

House of Commons CANADA

# Standing Committee on Environment and Sustainable Development

ENVI • NUMBER 011 • 2nd SESSION • 39th PARLIAMENT

**EVIDENCE** 

Monday, February 4, 2008

Chair

Mr. Bob Mills



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• (1535)

[English]

The Chair (Mr. Bob Mills (Red Deer, CPC)): I would like to call the meeting to order and welcome our guests. Thank you very much for appearing.

I would like to remind members that this is an environmental panel and that we're looking at the scope of the bill, greenhouse gas reductions and targets, and that should be the main emphasis of our questioning and of our presentations to deal with the environmental aspects of Bill C-377.

I would like to welcome you. We'll go in the order that you appear on our agenda. I would ask you to take approximately 10 minutes and then we will have the maximum time for our MPs to ask questions.

I would like to report to the members as well that we have had acceptance from Mr. Johnson and Mr. Morton to appear on February 27 for our other look at Bali. Ms. Simon is in Finland and Ms. Dowdeswell is in Vienna, so they would not be available on that date. My suggestion is that we go ahead. We have two people, and I think we're going to constantly have date problems. With your permission, we will send a letter confirming that with them, and we'll ask them to appear on February 27.

We'll start with Mr. Marshall for 10 minutes.

Mr. Dale Marshall (Analyst, Climate Change Policy, David Suzuki Foundation): Thank you, Mr. Chair, and thank you to the committee for inviting me. My name is Dale Marshall. I'm with the David Suzuki Foundation.

First of all, again, thank you for inviting me to speak to you today. I'm here to express my support for Bill C-377. This important bill seeks to write into law the science-based targets that are needed to ensure that Canada takes full responsibility for avoiding dangerous climate change.

If you will, allow me to go back to 1992. Canada and the world signed the UN Framework Convention on Climate Change. The ultimate objective of that convention was to avoid dangerous climate change. Of course, that begs the question, what does "dangerous" mean?

Over a decade ago the EU set two degrees as a threshold for dangerous climate change, two degrees Celsius of average global warming compared to pre-industrial levels. This limit now has widespread support from countries and scientists, including most recently the Bali Climate Declaration by Scientists.

Canada seems to be coming around on the issue of two degrees after, frankly, having ignored it for a long time. A document released by Foreign Affairs Canada concluded that setting the two-degree limit has been beneficial to the EU because it's allowed its 27 member states to, and I quote here, "focus policy development". In the House of Commons in December 2007, Canada's environment minister, John Baird, stated that a rise of two degrees Celsius is unacceptable.

So the logical extension of the minister's opinion on this is that Canada now needs to set limits to ensure that greenhouse gas emissions don't rise to a level that would allow two degrees Celsius and for Canada to do its fair share in keeping the planet within that limit of warming. That's what this bill does.

The Intergovernmental Panel on Climate Change has found that to have a reasonable chance of limiting warming to two degrees, developed countries would have to reduce their greenhouse gas emissions by 25% to 40% below 1990 levels by 2020 and by 80% to 95% below 1990 levels by 2050. I'll note that the targets that are set in Bill C-377 are in those ranges but are at the lowest end of those ranges.

Those targets are also the ones that were proposed by the David Suzuki Foundation and the Pembina Institute in our report from two years ago, "The Case for Deep Reductions", based on what the science was saying about two degrees and based on Canada doing its fair share with respect to avoiding that limit.

Of course, these targets would also put Canada in line with the UN process and the international community. The IPCC target range of 25% to 40% is also one that Kyoto parties, including Canada and about 160 other countries, agreed to consider, both in Vienna and then again in Bali.

So there seems to be convergence, both in Canada and internationally, on the measures in this bill, both the two-degree limit and the greenhouse gas targets.

The next question becomes how Canada reaches those targets, and there's every reason to believe that Canada can meet these with very little or no economic disruption. The economic modelling work done by the National Round Table on the Environment and the Economy shows that Canada can reduce its emissions by 65% in the next 43 years by foregoing about one year of economic growth. So even with existing technology, we could spend one year of our future growth in the next 43 in order to reach the government's targets.

Now, the government's targets aren't the targets in this bill. The NRTEE's work did not consider 80% and did not use the 1990 baseline. It used the targets that the government set. But the report did state that further emission reductions are possible at slightly higher economic costs, and again, referring back to the IPCC, found that globally we could stay within two degrees Celsius with approximately two years of foregone economic growth in the next half century.

The David Suzuki Foundation has also commissioned some economic modelling to look at the medium-term target of 2020. Unfortunately, that report has not been released. It will be released three weeks from today. But let me share with you some of the findings.

## **●** (1540)

It showed that Canada could get 80% of the way to the 2020 target that is laid out in the bill merely by applying a sufficiently high carbon price through either a tax or a cap and trade system. This, of course, does not include additional measures that could be taken, like regulations on energy efficiency for equipment and appliances, regulations on vehicle fuel efficiency, and stronger building codes for energy efficiency.

So what would be the macroeconomic price of this? Canada would forego 1% of GDP—about half a year's growth—between now and 2020 and join the global fight against climate change. In other words, between now and 2020, the Canadian economy would grow by 26% instead of 27%, while reducing our greenhouse gas emissions to well below what the government has laid out in its 2020 target.

By the way, all these findings are very consistent with international studies that have shown that where emission reductions have happened, they've happened at very low economic cost and they're consistent with economic projections for future emission reductions. Jurisdictions like Norway, the U.K., and California have all modelled the kinds of emission reductions that are found in this: 80% reductions. Norway has a target of 100% emission reductions by 2030. In other words, Norway is planning on being carbon neutral within a generation. Norway presents an interesting example because it is a country that has the same characteristics as our country, and those characteristics are supposedly barriers to Canada getting really serious on climate change. Norway, like Canada, is a northern country. It has a very small population compared to its land base. It's an oil and gas exporter, yet it is planning on being carbon neutral by 2030.

My point is that the costs of tackling climate change head-on are important, obviously, but so are the costs of not acting, or not acting fast enough, to limit warming to two degrees Celsius or below. The global costs of passing the two degrees threshold are unacceptably high—for people, our economies, and for the natural ecosystems we depend upon.

The most comprehensive economic report on climate change, the Stern review, found that the impacts of climate change, if we don't act, will be five to twenty times greater than if we do. Stern calls serious action on climate change the "pro-growth strategy" for the future. So the world must act on climate change, and Canada has to

do its fair share. This act is an important step in ensuring that Canada does exactly that.

Thank you for your attention. Merci bien.

• (1545)

The Chair: Thank you very much, Mr. Marshall.

Mr. Ogilvie, please.

Mr. Kenneth Ogilvie (Executive Director, Pollution Probe): I'll try not to repeat and will focus a little more on the solutions, but not in any great depth.

Dale pretty well said what I would want to say about the fact that the threat of global climate change is real and the cost of inaction is great. We have good references for all of these. I did make a submission and I've provided references, so I don't really want to get into detail on that.

The reason we need to think about supporting a bill such as Bill C-377 is that Canada has failed to take aggressive policy measures to control greenhouse gases in line with some of the leaders around the world. We all know the European Union is setting aggressive targets. We know that some states like California are moving, as are some provinces in Canada. We need to be with the leaders on this, in my opinion.

Also, industry has been calling for stable policy direction. Different numbers occur in different people's minds, but we're talking about the Canadian Council of Chief Executives, or, internationally, something called the three-C group, Combat Climate Change. It has four Canadian multinational companies represented on it. They're saying that we need to set targets.

The three-C group, in particular, endorsed the 80% by 2050 target. They're less resolute about exactly what can be accomplished by 2020 or 2030, but they believe we have to go with the science, set the long-term targets, and then set some short-term goals to get there. So industry is calling for stable policy direction.

And the public is concerned. We've seen various polls and so on about where the public is at.

I think the argument for a bill that requires us to move forward is pretty clear, because in the absence of it, we're not going to move forward. We're going to just keep fighting over what we can't do as opposed to what we can. I think the rationale is strong.

The question then, of course, is this. How do we get there and what do we do? We do have lots of studies showing the different ways in which we might get there. I know it's been a question more of equity and more of fairness as to how one gets there, as opposed to the fact that there are technologies and ways to get there.

I'd like to segment things very simply into infrastructure, technology, and prices, which I think are the three huge drivers of progress. If we don't invest in infrastructure, and the right infrastructure, it lasts a long time. We have to do that. If we don't push technologies to be consistent with climate change goals and with that infrastructure, then we're going to be locking in the wrong technologies. Of course, we all know that prices, especially in a market economy, are what move both individuals and companies.

On infrastructure, it's very clear that we have to think very, very large-scale about roads, rail, air, public transit, water and sewage, electricity, pipelines. These are infrastructure. A lot of that is paid for by public money, one way or the other, so politicians have a great deal of influence through planning processes, budget processes, and so on to shape the way that goes. We need a vision of where that has to be in 2050, and that vision has to tie into some notion of the hard numbers we have to achieve.

On the technology side, again, governments have a great deal of influence, both through the infrastructure that's put in place and the technology that has to match to it, but also in terms of regulations and other incentives. Industry is very largely a technology developer and has to feed into something that provides a return on investment and so on. We need the technology. It has to be very much a society-wide effort, with industry fully involved to develop the technologies we need, and we need prices that help make all of that fit together.

All three of these things interrelate, so as the national round table put it, without an economy-wide price signal, we're going to have trouble convincing consumers to be part of the solution. Without signals through either emissions trading or taxes and other mechanisms, we're going to have a hard time making the business case for business.

I think it's all a package and can't be seen as one or the other. I don't think we get there just simply by putting a price on the system. I don't think we get there simply by incenting technologies and hoping they'll get applied. I don't think we get there just by building one form of infrastructure and letting the rest of the system fall in place.

All of that requires a great deal of vision—ideally, a great deal of cooperation. That would be the best way to get forward, particularly in a country like Canada with its various economies and different circumstances. We need to look toward the leaders in the world as to how far and how fast they're going, and how far and how fast they're committed to go.

