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## Legislative Committee on Bill C-30

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**Tuesday, February 6, 2007**

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**Chair**

**Mr. Laurie Hawn**

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Tuesday, February 6, 2007

•(0910)

[English]

**The Chair (Mr. Laurie Hawn (Edmonton Centre, CPC)):** Good morning, everybody. We'll call this meeting to order. Welcome to meeting number four of the legislative committee on Bill C-30.

We're having a bit of a challenge with some of the video conferencing at the moment, so we'll go ahead with a couple of other items of business, and we'll get to that in about 10 minutes. We may need to have a small suspension when we're finished our first bit of business. There are a couple of housekeeping items.

For the first speaker, Chief Erasmus, we have a submission from the first nations, but it's not translated yet, so we'll get it to you when it's translated. We haven't received other submissions. When we get them, we'll translate them and get them to you as well.

What I'd like to do for the first bit of business is to go back to the first report, which we believe is now the real version of the first report. You have it in front of you. The clerk will note a couple of things for you.

**The Clerk of the Committee (Mr. Chad Mariage):** I just note that there had been some concern that the witnesses who were added last night aren't on the list. That's only because the subcommittee's recommendation didn't originally include those people, so that becomes then a motion and a resolution of the main committee. They have been invited. They will be coming tonight. They're not on the report per se.

**Hon. John Godfrey (Don Valley West, Lib.):** We should also scratch the people whom we may have voted for but who were clearly not coming.

**The Clerk:** The difficulty with that is the subcommittee is reporting back that they've adopted these people, so they may change their minds and decide to come. Those are the recommendations from the subcommittee, and if they don't come, then that's...

**The Chair:** At the risk of inviting something else, we'll entertain a motion for the adoption of the first report.

**Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP):** I so move.

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

**The Chair:** That report is adopted.

That was the only item of housekeeping business we really had, so I guess chat amongst yourselves.

Do we have an idea yet, or are we still looking at 10 minutes for the video?

Mr. Godfrey.

**Hon. John Godfrey:** On a point of business, I don't know whether the parliamentary secretary has any update on the appearance of the minister.

**The Chair:** I will turn the floor over to the parliamentary secretary.

**Mr. Mark Warawa (Langley, CPC):** As the member knows, we were working until nine o'clock last night. I got out of my office at eleven, so I haven't had a chance to meet with anybody yet. Hopefully I can provide an update at this afternoon's meeting.

**The Chair:** Mr. Bigras.

[Translation]

**Mr. Bernard Bigras (Rosemont—La Petite-Patrie, BQ):** I understand the parliamentary secretary: we are all tired. However, can he commit this morning to telling us, by this afternoon's meeting, when the minister will appear before the committee?

[English]

**Mr. Mark Warawa:** As I said, I will report to the committee this afternoon. Specifics of what I'll be able to report, I can't give you yet, but I will report back.

**The Chair:** If nobody has any further business just for the moment, we'll call a short adjournment. As soon as the technical folks are ready, we'll carry on.

• \_\_\_\_\_ (Pause) \_\_\_\_\_

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•(0915)

**The Chair:** Folks, we're apparently good to go. We'll call the meeting back to order. Perhaps members could take their chairs and close their BlackBerry's.

Again, welcome to meeting number four of the legislative committee on Bill C-30. Today's topic is climate change.

We have an assembly of witnesses, starting with Chief Bill Erasmus from the Assembly of First Nations. From a distance, we have Claude Villeneuve, from the University of Quebec at Chicoutimi, and David Boyd, adjunct professor, policy, from the University of British Columbia.

[Translation]

We also have André Bélisle from the Association Québécoise de la lutte contre la pollution atmosphérique.

Are you here, Mr. Bélisle?

**Mr. Mathieu Castonguay (Association Québécoise de la lutte contre la pollution atmosphérique):** Good morning, my name is Mathieu Castonguay. I am the Executive Director of the AQLPA. I'm replacing André Bélisle.

**The Chair:** Pardon me.

[English]

As is our custom, we will give each speaker 10 minutes to make a statement, starting with Chief Erasmus. Then the committee members will have the usual time allotment to ask questions of whomever they wish.

Chief Erasmus, the floor is yours for about 10 minutes.

**Chief Bill Erasmus (Chief, Regional Office, NWT, Assembly of First Nations):** Thank you, Mr. Chairman.

My name is Bill Erasmus. I'm the regional chief for the Northwest Territories for the Assembly of First Nations, and I have the environment portfolio for the AFN.

I also have with me Stuart Wuttke, who is the head of our lands division at the Assembly of First Nations.

As you mentioned earlier, we have provided a copy of our full submission. Unfortunately, it hasn't been translated into French yet.

On behalf of the Assembly of First Nations, I'd like to give our presentation—I hope it's under 10 minutes—and then we'll be quite open to questions.

We'd like to thank the committee for accepting our request to make an intervention on the important subject of Bill C-30. First nations governments collectively are seeing tremendous impacts on the environment and natural resources as a result of air pollution and climate change.

At the outset we'd like to state that first nations people have much to offer Canada. First nations people continue to have a close relationship with the land. We repeatedly offer to share what we know of the environment, with the hope that our knowledge will assist others to improve the quality of life for all.

Canada requires better tools to monitor and prepare for changes to the environment. We believe that first nations can assist in this. In moving forward, it is necessary for governments to recognize first nations ownership of natural resources and wildlife as an integral component of aboriginal title. An important component of this is first nations obligations to protect the environment and fragile ecosystems on which all creatures depend.

On the Clean Air Act, our purpose in being here today, we are pleased to offer this committee our perspectives on it and required amendments. In our view, the government's plan to combat air pollution and global warming do not go far enough in the Clean Air Act.

Air pollution is a major issue for first nations people. There is no denying that the air we breathe is contaminated with harmful substances. The AFN disagrees with the removal of air pollutants and greenhouse gases from schedule 1 of CEPA and the placement of these substances into two new categories. It is our preference that

greenhouse gases, pollutants, and other substances harmful to human health be listed on schedule 1 of CEPA.

Bill C-30 should establish the authority to deal with sources of air pollution in one province or territory affecting others, and the act should consolidate under CEPA the regulatory authority over emissions and fuel economy for all types of vehicles and engines, including on-road and off-road cars and trucks, ships, aircraft, and railway locomotives.

On the issue of greenhouse gases and global warming, the Clean Air Act has to be greatly improved. Reducing smog to combat global warming is contrary to scientific research. In its present form, the Clean Air Act abandons Canada's international commitment under the Kyoto Protocol, as it contains no short-term targets and defers any meaningful action until 2050. In its present form, the Clean Air Act will result in increased emissions by the Canadian industrial sector for the next 43 years.

In our view, Bill C-30 should be amended to implement targets set by the Kyoto Protocol. Bill C-30 should include a long-term target for reducing overall domestic greenhouse gas emissions to at least 80% below 1990 levels by 2050, as well as interim targets. Bill C-30 should require the federal government to introduce limits to greenhouse gases and pollution from industry by 2008. Last of all, Bill C-30 should permit the creation of a first nations carbon trading system.

On consultation, we'd now like to move away from universal commentary on Bill C-30 to discuss first nations interest in the legislation.

• (0920)

Canada's "made in Canada" plan was developed without first nations involvement and does not include first nations governments in its commitment to working with all orders of government in Canada to meet clean air commitments.

We recommend that the legislative committee on Bill C-30 establish an adequate consultative process on the Clean Air Act with first nations governments to ensure meaningful first nations involvement in the development of the legislation. In addition, the Clean Air Act should be amended to recognize first nations governments in decision-making fora related to the implementation of the legislation.

The principle of the participation of aboriginal governments in the implementation of CEPA is an important one. Fundamentally, first nations must be included in environmental decision-making. While the Clean Air Act contains provisions for consultation with aboriginal governments and/or peoples, it has been the experience of first nations that such consultation has been poorly executed. Before the Clean Air Act moves any further, the federal government should immediately, thoroughly, and properly consult with first nations governments, as the legislation may affect or have an impact on first nations interests and rights and/or their participation in the future implementation of CEPA.

Impacts to first nations communities. Air pollution and global warming will create a number of challenges for first nations governments and communities. There are transportation issues related to climate change that are unique to first nations, especially to isolated first nations. Changes in the winter season will have an adverse effect on the construction of winter roads that some first nations rely on for the transportation of goods and services. If winter roads are increasingly not an option, alternative methods of transportation, such as transportation by air, will be required.

The AFN recommends that the Clean Air Act legislate the federal government to work with the provinces and territories and each first nation government to establish clean transportation alternatives to first nations communities.

With respect to water, Mr. Chairman, first nations rely on bodies of water for many purposes, such as transportation, drinking water, recreation, harvesting, and agricultural activities. Air pollution, acid rain, and extreme weather events resulting from climate change threaten water quality for many first nations. The AFN recommends that Bill C-30 lead to the establishment of an arm's-length first nations water quality agency. This body would be responsible for independently facilitating and implementing actions to ensure water quality standards are met.

