would involve increases of less than 1% per year of our energy costs.

● (1845)

Mr. Mark Warawa: Thank you, Mr. Jaccard.

I'll switch to Mr. Wood. You also mentioned in your presentation that we need to use all technologies and all efficiencies. Could you elaborate, please?

Mr. Alexander Wood: Sure. The analysis we undertook on how we could reduce our emissions by 60% by 2050 essentially looked at the full array of technological options. It concluded that given the scale and nature of the problem, of the challenge, we would need to use every possible technology. Just as a caveat, our starting assumption was to do an analysis based on current technologies and what was known about the rates of development and uptake of those technologies. We weren't anticipating any kind of new breakthrough technology that might contribute to the solution here. So the message was that everything would need to be brought to bear, but some things were more equal than others.

We pointed to three strategic priorities that the country should move forward with. The first was energy efficiency, which was the single greatest of those wedges I was describing. It is an aggregation of a number of smaller wedges, and touches on some of the aspects Dr. Jaccard was talking about earlier. It certainly dealt with transportation efficiency and building efficiency, but that was the single biggest contributor to this overall reduction.

The second priority was in the form of carbon capture and sequestration. So we identified energy production from the oil and gas sector as the second key strategic priority in technology.

The third of those technology priorities was the electricity generation sector generally and the need to bring into that electricity system a much more decentralized and distributed approach based on cogeneration and renewables. Just about every electricity generation technology that exists today that we are aware of would have to make a contribution. Several of them would have to see their contributions ramped up substantially, primarily the renewables and the cogeneration.

The Chair: Your time is up, Mr. Warawa.

Mr. Godfrey, please.

Hon. John Godfrey (Don Valley West, Lib.): Dr. Jaccard, I just want to make sure I understand a couple of things here. The first is that you're not, I'm assuming, opposed to Canada participating in an international system such as Kyoto; it's just the way in which we go around setting our targets that causes you a problem. Is that a correct assumption?

Prof. Mark Jaccard: Absolutely. I want to distinguish between the need for Canada to be involved in international processes to address climate change—which I agree with completely, and always have—and mistakes or whatever that Canada may have made in setting its target or in trying to meet its target. That has put us in a conundrum right now. What is unfortunate for me is that people are connecting whether or not we can comply with Kyoto with whether or not one cares about international processes.

My analysis in the year 2000 showed me that if government didn't put that tax in, we were not going to meet Kyoto, so I've known that for about seven years. At the same time, I'm always a strong advocate of international agreements.

● (1850)

Hon. John Godfrey: That's good.

My second point has to do with the fact that you're suggesting that to be rational and to prevent leakage, we don't need to focus simply on the 50% of the emissions that come from industry—largely from electrical generation, upstream oil and gas, and the rest of industry's large final emitters, excluding those two; we also need to focus on the other 50%, which would be residential and commercial transportation, agriculture, and waste. That would give us 100% capture of the universe of emitters, and we need to focus on that.

Prof. Mark Jaccard: I agree, and I think this second half that I'm worried about could really explode on us.

Hon. John Godfrey: As a third point, do I understand from your analysis that it's not that you're against targets, it's that you think we have them upside down? It's sort of a chicken-and-egg situation. What you're really saying is that if you tell me how compulsory you're going to be toward those six slices, as opposed to your six wedges, I can tell you with a degree of compulsoriness what you're likely to get by way of a target. In other words, the policy will then determine the target. You just don't like free-floating targets. Is that a fair summary?

Prof. Mark Jaccard: Absolutely.

Hon. John Godfrey: All right.

Then I also want to just make sure that, just as you are, in fact, in favour of our participation in an international system, you're not opposed in principle to our participating in a well-verified, validated international trading system. Your concern is simply supply in the short term. The concept of Canadian industry being able to get through a transition period by acquiring credits through verifiable additionality, so to speak, doesn't offend you.

Prof. Mark Jaccard: That's right, although I want to be careful with "verifiable", because I have some issues with what we define as offsets, whether they're happening in Canada or elsewhere, but just in general.

Hon. John Godfrey: To take you down the road a little further, then, toward the end of your presentation you concluded that we need to get going with policies right away, policies of compulsoriness that would apply to the 100% of emitters, not the 50%. Would it be fair to conclude from that that if we got going with short-term policies of compulsoriness for the entire sector of emitters, we might expect some predictable—indeed, measurable—short-term results that we might call targets?