We do need a national vision.

# **●** (1550)

I was reading in the *Globe and Mail* about the carbon capture storage report that's just come out. It's asking for \$2 billion for initial work on carbon capture and storage. The second part of the bill wasn't even disclosed, but it could be quite a bit more. So why don't we have something of that scale and more on energy efficiency in renewables? We need that scale and much more on urban form and infrastructure, and recapitalizing the electricity grid to tap into the two technologies that will get us to the 80% reductions.

Why aren't we retooling our auto sector so that it's more vibrant and building the right kinds of efficient vehicles, rather than a sector that's trying to hold onto building the wrong kinds of vehicles that will eventually go the way of the dinosaur, taking our economy with it if we're not careful?

In closing, I think we need a bill that makes it very clear to industry, the public, and everybody that we have a long-term target and we are going to require plans to get there. We need a vision of what we're going to do with these big policy levers of infrastructure, technology, and prices in a whole pile of areas. We need investment across the board in a kind of recapitalization of the Canadian economy and social structures so that we have the kind of future that I think is totally there for us. There are tremendous hurdles along the way, but I think it's there if we set out to do it. I encourage you to consider that in your deliberations.

Thank you.

The Chair: Good. Thank you very much, Mr. Ogilvie.

Ms. Langer, please.

Ms. Julia Langer (Director, Global Threats, Conservation, World Wildlife Fund Canada): Thank you, Mr. Chair and committee members. Thank you for the invitation.

My name is Julia Langer. I'm director of the climate change program at World Wildlife Fund Canada.

World Wildlife Fund's mission is to build a future in which humans can live in harmony with nature. We work at conserving the world's biological diversity, ensuring that renewable resources are used sustainably, and promoting the reduction of pollution and wasteful consumption. But our 40 years of work in Canada to protect and manage and restore biodiversity could well be for naught if we don't avert the über-threat posed by global warming and climate chaos. It is with this perspective in mind that WWF is speaking in favour of Bill C-377.

We feel that Bill C-377 reflects the science, and the science calls for immediate action to achieve deep reductions. The reduction targets outlined by the Intergovernmental Panel on Climate Change are not arbitrary; they reflect the work of thousands of scientists over many, many years. They tell us we must reduce global warming pollution by at least 25% by 2020 and 80% by mid-century against the internationally referenced baseline of 1990. I am repeating and endorsing what Mr. Marshall has said. That is our reference point. There is no other way to look at this picture. I would also note that it means "at least", because these are the bottom end of targets that are considered appropriate for industrialized countries like Canada.

Calling global warming a "hypothesis", as the Prime Minister did less than four years ago, is now considered irrational. Governments of all political stripes around the world, including ours, are starting to reflect climate change science in policy. But accepting the science is only the first step. It is absolutely necessary and appropriate at this stage of the game to entrench targets and implementation requirements in law, because the current government's approach is a public relations ploy. It has to be brought into a management system.

I say it's a ploy because it's out of line with the science by virtue of having moved the baseline. It is ineffective because emissions will continue to explode—with more pronouncements than actions so far—and it's provoking some federal-provincial battles, which are not helpful toward getting on with the solution.

By way of looking at some of the targets we need, I want to focus on the tar sands as a prime example of how the government's proposed greenhouse gas rules for large final emitters would give a free pass to pollute and perpetuate the biggest source of emission contributions in Canada.

An important point to focus on when we're setting targets is what it is going to affect. Consider that emissions from the major emitters constitute 47% of the national total. The proposed targets call for greenhouse gas emissions to be reduced 23% against a unit of production basis by 2020, with a 6% exemption for fixed process emissions. This might sound like reduction, but it's not.

I'm not going to do a PowerPoint presentation, but maybe you can follow those charts. That graph is NEB's projections of tar sands growth, which has unmitigated emissions on a very steep climb. That's the blue line. Industry has already said it would continue to reduce emissions per barrel, and in fact it has set some targets for that. That dampens growth, but it doesn't reduce it overall. That's the green line. The proposed large final emitter rules, which is the red line, more or less matches these existing commitments and technically feasible mitigation options. This is a free pass. Further, more aggressive improvements have been targeted by some companies. That's the purple line.

The gap there, this excess reduction, can be turned into credits and sold within the LFE emission trading system. When you multiply that by \$15 a tonne, that will generate millions in profit for an already profitable industry. The real bottom line is that emissions will double or triple by 2020. This elephant in the room cannot be ignored, and it has to be factored into our target setting.

• (1555)

It would be impossible to act in keeping with the science and with the proposed purpose of Bill C-377, or to deliver expected reductions as set out in the bill, without addressing the exploding emissions from tar sands operations. Uncontrolled, they will undermine action by other jurisdictions and other sectors and Canada's international reputation. How is Alberta's 14% reduction from 2005 levels by 2050 consistent or justified?

Parliament needs to set extremely clear rules that will work in the real world of the Canadian federation. So-called equivalency agreements, without a firm national cap, which needs to be set in this bill, will further undermine the objective.

With many, many provinces starting to make commitments and moving ahead, we need to ensure that the efforts of leading provinces are not cancelled out. Requiring the minister to demonstrate measures taken to meet the targets, including cooperation or agreements with some national governments, may not be clear or an ample enough mandate to allocate and distribute expected reductions among regions or sectors.

To help with this dilemma—I'm not suggesting this is an easy one to tackle—lessons can be taken from Europe for achieving fairness in a national climate action plan. As a federation, the EU's approach is to set the clear, binding targets, to divide up the responsibility on a transparent basis—they call it burden sharing, and it's not easy but it has to be done—and they create regulatory, market-based, and fiscal tools for implementation. And they require accountability—for instance, the ability to approve or reject plans, with repercussions for non-compliance.

There is a lot of moaning about the difficulties Canada faces. No one can really pretend that we have an easy road to hoe. But as numerous analysts have highlighted, there are significant costs of inaction. Canada is falling further and further behind on energy productivity and will suffer under high fossil fuel costs. With oil pushing \$100 and more and government's refusal to go ahead on sustainable energy, our economy, our businesses, and consumers will be left exposed, not to mention the risks associated with extreme weather and warming itself.

Europe, on the other hand, is leaping ahead with a low carbon economy as a centre point. Last week the EU adopted a new package of climate and energy measures, including a 20% target. They said they would go to 30% if other countries came on board. What a bonus it would be if we set a target commensurate with the 25% or 30%. I think that would motivate Europe to go even further.

Renewable electricity and biofuels commitment is in their bill, as well as a new emissions trading system and very, very aggressive efficiency requirements, as Ken has put forward.

People like to complain about China and India, but they are very noteworthy because they are growing in an energy-constrained world that is forcing them to be super efficient, a claim that Canada cannot make, as we have the highest per capita energy consumption and the second-highest energy consumption per GDP.

In closing, WWF urges Parliament to get on with meeting the climate change challenge. It is essential to have a national law that entrenches the science, that positions Canada as a good-faith international player, and that reflects public expectations for avoiding dangerous climate change. The government has accepted the science and is a party to UN climate agreements, yet targets and proposed measures are inadequate. Emissions will continue to burgeon without appropriate binding targets and requirement for implementation.

As we enter Kyoto's first period and look to the next phase of multilateral collaboration, clear direction and expectations are essential. Bill C-377 fits the bill, and that's why we're supporting it. We urge all the parties to endorse the greenhouse gas reduction targets and timelines, and the government's obligations, as set out in the bill, in the spirit of creating a low-carbon society. We can't afford any other excuses and delay. Let's just get on with it.

Thank you.

**●** (1600)

The Chair: Good. Thank you very much.

We'll go directly to the first round of ten minutes.

Mr. McGuinty, please.

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

May I go back to basics, for the benefit of Canadians who are listening to or reading this. Very quickly, Ms. Langer, how many members does WWF have across Canada?

**Ms. Julia Langer:** World Wildlife Fund has approximately 80,000 Canadians as members, and internationally we have approximately five million members.

Mr. David McGuinty: How many staff do you have in Canada?

Ms. Julia Langer: We have probably 120 staff in Canada.

**Mr. David McGuinty:** Were you consulted by the government when it formulated its climate change plan?

**Ms. Julia Langer:** Well, about a year ago we specifically put out a notice regarding Bill C-288, which was probably before this very committee. I didn't appear. We did outreach on that, and 12,000 people signed a petition in favour of having targets entrenched in law

**Mr. David McGuinty:** Do you support the government's climate change plan?

**Ms. Julia Langer:** We have really serious concerns with the government's climate change plan as formulated, mainly for some of the reasons I expressed here. It does not reflect the science as set out by the IPCC.

When we've done the calculations and case studies, one of which I presented regarding the tar sands, it appears to us that the measures proposed will not meet even the target proposed. So we have a disconnect between science, action, and even action and targets.

• (1605)

**Mr. David McGuinty:** Can you name a single independent group in Canada that warrants the government's numbers and the fact that they claim they're going to achieve a 20% reduction by 2020? Can

you name a single group in Canada, as a third-party validation, that will support the government's plan?

**Ms. Julia Langer:** I don't know, but I haven't canvassed everybody.

**Mr. David McGuinty:** Mr. Ogilvie, how many members do you have at Pollution Probe?

Mr. Kenneth Ogilvie: About 7,500.

**Mr. David McGuinty:** Were you involved in helping to formulate the government's climate change plan?

**Mr. Kenneth Ogilvie:** Not as a plan itself, no. We've had selective consultations on pieces of policy, but not on the plan itself, no.

**Mr. David McGuinty:** Does Pollution Probe believe that the government's climate change plan is the art of the possible in today's world?

**Mr. Kenneth Ogilvie:** Oh, the plan is possible, but I think we can go much further.

**Mr. David McGuinty:** Can you name a single group in Canada that has reviewed the government's plan and warrants its numbers or supports its analysis? For that matter, have you seen any analysis to substantiate the government's claims?