Air pollution and acid rain are major causes of property damage in first nations communities. As the climate changes, first nations homes that are more effective in energy conservation and that provide greater protection against extreme weather events are needed. The Clean Air Act should establish a five-year legislative program aimed at the recognition of first nations governments to advance and develop regulations and standards, along with providing the capacity and other resources to create and generate incentives.

Global warming is having an impact on first nations cultures, traditions, practices, and way of life. We are only beginning to think out possible impacts that threaten our societies. To assist first nations governments in preparing for climate change impacts, AFN recommends that the Clean Air Act establish the creation of a first nations traditional knowledge institution. The purpose and role of the institution would be to provide first nations governments and industry alternative solutions to address cumulative environmental damage as a result of air pollution and climate change.

Finally, first nations will need specific first nations adaptation programs in the future. Unlike other people in Canada, first nations are tied to their communities through treaties, land claims, and prior occupation. The complete relocation of our societies may not be possible.

The Clean Air Act should establish five-year legislative first nations adaptation programs specific to first nations communities. The AFN recommends that government consult with first nations communities and accommodate their needs within the programs.

Conclusion. Mr. Chairman, it is essential that the federal government recognize first nations jurisdictions and authorities. Government cannot continue to work in isolation, as first nations have a lot to offer. Together, we can develop sound environmental

practices that are backed up with real accountability measures for the decisions we make.

• (0925)

We strongly encourage the legislative committee to adopt our recommendation to continue working with first nations people to ensure the sustainable development of our natural resources while protecting the environment for future generations to enjoy.

Thank you for this opportunity to present to you.

**The Chair:** Thank you very much, Chief.

[*Translation*]

I'll now ask Claude Castonguay, from the Université du Québec at Chicoutimi, to make his presentation.

You have 10 minutes.

**Mr. Claude Villeneuve (Biologist, University of Quebec at Chicoutimi):** Thank you, Mr. Chairman.

I've been asked to talk about climate change. I think we should note last week's publication of the IPCC's fourth report on climate change. It's clear that the scientists' message, in the form of this fourth IPCC report, is a stronger message than that of the 2001 report, the findings of which were already very significant with regard to human responsibility.

We now have a higher degree of certainty, a consensus that has never previously been seen and greater certainty. We're starting to be able to make regional predictions, across Canada in particular. We must note the work of the Ouranos Consortium and Prof. René Laprise of the Université du Québec à Montréal, who is a member of the IPCC and has provided an excellent forecast of what's awaiting us using the Canadian regional forecasts model.

The climate inertia factors have been much more clearly characterized. The measurements are more accurate, in particular for past climates. We have a better understanding of the mechanisms behind the climate changes we're witnessing. We have new research questions, and scientists are expressing a greater sense of urgency and requesting that concrete measures be taken.

In its fourth report, the IPCC is telling us, increasingly clearly, that human beings are responsible and that the developed countries, such as Canada, which has various sectors that produce greenhouse gases, are primarily responsible for this increase. The concentration of greenhouse gases in the atmosphere has never been this high in 650,000 years, and the temperatures we're now experiencing are higher than in the past 1,300 years at least.

In addition, the rate of warming is partly masked by the effect of aerosols, and the warming observed from 1990 to 2005 was faster than the models predicted. We therefore have a high degree of scientific confidence in our forecasts. According to those forecasts, over the next two decades, there will be an increase equivalent to half of that observed during the 20<sup>th</sup> century, which makes the concerns of the previous speaker all the more critical. Temperatures are not rising evenly everywhere. They are rising twice as quickly in northern Canada, which is a major cause for concern. Similarly, the sea levels are rising. We are measuring the rise much more accurately and we realize that levels have risen in recent decades.

Let's talk about the issue of melting ice. The North is particularly important for Canada. The fact that the icefloes are melting could mean that the Arctic Ocean might be ice-free in summer as early as 2035. A rise in extreme temperatures is also forecast.

It must be understood that climate science can only provide warnings. Solutions must come from players at various levels. Governments must adopt more restrictive ground rules so that people can play by those rules. Moreover, industry is requesting that ground rules be established on a fairly long time horizon so it can justify the investment and decisions that have to be made today.

Industrial interests must introduce new technologies and new processes. They must be able to reduce their emissions by including the cost of carbon in their products so that cost is internalized.

● (0930)

Citizens, who ultimately make consumption decisions, must be informed, change their behaviour as consumers and electors and take preventive action. Climate change will affect citizens' health and safety in a very uneven and unpredictable way.

Since it ratified the Kyoto Protocol in 1997, Canada has not taken the necessary measures to discharge its responsibilities. The challenge for this planet between now and 2050 is to reduce annual CO<sub>2</sub> emissions by 25 billion tonnes. Canada's effort will probably be in the order of 500 million tonnes a year. We have already exceeded our objective set at the time Kyoto was signed by 270 million tonnes. We are therefore lagging very far behind, and those are the figures for 2004 emissions. I can guarantee you with more than 90% certainty, that, in 2008, we will be at least 300 million tonnes above the objective set. And we still don't have clear ground rules! So we'll have to pick up the pace.

Consequently, Bill C-30 will have to address the causes of air pollution rather than merely its effects. In principle, in order to pick up the pace, we'll have to establish firm provincial targets, not just a pan-Canadian objective. It must be recognized that sources are different and the efficiency of measures is different as well. A wind farm in Quebec won't reduce greenhouse gases; a wind farm in New Brunswick might do it; a wind farm in Alberta will have a much greater impact on carbon intensity reduction than if it's installed in Ontario. We also have to be able to put a national carbon market in place as soon as possible, with a Canadian ceiling, not a reduction in carbon intensity. I'll be able to answer questions on carbon intensity later on.

We will have to levy a carbon tax that will be applicable to exports as well, as Norway has done, so that we can have revenue to

purchase reductions in the international market and not to put our industries and population at a disadvantage. Currently, Canada should reduce its emissions by 10 tonnes per person in order to achieve its Kyoto objectives, which is a burden that we can't impose on Canadians in the current state of affairs.

A major research and technological development effort must also be funded, and funding must be guaranteed for at least 10 years and must be renewable. The horizon of the challenges facing us is 2050. The initial reductions are easy to achieve, but the ones that will come after that will demand a very great scientific and technological effort.

To send a very clear signal to consumers and citizens, automobile consumption should also be taxed progressively, because automobiles are over-equipped with an economic life of at least 10 years. Consequently, voluntary measures put in place by the previous government, and extended by the present government, together with the automotive industry, will not have any effect on emissions.

Disclosure of emissions in automotive advertising must also be made mandatory so that citizens are informed. I would even go as far as to say that the production of greenhouse gas emissions should appear in automobile sales contracts. We should also consider that we must stimulate field-based initiatives, but field-based initiatives that are not just festive. They must be documented and accounted for.

Thank you.

● (0935)

**The Chair:** Thank you very much, sir.

[English]

We'll turn now to David Boyd, adjunct professor of policy, University of British Columbia, by teleconference.

Mr. Boyd, the floor is yours for 10 minutes or less.

Thank you.

**Mr. David Boyd (Adjunct Professor, Policy, University of British Columbia):** Good morning.

Thank you to the committee for the invitation.

I apologize for only being on the phone, but I'm often told I have a voice and a face that are made for radio.

**The Chair:** You look marvellous.

**Mr. David Boyd:** I hope all of you have read the "Summary for Policymakers", published last week by the IPCC, which Mr. Villeneuve has spoken about. It certainly provides a profoundly disturbing overview of our current trajectory.

Mr. Villeneuve has also gone through the basic facts about Canada's performance in attempting to reduce greenhouse gas emissions, so I won't repeat what Mr. Villeneuve has said.

In essence, however, the task before us is one of substantial magnitude. Canada's emissions in 1990 were 599 million tonnes. Canada's Kyoto commitment to reduce to 6% below that level by 2012, as Mr. Villeneuve has said, is roughly a 300-million tonne reduction from projected levels. Our greenhouse gas emissions have instead risen by upwards of 27% between 1990 and 2004.

The first major point I want to make to the committee this morning is that we need to recognize that Canada cannot realistically meet our initial Kyoto target of 6% below 1990 levels by 2012.

Under Kyoto, there are basically two ways of meeting our target. Domestic reductions is one; purchasing international credits is the other.

To meet our Kyoto target through domestic reduction in emissions, Canada would need to reduce our emissions by about 7% per year for each of the next five years, reversing a trend of growth of about 2% per year.

To achieve that kind of a target through domestic reductions would require a rate of emissions decline unmatched by any modern nation in the history of the world, except those that have suffered economic collapse, such as Russia and the Ukraine.

The best example we have to emulate is Japan, which in the wake of the OPEC oil crisis became the world's most energy efficient nation. They did not come close to reducing their dependence on fossil fuels by 7% a year.

