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Chair

Mr. James Bezan

Standing Committee on Environment and Sustainable Development

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● (1110)

[*English*]

The Chair (Mr. James Bezan (Selkirk—Interlake, CPC)): Order, please.

We'll get this meeting under way. This is meeting 34 of the Standing Committee on Environment and Sustainable Development. We will be continuing with our study of Bill C-311.

With us today is Rick Hyndman, the senior policy advisor on climate change and air issues with the Canadian Association of Petroleum Producers, or CAPP.

Welcome.

From the Canadian Electricity Association, we have Eli Turk, vice-president, government relations.

Welcome back, Eli.

We're waiting for Robert Hornung from the Canadian Wind Energy Association, whom we expect to show up soon.

I think we'll get rolling, so Mr. Hyndman, please kick us off.

Dr. Rick Hyndman (Senior Policy Advisor, Climate Change and Air Issues, Canadian Association of Petroleum Producers): Thank you, Mr. Chair.

I appreciate the opportunity to be able to come and discuss this topic today. I've been working on climate change with CAPP since 1988. I think some of you remember the issue tables process, which was the huge process that got us launched.

We've been working on policies for pricing carbon in Canada since the fall of 2002. So it's been a long time, seven years, since we first started becoming articulate about carbon pricing. CAPP has been supportive of carbon pricing since.... I think our public position was around 2001, 2002. We've been studying ways to make good policy.

I want to give you some comments on how we perceive the greenhouse gas policy and how our perception leads to the position we have adopted.

I'm sure you all know the nature of the greenhouse gas challenge globally: incomes and population are rising dramatically in the developing world, and incomes are rising in the developed world as well. All of that gives rise to an increase in the demand for energy.

Hydrocarbons are the dominant form of energy supply in the world, and our energy comes to us through huge capital-intensive systems that take a long time to put in place and to change. So in light of the dangerous rise in greenhouse gases, the world faces a challenge: to develop future economic alternatives to hydrocarbons, while reducing present hydrocarbon emissions. In the face of the rapidly growing demand for energy, that's no small task.

There are major actions that we need globally to deal with this and try to slow down and reverse the growth in greenhouse gas emissions. First, we need to focus on energy efficiency and conservation so that we can slow down the demand for energy, which is going to happen for some time to come. We need to deploy the existing technologies we have available to us that are economic that can reduce the carbon emissions. More importantly, we need to invest heavily in energy technologies that will get taken up in the developed and the developing world as the demand for energy grows. Finally, we need to reduce global deforestation, which is crucial to the health of the planet and a necessary part of our long-term strategy to transform the global energy system.

Canada must do its share in this global effort, but we've discovered just how different our Canadian circumstances are from those of other developed countries. We have roughly 10% of the world's land mass, with all the resources that go with it. But we have only 0.5% of the world population. So it's no surprise that Canada has a resource-based economy, which depends on resource-intensive industries that are both energy-intensive and emissions-intensive. Canada has high per capita emissions because of our climate and our focus on the resource sector.

Unlike many other developed countries, which are undergoing deindustrialization and have stable populations, we are facing rapid growth in greenhouse gas emissions as our economy expands. We're naturally going to look much worse than economies that are deindustrializing and have stable populations. So comparing our efforts in Canada with those of other countries is misleading. In any assessment of our emissions, it is important to take our special circumstances into account.

If we adopt a target relative to history that is similar to what other countries are adopting, we're going to be in a situation where we have an unachievable target relative to these other countries. What that will do is cause us this endless debate that we have seen since the Kyoto Protocol has been signed over how we're going to do this and achieve the impossible, and who's going to pay for it? All of that debate slows us down from actually getting on with what Canada's contribution can be, which is improving efficiency, deploying existing technology, and investing in new technology to deploy and get greater reductions in the future.