Mr. Kenneth Ogilvie: Not that I'm aware of, no.

**Mr. David McGuinty:** Mr. Marshall, how many members do you have in the group you represent?

**Mr. Dale Marshall:** I'm not 100% positive, but I think we have 60,000 members.

Mr. David McGuinty: How many staff do you have?

Mr. Dale Marshall: About 55 to 60.

**Mr. David McGuinty:** Increasingly, the foundation does.... What's your budget for the year?

Mr. Dale Marshall: I have no idea, sir.

**Mr. David McGuinty:** You do a lot of analysis, including economic analysis and other forms of analysis. Increasingly, the foundation has really invested heavily in capacity to do detailed analysis. Is that right?

Mr. Dale Marshall: Yes, absolutely.

**Mr. David McGuinty:** Okay. Does the foundation support the government's climate change plan?

**Mr. Dale Marshall:** No, we think it's much too weak. The targets are not the right ones. As I've laid out today, we need much stronger targets. I think it's reasonably clear by all the analyses that have been done out there, including our own, that the policies that are in place aren't going to reach the weak targets that have been set.

**Mr. David McGuinty:** Can you name a single third-party group in Canada—industrial, NGO, governmental, non-governmental, international, domestic—that's reviewed the government's plan and said it's going to live up to the numbers it claims it'll live up to?

**Mr. Dale Marshall:** I can't. The four independent analyses I've read have all said those targets aren't going to be reached with the policies.

**Mr. David McGuinty:** You're all familiar with Bill C-30. It was in the House before the House was prorogued by the government. It received all-party support, including the support of the Green Party, as a go-forward strategy to deal with the climate change crisis we're facing as a country. When you look at the bill put forward by Mr. Layton and you compare and contrast with Bill C-30, was Bill C-30 the more comprehensive, perhaps all-inclusive, package we were looking for as a nation state?

Mr. Dale Marshall: Who are you asking?

Mr. David McGuinty: All three of you.

**Mr. Dale Marshall:** Bill C-30 was more comprehensive in terms of the policies.

**Mr. David McGuinty:** As amended, that is, not the government's first one.

**Mr. Dale Marshall:** Yes, of course, the amended Bill C-30. I would say Bill C-288 and Bill C-377 and Bill C-30 are all complementary to one another. You need the targets, but you also need the more comprehensive policies to reach those targets. That's what I would argue for this bill as well. It's great to set targets, but you also have to put in place the policies that obviously allow us to reach those targets.

Mr. David McGuinty: Mr. Ogilvie.

**Mr. Kenneth Ogilvie:** I would agree with what Dale said. I don't have anything further to add.

**Ms. Julia Langer:** I haven't done an exact comparison, but Bill C-30 did have some small improvements on the energy efficiency side. We have been pursuing that very aggressively and would give more ambit to setting energy efficiency targets. It's not that many of those things could not be done now, but it was interesting to see the ambit improved.

**Mr. David McGuinty:** All three of you were involved in detailed analyses of climate change in Canada; you have been for quite a while, depending on the individual and the organization. Have you received any analysis of any kind from the federal government to substantiate the numbers it put forward in the *Turning the Corner* plan? Have you seen any research or analysis commissioned internally or externally from the government and put forward to substantiate the government's plan?

**●** (1610)

**Mr. Dale Marshall:** The *Turning the Corner* plan itself has some analysis in there, but it's not detailed enough to really get a sense of how the measures translate into the targets. As I said, the analyses that have been done, which are much more detailed than what's in *Turning the Corner*, actually refute what *Turning the Corner* says about the targets it expects to achieve.

**The Chair:** I would remind you that we are dealing with Bill C-377. I'm trying to give everybody as much leeway as possible, but please try to stick to Bill C-377, in fairness to our witnesses who appeared here to talk about Bill C-377.

**Mr. David McGuinty:** I'm trying to elucidate, as one witness has said, that it's fine to set targets, but what we've not seen in this bill, and in the whole plan that has cost millions and millions of dollars to

communicate to Canadians, is a single shred of evidence that the analysis that needs to backstop this bill and the government's own plan is simply not there.

I want to ask the witnesses another question about analysis, which relates again to this bill on the table. Mr. Stern conducted a global analysis, an econometric analysis with distributive effects, and as you say in your brief, Mr. Ogilvie, he talks about a 1% GDP cost.

I think we all remember the shock and awe communications strategy that was put out by the government on Bill C-288, that the sky was going to fall if we actually implemented Bill C-288. Have any of you seen any analysis on the numbers put forward by the government on Bill C-288?

**Mr. Kenneth Ogilvie:** I haven't. There are other analyses out there, but—

The Chair: Thank you, Mr. Ogilvie.

Mr. Warawa.

**Mr. Mark Warawa (Langley, CPC):** My apologies to the witnesses for interrupting, but as you pointed out and as was brought to your attention, Mr. Chair, we're talking about Bill C-377. Mr. McGuinty is taking the witnesses off topic. We're supposed to be asking questions about Bill C-377. Is Bill C-377 a good bill? How can it be improved? It's not helpful to keep taking the witnesses off topic. I'd encourage the questioning to be about Bill C-377, because that's why we're here.

The Chair: Thank you, Mr. Warawa.

Yes

Mr. Peter Stoffer (Sackville—Eastern Shore, NDP): On a point of order, in order to know if a bill is good or not you need something to compare it to. Comparing it to Bill C-30 or Bill C-288 is a proper line of questioning to determine whether the government has improved or not—to go forward or back. I think it's a fair question in this regard.

If you have a piece of legislation before you, what can you compare it to; what can you analyze it against? I think Mr. McGuinty's questions are in line with what's happening here today.

**The Chair:** Mr. Stoffer, that's why I'm trying to leave it as far as we can go. I would like it to ultimately end up with an analysis by our witnesses of Bill C-377, because we will be doing clause-by-clause on it; we'll be saying yes or no to it. I would constantly like to remind members to try to stay with that focus, because that's where we can move ahead.

We have limited time with these witnesses. It was the same last time. We have economists coming, so let's not ask economic questions on this. Let's try to evaluate Bill C-377 and show whether it's an improvement on what we had—without dwelling too much on the past—and go on with the future. I think everybody would agree with that.

Mr. McGuinty, let's continue. I will add an extra couple of minutes to your time.

Mr. David McGuinty: Thanks, Mr. Chair.

I'll go right back to my questions, if I could. To the panel, does Canada need a tailored Stern-equivalent report applied to the Canadian economy in detail? For example, should the Prime Minister, having devolved responsibility for his own national round table to a line department and the environment minister, not refer the question of a Stern-like analysis to the National Round Table on the Environment and the Economy, or another think tank capable of doing it, and then use it to help achieve the kinds of targets that are being called for in this bill? Is it not time for us to stop scaring Canadians with pain, grief, and cost, and instead start talking about the inherent opportunities, economic opportunities, and the real prices we may pay at the back end if we don't start acting now? Is it time for us to do this?

Ms. Langer.

### • (1615)

**Ms. Julia Langer:** Maybe I can turn this to the solutions side. We do have Stern analysis; we have the national round table perspective, which was very much in line with Stern. In fact, there's not very much pain involved here. What we need to look at is the cost of inaction. Having a Canadian perspective on that might be interesting, but I don't think it's going to change anything. On the other hand, various studies from all over the world are, I would say, the "get on with it" perspective that Canadians need.

Meeting the targets is possible, and there are four or five basic things to do.

Constrain carbon and the megatonnes will drop off. That's the first order of business.

Set the targets, set them short term, set them medium term, set them long term, and that means there will be price pressure, there will be innovation. It means all sectors will be captured.

Drive an energy efficiency revolution. If you want to talk about benefits, that is where we have the biggest opportunity to shave dollars off the cost of doing business for consumers, for government. This is the only way to recession-proof ourselves. That's where the studies have to be. It's no regrets; why aren't we doing that?

It's the same with renewable energy. We have to open the floodgates. The clean-tech companies are just chomping at the bit on that. If you want to do a study, do a study on that to show where the potential is.

No unmitigated sources of greenhouse gas emissions—none—going forward.

Those are the kinds of policies we know are there. If you want to do a study, do another study, but I can't see we are missing any information at all. We're missing the targets and the drivers to make it happen.

The Chair: Mr. Ogilvie and Mr. Marshall, just very briefly, your answers, please.

Mr. Kenneth Ogilvie: Yes, I'll take a little bit of a different tack. I think there are many things we know we can do right now, and some of them are beneficial. They're net negative cost. We do need some detailed analysis because we need to write a business plan on how we're going to get there. We need to count things: power plants, pipelines, whatever. We need to remove barriers to getting there. We

need to bring that to the public so they know what's going on. It's that type of detailed analysis, and a little bit is being done now.

I think I'm very much of the opinion that if we put a reasonable price on carbon and do good analysis, we're going to find out we have a tremendous number of things we can do that are really quite manageable. These numbers that Stern is talking about will probably pop out of that type of analysis. It needs to be done; it needs to be transparent so that the public understands; it needs to be independent so that we know it's in our interests as a nation to do them; and then it's going to take a fair bit of courage to get on with it because there will be big opposition.

I believe it's totally doable. I believe the analysis will show it and that there are a tremendous number of cost-effective things when one imputes an environmental price on some of the pollutants we're dealing with. It's all sitting there; the technologies are out there, and others will come if we start down that path.

The Chair: Mr. Marshall, very briefly.

Mr. Dale Marshall: I think the Stern report for Canada would be useful, but I'm definitely in the camp that says what we lack is not information; what we lack is political will at this stage. We know what needs to be done. We understand the science. We know what policies work. We know what technologies need to be implemented. If I had a choice between the Prime Minister saying we're going to have a Stern review or him saying we're actually going to get serious about tackling climate change by putting policies into place, I'd pick number two.

The Chair: Thank you, Mr. Marshall.

Mr. Bigras, please.