The second route available to us under Kyoto to fulfil our 1990 commitment of 6% is to purchase large volumes of international credits. While I support the concept of international credits where those Canadian investments would contribute to the development of renewable or zero-emission energy in developing nations, those kinds of credits are simply not available in the short term in anywhere near the volume that Canada would require.

The only credits available at this point in time in large volumes are hot air from countries like Russia and the Ukraine, which have endured economic collapse. Those hot air credits would be a bad investment for Canada, sending billions of dollars abroad for zero environmental benefit.

We need to come to terms with the fact that we will not meet our initial Kyoto target. We have denied, debated, and dithered for too long. But that does not mean turning our back on the Kyoto Protocol. The agreement has provisions for nations that missed their initial targets. Penalties will be applied to reduction targets in subsequent periods.

The Kyoto Protocol needs to be broadened, deepened, and strengthened, and Canada needs to play a constructive role in those international negotiations. But that is a subject for another day.

I want to mention the current government's proposal to use intensity-based targets. Intensity-based targets are inherently a fraudulent approach to climate change. They simply endorse and entrench the status quo, as business is consistently improving the

efficiency with which they produce goods and services. The problem with an intensity-based approach is simply that it allows total emissions to continue rising, and total emissions are what we need to keep our eye on.

If you actually consider Canada's record over the past 17 years since 1990, which we all agree is not a good one on climate change, if you look at that through the lens of intensity, then it actually looks pretty good. GDP, which I'll use as a proxy for total economic output, went up 47% in Canada between 1990 and 2004. Canada's greenhouse gas emissions, as you know, rose 27% between 1990 and 2004.

It represents a 43% improvement in emissions intensity, which makes it sound like Canada is doing great and makes it look like the Liberal record on climate change is great. It's obviously not the case, and it underscores the importance of moving to absolute emissions targets immediately and not falling into the trap of intensity-based targets.

The real goal in terms of absolute emissions reductions is to achieve reductions of at least in the order of 80% by the middle of this century, by 2050. That goal should be explicitly placed in Bill C-30, and the majority of my comments from now on will address the question of how Bill C-30 can assist Canada in meeting that goal.

The year 2050 may seem like a long way away, but the only way we can achieve a goal of 80% reduction is if we start laying the foundation now with good policies. When I say good policies, I mean policies that meet three basic tests: effectiveness, efficiency, and equity.

●(0940)

There is abundant evidence that the policies employed by the Canadian government to this point, relying largely on voluntary measures and subsidies, fail the effectiveness test. They have not produced significant reductions in emissions, so we must use stronger approaches, including economic disincentives and regulations, which leads me directly to Bill C-30.

Environmental laws like the Canadian Environmental Protection Act are like the toolbox, and then regulations, programs, fiscal instruments, etc., are the tools that actually do the work. When I read through Bill C-30, I see precious little in terms of new tools for addressing climate change. I'm left scratching my head about what it actually adds to the Canadian Environmental Protection Act, and I'm concerned that, for minimal benefits, the Clean Air Act creates substantial risks. As you know, greenhouse gases are already on the list of toxic substances, also known as schedule 1 of CEPA. This gives the Government of Canada fairly broad powers already to regulate greenhouse gas emissions under part 5 of the act.

The proposed clean air provisions, creating a new part 5.1 of CEPA dealing with air pollutants and greenhouse gases, by and large, simply duplicate the existing provisions of part 5. This not only wastes reams of paper, but in my opinion could pose a threat to the constitutional underpinnings of the Canadian Environmental Protection Act. Most of the changes, therefore, are not only unnecessary but undesirable.

I ask you, as you conduct your review of Bill C-30, to ask yourselves this question: What does this add to the Canadian Environmental Protection Act as it already exists? If the answer is nothing, then strike out the offending clauses.

There is one specific amendment that does need to be made to CEPA to add another critical tool to the toolkit, and that is specifically adding to the list of economic instruments authorized under part 11 of CEPA. The amendment I'm recommending is to authorize the federal government to use environmental taxes, specifically a carbon tax. The majority of experts and economists agree that the most effective and efficient means of addressing the market's failure to internalize greenhouse gas emissions is a carbon tax, a tax on the sale of fossil fuels based on their carbon content.

A tax that starts at a modest rate and increases gradually and predictably over time can establish incentives throughout the entire Canadian economy to reduce carbon dioxide emissions with minimal disruption to the economy. A carbon tax offers an opportunity to shift taxes away from activities that are good for society, like labour and investment, and shift those taxes onto activities that pose risks to society, like carbon dioxide emissions and the use of toxic chemicals.

Supporters of a carbon tax to address global warming are plentiful and span the political spectrum. Here are a handful of quick examples: Al Gore; Alan Greenspan, former chairman of the U.S. Federal Reserve Board; Joseph Stiglitz, Nobel Prize winner and former chief economist at the World Bank; James Rogers, chairman and CEO of Duke Energy; Nicholas Stern, author of the most comprehensive look at the economics of climate change on behalf of the U.K. government. There are some even more surprising proponents of a carbon tax: American Enterprise Institute for Public Policy Research, a right-wing think tank; and last but not least, the Canadian public. A recent survey from Ipsos Reid shows that a majority of Canadians are favourable to a carbon tax, and, somewhat remarkably, Albertans are more favourable than most Canadians.

Carbon taxes offer numerous advantages. I'll list them quickly here, and I'm happy to answer questions about the details. Carbon taxes are comprehensive. They cover the entire economy. They are widely regarded as the most efficient policy approach. They're transparent. They're administratively simple and they're less likely to cause energy price volatility than a cap and trade system. As well, the revenues generated by a carbon tax could be returned to the public in various ways to ensure the tax is not a new tax but is revenue neutral. Finally, carbon taxes have a proven track record of success in Europe. In the brief that I will submit to you later this week, I'll include some specific recommendations for amendments to the Canadian Environmental Protection Act to authorize the use of environmental taxes such as a carbon tax.

• (0945)

The two main objections that are often raised to carbon taxes are their regressive nature, regarding the fact that lower-income households spend a larger proportion of their income on energy. That can be addressed in the way the tax is designed.

The other objection is on grounds of competitiveness. I note that the four top nations in the World Economic Forum's rankings of

economic competitiveness this year have carbon taxes, and all of those nations ranked ahead of Canada on the competitiveness scale.

Norway is perhaps the most instructive case from a Canadian perspective, because Norway is a major oil and gas producer. Norway implemented a carbon tax in the early 1990s and has seen its economy grow by roughly the same amount as Canada's, but Norway's greenhouse gas emissions are up only 4%.

Interestingly, the imposition of a carbon tax in Norway contributed to the development of new carbon capture and storage technology, also known as carbon sequestration. Norwegian natural gas producers are capturing carbon dioxide from Wales and the North Sea and re-injecting it into deep saline aquifers at a rate of millions of tonnes annually, saving themselves roughly \$150,000 a day in Norwegian carbon taxes.

I'm running out of time, so I want to make several other brief comments. I know that a cap and trade system for large final emitters is under consideration. Although those have been successful in the United States in dealing with acid rain, you need to recognize that the European cap and trade system is a mess, because governments allocated more permits than emissions. So those permits are fast becoming worthless.

One of the world's leading economists in the field of climate policy, Professor William Nordhaus of Yale University, wrote that "cheating will probably be pandemic in an emissions-trading system that involves large sums of money." That's basically because there are information asymmetries, meaning that industry has knowledge about the availability of technology and the cost of implementing it that government simply does not have access to.

Another vitally important thing that is not really dealt with in Bill C-30 is that Canada needs to invest aggressively in developing low carbon and zero carbon energy technologies.

Concluding on a couple of brief notes, regarding the provisions of Bill C-30 that deal with the Motor Vehicle Fuel Consumption Standards Act, that law has been on the books for 25 years and should come immediately into force.

You should also know that in 2010, even if Canadian motor vehicle manufacturers comply with the current voluntary agreement, Canadian fuel efficiency will still lag behind Europe, Japan, Australia, California, and China—yes, China.

There's also much room for improvement in the last section of Bill C-30, dealing with the Energy Efficiency Act. I would recommend ensuring that Canadian standards meet or beat the highest levels in the Organization for Economic Co-operation and Development, the OECD; that the act be amended to provide for a mandatory review of standards every five years or so; and that there be mandatory elimination of the worst 10% of products in each product class, a precedent that was set with the prohibition of low-efficiency furnaces.



Thank you for your time and attention.

I look forward to your questions, and I would like to speak to you again about air pollution, if that opportunity arises.

• (0950)

**The Chair:** Thank you very much, Professor Boyd, and especially thank you for getting up so early in British Columbia. We really appreciate that.

[*Translation*]

The last presentation will be made by Mr. Castonguay from the Association québécoise de lutte contre la pollution atmosphérique.

Sir, you have roughly 10 minutes.

**Mr. Mathieu Castonguay:** It could well take less than 10 minutes.

Good morning, ladies and gentlemen.