Prof. Mark Jaccard: Yes, although I don't understand the words "short-term policies". To me, a policy in this context is going to be a policy that involves technological transformations, so it's inevitably a long-term policy and it starts today.

Hon. John Godfrey: Correct. So let me correct myself and make sure I've heard you properly here. If you start with the right policies in the short term—that assumes you're going to be continuing those policies, that there's no deviation, and that people had therefore better line up with those policies—that will get us on the right track, but it will also produce some shorter-term results that we might be able to measure and indeed call targets.

Prof. Mark Jaccard: Yes, and those are on diagram 6 that I've given you. You can pick different years along there, but please recognize that there's great uncertainty about those values. They're a prediction about how the economy would respond to certain policies.

Hon. John Godfrey: But we have to get going now, in the short term, for the long term.

That leads me back to you, Ms. Hughes Anthony. If we're going to get going on this, do you see any problem with the argument for short-term compulsory policies starting as soon as possible, leading to the long term being consistent? Do you have any problem with what Dr. Jaccard is talking about?

Mrs. Nancy Hughes Anthony: No, but I think the point that was raised by Mr. Wood was that if you're going to set short-term targets, you need to have them set in some context that coincides with your long-term framework—if I have you right, Mr. Wood. I'm not sure if we're saying the same thing or not, Mr. Godfrey, but I would certainly agree with Mr. Wood's observation on that point.

Hon. John Godfrey: Could I just ask one quickie? It's just a yes or no.

Did the business community, back in the 1990s, actually push for an international greenhouse gas emissions trading system, to allow businesses to be able to make those transitions in Canada more easily?

● (1855)

Mrs. Nancy Hughes Anthony: I'm sorry, but I don't know the answer to that question, Mr. Godfrey. I can find out, if you like.

The Chair: Mr. Jean, for five minutes, please.

Mr. Brian Jean (Fort McMurray—Athabasca, CPC): Thank you very much, Mr. Chair.

My question actually is to Mr. Martin, to start. Canada is responsible for less than 2% of the greenhouse gases in the world. Is that correct?

Mr. David Martin: Yes.

Mr. Brian Jean: And you suggest that we can meet our Kyoto commitments by the period of 2008 to 2012?

Mr. David Martin: Yes, I believe it's possible.

Mr. Brian Jean: Do you believe it's possible to meet those commitments without international credits?

Mr. David Martin: International credits will have to be part of the solution.

Mr. Brian Jean: In essence, we would have to send money to third world countries, developing countries, to meet our Kyoto targets and to help them build more efficient industries. In fact, I think that was what you said: Let's not send money over to them so they can spend it on the projects they want, let's send it over to them so that they can build more efficient plants, etc.

Mr. David Martin: The physical reality is that carbon dioxide doesn't stop at the 49th parallel or any other border. If we can make efficient investments elsewhere, outside of the country, that works too. But we don't think we should be investing in so-called hot air. Let's invest in the really effective greenhouse-gas-reducing technologies.

Mr. Brian Jean: I understand that.

China is responsible for somewhere in the neighbourhood of 17% of the greenhouse gases.

Mr. David Martin: I don't recall the exact figure, but that sounds....

Mr. Brian Jean: It's about right.

And it's 11% to 12% for India. Is that correct?

Mr. David Martin: Fair enough.

Mr. Brian Jean: Indeed, China, for instance, is introducing a new coal-fired plant every week right now. I think they're building one right now, aren't they? Is that correct?

Mr. David Martin: That I couldn't tell you. I know they're radically increasing their renewable energy production as well.

Mr. Brian Jean: In fact, in some places in China people are born and die without ever seeing the sky because it's so polluted.

Mr. David Martin: One of the biggest successes we're seeing now with the Kyoto Protocol is the clean development mechanism. The uptake in China for the use of that so-called flexibility mechanism under the Kyoto Protocol has been massive.

Mr. Brian Jean: I understand, but on one side they're going to build coal-fired plants at a rate of one per week and do other polluting things, and we're going to send money over for them to build more efficient plants. It seems a little bit strange that we would invest money in technology there when we could invest money here to get our job right first, because we don't have our backyard cleaned up. And then we could send the technology.