[Translation]

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

I have two questions, one for Mr. Marshall and one for Julia Langer.

In my opinion, one of the strongest arguments in support of the bill was made by Dale Marshall from the David Suzuki Foundation. Allow me to quote an excerpt from his submission.

Canada could get more than 80% of the way to the 2020 target laid out in this bill merely by applying a sufficiently high carbon price through a tax or a cap-and-trade system.

As I said, I think this is one of the strongest arguments in favour of the bill that we have heard, particularly in so far as our 2020 targets are concerned, coupled with the fact that all of the witnesses agree on the need to set a carbon price and to use the market tools available to us. The National Roundtable on the Environment and the Economy had adopted this position, and, if I am not mistaken, the Conference Board of Canada took a similar stand a few days ago.

Since we are likely to receive the official report in three weeks, as noted in the submission, and since we will likely be doing a clause by clause study of the bill before the report is tabled, perhaps Mr. Marshall could tell us what modelling was used to make these findings? I assumed he set a quota system. On what basis was quota allocated? For example, did companies that managed to cut their greenhouse gas emission levels receive additional credits that they could then turn around and sell on the market? Without necessarily getting into the specifics, what type of modelling accounts for these findings?

### **(1620)**

**Mr. Dale Marshall:** The research in this case was conducted by Dr. Jaccard of Simon Fraser University, a climate change and energy expert. The research that was done was used by the current government and by the previous Liberal government. The modelling used fixes a carbon price. It does not call for setting a carbon tax, ceiling or exchange system, but for rolling everything into a shadow price. The model verifies changes to energy use patterns.

Only by setting a carbon price will we be able to achieve the 80% or better target by 2020.

**Mr. Bernard Bigras:** In your opinion, would we be able to surpass the target for 2020 if we applied other energy saving regulations? You stated that by bringing in energy saving regulations for motor vehicles, we could lower emission levels even more.

Are you saying then that if we bring in market tools and energy saving regulations, we could exceed the 25% target?

Mr. Dale Marshall: We plan to focus on precisely that in the next part of the study. I can't say for certain that we can exceed the proposed target for 2020. The experts that I've spoken to say that the 2020 targets are achievable, but I don't know if they can be surpassed.

**Mr. Bernard Bigras:** I see. Therefore, you believe that if the government chose to use the tools available to it, it could meet this realistic target.

**Mr. Dale Marshall:** That is precisely the message I was trying to convey.

**Mr. Bernard Bigras:** My question is for the World Wide Fund for Nature.

We note the following in the second box on page 7 of your submission:

With many provinces making commitments and moving ahead, we need to ensure that the efforts of leading provinces are not cancelled out.

Prior to that, you say we need this:

Need clear rules that will work in the real world of the Canadian federation. Discussion [of] equivalency agreements will further undermine the system.

I think it is important to call to mind the discussions that the committee has had on bills C-30 and C-288. We had reached a consensus on the issue of equivalency agreements, provided that they be based on outcomes and not necessarily on regulations.

If equivalency agreements are results based and some provinces were to present their plans to meet the targets set in Bill C-377, would these targets in fact be achievable, realistic and fairer?

(1625)

[English]

**Ms. Julia Langer:** My concern with the equivalency agreements being discussed now is the absence of actual targets. In other words, we're having bilateral discussions in which there's no overall goal or target, which is something that the bill in front of you could actually rectify.

If you have the target set, then you can discuss various slices and dices of the solution in an orderly way, and you may want to do that through equivalency agreements or cooperation agreements. As I said, the European Union calls it "burden sharing".

Without any kind of framework, having these discussions would be really quite futile and would perhaps undermine what some of the provinces going further might want to do.

[Translation]

Mr. Bernard Bigras: I have no further questions.

[English]

The Chair: Thank you.

Mr. Lussier, there are about three minutes left if you want to use that time.

[Translation]

Mr. Marcel Lussier (Brossard—La Prairie, BQ): Mr. Ogilvie, you note the following in the third paragraph of your submission:

The federal government has faced enormous opposition from industry and provincial governments to implementing aggressive greenhouse gas mitigation measures [...]

In my opinion, provincial governments have cooperated admirably, with the exception of Alberta which has minimal reduction measures in place. Since 1990, through their collaborative efforts, industries have achieved substantial cuts to greenhouse gas emission levels.

I do not understand your statement. Could you clarify it for me? [English]

**Mr. Kenneth Ogilvie:** Is your question on differences within the federal bureaucracy?

[Translation]

**Mr. Marcel Lussier:** No. You say that industry and the provinces have shown some resistance. I think the federal bureaucracy is the party that is resisting.

[English]

**Mr. Kenneth Ogilvie:** I see. I think it comes from all three quarters, depending on who's being targeted for what measure.

I'm certainly working very actively now on the vehicle fuel efficiency file. There's tremendous opposition within industry to being subject to a standard at all, to some extent, and certainly to anything that's stronger than the inadequate standard that the Bush administration is proposing. So there's resistance there.

Traditionally, there's been bureaucratic infighting. Of course, federally that's between departments over measures and so on, and we're all aware of that. Different provinces have different aspirations.

There is a lot of discord out there, which I think is one of the reasons this bill, or something like it, is needed. It would settle things down, and we could say, "Look, we are going to go forward". We have to look toward solutions as opposed to segmenting ourselves into little camps and fighting over things.

[Translation]

**Mr. Marcel Lussier:** You also say that we need to focus our efforts on three areas: infrastructures, technology and prices. Are we spending too much money on roads and bridges compared to what we could be spending on public transit? Should we not be spending large sums of money on public transit, the real solution to lowering greenhouse gas emission levels?

[English]

**Mr. Kenneth Ogilvie:** Yes, I totally agree with you. I think we have to look at compact, mixed-use communities, transit-oriented development to get these big reductions. The experience is that if you build a road and you build a transit system next to it, you have trouble filling the transit system. You have to subsidize it, and people get in their cars and drive in single-occupant vehicles on the roads.

You have to design your urban centres, where 80% of the population live, to be much less energy-intensive and, frankly, much safer and cleaner along with it. So we can save money, save on the environment, and I think make more liveable communities through these types of designs. Yes, I agree that transit deserves much more investment than we've given it.

The Chair: Thank you very much, Mr. Lussier.

Mr. Cullen.

**●** (1630)

Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP): Thank you, Mr. Chair, and thank you to our witnesses.

Thankfully, I've read many of these documents already, so missing your presentations, although I'm sure they were excellent.... I apologize for a late flight in.

The place I'd like to start is with the impacts on the economic side of not doing things that are prescribed in Bill C-377. There was much news made in the past year or so with the Stern report and others, seeking to understand what the implications of inaction mean, because oftentimes governments, like our own currently, that are resistant to bringing in some of the measures that are contained here will talk about the cost to the economy and focus on that and do the doom-and-gloom scenario.

What understanding have you seen that the Conservative federal government has in terms of the implications of not acting? Have any of you seen a study, a panel, an understanding within the federal government as to the impacts of climate change on our economy?

Mr. Kenneth Ogilvie: There is an unreleased study at the moment on climate change impacts and adaptation, and we're waiting anxiously to see that. My senior scientist, Dr. Quentin Chiotti, was the co-lead for the Ontario chapter of the assessment, so I have some notion of what might be in it. But until it's actually publicly released....

I think that will help frame, in part, the cost of inaction. It's not a hard economic analysis, but it will give us a physical picture of what could happen on the landscape.

**Mr. Nathan Cullen:** We've been hearing about this report and the study since before the Bali meetings in Indonesia. I'm a bit confused. If climate change has been cited by many of the world's leading authorities and thinkers on the economy as one of the greatest threats.... Is this report just not finished? Is it a problem with what's happening? I imagine this is a question for the government.

What I'm trying to understand is, if there's resistance from the government in agreeing to legislation like Mr. Layton's bill, why is it that they haven't made a counter-argument to say that there is no threat to the economy and we can go on with business as usual under this scenario? I'm a bit confused, from an economic point of view, and I've heard Tom d'Aquino and others express similar confusion. So why not release this report if it's ready?

Mr. Dale Marshall: The Climate Action Network of Canada and the David Suzuki Foundation have been asking for this report to be released. Our understanding is that it was completed before the Bali conference, and we were hoping it was going to come out then, because I think it would very likely have been useful in hopefully shaping government policy in our international positions. We're still waiting for it to come out.

**Mr. Nathan Cullen:** As I know the questions are now going to my government colleagues, perhaps they can enlighten us and the Canadian public as to this use of taxpayer dollars to do a report like this of such a critical nature and why we don't have it in our hands today, on which to base our judgments going ahead.

I'm wondering about the critical nature of putting something like this piece of work into legislation as opposed to just prescribing various uses of permits and whatnot. There's been some criticism in the past that without the legislative authority of something existing in law, it becomes relatively easy to remove programs, to remove goals and ambitions for our country. Does it matter whether we put something into law or just keep it in regulations, as it has been in the past?

Mr. Ogilvie.

Mr. Kenneth Ogilvie: I would like to answer that.

I've worked for three governments: Ontario, Manitoba, and the federal government. It's terrifically hard to fight new policy into existence and new programs. They get dropped just like that when it suits somebody. We need to have a way of putting into place these programs, and it has to be difficult to drop them. There has to be a rationale to drop them, just like there has to be a rationale to put them in place.

I think the act would give a measure of support to maintaining programs that work. There should always be evaluation and a way to eliminate or change programs that aren't working. I totally agree with that too. I think this would give a stronger measure of holding in place programs that work, and that's another reason why I support the bill.

**Ms. Julia Langer:** From my perspective, getting the targets entrenched sets the level of ambition. You then have the opportunity to design programs from year to year, on a three-year rolling average, or for 10 years, as long as they are working.