I agree with most of the speeches I've heard this morning. I believe it's absolutely essential to send Canadians a signal by means of a carbon tax, a fuel tax. However, that signal must be proportionate, that is to say that the tax must be determined on the basis of energy efficiency and the life cycle of appliances, equipment and measures put in place. In other words, equipment or measures that have the lowest emissions rate should not be taxed, and those with the highest emissions rate, level or equivalent should be taxed at the highest rate in order to influence choices and inform Canadians of the best measures that should be put in place.

We may not be able to achieve the Kyoto objectives by the scheduled date, but the technologies and measures exist. Some measures are extremely effective in reducing greenhouse gas emissions, but can't be taken because they aren't cost-effective. Geothermics is a very promising example in this regard. It's a highly cost-effective measure, but it may take a little more time to become cost-effective than a natural gas furnace. If a tax were levied to make a natural gas furnace represent the effective cost paid by the consumer, that is the environmental cost and the overall costs of the device, the choice would be easier.

Since the economic factor is decisive in consumer choices, the fact that this tax is proportionate would encourage Canadians to make the most responsible choice in terms of greenhouse gas emissions. Furthermore, this measure would have an impact on the final major emitters, on the economy as a whole, but it's the citizen that will base choices on much more environmentally responsible technologies.

This also enables Canadians to react to climate change. You can't simply ask people to reduce overall greenhouse gas emissions without that having an impact on our choices. Levying a tax on carbon emissions and emissions related to the life cycle of every product and service that Canadians consume is, we think, the most effective way of achieving ambitious reduction objectives.

We must completely rule out measures based on emissions levels and emission intensities. In the case of atmospheric pollutants, it's absolute measures and ceilings that work and make it possible to meet what are considered acceptable pollution levels. The Association québécoise de lutte contre la pollution atmosphérique finds it hard to understand why a measure that is known to be effective in

fighting air pollution couldn't be applied to greenhouse gas emissions, whereas this is clearly an issue these days. It is very important to mention that fact.

The message we're being sent is that we should make information available to Canadians so that they can make the best possible choices, by means of a carbon tax. Unfortunately, that's not the direction taken in the bill. We hope you'll base the regulations on energy efficiency in that sense.

Thank you.

• (0955)

**The Chair:** Thank you, Mr. Castonguay; I appreciate the fact that you were brief.

[*English*]

We've got another committee following us at 11 with a very large international delegation. We'll try as much as we can to respect that. We'll get another round of questioning, and the chair will try to be very strict on the seven or five minutes, so brief questions and concise answers, please.

We'll start with Mr. McGuinty.

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

Chief Erasmus, I'd like to begin with you and ask you a first quick question. I did hear you say that the AFN was fully supportive of Canada's continuing involvement in the Kyoto Protocol?

**Chief Bill Erasmus:** Yes.

**Mr. David McGuinty:** Was the AFN involved in the last several years in helping Canada accede to the Kyoto Protocol? You've been engaged with this for some time?

**Chief Bill Erasmus:** Yes, thank you. I was just getting some advice here.

We made recommendations, but we weren't formally engaged in the discussions.

**Mr. David McGuinty:** Okay. Thank you for that.

Could I turn, Mr. Chair, then quickly to Mr. Boyd.

Mr. Boyd, I'm looking forward to seeing your brief, and I'm hoping you can include some consensual economic analysis to justify your conclusion that, if I can interpret what you said, Canada's only go-forward strategy is to adopt a carbon tax. If we were to see here, say, four or five economists, Mr. Boyd, in one room at the same table, would we find a consensus on your views?

**Mr. David Boyd:** Mr. McGuinty, I think you'd find approximately the same kind of consensus among economists as to the efficiency of a carbon tax as you find among scientists with respect to the science of climate change. It's widely recognized that a carbon tax is the single most efficient way to address greenhouse gas emissions. And that's a function of the fact that it covers the entire range of fossil-fuel-consuming activities in an economy and allows the market to allocate those emissions reductions at the lowest possible cost.

**Mr. David McGuinty:** You went further and said that the top performing, most competitive countries in the OECD, if I understood, all have carbon taxes. Are you telling us that there's a causal connection between the carbon tax presence in those four economies and their competitive position globally?

**Mr. David Boyd:** I wouldn't put it that way, Mr. McGuinty. I'd actually say that those countries, which are Switzerland, Sweden, Finland, and Denmark, all of which have carbon taxes and have had carbon taxes for a number of years, have not had their economies harmed by the presence of those carbon taxes. And there is considerable support in the economics literature for the proposition that with a carbon tax, if it's imposed in a revenue-neutral way and the revenues generated by the tax are used to reduce other forms of taxes—payroll taxes, income taxes—you get what's called a “double dividend”; you get environmental benefits as well as economic benefits.

• (1000)

**Mr. David McGuinty:** Thank you for that, because I misunderstood. I thought I heard you say that those four economies were successful or more competitive as the result of the presence of a carbon tax. But I've just heard you say that in fact what you really mean is that the fact they have a carbon tax has not affected their competitive position. Is that right?

**Mr. David Boyd:** That's right, yes.

**Mr. David McGuinty:** If that's the case, how come more nation states have not adopted a carbon tax?

**Mr. David Boyd:** I think the fundamental hurdle that has existed to date to adoption of a carbon tax has been the question of political acceptability. Certainly it's a tool that has all of the merits on effectiveness grounds, efficiency grounds, and can be designed to meet equity concerns. But in Canada and the United States in particular there has been a political aversion to the imposition or the creation of new taxes, which all of you are very familiar with based on the more recent experiences with the GST. And I think what's really interesting about this all-party committee on Bill C-30 is that you have an opportunity to make a collective recommendation that recognizes that a carbon tax is what the experts are saying is the best approach to moving forward. That way, no single political party can really be saddled with the public vitriol that may arise through the imposition of a carbon tax.

I also think it's absolutely fundamental to the public acceptance of a carbon tax that it be not a revenue-raising tax but a revenue-neutral tax.

**Mr. David McGuinty:** So you're talking about tax shifting, right?

**Mr. David Boyd:** That's right.

**Mr. David McGuinty:** Am I right in concluding that the cap and trade influence under the U.S. Clean Air Act was the primary driver for the inclusion of a cap and trade system under Kyoto?

**Mr. David Boyd:** I'm not sure if that was the primary driver, but certainly of the U.S. cap and trade system under the Clean Air Act dealing with emissions giving rise to acid rain was successful. The program is widely recognized as having achieved its environmental objectives and as having done so at a cost much lower than was projected, certainly by industry and even by government, when the

program was put in place. That precedent was certainly one of the bases for the emissions trading under the Kyoto Protocol.

**Mr. David McGuinty:** Has there been, for example, any analysis of the countries that have carbon taxes versus the cap and trade system in the U.S. under the U.S. Clean Air Act? Which of the two systems is in fact costing less to achieve greenhouse gas reductions?

**Mr. David Boyd:** The U.S. system is not achieving greenhouse gas emissions reductions, so it would be comparing apples and oranges. The U.S. system is producing reductions in sulphur dioxide emissions. Carbon taxes are obviously reducing different pollutants. I think it is important to look at the European experience and the emissions trading system that was put into place across the European Union.

The first point is that these two tools can be used at the same time within a nation, so the European nations that have carbon taxes are also participating in the European cap and trade system—

**Mr. David McGuinty:** Mr. Boyd, I'm sorry to interrupt, but my time is up.

Finally, just for the record, the European emissions trading system is a pilot project, is it not?

**Mr. David Boyd:** Yes, it is.

**Mr. David McGuinty:** How long is it to last in the first phase?

**Mr. David Boyd:** The first phase actually expires in 2007. Then another phase starts in 2008 and runs till 2012.

**Mr. David McGuinty:** When it was launched, it was a pilot project they were trying to get off the ground in a particular area. Is that correct?

**Mr. David Boyd:** Right.

**The Chair:** Thank you very much.

Monsieur Bigras is next.

[Translation]

**Mr. Bernard Bigras:** Thank you very much, Mr. Chairman.

I don't intend to discuss Canada's greenhouse gas emissions reduction record for very long in my remarks. I believe we all know it. Instead I'd like to talk about ways or measures enabling us to improve our greenhouse gas emissions reduction performance.

I really liked Mr. Boyd's statement when he told us that we need an effective, efficient and equitable policy to fight climate change.

Mr. Villeneuve provided us with some food for thought earlier in proposing, for example, a carbon exchange, a carbon tax, research funding and indicating greenhouse gas emissions reductions in vehicles sales contracts. He also told us about by-province objectives, and I think that's important.

I'd like to know the speakers' opinions, particularly that of Mr. Villeneuve. Canada's problem, I believe, isn't necessarily attributable to the programs put in place or measures that, of course, could have gone further. Isn't it a problem of approach, to the extent that we have adopted a sectoral approach, from sea to sea, whereas the Canadian economic structure differs from province to province, and Quebec's energy situation is not the same as that of the West?