Mr. David Martin: I don't have any argument. The environmental community has argued as strongly as anyone that we should be acting domestically first as a top priority, before we look offshore.

Mr. Brian Jean: Has your group costed out the amount of money it would take to meet the Kyoto Protocol by 2008 to 2012? Have you had it professionally costed?

Mr. David Martin: No, we're not sure of the amount of money it's going to take. We are sure that the cost, however, will be much greater if we don't invest that money.

Mr. Brian Jean: Long-term, absolutely.

Your group is suggesting to cut out 800 megatonnes per year, starting in 2007.

Mr. David Martin: We're at roughly 800 megatonnes. The figure was 758 megatonnes for 2004.

Mr. Brian Jean: You're aware that the oil sands account currently for about 6% of the gross domestic product of the country.

Mr. David Martin: I'm not sure of that figure, no, but I'll take your word for it.

Mr. Brian Jean: They currently account for somewhere between 20 and 30 megatonnes. By my math, that's a pretty big chunk of the gross domestic product if we meet 800 megatonnes in this year alone.

Are we going to do that by nuclear? What are you suggesting we do it by? Solar cells? What kind of technology?

Mr. David Martin: First of all, we need to level the playing field. The oil sands have received undue support from the government, and I don't think the oil sector needs any more subsidies. I don't they need a 100% write-off for their capital costs in the oil sands—

Mr. Brian Jean: It's an accelerated capital cost write-off. It just accelerates what they can do long-term. It actually makes it occur more quickly. In essence, it's not a subsidy. It's just an accelerated depreciation that they can show on their books so that they can depreciate the property faster.

Mr. David Martin: I understand, but the physical reality of the technology is that it produces five times as many greenhouse gases as conventional oil. We shouldn't be incenting that kind of activity that has such an adverse environmental impact.

Mr. Brian Jean: Okay, my last question, then. Your group and you have several quotes, which I have here, suggesting that nuclear should be shut down as well. Is that correct?

● (1900)

Mr. David Martin: Well, not shut down. We don't expect those plants would be shut down tomorrow, but we think they should be phased out as they reach the end of their lifetime, rather than reinvesting. We certainly think we should not be investing in new nuclear plants.

Mr. Brian Jean: In fact, if your quote is correct—and I would suggest it is, based on this—"Nuclear power has been a tragic tale of false promises, inflated expectations, titanic costs, frightening accidents, and environmental nightmares". Isn't that your quote?

Mr. David Martin: That is a quote, and an accurate one.

Mr. Brian Jean: And 50% of the energy consumed in Ontario right now is nuclear. Is that correct?

Mr. David Martin: No, about 40% to 50% of the electricity consumed is nuclear.

Mr. Brian Jean: Electricity, yes, sorry.

The Chair: That's it.

Mr. Brian Jean: Thank you very much.

[*Translation*]

The Chair: Mr. Lussier, you have five minutes.

Mr. Marcel Lussier (Brossard—La Prairie, BQ): Thank you, Mr. Chairman.

Mr. Martin, I really appreciated the Greenpeace brief. In your conclusion, you indicated that the objective of 50 megatonnes per year was necessary.

Does your analysis include a breakdown of this yearly 50-megatonne objective on a territorial basis, or have you broken it down according to corporate or big polluter objectives? Have you provided a breakdown for this 50 megatonnes?

[*English*]

Mr. David Martin: No, we haven't, but that figure was simply meant to put some perspective on what meeting our Kyoto target might mean. The reality is, if we have a business-as-usual scenario projection of what demand will be, it will be even higher. But it's meant to indicate that this is doable. It's not an absolutely inconceivable undertaking to try to meet our Kyoto target. We can do it, and we should do it.

Now, as to how that breaks down by region or province, that's a difficult question to answer. I think we have to pursue this project on provincial and regional bases, as well as on a national basis. I think the announcement today is a good indication of what can be accomplished when we approach the problem from different levels.

[*Translation*]

Mr. Marcel Lussier: Have you had an opportunity to review Quebec Green Plan, which defines targets according to broad categories?

Is it possible to reach them? Is this achievable?