Regarding the whole issue of impacts, part of the reason that a Stern report for Canada is not necessarily the best investment is that Stern did a global analysis. Now, obviously, it is not the microanalysis of Canada's exact situation, but it does give a perspective for any country on the kinds of risks and the kinds of opportunities we have: the risks of inaction and the opportunity for action. It relates our programs in Canada very clearly to the cost of fossil fuels, which is going nowhere but up. We have opportunities for efficiency. We have the opportunity to save ourselves some pain and actually give ourselves some gain here. Not doing that is actually pushing us further behind, creating a cost of inaction. By not acting you will create costs for the public, for business, for government. These are very simple calculations to do, and they're based on that basic currency of fossil fuel costs. We're paying it, you're paying it, and it would be a real disservice to the Canadian public and to business throughout the economy to not actually get a grip on carbon.

• (1635)

Mr. Nathan Cullen: Let's take this for a moment. On my flight here today I was responding to cards from my constituents who were asking about climate change. There is frustration that's been there for a number of years as to why we do not just simply get on with it. That was on one card I'm thinking of—from a Conservative voter, no less

I have a question about certainty in the business environment. In my office I've had a number of directors and CEOs from the major polluters in this country. They have been decrying the fact that when they've heard the signal from government, they've begun to act and have made those investments that are necessary. Then it washes away, and there's another plan and another call to action. The business community gets a little less excited this time, having learned from their previous experience.

The business community right now—and I know you folks, to varying degrees, consult with that element of the Canadian economy—is so frustrated that they are not willing to act any more unless certainty is placed before them in black and white, with no questions about it, and those goals that you talked about are entrenched into law.

Recently there was a report showing that many of the major polluters in Canada have reduced their investments in some of these infrastructure costs due to that. Staying with the business community, are you getting any sense of that frustration level and an unwillingness to have that alarm button pushed again? The response is just not the same.

**Ms. Julia Langer:** The World Wildlife Fund works with what we consider to be change-ready, leading-edge companies. Actually, we see a lot of willingness to act within the business community that we're dealing with. But there is also a recognition that it would be (a) a lot easier, (b) a lot more motivating for their competitors, and it would even the playing the field if it were entrenched in policy.

You always have that leading edge, which is great because you actually want to profile best in class. But that wears thin after a

while, and it gets very hard on the leaders when they have to really be out front for way too long. Even taking this market transformation kind of approach basically involves taking the signal from some of the leaders. The climate saver companies that World Wildlife Fund has worked with range from Sony to IBM to Johnson & Johnson to the Catalyst paper company. These are companies that are making very significant reductions to their greenhouse gas emissions in their own operations. Catalyst has made a 70% reduction. You might know of them. Take their lead and entrench it in law.

Mr. Nathan Cullen: Chair, how much time do I have?

The Chair: You have a minute.

**Mr. Nathan Cullen:** Recently, Alberta came forward with the notion of a carbon capture and sequestration program for their oil and gas sector, with the caveat that the public would be picking up some of the cost, if not perhaps all of the costs, for some billions of dollars. Under a plan like Bill C-377, what would the alternative suggestion be to capitalizing that type of project and reducing the amount of carbon? Is that a go, or is there something else available under our cap and trade program that exists right now to create the same mechanism perhaps of the cap and trade environment for the oil sands and for the oil sector in general?

(1640)

Mr. Dale Marshall: You can put in place any system that prices carbon and that gives oil and gas companies an incentive to themselves invest in carbon capture and sequestration, if they feel like it. That's the approach that we would advocate, that you set the targets, you put in place a carbon price, whether it's a carbon tax or a cap and trade system—actually, there are hybrids that probably would work best—but at the end of the day, I don't see any reason why it should be the public that picks up the tab for oil and gas companies taking responsibility for the pollution they produce.

The Chair: Thank you.

Mr. Warawa.

Mr. Mark Warawa: Thank you, Chair.

Thank you to the witnesses today. I'm going to be focusing my questions on Bill C-377 and solutions. Your perspective is an environmental perspective, and I'm going to be looking for your wisdom in providing good direction on where you see Canada if we do accept these targets.

Now, you've suggested that we set these targets, that we entrench them into law, and then we achieve those targets. What would you see Canada looking like in 2050 and in 2020? How would this transition affect each and every Canadian? So there's how we achieve that but also what it will look like.

I'd like to begin by asking you, as I have with the other witnesses, about the importance of having this bill costed. I asked Mr. Layton if it was costed, because in sustainable development, part of that equation is that it has to protect the environment but you cannot destroy the economy. Each witness has addressed that briefly. On Wednesday we are going to have economists who will be presenting.

So Mr. Layton said yes, it had not been costed, and he'd like the government to cost it. I asked Mr. Bramley if it had been costed. He said no, and he also expected it to be costed. I asked Dr. Stone a week ago if it should be costed, and he said yes, he thought so.

Ms. Langer, you said you did your calculations, as provided in the deck you handed out. Has any costing been done by any of you three on Bill C-377?

**Ms. Julia Langer:** I'm not quite clear on what you mean by costing. Is your main focus here what it would cost to actually achieve the targets that would be set out in the bill?

Mr. Mark Warawa: I'm sorry, I....

**Ms. Julia Langer:** Is your point with regard to what it would actually cost to implement the targets set out in the bill?

**Mr. Mark Warawa:** Bill C-377 sets some very aggressive targets. These targets are coming from the IPCC report. Pembina and the David Suzuki Foundation have then provided a case for deep reductions.

There was mention of the government's bill, *Turning the Corner*, and that was costed. There was some debate on whether or not that will be achievable and what the costs of that plan will be to the GDP, to Canadians, and maybe some questions on whether or not those targets will be reached.

I think there was comment that the targets aren't tough enough from an environmental perspective, and from industry they're too tough, which we're also hearing from some provinces. So we're sort of in the middle.

In terms of costing, what will it cost the Canadian economy? That seems to be a bit of a benchmark to compare perspectives and plans. The government has a clear plan, an absolute reduction by 2020, and deep reductions of 60% to 70% by 2050. That was costed.

Has Bill C-377 been costed? As I said, Mr. Layton said no, Mr. Bramley said no, and Dr. Stone said no, but each has said it should be costed so that we're not just setting arbitrary numbers but getting a full picture of what this means in Canada.

So that was my preface: what will Canada look like? What is urban development going to look like? What kinds of cars will we be driving? Where's the energy coming from? What are the costs? There is that balance, but what are the costs for Bill C-377?

● (1645)

The Chair: Go ahead, Mr. Marshall. I think you're up first.

**Mr. Dale Marshall:** I cited evidence as to how we can get the kinds of deep reductions we need at little economic cost. The IPCC has done one globally. We've done modelling for 2020, and there is modelling for 2050.

All of it shows that we can get serious, deep emission reductions with virtually no impact on the economy. I cited the study we did where we would have economic growth in Canada at 26% instead of 27% between now and 2020.

You can turn that around and ask about the costs of not acting, and you start—

Mr. Mark Warawa: Unfortunately, I don't have the time to get into a debate.

Mr. Dale Marshall: I think that's an important point.

**Mr. Mark Warawa:** I appreciate that, and I hate to cut you off, but my time is limited. You're suggesting that in your report it is costed in a very general way.

Mr. Ogilvie, could you comment?

**Mr. Kenneth Ogilvie:** There is no large-scale integrated cost analysis around anything I've ever seen in a plan.

I expressed the view that when we do the analysis we're going to see lots of opportunities. There have been bits and pieces. The energy ministers had modelling done on energy efficiency and came up with their agreement on efficiency. We know we can save money on buildings. There is a model ready to be run for the transportation sector on vehicle fuel efficiency, and so on. I'm a big fan of doing that analysis.

I think we know what we have to get to in 2050, and we know we have to get there in stages and steps. We also have a signal as to what we should probably shoot for in 2020. To me, it's a matter of costing that out and finding the most productive, least cost, and most favourable competitive positions to achieving those goals.

So yes, the analysis should be done. Pollution Probe hasn't done it; we've been part of exercises where some of it has been done.

Mr. Mark Warawa: Okay, thank you.

I, too, think we should be costing this so that Canada knows where we're going. I think the targets are aggressive, but we need to really look at the impacts.

When Mr. Layton was asked what the costs are and where the targets come from, he acknowledged they were from the David Suzuki Foundation and the Pembina Institute. And he gave a very interesting analogy about a railroad. He said:

I think of the people who thought about connecting one end of the country to the other with a railroad. Do you think they had it all figured out as to how they were going to pull it off? Do you think they had figured out how they were going to pay for it all? Did they do it perfectly? The answer to all those things would be no, but they had a dream about where they wanted our country to be, and they took on the impossible and they focused on it.

He has a dream. He set these targets, as recommended by the David Suzuki Foundation, which is a well-respected organization, and the Pembina Institute. We thank you for encouraging those.

Can you elaborate on what you see Canada looking like? I'll preface my comments by saying that I drive a hybrid. It's a transitional technology. I look forward to a time when they have electric cars that I can plug in when I get to the airport and I can drive home and plug it in. I think that technology isn't that far away.

Where do you see Canada in 2020 and 2050? Do you see coal-fired generating plants like we have in Ontario, for which the federal government provided \$583 million to shut down and they haven't been yet? In 2020, do you see that kind of technology being shut down and us moving to a greener Canada, greener technologies, maybe with electric cars, solar energy, tidal energy, and more efficient homes with people living on smaller lots?

And do you also see there being a carbon tax? I hope not. I think Canadians are overtaxed, and our government doesn't support a carbon tax. But do you see a carbon tax in 2020?

**Mr. Dale Marshall:** Up until the opposition to a carbon tax it sounded like you had a vision.

Mr. Mark Warawa: I do.

**Mr. Dale Marshall:** Because that's what it is. It's about using less energy. It's about using cleaner energy. It's about moving away from polluting industries and toward industries that provide us with the services we need and yet don't disturb the climate.

It will have to involve a carbon tax—a carbon price of some kind—whether it's a tax or a cap and trade system. It will have to. You don't get the reductions unless you have a regulation to reduce emissions or a price that compels polluters to reduce their emissions.