Couldn't this approach, by provincial targets, enable us to maximize greenhouse gas emissions reductions for every dollar invested? Ultimately, don't the territorial approach and the provincial targets approach make it possible to put in place an effective, efficient and equitable policy for combating climate change in Canada?

I'm asking Mr. Villeneuve the question.

• (1005)

**Mr. Claude Villeneuve:** All right, Mr. Chairman.

That's an extremely important question. Indeed, one of the reasons for Canada's failure is its desire to adopt an approach that's equal for everyone, on the ground that it's more equitable to be equal with players who are unequal.

We clearly have to ensure that a measure is effective. I'll simply cite the example of the former home insulation program. Cutting a tonne of greenhouse gases by reducing the number of kilowatt-hours used could cost the Ontario government about \$5, the Alberta government about \$3 and the Quebec government \$700 to \$800. Greenhouse gas emissions per kilowatt-hour in the energy generating system of those three provinces vary by a factor of 10, and even by a factor of 50, in the case of Alberta and Quebec.

Having made that observation, the regional approaches are clearly much more promising, since energy policies are set by the provinces, natural resources are managed by the provinces, and each of the provinces has a different system. That doesn't mean that there can't be exchanges or mutual assistance among the provinces.

I'll give you a very simple example of a purely hypothetical situation, but one that would be very effective. In Gaspé, in Quebec, they produce a lot of wind energy. That changes absolutely nothing in the amount of energy used in Quebec because, in its life cycle, wind energy produces a little more greenhouse gas than hydro-electric power. In principle, therefore, there are no gains to be achieved, in terms of greenhouse gas, by generating wind energy in Quebec.

However, if we built a transmission line to New Brunswick, a transmission line barely 50 kilometres long, and we closed the Belledune coal-fired station, we'd achieve gains in the order of two to three million tonnes of CO<sub>2</sub> a year from the production of wind energy generated on the Gaspé site and used in the New Brunswick power grid.

These are facts that the present Canadian policy does not make it possible to use since, by focusing solely on reducing carbon intensity, it keeps in place all the old generation infrastructures and merely adds clean generation on top of them, which ultimately masks the actual situation.

We need an approach that includes aspects penalized by the tax, the benefits and effectiveness of which Mr. Boyd clearly explained, but also a project-centred approach that, in an exchange market, makes it possible to have the value of these projects recognized.

What we want is a real reduction in total emissions. Carbon intensity is simply an indicator. That indicator may make it possible to compare performance within a sector. For example, in the aluminum sector, we can compare two aluminum plants, with regard to greenhouse gas emissions, one relative to the other or relative to their emissions gains.

In this way, then, we establish reference scenarios. Overall carbon intensity for a country is moreover one measure that was included in Mr. Bush's policy in 2003, which Canada jumped on like a lowly imitator.

• (1010)

[English]

**The Chair:** That's a good answer, and it's very thorough, but it used all the time. I'm sorry.

Mr. Cullen, for seven minutes.

**Mr. Nathan Cullen:** Thank you, Chair.

To our witnesses, you'll notice the time passes incredibly quickly.

I'll start with Mr. Erasmus.

Consultation has been well described in our courts, as well as the obligation of the Crown to consult with first nations, through numerous cases, such as Sparrow, Delgamuukw, and on down the line. What consultation did the government do with respect to Bill C-30, the bill in front of us today, with the first nations people?

**Chief Bill Erasmus:** Thank you.

As I said in the presentation, we really weren't consulted at all. We have self-government agreements, for example, that stipulate, as you say, that there is an obligation. Some of them have taken down legislative authorities or powers to have jurisdictions recognized by them. But even those bodies weren't consulted through this process.

**Mr. Nathan Cullen:** I raise the point in particular over the question of adaptation, which we haven't approached today. It has not been discussed at all by the government to this point, and as increasingly we delay on action, the question of adapting to the changes becomes hugely problematic, particularly, I would suggest, in more remote rural communities, first nations reserves.

Because of the limited time, I'm going to turn to Mr. Boyd for a second.

Mr. Boyd, let me assume the logic that global effort is needed on the fight against climate change. Is that correct?

**Mr. David Boyd:** Yes, absolutely.

**Mr. Nathan Cullen:** When the government has been asked for their plan for climate change, they've held aloft Bill C-30 as their plan and said, this is the plan. In an international context, what type of credibility would Canada have presenting a plan like Bill C-30 as the initiative that Canada is willing to undertake in the global effort to fight global warming?

**Mr. David Boyd:** I can give you a short answer to that question, Mr. Cullen. The answer would be zero. Bill C-30, as it currently stands, offers no comfort to anyone in Canada or elsewhere that Canada is going to change course and begin taking this challenge seriously.

**Mr. Nathan Cullen:** There seems to be...I don't know about a crossroads, but a conundrum that we face. You mentioned the three Ds, which I'll be referring to now, as denied, debated, and dithered for too long when it came to climate change. This placed Canada in the position that we are now. I believe you said that the 2004 number is 27% above.

**Mr. David Boyd:** That's right.

**Mr. Nathan Cullen:** So one assumes the business as usual that's gone on in the last two and a half years would place that number well above 27%.

**Mr. David Boyd:** That's right.

**Mr. Nathan Cullen:** Of the signatories that have binding targets, is there anyone at such a bad place right now with respect to their Kyoto targets?

**Mr. David Boyd:** I haven't looked at this for a few months, but the last time I checked, among the countries that have actually signed and ratified Kyoto, Canada is the farthest from achieving the target we set.

**Mr. Nathan Cullen:** For Canadians watching this debate and listening to this go back and forth in Parliament, we are amongst the greatest laggards in the world with one of the most difficult targets, and we have in front of us a so-called plan, a bill, that would gain us no international credibility whatsoever. Is that true? Have I summed it up?

•(1015)

**Mr. David Boyd:** You've summed it up correctly, and I think this committee.... That's why I made my first point. It was recognizing that it's simply not feasible for Canada to meet that 6% target in such a short amount of time. We have to think of global warming as a marathon, not a sprint. Canada is like someone who has talked about running a marathon for years without ever doing any training. For us to try to run one would inevitably cause severe injury.

**Mr. Nathan Cullen:** If we were to begin this marathon effort in earnestness, are absolute targets required in terms of emissions from, let's say, the large final emitters, the big polluters?

**Mr. David Boyd:** Yes, absolute targets are absolutely vital. The key absolute target is really emissions reductions of 80% by 2050, and then we can backcast from there to the present time and set interim targets based on absolute emissions reductions that will get us from where we are now to where we need to be.

**Mr. Nathan Cullen:** In your opinion, do those need to be legislated targets or can they be a voluntary system?

**Mr. David Boyd:** Certainly the experience would be that legislated targets would be a preferable approach because they create greater transparency and greater accountability.

**Mr. Nathan Cullen:** You've had some experience in this. Why are governments reticent to legislate targets?

**Mr. David Boyd:** The only reason for being reluctant to legislate a target is if you're not really inclined to meet that target. I can give

you an example. If you look at the environmental issues regarding which Canada has been successful, we have set ambitious targets and we have taken the necessary regulatory steps to meet those targets. The example of ozone depletion is a great one. Canada signed on to the Montreal Protocol on Substances that Deplete the Ozone Layer with very aggressive targets for eliminating CFCs and other ozone-depleting chemicals. Then we set regulations under the Canadian Environmental Protection Act that forced us to phase those chemicals out.

**Mr. Nathan Cullen:** So we have both experience and success in legislating targets in this country.

I have one final question to you, as my time is about to end.

With respect to the 43% improvement you talked about, if that number was shown to Canadians, many of them would say, well, that's remarkable. But even under a 43% improvement, which you noted with large final emitters, the overall impact of Canada's footprint on the planet has been disastrous. Is that not true, that even with a seemingly strong number like that, Canada's obligation to the world community would still not be met? Is the intensity target that has been suggested around this place a red herring? Does it give false hope?

**Mr. David Boyd:** Of course, it's a red herring, and it's inherently fraudulent. I mean, Canada's absolute greenhouse gas emissions, which are what matters, have risen 27% between 1990 and 2004. But if you applied an intensity-based lens to that period of time, our emissions intensity improved by 43%. That just shows what a pile of rubbish the intensity-based system is.

**The Chair:** Professor Boyd, we have Mr. Paradis.

[Translation]

**Hon. Christian Paradis (Mégantic—L'Érable, CPC):** Good morning. My question is for Mr. Villeneuve.

Your record speaks for itself. I'm pleased to be questioning you this morning, and I thank you for providing us with some clarification.

First of all, from what I understand, Canada has taken no measures since 1997 to achieve the Kyoto objectives. In the present situation, it's as though I was asking you to leave Chicoutimi and come and meet with us on Parliament Hill in the next hour. We have to put this back on the rails.

The public of course reacts when they hear about a restrictive approach and targets set for 2050. Some people tell us that a lot of things can happen between now and 2050. You mentioned some concrete measures that can be taken to achieve more short-term objectives, but I'd like to know how you think we can ensure, and assure people, that we're headed in the right direction. As Mr. Castonguay said, citizens have to change behaviour and take more concrete action in their everyday lives.