So let's just look and see what the target proposed in Bill C-311 actually implies. And I'm just looking at the 2020 target—for me, 2050 is pretty far out and lots of things can change dramatically between now and then. But if we look at the 2020 target of 75% of 1990 emissions, that's 38% below the 2006 emissions, and it's 49% below Environment Canada's projected business as usual—BAU—or current trend emissions for 2020.

Obviously, if we're not going to have a major reduction in economic output or drop in population or incomes per capita in this country, that means we would have to reduce the emission intensity of gross domestic product in this country by large amounts—49%, if we compare the BAU for 2020.

If we just look at some recent trends in the U.S. and Canada to see how significant that is, in the U.S. the carbon intensity of GDP decreased by 2.2% per year from 1980 to 2006. That was overwhelmingly because of the reduction in energy intensity of GD, and only a small amount through fuel switching from hydrocarbons to non-hydrocarbons.

If we look in Canada from 1990 to 2007, the decrease in carbon intensity of GDP was 1.3% per year. If we look at Environment Canada's projection for business as usual for 2020, it's 0.73% per year from now till 2020—that's the anticipated trend improvement in intensity of GDP. So if we're trying to reduce the emissions to the target level from the current level, that's a 6.7%-per-year drop in emissions. And with a growing GDP of, say, 2.1%—which is, I think, in the latest budget information from the government—you add those two together and that would require an improvement in emission intensity of GDP by 8.7% per year.

That's over seven times, roughly seven times, the 1990-2007 improvement, and it's over ten times the BAU anticipated improvement to 2020. That's unprecedented. It's unobserved anywhere else. It is just inconceivable that we could actually improve our GHG intensity over that timeframe by that amount.

We could go and buy foreign credits, hypothetically, so what we don't do here we pay somebody else for doing. But there are a couple of things that stand in the way of that. It assumes that other countries are doing far more than their commitment to improve their GHG performance and have this extra space to sell to us, which begs the question of why we have taken on a commitment or why we would take on a commitment that is so much more onerous that we can't do ours and they have one that they can overperform on.

The second thing is that, if countries like China and India, which are the big industrial developing countries, are actually contributing to the global effort, they're going to need their own reductions for their own commitments. So this idea that there are these gigatonnes of foreign credits floating around that we can buy and thereby meet our commitment, I think, is a bait-and-switch game going on. Most of the informed observers I've run into believe that the amount of foreign credits that will be available when the whole world is actually acting on climate change will be much smaller than what people are assuming in some of these projections.

● (1115)

I think Bill C-311, with its target of 25% below 1990 in 2020, is counterproductive to Canada's getting on with doing our part in the global effort.

What should our GHG policy be?

We need to align with the U.S. in the obvious areas of industry and transportation, given our strong economic ties to the U.S. and our integrated energy systems. So we need to keep in mind that whatever we do, we need to do in a way that is compatible with the U.S. We need to establish a price on carbon emissions. We've been trying to work on that policy, as I said, for seven years with the federal government and some of the provincial governments. We need to increase the price, over time, in line with what the price is set in the U.S. and other major economies. And we need to increase our investment in low-carbon emission technology, especially in those areas that are particularly relevant to the Canadian industry and circumstances.

We need to keep in mind that at the provincial level, Canada has already taken a leadership role. Alberta put in a pricing for large industry emissions in the middle of 2007, and so far it's $15 a tonne for emissions above 88% of their base period intensity. Quebec put in its carbon tax of roughly $3.30 a tonne, covering broad combustion emissions from hydro carbons, and it did that in October 2007. B.C. put in carbon pricing through its broad carbon tax on combustion emissions in July 2008. It started at $10 a tonne, it has gone up to $15 a tonne, and it's headed for $30 a tonne in 2012.

We're already leading. What we need is a national policy on carbon pricing, one that will work together with the provinces, and we need to ramp that policy up in line with what the other major economies are doing. We need to get on with our contribution to the global effort in pricing emissions to drive that efficiency, and investing in technology to be able to provide solutions for Canada and the rest of the world in the future.

Mr. Chairman, I look forward to a discussion following Mr. Turk's presentation.