[*English*]

Mr. David Martin: Yes, I do think it's achievable. Quebec is obviously in a lucky position with hydraulic capacity. But still, this is a plan that has been put forward, it's a rational plan, and I think we'll see the results. It will come down to 80 megatonnes for Quebec, which is Quebec's share of the Kyoto target. It can be done. Quebec is a good model for the rest of the country.

[*Translation*]

Mr. Marcel Lussier: Thank you.

Ms. Hugues Anthony, is the Chamber of Commerce report unanimous?

As regards your presentation, did the Fédération des Chambers de commerce du Québec submit a dissenting minority report?

Mrs. Nancy Hughes Anthony: You are referring to a report. Our position was set out in a resolution adopted during our annual convention. Several chambers of commerce from the province of Quebec participated in our convention, including the Fédération des Chambers de commerce du Québec.

Mr. Marcel Lussier: Quebec appears to be headed towards a reduction of oil dependency and the Canadian west seems to instead be promoting economic growth through the oil sands.

Don't you think that there's a contradiction between these two schools of thought?

Mrs. Nancy Hughes Anthony: In my opinion, this is not about two schools of thought, but rather two realities. You can't change how natural resources are distributed amongst the provinces and territories with a wave of the wand.

Mr. Marcel Lussier: And yet I heard you say earlier that Canadian policy should be applied equitably or equally, without making any distinction between the provinces.

● (1905)

Mrs. Nancy Hughes Anthony: As my colleague, Mr. Murphy, indicated, I too think that every province has a role to play. There is no doubt about that. Every province has different energy resources and industries.

Mr. Marcel Lussier: I am talking about national policy.

Mrs. Nancy Hughes Anthony: Let us consider the Canadian economy, as one of the members suggested. Obviously, the development of natural resources has an entirely positive impact on the Canadian economy as a whole, and that includes Quebeckers, I believe.

This is why I believe it is difficult to establish targets on a territorial basis without recognizing the way that energy is distributed across the country.

Mr. Marcel Lussier: You told me, earlier, that we must not hurt the economy by putting too many restrictions on the development of the oil sector. Should we be considering this approach, which is tied to the oil sands, from a long- or short-term perspective?

You talked about hurting the economy. I see short-term damage, but we must tie this to the global issue of climate change. You have seen from the Stern report what is waiting for us in 20 to 25 years.

[*English*]

The Chair: A very short answer, please.

[*Translation*]

Mrs. Nancy Hughes Anthony: I completely agree, however, in my opinion, we must not identify one project in particular and say that it is the guilty party. The oil sands have made a tremendous contribution to Canadian growth. Last year, this was about 3%.

Mr. Marcel Lussier: They also contributed to greenhouse gas emissions.

Mrs. Nancy Hughes Anthony: That's true. In my opinion, we need to do more research and develop technologies so that we can benefit from this development and minimize greenhouse gas emissions.

[*English*]

The Chair: Thank you very much.

Sorry, Mr. Lussier, your time is up.

Mr. Manning, for five minutes, please.

Mr. Fabian Manning (Avalon, CPC): Thank you very much for your attendance here today.

Mr. Wood, as Canada's greenhouse gas emissions skyrocketed over the past ten years, did the National Round Table on the Environment and the Economy ever relay those concerns about these trends, either formally or informally, to the federal government?

Mr. Alexander Wood: As I said at the outset, there were a number of reports. The round table is an advisory committee, so the advice is offered up to the government to do with it what it chooses to do. There were a number of initiatives through the nineties focused on practical solutions to greenhouse gas emissions, on the transportation sector, on emissions trading, on the use of fiscal policy. There was also a national forum that was convened by the national round table to bring together members of the Order of Canada to look at what was known about climate change at that point, to try to arrive at some consensus statement over the issues that should be first and foremost in Canadians' minds. So there was that ongoing work in that period.

It's scaled up, obviously, because of references that have been made to the national round table by the previous government and by this government. So most of the more detailed analyses of the options that Canada is facing in the long term have really come over the last couple of years. It would be inaccurate to say that it was not a major preoccupation of the round table before that as well.