You've also talked about a national carbon limit. I'd like you to give us some more details on that subject.

Lastly, time permitting, I'd like us to discuss one aspect of Bill C-30 that we didn't address today, the fight against atmospheric pollutants in order to combat smog. I believe that's unheard of, and I'd like to hear your comments on that subject.

Thank you.

• (1020)

**Mr. Claude Villeneuve:** Thank you.

The year 2050 is tomorrow morning. When you establish a power station, whether it's a gas-fired or coal-fired station or something else, you have to know that it will have an economic life of at least 50 years. So current decisions already have an impact on the situation that will prevail in 2050.

Moreover, as regards the absolute emissions limit, it must evolve. When Canada committed... [*Technical Difficulties —Editor*].

[*English*]

**The Chair:** Professor Villeneuve, can you hear me?

**Mr. Claude Villeneuve:** Yes, I can.

**The Chair:** Okay. I'm sorry, we lost the feed—both ways. We'll have to ask you to start your answer again, if we could, and to be brief.

**Mr. Claude Villeneuve:** I can continue in English, very fast.

The year 2050 is a very short period of time when we speak about energy, because if you are installing a facility today, it will still emit greenhouse gases in 2050. As for the cars for which it's a ten-year period, for the electrical facilities it's a fifty-year period. That's not a long period.

Second, the cap has to begin by stabilizing. Stability is the first target we have to have, followed by reductions progressively from year to year.

And the third one is air pollutants. Actually, there is a direct relationship between combustion and air pollutants. Reducing greenhouse gas outputs will reduce the other air pollutants, but take care. One of the factors affecting smog is pollution coming from south of the border. As long as the United States does not reduce its own air pollutants, the Canadian efforts will be less than efficient.

This is one of the main failures of Bill C-30, in my understanding. It does not address the real problem. There are three or four factors affecting smog that are not addressed by Bill C-30, so it will probably be inefficient in that way also.

[*Translation*]

**Hon. Christian Paradis:** Earlier you discussed the national carbon emissions limit. I'd like you to give us more details on that subject.

**Mr. Claude Villeneuve:** All right. The first step must be a stabilization limit. Emissions are still increasing year after year, and that's definitely not a good sign. The government will therefore first have to set a limit in the context of which we will recognize the need not to exceed the emissions level achieved in 2005. It's too late to do any more. Moreover, we have to be able to establish a direct connection between the effectiveness of measures taken and pollutant levels.

For example, we could set an objective of stabilizing emissions at the 2003 level between 2008 and 2012. That would be the first objective. That would probably require us to achieve an average reduction of approximately 10%. That would be too low to enable us to achieve the Kyoto objectives, but it would be within the Canadian government's reach.

A very large portion of our emissions is associated with exports. As Canadians, our responsibility with regard to increased emissions is fairly limited. In the case of emissions attributable to oil and aluminum exports, for example, these are imports designed to meet the needs outside the country. In Canada, our domestic market is much too small for us to be able to consume all our exports.

We therefore have to negotiate, in the context of a second stage of the Kyoto Protocol, measures that take this specific situation into account. With the exception of Russia, Canada is the only Kyoto partner that is what is called an empty country, that is to say that exports far more resources than its own population can consume.

• (1025)

**The Chair:** Mr. Villeneuve, pardon me for interrupting you, but your time is up.

[*English*]

Mr. Godfrey, please, for five minutes.

**Hon. John Godfrey:** Mr. Boyd, that was a very interesting presentation on carbon tax. I just want, for all of our sakes, to better understand the relationship between that and possible cap and trade systems, and also the international implications.

I think I heard you say Norway also has a cap and trade system and also does international trading in an emissions market. Of the five countries we've talked about—Norway, Switzerland, Sweden, Finland, and Denmark—how many of them actually achieve part of their goals through international trading of carbon credits?

**Mr. David Boyd:** Just to be clear, Mr. Godfrey, those European countries do not have domestic permit trading systems. They're participating in the European emissions trading system and participating in the emissions trading under the Kyoto Protocol. I don't have numbers for you in terms of the extent to which those countries are relying on the purchase of international credits to achieve their Kyoto commitments.

**Hon. John Godfrey:** But on the fact that they do this even though they have a carbon tax system, is that an ineffective thing, in your view? Is it that they ought not to participate in the European emissions trading scheme or a Kyoto trading scheme through the clean development mechanism?

**Mr. David Boyd:** No, not at all. I should clarify. I certainly didn't mean to portray a carbon tax as a one-size-fits-all or say that all we need is a carbon tax and we're away to the races. A carbon tax is a powerful tool, but it needs to be part of a suite of programs and policies that Canada puts in place in the short term to begin driving our emissions down.

A carbon tax is compatible with a permit trading system. There are economists who have looked at the possibility of using those two mechanisms jointly, and that's something that could be explored in Canada. But it's really important to understand that there are both pros and cons with all of the policies and tools we're talking about. What we really need to do is put these things in place and start using them, and then we can make adjustments as time goes by.

**Hon. John Godfrey:** If there are, broadly, six big slices of carbon emissions in Canada—electricity generation, upstream oil and gas, industry, vehicles, residential, agriculture and forestry—are there any obvious places where a carbon tax is more appropriate in one of those sectors than in another, yet in another one cap and trade might work? Are there obvious divisions? If you're going to have a mix and match system, which you've talked about, or a suite of instruments, are there places where you'd have one in one case and one for another?

**Mr. David Boyd:** A cap and trade system is probably something that's going to be more useful in a situation in which you have a limited number of emitters. I don't think you'd want to create a national cap and trade system whereby individual Canadians would have a carbon cap and they'd be able to trade their allowances back and forth. I think that would be, from an administrative perspective, completely unworkable.

The cap and trade system is better suited to where there's a smaller number. For example, in the situation of industry, electricity generation, and oil and gas producers, those would be potentially more suitable for a cap and trade system.

• (1030)

**Hon. John Godfrey:** For large final emitters—let's say there are 700 of them—what are the virtues of cap and trade for large final emitters, versus a carbon tax?

**Mr. David Boyd:** As I said, I think a carbon tax offers certain advantages in the sense that it's less easily manipulated by the participants. The reason the European trading system is having problems is that businesses convinced governments that they needed more permits than they actually did, and that created an opportunity for windfall profits because companies were able to sell permits they never were going to need. Now it has also created a system in which permits under the European system are almost without value, because the number of permits exceeds the amount of emissions.

When Canada, under the previous Liberal government, was developing the large final emitters system, I would say we were on the brink of falling prey to that same problem. Government was having to rely on industry to provide business as usual projections for the year 2012, and those projections were inflated. If that system had gone ahead, we would have been in the same situation as Europe. Companies, including oil sands operators, would have been selling their credits and making money by selling emissions credits. At the end of the day, that system would not have resulted in an absolute reduction in greenhouse gas emissions.

**The Chair:** Thank you, Professor Boyd. We'll have to stop there.

Mr. Jean.

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

My first set of questions is to Chief Erasmus.

I'm from northern Alberta and I've been there since 1967, actually travelling up to Yellowknife. I've seen a change in many things in the north since my time there.

You made some comments about Bill C-30 and talked about Kyoto. I'm wondering if you'd change your mind if you heard a couple of things.

First, did you realize that the Clean Air Act, Bill C-30, regulates indoor air, which causes a lot of health problems to Canadians? It actually regulates stoves and fireplaces, which are very important to aboriginal communities in my area, because of course right now there's no way to regulate the quality of air that comes out of those, and that causes a lot of health problems. Most reserves have that kind of heating, at least partially.

Air pollution now includes smog and acid rain—which wasn't included under Kyoto—and not just climate change. Under Bill C-30 there will be a national environmental monitoring system to monitor air we breathe wherever we may be, in the north or different areas. That air, of course, changes dramatically with wind patterns from plant sites, and all over Canada from industries. It will not just monitor, but will also research and publish that information for the Canadian public. It also includes the ability to monitor air and human bodies to see what kinds of toxins we've taken in.

Bill C-30 also requires large final emitters to have a pollution prevention plan on greenhouse gases, also on air pollutants and toxic substances, which of course are not included in Kyoto, which has no reference at all to the problems to human health that result from consumption of bad particles in the air. It also allows government to regulate the blending of fuels so we can have more efficient vehicles, and the fuel components, which of course Kyoto does nothing for.

Kyoto does nothing to address clean or healthy air. I think that's my main point, that Bill C-30 does that. It helps Canadians wherever they may be, because we're a vast country.

Indeed, I know you weren't at the testimony yesterday, but you mentioned the short-term targets. We heard yesterday from government officials that indeed the short- and medium-term targets were going to be set in the regulations, and that we're going to be able to address those. The long-term target was dealt with in the Clean Air Act, but we are going to have short- and medium-term targets that are going to be regulated, and regulated efficiently.