● (1120)

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

Mr. Turk, you have the floor.

Mr. Eli Turk (Vice-President, Government Relations, Canadian Electricity Association): Thank you very much, Mr. Chair.

[*Translation*]

Thank you, Mr. Chairman.

I would like to thank Committee members for giving me this opportunity to express my views regarding Bill C-311.

The Canadian electricity sector is committed to reducing Canada's overall greenhouse gas emissions. The targets approach has been a useful contributor to developing understanding as to the size, cost and complexity of the challenge, but targets need to be set with a reasonable understanding of the strategies necessary to meet those targets.

[*English*]

The Canadian electricity sector is committed to reducing Canada's overall greenhouse gas emissions. The targets approach has been a useful contributor to developing understanding as to the size, cost, and complexity of the challenge, but targets need to be set with a reasonable understanding of the strategies necessary to meet those targets. Let me explain.

The central question for the electricity sector is how can we achieve a carbon-reduced future while ensuring that the electricity demand in Canada can be met? As you know, Canada's electricity system is the envy of the world. It is over 75% non-emitting, thanks to hydro and nuclear generation. Only 24% of Canada's electricity fleet is generated from fossil fuels like coal, oil, and gas.

CEA member utilities are already making substantial investments to reduce the carbon intensity of power generation. Hydroelectric projects are either in the planning or construction stages in Labrador, Quebec, Ontario, Manitoba, and in B.C. and Yukon. Electricity generated from wind continues to expand, with generation expected to exceed 3,000 megawatts this year. Wind and other forms of micro-generation will be key components of grid modernization and emerging smart grid technologies.

We were particularly pleased to see the Prime Minister's announcement in Calgary two weeks ago on the public-private partnership between the governments of Canada and Alberta on TransAlta's Project Pioneer. Successfully implementing carbon capture and storage is crucial if Canada and the world are to address CO_2 emissions from coal-fired generation. Like many countries, Canada has a plentiful supply of coal in various parts of the country, and CCS has the potential to make coal a carbon-neutral fuel. Canada is leading the world on CCS technology. Once complete, Project Pioneer will be one of the largest CCS facilities in the world and the first to have an integrated underground storage system.

CEA members accept the eventuality of legal constraints on carbon that will change the way the world produces, transmits, and distributes electricity. In many ways, electricity is the energy of the future. Not only is the Canadian electricity sector expected to reduce its own emissions, but we are to help other sectors reduce their emissions. Electric plug-in cars, mass transit in our large urban communities, even gas pipelines, wish to power their compression stations with electricity.

There are uses for electricity in our future that we have never even thought about. To meet these new uses, we need to invest in our electricity infrastructure. We must build new generation that will be reliable and affordable, with either low or nil emissions. We need to look at hydro, nuclear, wind, solar, tidal, geothermal, and clean coal: we need them all. We must also look at a smart grid that will provide system flexibility to include more renewables.

We believe Parliament should consider changes to enable the transition to more non-emitting generation based on the economic reality of turning over our capital stock. Equipment in electricity generation, transmission, and distribution is long-lived and amortized over many decades. We take great care in keeping our equipment in top condition in order to keep electricity prices affordable.

It follows that the laws and regulations, as they apply to emitters in the electricity sector, need to be well thought out and fair, and take into consideration the interconnected nature of the electricity system. Also, laws and regulations must provide options for compliance, other than shutting down the plants producing the electricity.

For the electricity industry, any workable climate change policy must include the following. First, it must include an integrated and coordinated energy and environment framework. The climate issue has global, national and regional ramifications, and cooperation and alignment with the U.S. in terms of outcomes is essential. A fragmented approach by various governments is unworkable.

Second, competitiveness with the United States is a necessary consideration. The pace of change and any future investments in cleaner power generation and new technologies must align with our trading partners so that Canadian businesses can remain competitive. We are encouraged by the ongoing clean energy dialogue between Canada and the United States.