You can design a carbon tax or a cap and trade system in many different ways and, if you wanted to, make it completely revenue neutral from a government perspective. You reduce other taxes. You can also use some of that money to invest in the emission reductions we need elsewhere, like retrofitting buildings, or putting more money into transit, which we have a consensus needs to be done.

**●** (1650)

Mr. Mark Warawa: These are all part of our plan, so I appreciate that.

The Chair: Your time is up. Thank you.

Mr. Godfrey.

Hon. John Godfrey (Don Valley West, Lib.): Thank you.

First of all, I want to thank all of you for coming. What has been useful is that you've come to the solution side from different angles, but they all add up to the same direction and to the picture, but it was a very rich set of presentations, so I want to thank you.

I want to go with Dale Marshall. Of course, part of the challenge is that he's shown us a bit of what this future study is going to be like, the one that's going to be released in three weeks. A couple of questions just beg to be asked. Whether he'll give me the answer, I don't know.

Canada could get to more than 80% of the way to the 2020 targets by applying a sufficiently high carbon price. What would the price be?

Mr. Dale Marshall: It is something we're going to release in three weeks

**Hon. John Godfrey:** Would it be in the zone of \$15 to \$20, which has been proposed by—

Mr. Dale Marshall: No, it would be significantly higher than that.

Hon. John Godfrey: I also want to understand the way you've set it out here. It suggests the whole of our 2020 target, or 80% of it, doesn't apply to other gains from vehicle fuel efficiency, appliances, and buildings, so I would assume you're talking about large final emitters, which, depending on your way of calculating, is either 47%, as Julia Langer suggested, or 53%, but we know the categories we're speaking of. Are you saying that just setting aside the other 47%, or whatever it is—let's call it the 50% that isn't there—you can achieve 80% of Canada's total target from that large final emitter sector, or 80% of it within that category?

**Mr. Dale Marshall:** No, a widespread carbon price, when just applied to large final emitters, would apply to all energy use that involved fossil fuels, so we're not just talking about 50%. It's actually closer to 80% of the sectors that are putting out carbon dioxide.

Certain things aren't captured very well by carbon taxes, aren't affected very much by carbon taxes, and this is where I think there is a real need, at least in that case, for regulations for things like vehicle fuel efficiency, buildings, and much higher standards for efficiency for appliances, for example. We know how to make natural gas furnaces that are 96% efficient. Why do we have some on the market that are 78% efficient? It makes no sense, having regulations in various cases where the carbon price by itself won't incent the kind of behavioural change we need to reduce emissions to those levels.

Hon. John Godfrey: In terms of the other sectors, that is to say the other 50%, it really comes from three areas: one, transportation; two, buildings and appliances—I put that together—and the third, which isn't mentioned here, is agriculture, forestry, and urban waste, the bio sector. Realistically, of those three sectors, understanding that particularly in the third sector the source of the emission isn't always energy but has to do with nitrous oxide or methane or something else, other kinds of greenhouse gases, do the three of you think it is possible, without going crazy, to achieve that kind of efficiency in the other three sectors: transportation, the built environment with appliances, and the bio sector? Where are we going to have the toughest part by 2020?

● (1655)

**Ms. Julia Langer:** On the efficiency side of things, there is no study in the entire world on greenhouse gas reductions that does not put energy efficiency at the top of the list.

First, energy efficiency is fast. These targets seem ambiguous in their timeframe. To protect the climate, you actually have to be frontend loading the emissions reductions. This is what the scientists show with all their curves—your panel must have shown you a lot of those last week. We need to front-end load some of the reductions, and the fastest, cheapest, and most permanent reductions come from reducing energy demand overall.

Conservatively speaking, in our Canadian economy we could be using 40% less energy to do exactly the same things we're doing now. But in fact we shouldn't be doing exactly the same things we're doing now. We should be using less. We should be using public transit more than cars. Then you get on top of that 40% additional reduction in energy demand. So in housing, transportation, agriculture, and forestry operations—the mill operations, not the fertilizer—we could get huge no-regrets gains. That's where we come down on the side of action now. We are wasting energy, and if we don't act, we're going to be disadvantaged as energy prices rise. So the potential is strongly there.

The Chair: Mr. Vellacott.

Mr. Maurice Vellacott (Saskatoon—Wanuskewin, CPC): Thank you, Mr. Chair.

We got into the topic of carbon tax a little already, and there has been a fair bit of talk about the issue of carbon tax. We are not sure where the Liberals stand on the issue of carbon taxes. One day their deputy leader supports a carbon tax; the next day Stéphane Dion does not. Just a couple of weeks ago, Mr. McGuinty rejected the notion of a carbon tax. Then his colleague Mr. Godfrey said he wouldn't dismiss the idea.

So we don't really know where the Liberals stand on the matter. Dale stated his response, but maybe Julia and Ken could say what kind of carbon tax would be required to meet the target in this bill. What would it look like? What would be the shape of it?

Julia or Ken?

**Ms. Julia Langer:** First of all, it's not necessarily tax we are talking about but price. You can create a price by various methods, either through a tax or through a constraint. If you constrain carbon through a cap or a regulated target, the price will go up because carbon becomes a commodity. So you don't necessarily have to tax carbon to raise the price of it.

Some of the studies that have been done, looking at \$30-a-tonne pricing, show that you would get a whole bunch of efficiency measures, a whole bunch of industrial reductions, with \$30 per tonne. You increase the price, through whatever method, and you make additional measures, additional reduction opportunities, more cost-effective, more viable.

**Mr. Maurice Vellacott:** It sounds to me like it is still a tax. But I could be persuaded.

**Mr. Kenneth Ogilvie:** There are some areas we know we can put a tax or a price on quickly, like fuels. The infrastructure to collect tax on fuels is easily used. You would hardly have to hire anybody else to collect and manage that money.

The national round table is moving into the next part of its analysis—looking at the pricing side of things. I think this requires a great deal of design.

It's clear that if you put an efficiency standard on, then the public simply takes that technology. But you have to get into the design of how to turn it over. If you are allowing people to make choices on whether they are going to use more or less heating fuel than they need, then price will have an impact.

So the word "tax" is a bad word, in a sense, but at the end of the day it is what it is. It's not so much whether to tax as it is how to tax . You have to make sure that you're dealing equitably with people who don't have the wherewithal to pay extra prices. But it's obvious: they're going to use less if they pay more, and they are going to use more if they don't pay at all. If we don't put that broad signal into the economy, then we're going to have real trouble. So I favour some kind of a price, whether it's a tax or not, on a heating bill or whatever.

There are some good analyses on this in the U.S. and in some parts of Canada, in which they study how much extra you actually end up paying if you have that extra price. I won't go into detail, but the Ontario Energy Board and the shared savings mechanism are ways in which you can go through utilities and consumers can pay more on the price side while saving on the fuel side through less use. So there are ways to do this, but it takes a great deal of design.

**●** (1700)

**Mr. Maurice Vellacott:** I have another quick question, and just a quick yes or no from each of you would be appreciated, as I'm running out of time. The government is moving, as you know, from voluntary compliance agreements to some good regulations, some tough regulations, on big polluters, as evidenced by the announcement in Indonesia to proceed with section 71 of CEPA. Just quickly, yes or no, do you support that move, instead of the voluntary, to the tougher announcements, as in proceeding with section 71?

**Ms. Julia Langer:** In principle, we absolutely should have regulated requirements.

**Mr. Dale Marshall:** Sorry, section 71? I didn't catch what you're talking about.

**Mr. Maurice Vellacott:** In terms of actual regulations, not just voluntary compliance, we should have tough regulations with respect to the big polluters, as under section 71.

**Mr. Dale Marshall:** An absolute emission reduction would be preferred in terms of the regulations, but we do favour regulations.

In fact, I didn't get a chance to answer your question from before, which is that one way of designing a system is to have an upstream cap and trade system, which of course involves regulations for large final emitters, have a downstream carbon tax that is felt by the consumer, and have regulations for things I've mentioned already that aren't really well captured by a carbon price.

The Chair: Thank you.

Mr. Regan, please.

Hon. Geoff Regan (Halifax West, Lib.): Thank you very much, Mr. Chairman.

Let me ask you about this question of what we've just been hearing about in terms of a carbon tax, which of course is different from a carbon budget or cap and trade system, although my colleagues in the Conservative Party don't seem to be able to grasp those differences, I gather, from what they're saying.

Let me ask you this question. In view of the rise we've seen in oil prices over the past year or so particularly, how much behavioural change has that created? How much of a tax in terms of this proposal—which we don't support, that is, the tax itself—are you talking about in order to have the impact on behavioural change that would be required?

Mr. Dale Marshall: I think there has been behavioural change with respect to higher gas prices, for example, with the kinds of vehicles people are buying, but this is why I argue that the best way to actually address emissions from transportation from personal vehicles is to put in place regulations that mandate that we ramp up quite quickly the efficiency of vehicles that we're allowed to buy. The California standards may be the best proposal from a North American standard, but the California standards compared to those of Europe, China, and Japan—compared to anywhere else—are incredibly weak from a vehicle fuel efficiency standpoint.

So that's how you best capture those emissions. You put into place vehicle fuel efficiency standards that improve—

**Hon. Geoff Regan:** That's a very different answer than the question of a carbon tax. You're not addressing the question. I mean, I accept what you're saying, that in fact there's no question, or the idea that having strong regulations on manufacturers of vehicles and so forth and limiting emissions that way is important. But if you're proposing that we also have a tax on oil, my question is, how much, and what impact do you see it having? I think we've seen some modification. It's one of the reasons I bought a Prius, along with the fact that it's better for the environment, and we all care about that, hopefully more and more these days, but not enough yet. Lots of folks are still buying SUVs and trucks and everything else.