I'm wondering if you would change your mind if you understood the impact to your own people and to all Canadians from coast to coast on clean and healthy air.

**Chief Bill Erasmus:** Thank you.

I don't think we're saying that the bill is not good at all. We're saying there are some areas that need to be strengthened and definitely need our input. That was the point we were making.

My question to you is, do you feel our people ought to be consulted as the courts are demonstrating? The last case was in northern Alberta with the Dene Tha', dealing with the proposed Mackenzie pipeline. The courts made it clear that they needed to be consulted.

• (1035)

**Mr. Brian Jean:** I think it's very important. In fact, a large component of my family is aboriginal, even treaty. I can assure you I think it's very important that all Canadians be consulted on all issues that affect them, and certainly aboriginal Canadians.

I want to turn to Mr. Boyd now, if I may. Quickly, Professor, as I don't have much time left, you are an adjunct professor, is that correct?

**Mr. David Boyd:** That's correct.

**Mr. Brian Jean:** I'm wondering, Professor, how would you grade the government's action from 1993 to 2005? What kind of grade would you give them on their adherence to their own finish line plan?

**The Chair:** In one minute, please.

**Mr. David Boyd:** I'd give them an F.

But I'd also like to respond to your question to Mr. Erasmus to clarify that everything you pointed out that the government is able to do on indoor air and bio-monitoring, in terms of reporting on pollution to Canadians, already exists under the Canadian Environmental Protection Act as it stands. You don't need Bill C-30 to do that.

I think you're confusing Kyoto and the Canadian Environmental Protection Act. Those things are not part of Kyoto. Kyoto deals exclusively with greenhouse gas emissions. The Canadian Environmental Protection Act is capable of dealing with greenhouse gas emissions, outdoor air pollution, and indoor air pollution.

I just wanted to make that clarification.

**Mr. Brian Jean:** I understand, Mr. Boyd, but to be fair, it does actually go further. If you want, I can send you a copy of this plan to show you how much further it goes.

My question to you is—

**The Chair:** Sorry, Mr. Jean. We're at five minutes.

[*Translation*]

I'll only accept a comment. We mustn't disregard Mr. Castonguay.

I turn the floor over to Mr. Lussier.

**Mr. Marcel Lussier (Brossard—La Prairie, BQ):** Mr. Castonguay, I didn't hear you talk much about air pollution in your presentation. I'd like to know whether you are examining Bill C-30, which concerns the issue of greenhouse gas emissions, climate change and air pollution; we're also talking a lot about smog and ambient air quality.

In your view, does Bill C-30 target the right objectives, with regard to climate change, or does air pollution currently pose a problem?

**Mathieu Castonguay:** For the Association québécoise de lutte contre la pollution atmosphérique, by reducing greenhouse gas emissions, we're clearly reducing the polluting emissions that cause smog.

Most smog-causing pollutants are produced through the combustion of fossil fuels. If we address fossil fuels, we thereby address the main contaminants that form smog. It's important to target greenhouse gas emissions on a priority basis because we achieve a range of gains for both health and environmental quality.

**Mr. Marcel Lussier:** Thank you.

Mr. Villeneuve, are you familiar with the Quebec government's Green Plan?

**Mr. Claude Villeneuve:** Yes.

**Mr. Marcel Lussier:** In view of the targets the Government of Quebec has set for itself, does it need Bill C-30 to achieve its objectives?

**Mr. Claude Villeneuve:** No, not necessarily. The Quebec government has developed a plan, which is its third since 1998. That plan provides for measures designed to reduce greenhouse gas emissions at various levels. However, the government doesn't have the necessary tools to do that. For example, the plan contains measures that merely transfer greenhouse gas emissions, and others depend to a large degree on the choices of individuals.

The Quebec government has established a carbon tax measure that is very much incomplete because it targets only a single sector, the oil industry. This measure is incomplete, and Bill C-30 isn't of any particular assistance to it in this regard.

• (1040)

**Mr. Marcel Lussier:** What do you mean by transfers? What do they transfer?

**Mr. Claude Villeneuve:** I'll give you a very simple example. The Quebec plan, like the Canadian measures retained from the old Canadian plan, recommends raising ethanol levels in gasoline to 10%. When you don't take into account the life cycle of ethanol, ethanol production doesn't directly reduce greenhouse gases. The Canadian plan, like the Quebec plan, states that this measure will make it possible to achieve a reduction equivalent to 10% of greenhouse gas emissions produced by automobiles. In actual fact, the reduction would perhaps be more in the order of 2% to 3%, with remaining emissions being transferred to the agricultural, transportation and industrial sectors. This is simply an emissions transfer. So this a measure that's not very effective.

**Mr. Marcel Lussier:** Earlier you talked about linking the Gaspé wind farms to New Brunswick. Is the possibility of linking Churchill Falls to Ontario another solution?

**Mr. Claude Villeneuve:** The solutions are effective only if they result in the closing of plants that are already producing greenhouse gases and atmospheric pollution. The example that I gave earlier was purely hypothetical. If we link Churchill Falls or any new hydroelectric dam and that results in the closing of six or seven coal-fired power stations in Ontario, there will indeed be a reduction. But if Churchill Falls or any other hydroelectric power station is linked to Ontario and no plants are closed and we merely add, we'll reduce carbon intensity, but we won't eliminate emissions.

[*English*]

**The Chair:** I'll just remind members that there are two meetings on air pollution scheduled as well, so we may not want to dwell too much on that.

Go ahead, Mr. Warawa.

**Mr. Mark Warawa:** Thank you, Chair.

Thank you to the witnesses for being with us in person and by video conference.

As the chair mentioned, there are eight topics: international aspects, climate change, transportation, target setting, large industry, tools, air pollution, and the IPCC report. Today the topic is climate change. I understand there is overlap and that we will drift off the topics a little bit, but I'd like to try to get us back to the issue of climate change.

I do appreciate the comments and recommendations. We're here to hear from each of the witnesses on how Bill C-30 can be strengthened and improved. I want to thank each of the witnesses for their suggestions already.

On climate change, many have said that it's Kyoto or nothing. Professor Boyd has said that we're not going to be able to meet those targets, short of sending billions of dollars outside of Canada to buy hot air credits. What are the options? Again, we need to do much more than what Canada has done in the past to deal with the issue of climate change.

What are the options for Canada internationally? Who would like to speak to that? Maybe I'll start with Mr. Boyd.

**Mr. David Boyd:** Thank you.

I think it's really important to distinguish between our participation in Kyoto and Canada's inability to meet one specific aspect of our participation, and that is the 6% target. That does not, in any way, mean that we are no longer participants in the Kyoto Protocol. As I mentioned earlier, the Kyoto Protocol does have provisions for nations that don't meet their targets. Penalties will be applied in subsequent periods, and obviously the emissions reduction targets for everybody, for future Kyoto periods—that is, beyond 2008 to 2012—remain to be negotiated.

A huge international challenge also involves broadening Kyoto so that countries that currently do not have emissions targets are brought on board. And I'm speaking specifically of some of the major developing countries, like China and India.

Canada has a vital international role to play in strengthening and broadening the Kyoto Protocol and in extending it further into the future to provide certainty, not only for Canadians but for all citizens

of the world as we move forward. This is a global challenge, and it will require a global effort to address the problem.

• (1045)

**Mr. Mark Warawa:** Thank you, Dr. Boyd.

I do appreciate your comment. I do agree. We are still committed to the Kyoto Protocol.

I'd like to ask Professor Villeneuve if he could comment on AP6, G-8 plus five, and the importance of dealing with Kyoto, but also on the other options that Canada can use.

[*Translation*]

**Mr. Claude Villeneuve:** The Kyoto Protocol is like a practice for the actual game. In actual fact, it isn't a final agreement. As Prof. Boyd said, to combat climate change, we have to achieve global objectives in the order of 25 billion tonnes, and Canada in all that only constitutes a very small part. Are there any other options besides the Kyoto Protocol? I'll use a simple analogy. If, in 2005, I promised that I'd weigh 30 kilos less by Easter 2007 and I weigh 60 more today, it's not very likely that people would believe me, especially if I haven't yet started an exercise program. Canada absolutely has to prove its will by putting in place the tools that will enable it to catch up, if it ever can catch up. For Canada, the issue of achieving a specific target isn't so much related to the target as to the process.

[*English*]

**The Chair:** Thank you very much. That concludes that time.

We'll go to Mr. Scarpaleggia.

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

I'll try to be efficient in my questioning.

Mr. Boyd, what is the penalty if we miss the targets?

**Mr. David Boyd:** The penalty that's currently established under the Kyoto Protocol is that 30% of the amount that you missed your previous target by is added to your emissions reduction target for the next period.

**Mr. Francis Scarpaleggia:** Of annual reduction target for the next period. So the penalty is a function of how much you missed your targets. Is that correct?