Third, we need adequate compliance mechanisms, including a technology fund that drives clean technology investment and deployment, and policies supportive of more electricity use in the economy, including the progressive conversion of the electricity industry from high-emission fuels to low-emission or nil-emission fuels.

● (1125)

Fourth, we need a holistic approach to legislative and regulatory clarity and coherence on energy and environmental issues. Regulatory processes that crosscut energy and environment would reduce delays that currently inhibit the expansion of clean energy infrastructure and stewardship activities.

Fifth, a fair and equitable burden must be allocated among all industries.

Finally, a recognition of the cycle of capital stock turnover in the electricity industry through a focus on retirement or refurbishment of existing plants at the end of their economic life is critical. We support changes that would enable the transition to less-emitting technology-based productions in an economically realistic manner.

In closing, Mr. Chairman, I'd like to remind members of the need to respect regional balance. The electricity industry is a microcosm of Canada, with varying interests and realities in different regions of the country. The provinces built the electricity system. A climate change plan that would prescribe strict reductions for coal-fired electricity generation would impact provinces like Alberta, Saskatchewan, New Brunswick, and Nova Scotia. Meanwhile, as I stated earlier, Newfoundland and Labrador, Quebec, Manitoba, and B.C. have hydroelectric potential that must be developed.

Clearly these realities of the generation mix in Canada are in many ways a result of geography. It is Canadians who ultimately will pay, and any plans that result in increased costs for some, but not others, will not be accepted by the public. It is perhaps this latter point that is one of the most important, not only for government, but for our industry as a whole. In order to build the electricity system our country will need in the decades to come—to support economic growth and our quality of life—we need broad support from both the public and government.

I thank you very much, Mr. Chairman.

[*Translation*]

I would also like to thank Committee members.

[*English*]

I look forward to having a good conversation.

Thank you.

The Chair: Thank you, Mr. Turk.

We'll kick off our seven-minute round with Mr. McGuinty.

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

Thank you both for being here.

I ask the same question of every witness who is appearing on Bill C-311. I just want to get it on the record. Do either of you have in your possession a climate change plan from the present government—after 46 months in office almost to the day today—to address all of the different elements that you have raised in both of your presentations? Is there a plan, and can you share it with us?

The Chair: Yes, Mr. Warawa.

Mr. Mark Warawa (Langley, CPC): On a point of order, I respect Mr. McGuinty's freedom to ask this question, but Chair, at our last meeting we had Michael Martin, the chief negotiator for the government, present to this committee an outline of the plan.

So for Mr. McGuinty to continue asking a question that is not relevant, I don't think is a parliamentarian—

Mr. David McGuinty: It's not a point of order.

The Chair: I'll make that decision, Mr. McGuinty.

● (1130)

Mr. David McGuinty: Please do.

The Chair: His question was to Mr. Hyndman and to Mr. Turk as to whether or not they had in their possession a copy of a plan. Now, we did have one submitted to us as a committee.

Mr. McGuinty, you were speaking specifically to Mr. Hyndman and Mr. Turk, and I'll allow the question.

Mr. David McGuinty: Just let me respond to the point of order, if I could, Mr. Chair, because you haven't ruled it out of order.

There was no plan delivered to this committee in the last meeting. There was a one-page handout, so that's not a plan.

The Chair: No, I'm saying your question is in order. You're fine to go.

Mr. David McGuinty: Thank you very much, sir.

Mr. Mark Warawa: I have a point of order.

The Chair: Make sure it is a point of order. I don't want debate.

Mr. Mark Warawa: I want to correct the statement of Mr. McGuinty. In the last meeting, he called it a one-page plan. Unfortunately, on the plan it did not have the word "over", but it was clearly shown that it was two pages. Mr. McGuinty ignored that fact.

Thank you.

The Chair: That's not a point of order.

You have six and a half minutes, Mr. McGuinty.

Mr. David McGuinty: Thank you, sir.

Dr. Rick Hyndman: Mr. McGuinty, we have the "Turning the Corner" plan, which was originally from a couple of years ago, and then last year again. In our opinion, it had some serious problems.