Mr. Kenneth Ogilvie: As was pointed out earlier, we're not economists, so we look to other people's analyses for this sort of thing. William Nordhaus, who is a very well-respected Yale University economist, has calculated that an economically optimal carbon price or tax would be about \$27 U.S. per metric tonne in 2005, rising to \$90 U.S. in 2050. So we're talking carbon tax one way or the other of anywhere from \$30 to \$90 a tonne, according to some economic analysis. I don't know how the numbers shake out in Canada, but that seems like a reasonable level that starts to get some action. Of course, prices could go much higher after that, depending on how tight we have to push to get further reductions, but those are the kinds of numbers people are throwing around. I don't know what my colleagues are going to come up with shortly on this.

• (1705)

**Ms. Julia Langer:** Part of your question has to do with what's called elasticity. You don't have very much choice in how much energy you use to heat your home; it depends on how cold it is. You don't have that much choice if you have to commute to work and there isn't a public transit system. This is what I'm concerned about, in terms of Canada and Canadians being exposed to higher energy prices.

These kinds of uses do not respond well to price signals, which is why you need a two-approach system. Price will drive those kinds of uses when they can avoid it: when there are efficiencies to be made within industrial plants or where the user actually has some control. It will not affect behaviour and use where you don't, which is why you need the complementary regulations. If we don't actually set some targets and deploy the measures that are appropriate for each of those uses, we will not reach them.

**Hon. Geoff Regan:** Let me ask if you saw a column in the *Globe and Mail* today by Gwyn Morgan. He's a good friend of the Prime Minister, I gather, and president of EnCana. He basically argues in support of what the government is doing, saving our focus should be

on the developing countries and getting them onboard to make reductions, rather than making reductions ourselves.

If you saw that, could you address it? I'm also interested in your comments on that generally.

Mr. Kenneth Ogilvie: He talked about setting standards and that sort of thing, which is really essential here—setting intensity-based standards for industry and then pushing them on developing countries. That won't get us to the kinds of numbers we're talking about, and I don't think he's claiming it will. The question is whether we'll go with the science and try to avoid the worst impacts of climate change or not. If so, we will have to deal with the science, the timing, and the numbers there.

It's a mission of getting there with the least cost and in the most economically optimal and favourable way, as opposed to saying, "Let's do intensity", or "Let's set a few standards and let things fall out where they will until the developing countries come along". We have to work backwards from the science and find the optimum way to get there, in our interests, as well as cost-effectively.

I think he's looking at a different scenario altogether, where he's not taking the science and factoring that in. He's looking at the economics from the point of view of industry and what it can cope with. I understand that, but it's not going to solve the problem.

The Chair: Mr. Harvey, please.

[Translation]

**Mr. Luc Harvey (Louis-Hébert, CPC):** Good day and thank you for joining us. Since I have only five minutes to spare before I have to leave, I would ask that you answer my question with a simple yes or no.

My riding is home to the Mining Association of Canada. As we know, aluminum is undoubtedly one of the most widely used metals because of its light weight. Producing a ton of aluminum in Canada generates four tons of CO2 in the process. In China, a plant that produces the same ton of aluminum emits seven tons of CO2.

You propose a carbon tax. If we apply a tax of \$30 per ton, that would mean \$30 times four. You didn't have time to get into this, but the figure could be slightly higher. Add to that the cost per ton of Canadian aluminum, namely \$120. Everyone knows that buyers will look elsewhere in the market and buy their aluminum from China rather than in Canada.

Do you think it is better for the environment for people to buy a ton of aluminum from China, where seven tons of CO2 have been produced in the process, instead of in Canada, where the smelting process generates four tons of CO2?

Mr. Marshall.

**●** (1710)

**Mr. Dale Marshall:** I'm sorry, but I would be more comfortable answering that question in English.

[English]

The way you deal with rapidly industrializing countries like China is to ensure that they are part of the global regime and their industries are being affected in the same way with respect to a global regime on carbon. Developing countries—

[Translation]

**Mr. Luc Harvey:** I would just like to point out that I asked you to keep your answers brief, because I have only five minutes to spare. You haven't even begun to...

Mr. Dale Marshall: This is a highly complex question, sir.

Mr. Luc Harvey: I understand that, but I asked you if the current way of doing things was better for the environment. Bill C-377 makes no mention of China. It talks about fluctuations, movements and so forth. That is the issue here. I am not interested in knowing what the Chinese must do. I want to know if our current approach is better for the environment. According to Bill C-377, ... You talk about imposing a tax, for instance a tax of \$30 per ton of CO2 produced, which works out to a cost of \$120 per ton of aluminum. What's going to happen then?

**Mr. Dale Marshall:** I'm saying that every country must assume responsibility for its emissions. The Chinese must be part of the international approach to control climate change.

[English]

Mr. Kenneth Ogilvie: We need equitable treatment with our own domestic production and imports. China should be paying an equivalent tax on its production, and it will pay more if it's less efficient. If we produce aluminum more efficiently in Canada—and it's very energy intensive—and there's a price on carbon, if the Chinese face the same price signal, then they will be paying more and we'll increase our competiveness.

**Ms. Julia Langer:** From an environmental perspective, all greenhouse gas emissions reduced are good greenhouse gas emissions reduced. We should be doing the best to reduce our own, and we should be doing the best possible to make sure that other countries do as well.

[Translation]

**Mr. Luc Harvey:** I see. We've heard how the European model has been a success. Mention was made of France, England and Germany. It is a well known fact that these countries use nuclear technology. Do you think that Canada should turn to nuclear energy to reduce its greenhouse gas emission levels, yes or no?

**Mr. Dale Marshall:** The answer to that question is no. Germany is in the process of scaling back its nuclear energy production.

**Mr. Luc Harvey:** Yes, and currently the Germans are buying their energy from France.

Mr. Ogilvie.

[English]

Mr. Kenneth Ogilvie: Nuclear has unresolved questions around it: waste disposal and hidden subsidies that are not well understood. I think all of this should be on the table. Prices should be adjusted to reflect a fair number for nuclear as opposed to the numbers we're told. I don't think they're appropriate, and in fact there are better options. Until we come up with solutions, we should be going in other directions first, as a priority.

**Ms. Julia Langer:** World Wildlife Fund does not support nuclear as an option. It's neither necessary nor desirable from an environmental perspective.

[Translation]

**Mr. Luc Harvey:** Very soon, Ontario will have shut down seven coal-fired electric power plants. What technology should Ontario embrace? It needs to generate electricity for its industries. What approach do you advocate?

[English]

Mr. Dale Marshall: World Wildlife Fund did a-

[Translation]

**Mr. Luc Harvey:** We've heard some lofty theories, but I'm talking about concrete proposals.

**Mr. Dale Marshall:** According to a study done by the WWF, through the use of clean energy, that is by resorting to energy efficiency and conservation measures, we could reduce our greenhouse gas emissions and close coal-fired electric power plants.

**Mr. Luc Harvey:** You're saying that if we did that, we could close the seven power plants?

Mr. Dale Marshall: Yes.

Mr. Luc Harvey: I see. Fine then.

[English]

The Chair: Mr. Harvey, I'm sorry, your time is up.

Mr. Scarpaleggia.

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

I was interested in your comments about Norway. It's a very similar kind of economy. It's oil based, and it has a kind of petro currency, which apparently, from what I hear, appreciated significantly and had a significant negative impact on its manufacturing sector.

Could you elaborate a bit more on the Norwegian experience? When you say that Norway is carbon neutral, could you, for the benefit of review, define that for us?

**●** (1715)

**Mr. Dale Marshall:** Essentially, what Norway is planning on doing is reducing its emissions quite dramatically, probably somewhere on the order of what's being proposed in this bill. Obviously, a country cannot eliminate its carbon emissions entirely. Part of its plan is to reduce emissions as deeply as it can, and then any remaining emissions that may come from that jurisdiction, from Norway, would be offset with credible emission credits from elsewhere, most likely the developing world.

**Mr. Francis Scarpaleggia:** Maybe this isn't a fair question—we're being very country specific here—but what strategies have they employed that perhaps we could employ here? Is it just setting targets?

Mr. Dale Marshall: They have a carbon tax.

**Mr. Francis Scarpaleggia:** They have a carbon tax and a trading system—

**Mr. Dale Marshall:** They have a carbon tax that affects their oil and gas industry, which is why the oil and gas industry actually uses CCS, because once you apply a large enough tax, it becomes commercially effective.

**Mr. Francis Scarpaleggia:** Which brings me to carbon sequestration as it would relate to Alberta and the oil sands. How far along are we in making carbon sequestration viable? For example, when we were discussing Bill C-288, we had some experts come in and say that we were still a ways away from making this an efficient or effective solution.

To any of the panel, what are your thoughts on the state of carbon sequestration, and what do we do if the predictions are right and the oil sands will produce 15% of Canada's greenhouse gas emissions by some date soon? What do we have to do to meet our targets? Do we have to cancel oil sands projects?

Is carbon sequestration a solution that will allow the Alberta economy to move ahead with oil sands projects? How do you see Canada's future from the oil sands perspective?

**Ms. Julia Langer:** On the tar sands and the role of carbon capture and storage, I don't see that anybody is seeing a future in which we can actually meet deep reduction targets without some significant investment in carbon capture and storage. As the panel that just reported has pointed out, we do have some of the geological formations that allow that. We have capacity to build infrastructure, etc. It's not that this is impossible; it just has not been done.

Then the question becomes, who's going to pay? Who's going to be responsible? In what framework does this reside?

If we put in place an appropriate, aggressive greenhouse gas reduction target that constrains carbon, which creates a price signal, we will see deployment of that technology, because it is one of the ways that industry can really reduce emissions. We have to do that, and it is being done. There are projects in the United Arab Emirates. There are projects starting up as pilots in Europe. There is a project in Australia. This is happening around the world. It's a collaborative exercise, and really, it's only a matter of working out the framework and the arrangements for that. So it certainly should go forward.