Mr. Fabian Manning: Mr. Martin, just to follow up on my colleague Mr. Jean, Buzz Hargrove testified here last week that Canada has less than 2% of the world's greenhouse gases. I want to quote Mr. Hargrove. He said:

> No country that's signed on to Kyoto has been able to meet the targets....
>
> Even if Canada had done everything possible, it couldn't do it all itself. If the United States doesn't do it, if other major powers around the world don't move in lock-step, then you still have a problem. Why would we jeopardize everything that Canadians hold dear while others are going merrily along their way?

I'd like to ask you to comment on it. Do you agree with Mr. Hargrove's comments?

Mr. David Martin: Well, in fact a number of countries are well on their way to meeting their targets. So we've already seen Germany has reduced its emissions since 1990 by over 17%. The United Kingdom has reduced its emissions by over 14%. I think the European Union countries generally are leading the way. So that's incorrect.

● (1910)

Mr. Fabian Manning: Which countries are not on target to meet their international commitments under Kyoto?

Mr. David Martin: Well, Canada is certainly among the worst of the culprits, but there are a number of them.

Mr. Fabian Manning: Can you name any?

Mr. David Martin: The ones that are worse than Canada are Turkey, Spain, and Portugal.

Mr. Fabian Manning: Thank you.

To Professor Jaccard, many would have us believe it's Kyoto or nothing to make things work, but now we're 35% above where we need to be. I'm wondering if you could express your opinion on that.

Prof. Mark Jaccard: My opinion on what, Kyoto or nothing?

Mr. Fabian Manning: Yes, the fact that we're 35% ahead of where we need to be, and still it's being professed that it's Kyoto or nothing.

Prof. Mark Jaccard: As I said earlier, I don't believe we'll hit our Kyoto target or that we can buy—politically get away with—the credits that would allow us to comply with our Kyoto Protocol commitment.

I do believe Canada should be playing a leadership role today in implementing policies on greenhouse gas reduction, but they'll be a waste of time if they're not compulsory-type policies. I also believe we can set an example and work with the United States in that endeavour. I think they'll be changing their position over the next few years. That's something where I believe the United States will be using even trade pressures to bring along countries such as China and India.

Mr. Fabian Manning: Okay.

To Ms. Hughes Anthony, as an important stakeholder in all of this, do you have any suggested amendments towards this bill? You represent so many people involved in the economic engine in Canada. Do you have any amendments that you think we could live by and that would still do what needs to be done with regard to protecting our environment?

Mrs. Nancy Hughes Anthony: Thank you, Mr. Manning. I'm not prepared at this point to say that we have proposed amendments to suggest. Perhaps I can take that under advisement.

Mr. Fabian Manning: Would you be interested in providing the committee, over the next couple of weeks if you get the opportunity, with some amendments for our discussions?

Okay, thank you.

Mrs. Nancy Hughes Anthony: Thank you.

The Chair: Time is up. Thank you, Mr. Manning.

Mr. Scarpaleggia for five, please.

Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.): Thank you, Mr. Chair.

I'd like to follow up on a point with you, Professor Jaccard. You say that we can't even meet our Kyoto targets by buying credits, correct?

Prof. Mark Jaccard: Yes. I don't have certainty on that. That's my judgment.

Mr. Francis Scarpaleggia: Do you see it as a sort of all-or-nothing proposition? That is, if we can't meet our Kyoto targets by buying credits, should we just not participate in that market at all?

Prof. Mark Jaccard: I don't think about this a lot. I think about how we can get going.

At this point, I think it would be very good for the rich countries of the world to set aggressive targets for themselves, with policies that make those targets happen. Basically, that's what's happening in the world. The Europeans are acting. The Americans are not, the Australians are not, and other countries, such as Russia and so on, are not taking actions but really are benefiting from reductions that happened earlier.

So only a small part of the world is really acting right now. I think Canada needs to step to the plate and start acting. I think we can help the world more by taking fairly aggressive domestic action right now.

Mr. Francis Scarpaleggia: Thank you.

Mr. Martin, in your brief you say that because industry is responsible for 50% of emissions, it should be responsible for cutting...?

Mr. David Martin: For cutting 50%, or more than 50%. I think we need a fixed, absolute cap on emissions for industry that extends a Kyoto-level target.

Mr. Francis Scarpaleggia: I understand your point, but to me the number is almost too clear-cut. It seems almost like a rule of thumb. It just doesn't seem like a number that comes out of some detailed, serious analysis.