The circumstances facing the industrial sectors of this country and the rest of the world have changed dramatically after the economic collapse of last year. So I haven't seen an update of details from that plan. I've seen pieces of the government's plan for transportation and offsets and that kind of thing.

I hope it's still a work-in-progress, because there were some important things to improve from what they last put out.

Mr. Eli Turk: I would just follow on Mr. Hyndman's comments. We do have the "Turning the Corner" plan, which was put out by the federal government, in our possession. There have been discussions in terms of updating that and we've had ongoing discussions with the federal government.

It's a work-in-progress, as Mr. Hyndman pointed out.

Mr. David McGuinty: How much do both your sectors represent in terms of economic activity?

Mr. Turk, one number, one answer: how much do you represent?

Mr. Eli Turk: Billions of dollars.

Mr. David McGuinty: Mr. Hyndman.

Dr. Rick Hyndman: I think we're roughly a third of the total industrial emissions—

Mr. David McGuinty: How much is that in dollars?

Dr. Rick Hyndman: In terms of GDP dollars, the price goes up and down monthly, so I don't know, but last I looked it was in the order of $100 billion of revenue and lots more in spinoffs.

Mr. David McGuinty: So you represent $100 billion in economic activity.

Mr. Turk, you represent multi-billion dollars of activity.

And neither of your trade associations, your members, have access to a defined plan. Is that right?

Dr. Rick Hyndman: Well, it's a work-in-progress, Mr. McGuinty.

Mr. Stephen Woodworth (Kitchener Centre, CPC): Mr. Chair, I have a point of order.

Mr. David McGuinty: Mr. Chair—

The Chair: Wait, Mr. McGuinty, we have a point of order.

Mr. Stephen Woodworth: I don't know all the rules of procedure, but it seems like a clearly misleading question. The witnesses just said they had a copy of the "Turning the Corner" plan. Mr. McGuinty in his question is now suggesting that they said something else.

The Chair: This is Mr. McGuinty's time. As long as he isn't breaking order according to the rules—and he isn't—he can ask the questions that he feels are appropriate. As long as he's treating the witnesses with respect, he has the floor to use the time as he sees fit.

You have four and a half minutes left.

Mr. David McGuinty: Have either of you seen any costing? Because there is no plan, this is a redundant question, but I'm going to assert that there's no costing for a plan that doesn't exist.

Have you seen any government analysis on the costs of inaction in 46 months?

Dr. Rick Hyndman: I haven't. I don't know that it isn't there; that's not what I've been focusing on, and—

Mr. David McGuinty: That's okay. It's a simple question.

Mr. Turk.

Mr. Eli Turk: The answer, of course, is that I've seen some of the international estimates and I've seen some of the projections and so forth.

Mr. David McGuinty: Canadian?

Mr. Eli Turk: I can't say I've seen specific data from the federal government, no.

Mr. David McGuinty: Okay.

The second round of questions for you, or the theme is, gentlemen, the government now has changed its message around climate change to assert there's a North American greenhouse gas target.

In both cases, your CAPP equivalent, Mr. Hyndman, in the United States, and Mr. Turk, your CEA equivalent in the United States, have you heard any talk or reference with your colleagues, your sister organizations, whatever they're called, in Washington? Are legislators and the Democratic government, to your knowledge, speaking about a North American greenhouse gas target?

Mr. Eli Turk: I'll speak to that.

We've been in close contact with our counterparts in the U.S., and there is definitely a view, industry association to industry association, that it's important—the U.S. is our largest trading partner—to have a comprehensive North American approach. I know they've said that the current government is engaged in a clean energy dialogue in terms of looking at cross-border cooperation to try to address those issues, so I think there's definitely been some movement in terms of trying to look at a North American strategy.

Mr. David McGuinty: So there's movement and talk about the need for one, but can you tell me what the target is right now in real terms from 1990 levels from whatever it is the government is saying, from whatever we can divine, depending on the day?