**Mr. David Boyd:** Correct.

**Mr. Francis Scarpaleggia:** So it's better to make that gap as small as possible.



In terms of credits, you say there aren't enough non-hot air credits for Canada to buy at the moment to achieve our Kyoto targets. Do you see the possibility that the situation may reverse itself? Markets tend to be volatile, or at least they can change direction sometimes rather rapidly. What's your prognosis for that market?

**Mr. David Boyd:** Well, sir, the problem is that under the Kyoto Protocol there is a mechanism called the "clean development mechanism" that establishes the process that has to be gone through for certifying international credits as compliant with the Kyoto regime, and the architecture of that process is very cumbersome. Despite efforts to fine tune it that have been made in recent years, it continues to take a long time. There's a long lead time in getting projects approved through that mechanism that are eligible as Kyoto-compliant international credits.

It's not like a free market where the market has the ability to respond. It's a cumbersome and bureaucratic process, and that's one of the aspects of the Kyoto Protocol that Canada needs to work on improving for future periods. I think you will get pretty widespread agreement from experts in the field that it's unlikely that there will be sufficient numbers of good international credits available by the year 2012.

**Mr. Francis Scarpaleggia:** In terms of a carbon tax, revenue neutral, if I understand, means that the government does not benefit from the tax overall. Is that correct?

• (1050)

**Mr. David Boyd:** Yes, there's no revenue impact.

**Mr. Francis Scarpaleggia:** On the government's revenues.

**Mr. David Boyd:** The revenues that are raised are offset by decreases in other taxes.

**Mr. Francis Scarpaleggia:** So if we had an export tax on oil and gas, we would use the revenues to offer incentives on the purchase of hybrid vehicles, for example. Is that correct?

**Mr. David Boyd:** There are a number of options for what you can do in terms of what you do with the revenues. Certainly, they could be earmarked for programs to reduce emissions. They could be used to reduce other taxes, including payroll taxes, income taxes, or the GST, or the revenues could also be used to address the negative impacts on low-income households. There are a number of options, but it is important that it be revenue neutral.

**Mr. Francis Scarpaleggia:** So a carbon tax doesn't necessarily penalize Canadian consumers and individuals. It can be used creatively to achieve greenhouse gas emissions without impacting too greatly on individuals.

**Mr. David Boyd:** That's absolutely right. One option would be to impose a carbon tax and then take the revenues and distribute those revenues right back to Canadians in the form of an annual cheque. What that would do is create an incentive right across the economy to reduce emissions, so that you pay less carbon taxes and yet you would still get money back at the end of the year. If you are a responsible citizen using less energy, you'd actually come out ahead. It would be the people who are driving gas guzzlers and being energy gluttons who would quite rightly pay more in terms of carbon taxes.

**Mr. Francis Scarpaleggia:** Great. Thank you very much.

**The Chair:** Mr. Manning, please.

**Mr. Fabian Manning (Avalon, CPC):** Thank you, Mr. Chair.

My question is for Mr. Villeneuve. If I understood you correctly, you talked about carbon trading with a fixed cap. From the point of view of hard caps, what would you see as some possible negative outcomes if we had a situation of hard caps?

**Mr. Claude Villeneuve:** I'm sorry, what are you calling air caps?

**Mr. Fabian Manning:** No, hard caps, fixed caps.

I need a new interpreter, I expect.

**Mr. Claude Villeneuve:** Oh yes. The cap is there just for the market to get a certain price and to achieve a goal. If you don't put on caps, you will never get an economic incentive to reduce, really, because anything goes. You can see that markets that work without a fixed cap will not bring interest, will not raise the demand for credits. Actually, if you don't set a cap, what will you trade?

**Mr. Fabian Manning:** Thank you.

I have a question for Mr. Boyd in relation to a comment that we cannot realistically meet our Kyoto targets and that the intensity-based approach is fraudulent. I'm just wondering, with regard to Bill C-30 and air pollution here in Canada, how we formulate policy that will take us to where we all want to go at the end of the day.

**Mr. David Boyd:** Sorry, on air pollution or on climate change?

**Mr. Fabian Manning:** On climate change. I'm sorry.

**Mr. David Boyd:** Well, I guess we need to recognize that climate change is a problem that is caused by all sectors of the economy. We need to put policies in place that are going to address emissions from all sectors of the economy. That would include some form of carbon tax, which is possibly complemented by a cap and trade system.

The first thing we need to do is to address that the market is failing to price carbon emissions. It's what economists call an "externality". So we have to put a price on carbon, and that can be done either directly through a carbon tax or indirectly through a cap and trade system.

As I said, we also need a whole range of regulations to deal with things like energy efficiency: standards for renewable energy, goals, and quotas for the sales of low- and zero-emission vehicles. I would also say we should have a minimum requirement for a carbon sequestration, to require the oil and gas industry to capture some of the emissions they're producing.

So we need a range of regulatory tools and economic instruments as well as investments in low- and zero-emission technologies. We really need a comprehensive suite of things. Some of those programs could already be done under the Canadian Environmental Protection Act. As I mentioned, the act will need to be amended to make carbon taxes and other environmental taxes available, because they're not currently in the list of economic instruments authorized by CEPA.

• (1055)

**Mr. Fabian Manning:** Thank you.

**The Chair:** Thank you, Professor.

Thank you, Mr. Manning.

Mr. Holland, for five minutes, please.

**Mr. Mark Holland (Ajax—Pickering, Lib.):** Thank you, Mr. Chair.

Mr. Boyd, I want to confirm what you said, which is essentially that the measures as presented in Bill C-30 as it stands now are either redundant, because of existing legislation under CEPA, or otherwise exist to deal with what it's presenting, or there are minor augmentations.... Really, your suggestion to the committee is that we should be focusing on other measures, other suites, other tools, if you will, to reduce our greenhouse gas emissions and begin going down the road of meeting our reduction targets. Is that correct?

**Mr. David Boyd:** That's right, Mr. Holland.

The legislative structure is there, and we need the programs and the regulations and the targets and the policies that are actually going to do the work to get us where we need to go.

**Mr. Mark Holland:** So if we're going to be successful in developing a plan, we'd be best to really look at those new measures, the measures that really aren't in Bill C-30 at all right now.

**Mr. David Boyd:** That's absolutely right. Some of these new measures could conceivably be included in Bill C-30 through amendments. It's clear that the existing provisions of Bill C-30 are nowhere near what's required to put a comprehensive national plan in place.

**Mr. Mark Holland:** Thank you.

Mr. Villeneuve, you touched briefly on intensity targets. We heard from Mr. Boyd on that. You had mentioned a desire to perhaps expand on that, and I wonder if you would like to. Secondly, I didn't hear you speak specifically to carbon tax and your thoughts on its efficacy versus a cap and trade or a mixture. What would your thoughts be on that?

[*Translation*]

**Mr. Claude Villeneuve:** Thank you.

Carbon intensity is a relative indicator. It indicates nothing with regard to the total quantity of greenhouse gases emitted. As Mr. Boyd said, we in Canada have increased our emissions by reducing our carbon intensity and, if there are no limits, carbon intensity can serve no other purpose than drawing a comparison with oneself.

Furthermore, carbon intensity isn't a guarantee that atmospheric pollution will be reduced because a number of other phenomena will contribute to smog episodes or atmospheric pollutant emissions. In addition, certain measures to reduce atmospheric emissions can increase greenhouse gas emissions. Once we've looked at that, we

conclude that carbon intensity therefore isn't an end, but rather a means.

The second element is that the carbon tax isn't a universal tool. It's one tool among others, and it must be combined with others, but it's a tool that has the advantage of demonstrating a clear political will, of being simple to use, of requiring little investment by the government and of needing relatively little control. In addition, as Prof. Boyd said, it can be used intelligently and creatively to redistribute this wealth in the Canadian economy, to help reduce inequalities that are created and, in particular, I would emphasize, to raise funding for research and development because, from a global standpoint, this program must be put in place for a number of decades.

If we immediately stopped increasing our emissions and even if we stabilized them, it would take at least two centuries for the climate to stabilize.

[*English*]

**The Chair:** Merci, Monsieur Villeneuve.

I think we'll cut it off there. I will ask Mr. Watson if he will yield his time for future consideration, in the interest of finishing on time.

• (1100)

**Mr. Jeff Watson (Essex, CPC):** Absolutely, Mr. Chair.

**The Chair:** Thank you, Mr. Watson. I appreciate that.

[*Translation*]

I thank all the witnesses.

[*English*]

I have just a bit of administration, but thank you very much to all the witnesses.

Professor Boyd, Starbucks should be open now, so go and enjoy your latte.

I have a couple of small points.

Mr. Jean.

**Mr. Brian Jean:** I'll be less than 30 seconds.

Mr. Boyd, I've asked the clerk to send you a copy of Bill C-30 to show how it actually expands the CEPA provisions, as we talked about at the end of my questions.

**The Chair:** The other point is that we need to cover the witness list on pollution. If the members of the subcommittee will consider staying tonight for about 20 minutes after the end of the meeting at 5:30, that will be terrific.

Are there any other points?

The meeting is adjourned.







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