When you say, “Well, 50%, therefore 50%”, it might be a good rule of thumb, but it just doesn't seem to be something that would be well supported in the details.

● (1915)

Mr. David Martin: I know it isn't easy when it comes to the negotiations, when it goes sector by sector, and when you have to deal with those industries and all of their particular problems, hassles, benefits, and costs, but it's the kind of negotiating that needs to be done.

I think governments need to be seen to be fair. I think Canadians expect this shouldn't be put on our backs as individual consumers and industry has to be brought to the table to pay their fair share.

Mr. Francis Scarpaleggia: I see your point. You're basically saying you have to start somewhere.

Ms. Hughes Anthony, you'll recall that about two years ago the Liberal government at the time proposed using CEPA to regulate greenhouse gases, something it followed through on. There was in fact a lot of controversy around it.

The opposition at the time, the Conservative opposition, did some sabre rattling, threatened to bring down the government, and made all kinds of alarmist statements, such as the following one, which I hate to bring up, because it involves the chair of the environment committee, who is a fine fellow, and I want to make that clear. At the time, Mr. Mills said:

> Placing the control of greenhouse gas emissions under the CEPA would be a de facto carbon tax, which would result in the loss of thousands of jobs and would increase the cost of heat, electricity, and transportation.

How did your organization react at the time? Whether or not to put greenhouse gases under CEPA was a hot issue. I'm sure you had something to say about it. What did you say?

Mrs. Nancy Hughes Anthony: I'll ask Mr. Murphy, who was involved at the time, to respond.

Mr. Michael Murphy: When it happened, you essentially heard the government of the day say they would call GHGs toxic. A lot of our members scratched their heads and asked under what definition it qualified. I think there was some negative reaction from that standpoint.

There wasn't a negative reaction to thinking about dealing with GHGs from a CEPA perspective in terms of the legislation. Because there was a lot of history here for the business community in terms of environmental protection legislation, a lot of our members were used to dealing with it.

You now have a program that basically says we'll amend it and take them out of there, and we'll create another section in the act and deal with it that way. I think people said okay, there's another proposal, and they would work with that. There's no question that there were clearly some folks who were upset about it.

The Chair: Your time is up, Mr. Scarpaleggia. Time flies when you're having fun.

[*Translation*]

Mr. Paradis, you have five minutes.

Hon. Christian Paradis (Mégantic—L'Érable, CPC): Thank you, Mr. Chairman.

My questions are for Ms. Hughes Anthony.

Ms. Hughes Anthony, I am aware of your reputation. I know that you figure amongst the 50 most influential women in the business world. I'm therefore very pleased to have an opportunity to ask you questions today, particularly since you made a statement earlier that, at the very least, can be described as interesting or troubling.

You were saying that many small- and medium-sized businesses do not yet know the impacts, what might happen. These SMEs have been over-looked: they are not part of the debate.

First of all, I would like you to tell us what are, in your mind, the key aspects for achieving a sustainable environmental economy. In your opinion, how can we achieve this?

Then, I would like you to describe your vision regarding the technologies that should be used, bearing in mind the realities of the SMEs that don't necessarily have enough operating funds to make such a change.

Earlier, you talked about the short and long term. I would like to hear your analysis of this aspect in particular.

Mrs. Nancy Hughes Anthony: Thank you very much. I am not, obviously, a scientist by profession but I do think that you're completely right. Our economy is essentially an economy of SMEs. It's also an economy of consumers. The debates that have taken place over the past few years have emphasized the industrial sectors. That is a good thing, because some sectors, such as the energy production sector, can be changed.

As regards consumers like us, the SMEs have really been overlooked, completely overlooked in my opinion. I think that some things are completely essential and that we have to put more effort into education. As I pointed out, we prepared a small report with the Pollution Probe Foundation which discussed reducing waste, modernizing heating and ventilation equipment, improving means of transport, etc. These are all things that will eventually serve to decrease pollution and improve energy efficiency, etc.

In my opinion, "a good plan" would demonstrate the government's clear intention to regulate certain industries and would also include targets, objectives or something aimed at the world of consumers and SMEs.