● (1135)

Mr. Eli Turk: In terms of a North American target?

Mr. David McGuinty: Yes. What is the North American target?

Mr. Eli Turk: I'm not sure we've talked about a specific North American target. I think there's been talk about a North American approach and the need to probably have a North American target.

Mr. David McGuinty: Okay.

Do we know what the Obama administration is seeking to achieve as a target, either in the two legislative instruments or the EPA instrument that the President is threatening to use? What target are they using, with 1990, say, as the baseline year?

Dr. Rick Hyndman: I don't keep the 1990 numbers in my head, Mr. McGuinty, but I know that in the Waxman-Markey bill and then the Kerry-Boxer bill, they went from 20% to 17%, and back up to 20% below 2005, I believe it is, in the States. We have a number that looks the same in Canada, which is 20% below 2006 that the government's been laying out. That's now widely recognized as far more onerous than a comparable number in the States because of these different circumstances I was talking about.

Mr. David McGuinty: Okay.

So there is no talk that I've heard at all from your counterpart organizations about a North American greenhouse gas target. They're not asserting in Washington, to your knowledge, what this regime is asserting up here, that it's all one seamless North American target, are they?

Dr. Rick Hyndman: I think the Americans are focused on their own situation.

Mr. David McGuinty: Yes. I would agree with that.

Dr. Rick Hyndman: The people we talk to, of course, recognize the value of alignment of Canada to the U.S., and the form of that is a matter of opinion as to what's best.

Mr. David McGuinty: Just in closing, if you could give a yes or no on some of these, I'll rhyme off a few elements of what a plan would comprise. Maybe you can just jot these down and respond.

Can you tell me what the government's policy is for your sectors for credit for early action? Can you tell us how they're going to have a cap and trade system with the United States based on intensity targets? Can you tell us for your sectors how they intend to allocate permits and recycle the revenue? Can you tell us what percentage the government intends to buy offshore credits?

You talked about that, Mr. Hyndman, saying they weren't available.

What percentage is in the plan for your sectors?

Just as a start, can you address those and let us know how those are going to affect the hundreds and hundreds of billions of dollars your sectors represent?

Mr. Eli Turk: Sure, I'll address them.

In terms of policy on credits for early action, in the "Turning the Corner" plan there were some provisions. Our view was that there should be more aggressive provisions for credit for early action. For example, in Ontario there have been some actions, I think, that are worth recognizing, so they need to be more aggressive there.

In terms of the cap and trade and intensity, I don't think there's a particular framework yet, and so we're following that very closely.

In terms of the allocation of permits, we haven't gotten to the details on that.

I'm sorry; what was your question on recycling credits?

Mr. David McGuinty: How much revenue will be raised if there's going to be an auction? How are they going to allocate the permits?

Mr. Eli Turk: Right.

I guess our main message on that would be, of course, any kind of auction, any kind of payment in lieu of, or credits that are generated, but also payments in terms of emissions, we've argued quite strenuously that they should be rolled into some kind of technology fund to have transformative technologies happen. So we feel that any kind of revenues that are created should be rolled into a technology fund.

The Chair: Very briefly, Mr. Hyndman. Mr. McGuinty's time has expired.

Dr. Rick Hyndman: On the intensity target issue, the vocabulary around this issue is highly polluted. People have concepts that are all quite confusing to people. It's important to know that in the Waxman-Markey and Kerry-Boxer bills, for the energy-intensive trade-exposed sectors, the allocation to them is in fact output-based —i.e., intensity. The Canadian system largely applies, apart from electricity, to energy-intensive trade-exposed sectors.

So in fact we're talking about aligning with a system in the U.S. that is intensity for the trade sectors we're covering. And we need to do the allocation in such a way that we don't tilt the balance between Canada and the U.S. for investment and competitiveness.

How will these systems tie together? Well, by doing allocations that are comparable and have a comparable burden on the trade-exposed sectors so that you don't create trade issues between the two countries.

The Chair: Thank you.