What does that mean for the Alberta tar sands? Well, I don't think I'm the first person to be saying that it's an overheated situation and that we should have a more appropriate pace and scale of development at the very least. We need limits. There are no limits right now, and in the absence of that, it's an absolute free-for-all, using the global atmosphere as a commons to pollute. The implications for the boreal forest and for water are immediate and pressing. We have so many reasons to do this.

The Chair: Time is up. You can comment very briefly.

**Mr. Francis Scarpaleggia:** This is a question for Ms. Langer or any panellist. You're saying we have to put some limits on oil sands developments if we are to meet our national greenhouse gas emissions. Do you think realistically—and this is probably not a fair question—you can see this particular government ever getting tough, in that respect, with that industry to a sufficient degree?

**●** (1720)

**Ms. Julia Langer:** I find it interesting that former Premier Lougheed is able to make pronouncements about pace and scale of development without blinking an eye. You have to read the situation, look at the overheated state of it, look at the public opinion in Alberta, and make a rational decision.

The Chair: Mr. Watson, please.

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

Thank you to our witnesses for appearing. I really enjoyed some of the conversations here today, some of the solutions. In fact, they spur probably more questions than I have time to ask now.

I want to start with a question for you, Mr. Ogilvie. When you were talking about Gwyn Morgan you said we had to work back from the science. It becomes an interesting question. There are probably two questions I have on this.

The first one, since this is a global issue, is, have any of your groups done any modelling, or is there modelling out there by the United Nations to suggest targets for developing countries? For instance, what kind of a target should China have, and by what year?

Mr. Dale Marshall: There's a whole bunch of different proposals for what should happen. The UN agreed that we should consider a peak and decline from 10 to 15 years and be well below 50% of global emissions by 2050, and that has very real implications for the developing world. Both of those things mean that the developing world, during that 10- to 15-year period, will have to peak and decline themselves, because they're making up an increasingly large proportion of the emissions. As I said, developing countries have signed onto that in Bali, saying that we do need that peak and decline to happen.

**Ms. Julia Langer:** One of the slides in my presentation is this very complicated little graph with many wedges. Those are solution wedges.

What World Wildlife Fund did was ask the question: can we live within a seven-gigatonne budget, which is a 50% global reduction from the projected business as usual, while still meeting our energy needs, recognizing that there's growth in population and there's growth in development? The answer is yes, if we aggressively pursue efficiency, if we aggressively pursue renewables. Carbon capture and storage is a wedge there.

So it is possible, the whole world cooperating together to meet that, which has obvious implications for China, India, etc.—the developing world.

Mr. Jeff Watson: Mr. Ogilvie, go ahead.

Mr. Kenneth Ogilvie: Just to sneak something in here, I'm not aware of the analysis for developing countries and what it should say, but it strikes me that it seems to be reasonable that when we're putting a cost on ourselves, a price on carbon, that may affect our competitiveness and just shift production somewhere else where somebody's not paying. We need to even the scale somehow. We should truly lose business if we're not competitive. If somebody's a better producer, a more efficient producer, for good reasons, that's fine. But where we're imposing a greenhouse gas constraint, there should be some way of evening the scales on that so that at least we're not introducing that as a factor to shift, as you say, production to the less environmentally friendly.

Mr. Jeff Watson: Would you be recommending an import tax, then, perhaps? What draws the question to mind is that while you're introducing a regulation on fuel efficiency to suggest, say, greater than 35 miles per gallon, as I think the Bush standard was, then we should worry about what fuel efficiency is coming in on Korean vehicles, for example, which is one of the developing countries, or China, with their \$10,000 vehicle—who knows what their fuel efficiency is going to be on that?

Is that what you're talking about?

**Mr. Kenneth Ogilvie:** I'm very much in favour of that type of analysis. The goal here is not to destroy Canadian industry. The goal is to make it efficient and to make the world efficient too. I think we should be looking at those sides of our policy.

Mr. Dale Marshall: And ensuring that every country takes responsibility for its emissions, which is exactly what the international discussions are about.

Mr. Jeff Watson: Thank you.

Last week we had some of the IPCC scientists here—Dr. Stone, for one. He and I had an interesting conversation.

I asked him about the target of 25% to 40% by 2020 and the 80% to 95% target. I asked him very specifically whether it was policy-makers or bureaucrats who made that decision, or whether it was scientists. He said that scientists had made that decision.

In his presentation there was no target for developing countries. I asked him whether that was because it wasn't scientifically quantifiable, and he said no. I asked him whether it was a decision by IPCC scientists not to quantify and he said yes.

My question to him, as a follow-up in our conversation, was whether that implied a bias on targets by scientists that wasn't necessarily scientific. He hedged at first before agreeing.

That concerns me. Have scientists ventured beyond the scientific now into the realm of policy-makers and decision-makers? As we're looking at targets that mirror the IPCC's own targets set by scientists, that is a question we have to consider, and whether or not the Chinas and the Indias and South Koreas and others take on absolute targets. That's the policy question now. And the decision not to do that modelling.... I guess science should have compelled—since it's aggregate emissions into the atmosphere—that some modelling should be done on that.

Would you agree that is somewhere the scientists have to go, as well as the policy-makers?

**●** (1725)

The Chair: Very briefly.

Mr. Dale Marshall: The policy-makers internationally have decided that in the next round of negotiations developed countries will continue to reduce their emissions, and developing countries will take on commitments. That means that their emissions track will bend downward and eventually peak. But there wasn't an expectation for them to have absolute emission reductions in the next phase, which is, not surprisingly, what the IPCC picked up on. So it didn't look at 2020 emission reductions for the developing world because it's not part of the play; it's not being considered. And for good reason, because it would be completely unfair at this stage to be

saying that India, with the average Indian having one-twelfth the emissions, and having hundreds of millions of people in poverty who are not responsible for climate change—

The Chair: Mr. Watson-

Mr. Jeff Watson: That's not scientific; that's a policy decision.

Mr. Dale Marshall: It is.

Mr. Jeff Watson: That's my point.
Mr. Dale Marshall: Thank you.

**Ms. Julia Langer:** In addition to that, it's just math. It's really just math in the end. To get to 50% by 2050, you make a policy decision about who bears the biggest burden, at least initially, and then you have to have the balance from the others. It has to add up to 100% on that 50% carbon.

**The Chair:** Mr. Watson, perhaps we'll just go to Mr. Godfrey for one minute and to Mr. Harvey for one minute. And I would like one minute.

Hon. John Godfrey: I have two quick questions.

Ms. Langer, I notice that on page 8, where you have the slices, there still a reference to nuclear. Maybe you could tell us why that's still there.

The second question to the panel is whether you favour the idea of carbon standards that are embedded in the manufacturing process such that when you sell a good in Canada, you recognize the energy that went into it in China, the United States, or any other place, so that you're not closing down Canadian industry.

**Ms. Julia Langer:** If you notice, the little nuclear slice actually ends at a certain point. There are nuclear plans in place. What the modelling took into account was that they're there, but they will not be replaced. So moving out to 2050, we can still accomplish the seven-gigatonne budget.

The whole life-cycle analysis and the embedded carbon is a fantastic idea. I think it's being taken up by some supermarket chains in the U.K. because of consumer demand. So let's build on that and really make this a global project so that we can all make decisions in the right direction.

The Chair: Thank you, Mr. Godfrey.

**Mr. Dale Marshall:** Emissions standards have a place and would be complementary to some of the things we've talked about today.

The Chair: Great.

Mr. Harvey, be very brief, please.

[Translation]

**Mr. Luc Harvey:** Earlier, we talked about the Chinese. At present, they are under no obligation whatsoever to reduce their emission levels. You stated that if we were to bring in a carbon tax, China would have to do likewise, to balance the equation. However, if China refuses to do so, what then?

[English]

**Mr. Dale Marshall:** Canada has been refusing way more than China. We have no moral authority to be pointing at the Chinese. None. We have zero.

We signed on to the Kyoto Protocol and then completely reneged on our commitments. Now we're pointing at the Chinese as people who have to take them on, and the Indians, which is even more ridiculous in terms of their development stage.

Once we get back in the game and make real commitments and actually meet them, then we can start pointing at the developing world to take on responsibility.

And I will be there with you, sir. As soon as Canada takes responsibility, I will be there pointing at others. But before that, I don't think it's responsible, and I don't think it's fair for us to be pointing at South Africa, Brazil, and India as countries that need to do something, when we've reneged on our commitments internationally.

**●** (1730)

The Chair: Thank you, Mr. Harvey.

I'd like to thank our guests for being here. I know as you've been following this issue for a number of years, as I have, how the level of discussion has improved. I know when I talked about carbon capture and storage in 2001, most people just looked skyward and thought it was a dream, but now of course everybody here is talking about that sort of solution. In my constituency, Nova and Dow, have been capturing all their CO<sub>2</sub> and sequestering it for the last 10 years. So it's not that it's not being done. And it's fine to say Dubai and so on are doing it, but it's being done in Canada as well, and of course in Norway.

The thing that frustrates me somewhat is when we talk about the EU always doing everything right. Germany has commissioned four coal-fired power plants without carbon capture and storage in them, and I find that a real concern when they talk one way and in fact do something different. So I don't think we should always hold them up as the great white saviours, because they have their problems too. And of course how do we get China, with its huge number of coal-fired power plants, to put in carbon capture and storage so that it at least can be done, rather than a total retrofit, which is very expensive? I think those are the steps we have to take with these kinds of countries.

Finally, I want to tell you, because I'm the only one from Alberta, that I do have to defend it somewhat. In Alberta, 13% of the electricity produced is from renewables, which is the highest per capita of any province in Canada for renewables. Just today there was an announcement about small producers. They're encouraging everybody to produce electricity on their roofs and with their windmills, and they will be subsidized. That announcement was made today.

I'm particularly pleased, because today, this very minute, I'm installing 28 solar panels on my roof. That's the kind of exciting future I think we have.

I thank you for being here. I think you've enlightened us all.

Thank you, members. I think it was a very good session.

The meeting is adjourned.

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