● (1920)

[*English*]

I was quite struck by Professor Jaccard's observation that energy efficiency sometimes leads to a plethora of new energy devices. I think what he was referring to is what I call the beer-fridge phenomenon: when you buy a more efficient refrigerator, you take the old one and you put it in the basement and put your beer in it—or maybe I'm just speaking to myself—and therefore you have not effectively reduced your energy consumption that much.

I do seriously think that any good plan will have to have measures that will touch the small-business community directly and will give guidance as well to consumers. It will have to be more direct and more informative than the one-tonne challenge, if I may say so.

[*Translation*]

Hon. Christian Paradis: There is talk about new technologies which, for some, may be more innovative than others. Given the current situation, how are the SMEs reacting to these ideas? Do you feel that there is a desire to make this change? Is Bill C-30 a good thing? Is this a good start that will lead to the use of technologies that are more compatible with sustainable development?

There are many SMEs in my riding. It is often said that we will start by doing business, but it obvious that the environment is there, and we want to take care of it. What has the reception been like? What means could we adopt, in your opinion, to go in this direction and link business with the preservation of the environment?

Mrs. Nancy Hughes Anthony: I think that we need to encourage scientific development in many sectors. In my opinion, Mr. Wood is the expert in this field, whether you're talking about transportation, heating or the lights in the House of Commons. We need effective solutions.

Currently, there is a problem for the SMEs, the consumers and certain sectors: the solutions may be available, but they are still at the pilot-project phase. They are neither effective nor profitable.

I hope that the Canada-wide plan will encourage rapid investments in new technologies and that this will be done commercially, so that the SMEs and consumers will have access to the cars, trains, heating and electricity systems, etc.

[*English*]

The Chair: Thank you.

Thank you, Ms. Hughes Anthony. I don't think you're alone on the beer fridge.

Mr. Watson is next, for five minutes.

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

Mr. Martin, I'll start with you. You've concluded in your brief to us that intensity-based targets are unacceptable. Do you stand by that statement?

● (1925)

Mr. David Martin: I believe that intensity-based targets are an unacceptable way to effectively gauge our progress on greenhouse gas reductions.

Mr. Jeff Watson: Okay.

Mr. David Martin: I think they have their purpose. They have a use, but this isn't the best use of them.

Mr. Jeff Watson: Are they useful on our way to a hard cap?

Mr. David Martin: They're interesting as a way of trying to understand what's happening in the economy. I mean, we want less intensity. That's a good thing. We want to accomplish more with less energy. There's no question that that's a good thing, but if we want to reduce greenhouse gases, let's be clear about it. Let's call a spade a spade. Let's have absolute levels, target them, and go for them.

Mr. Jeff Watson: You mentioned that Canada's greenhouse gas intensity decreased 14%, while absolute levels of GHGs increased 27%. That 14% decrease, was that—

Mr. David Martin: That's an improvement, right?

Mr. Jeff Watson: Was that an intensity-based target, or is that just a measurement of something that actually happened?

Mr. David Martin: Well, it's not really clear. It may be, in fact, that the economy is in a downturn. It may indicate, and probably does, that the—

Mr. Jeff Watson: I'm asking you whether that reflects an intensity-based target that was set.

Mr. David Martin: Oh, no, I don't believe so. I think that was happening spontaneously. That's what I'm saying.

Mr. Jeff Watson: Okay. Moving to Alberta's targets, you said 16% in 2010 and 28% in 2020. But they would allow absolute increases of 34% and 38%, respectively.

What would happen if those intensity-based targets were say 5% in 2010 and 15% in 2020? What would happen with GHGs?

Mr. David Martin: Well, I mean, obviously—

Mr. Jeff Watson: Would they get worse?

Mr. David Martin: Yes.

Mr. Jeff Watson: What if they were say 25% in 2010 and 40% in 2020? What would happen to GHGs?

Mr. David Martin: Well, things would improve.

Mr. Jeff Watson: Okay. So intensity-based targets are not necessarily failures. It all depends on where you set them.

Mr. David Martin: No. I think they're a tool; I just don't think they're the best tool for this job.

Mr. Jeff Watson: Okay. Intensity-based targets are unacceptable is what you said, though.

Mr. David Martin: That's correct. They are not acceptable as a means of targeting and achieving greenhouse gas reductions.