[*Translation*]

Mr. Bigras, you have seven minutes.

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

I consider it unfortunate that people representing industries such as the wind, forest and aluminum sectors, are not with us this morning. However, I do hope that, if they submit a brief, we will consider it as part of our analysis and report on Bill C-311.

I want to thank you for being with us today. It seems to me your briefs are quite clear. Over the last 12 years, we have had discussions with representatives of a variety of industries. Many of them are of the view that, when it comes to climate change, there is nothing worse than uncertainty. Whether you are in the forest or oil industries, uncertainty causes considerable harm in regulatory terms. We are in favour of regulations, but we would also like to see them come into force as quickly as possible.

The Minister announced yesterday that his regulatory framework would be postponed until later—until after the conference in Copenhagen, to be exact. Do you think this additional delay will be harmful to your industry? Will that again create uncertainty? Should we not try to bring a regulatory framework into effect as quickly as possible?

● (1140)

[*English*]

Dr. Rick Hyndman: Thank you, Monsieur Bigras.

[*Translation*]

I am afraid I am unable to answer you in French. My French is not good enough for that.

[*English*]

First of all, yes, I don't think we can get certainty, and we've changed our vocabulary on that, just to be clear. We need predictability and stability. I don't think there is any certainty that anybody can have for any length of time because the world has to adjust to what's possible, what's happening, new developments on science and everywhere as to what we have to do.

Clearly industry, and CAPP, have been pushing to have policy in place, as I've said, for seven years now, but we don't want just any old policy, obviously. We want certainty of good policy, and it's important to get that as soon as we can. I don't think a delay of a few months at this stage is what's critical; what's critical is to get in place a policy with the right orientation, the right structure, and be in a position to ramp up the price and the demands on industry in line with what our major trading partner and other major economies are doing so that we can move forward with those other countries in our contribution to the global effort.

[*Translation*]

Mr. Bernard Bigras: I was reading one of the requests made last week by the Canadian Oil Sands Trust, which is that the government introduce intensity sites. I am trying to reconcile that, among other things, with the statements you made today. It is one of the points—number five—raised by Mr. Turk in his presentation. He says that he would like there to be "a fair and equitable burden among all industries".

Does that mean that, as far as you are concerned, intensity sites represent a fair and equitable process for all sectors of the industry?

Do you not think it is totally unacceptable for companies that have been working at this since 1990 and have succeeded in lowering their greenhouse gas emissions—like the forest and oil industries—to be subject to an intensity regime? Basically, do you really believe that the intensity regime and sites that the government is preparing to introduce constitute a fair and equitable process and burden for all industries in Canada?

Mr. Eli Turk: Thank you.

In terms of fairness, it is obviously the details that matter when defining the program to be introduced. As for whether an intensity regime is appropriate or not, that is certainly the subject of ongoing debate. When we say "fair and equitable", what we mean is that we would like to receive credits for past actions. This is what we advocate in our particular industry.

So, you need to be smart about this and see what the impacts are going to be in the different industries in order to arrive at something that is fair and equitable, from a national perspective and for the industries concerned. How can we do that? Well, there needs to be dialogue.

Coming back to your first question about targets, we are very much in favour of certainty. For large, long-term projects involving a significant investment, there obviously has to be certainty. Also, the context must be reasonable. In other words, you have to be sure that you are working in both the North-American and global contexts. Just to give you an example, here in Canada, we may have two or three new facilities. However, in China, there are two or three new facilities coming on live every week. And what happens in China, India and the United States clearly has an impact, not only on our industry, but on others as well. In the global context, that kind of perspective is a must.

So, yes to certainty, but as Mr. Hyndman said, as part of a reasonable context and process.

● (1145)

Mr. Bernard Bigras: You mean that the context must be continental.

At the same time, when I look at what is being done in the United States and Canada, I have the feeling that… You commended the government today for its investments in carbon capture and storage. So, you believe that Canada has to reduce its carbon footprint, but that CO_2 capture and storage is the way to go in order for that to happen. In the meantime, the United States has decided to invest massively in renewable energy.