Mr. Jeff Watson: Really? But you said that if the targets were set higher, we would in fact see measurable improvements in GHG reductions. How you set the number is where I'm going, I guess. So we can't conclude that they're necessarily unacceptable.

Ms. Hughes Anthony, Ontario's economy is soft right now; Alberta's is hot. Are you concerned about short-term targets, about what happens in the short term in that kind of scenario? What are you looking to see over the short term?

Mrs. Nancy Hughes Anthony: Can you respond to that one, Mike?

Mr. Michael Murphy: Yes, absolutely. It's a major concern in terms of the economic impact.

If you're looking at the kinds of targets we've had for the last number of years as a result of ratifying Kyoto, and I think there is a pretty good consensus that we can't meet those, those would really be punitive. Anything that looked like that would be really punitive to the economy, not only in Ontario but everywhere else.

Mr. Jeff Watson: What would your direction be to this government, then, with respect to the short-term targets?

Mr. Michael Murphy: I like the idea of saying that as you phase through the process here, as is proposed, you start consulting with people—which has already occurred, it started to occur right after the bill was tabled—you start to understand what people can do in terms of their realities with respect to their own industries in terms of investments and the cycle they're in, and then you start thinking about intensity targets in the short term that you can then ramp up later.

Mr. Jeff Watson: Has the economy already experienced sort of a picking of the low-hanging fruit in industry, or is there still more to be had, and if so, in which sectors?

Mr. Michael Murphy: Yes, that's an expression that a lot of people use, and I guess we've used it too. People haven't been doing nothing; people are conscious of the need to invest in their plants. And I think we need some more encouragement in that area, by the way, and there are some tools that are available to governments. But a lot of the easy stuff, quite frankly, has been done, so we're now into the tougher slogging in terms of what needs to be done in the future.

Mr. Jeff Watson: And it's therefore more expensive.

Mr. Michael Murphy: Oh, there's no question.

The Chair: Mr. Watson, sorry, your time is up.

Mr. Jeff Watson: Thank you, Mr. Chair.

The Chair: Was there another point? Do you have a point of order, Mr. Jean?

Mr. Brian Jean: I do, yes.

The Chair: Okay, you can have a short one.

Mr. Brian Jean: It's very short, Mr. Chair.

We have a lot of witnesses here, and I'm curious if we could have consensus from the other members that any witnesses who come forward in the future be notified in advance to prepare suggested amendments to the legislation. Because we have such a short timeframe, I'm worried about that, and I think a lot of the things that were mentioned today by the witnesses would be very helpful. So I think that would be good.

As well, I would like to ask if one particular document that was referred to before could be provided to the clerk and sent around.

● (1930)

The Chair: Who was the document from?

Mr. Brian Jean: I think it was Mr. Wood's.

The Chair: Okay. Or was it Mr. Martin?

Send us whatever you've got.

Mr. Brian Jean: I appreciate it.

And receiving possible amendments beforehand, as I am sure everybody else would....

The Chair: Yes, and I'm informed the chair does provide that as part of the instructions when witnesses come, that if they have amendments, we'd appreciate those.

Mr. Brian Jean: But to ask for those amendments would be helpful.

The Chair: Yes.

I want to thank the witnesses.

Mr. Godfrey.

Hon. John Godfrey: I think it's a great idea to get witnesses to submit amendments beforehand, but recognizing the way we group the witnesses, it may not be appropriate to speak about those amendments because they may be on another subject.

The Chair: Yes, it's an option for the witnesses.

[*Translation*]

I believe that we have obtained a great deal of useful information.

I would like to thank all of the witnesses.

[*English*]

Mr. Jaccard, thank you very much for your long-distance testimony.

I will just say that for tomorrow, Ms. Vicki Arroyo of the PEW Center on Global Climate Change, her mother has had a serious heart attack, and she will not be with us tomorrow morning. So we wish her and her mother very well. Her remarks are going to come with Mr. John Drexhage, so we'll have the two tomorrow. We'll probably give both witnesses a bit more time for comments before we get to questioning.

Other than that, this meeting is adjourned. Thank you very much.

Published under the authority of the Speaker of the House of Commons

Publié en conformité de l'autorité du Président de la Chambre des communes

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