What I am hearing from people in the wind energy sector is that we are missing the boat and the green shift here in Canada, and that Canadian companies are considering no longer investing in Canada, and are heading to the United States because their tax and regulatory regimes are more favourable.

Are we not ensuring that the Canadian economy will remain in the Stone Age in terms of its development, while the United States, in the meantime, is adapting its tax and regulatory regimes?

Let's talk about the flight of capital, because it is often said that climate change regulations result in an outflow of capital. In the final analysis, is our current policy not resulting in an outflow of capital that could be invested in the industries and technologies of the future, such as sustainable and environmentally-friendly energy?

Mr. Eli Turk: There is no doubt that we need to be aware of what is going on on both sides of the border, in order to offer attractive incentives here in Canada.

With respect to renewable energy and carbon storage, that is only one option among many.

Canada—for example, TransAlta which I mentioned earlier—is investing heavily in the wind energy sector. Other companies, such as Hydro-Québec, are also investing heavily there. Canada is quite dynamic when it comes to wind energy. In Ontario, they have a policy in place to promote the use of solar energy. So, I think some considerable effort is being made in that regard.

Of course, we can always do more, and we are trying to do more. I can tell you that every member company of our association is very focused on renewable energy. In fact, some companies are focusing exclusively on renewable energy.

[*English*]

The Chair: Thank you.

Madam Duncan.

Ms. Linda Duncan (Edmonton—Strathcona, NDP): Thank you, Mr. Chair.

Mr. Turk, does your association also represent the renewable sector?

Mr. Eli Turk: The Canadian Electricity Association is a multi-fuel and multi-technology association. So a lot of our companies are large renewable players.

For example, TransAlta, which I pointed out earlier as doing CCS, has a very aggressive wind program. In fact, they're one of the first companies to get fairly aggressively into wind in southern Alberta. They bought a company called Vision Quest, and that has a large footprint. Hydro-Québec, Manitoba Hydro, and all those companies are involved in renewables, and wind and others.

A voice: Hydro.

Mr. Eli Turk: Yes, of course.

Ms. Linda Duncan: So has your association lobbied the federal government to in fact put forward the dollars that were promised in this year's budget to trigger greater investment in renewable technology?

Mr. Eli Turk: There have definitely been some steps taken in terms of the ecoEnergy program and various other programs, including renewables. The wind power production incentive and other programs that have been precursors have been important ones. We're always lobbying for more incentives on renewables, no doubt about it.

Ms. Linda Duncan: So you have gone to the federal government to ask them to finally bring forward the money that was promised in this budget.

Mr. Eli Turk: We're always looking at more support.

Ms. Linda Duncan: Just say yes or no.

Mr. Eli Turk: In a broad manner, yes.

Ms. Linda Duncan: Michael Martin, who is the chief negotiator and the ambassador for climate change for Canada, last week shared Canada's briefing package, as Mr. McGuinty mentioned, for Copenhagen. He reported that Canada will replace 90% of electricity needs, without emitting greenhouse gases, by 2020 and that we will meet that commitment by fuel-switching away from coal.

Can you advise the committee if Alberta has committed to shut down its thermoelectric plants by 2020?

Mr. Eli Turk: The target that you're talking about is a very aggressive one. There's no doubt about it.

As I pointed out in my opening comments, there is some great hydro potential right across the country. I don't think the—

● (1150)

Ms. Linda Duncan: No, no, I asked if Alberta is planning to shut down its coal-fired plants by 2020.

Mr. Eli Turk: Again, to get back to the target, it isn't province by province. It's a national target. So if there's activity in a certain particular area, that will help with the overall target.

To simply answer your question, no, I'm not aware of the Alberta government saying they're going to close coal plants.

Ms. Linda Duncan: Thanks.

Mr. Martin also testified that Canada will implement, through CEPA, greenhouse gas emission standards for coal-fired plants to promote the deployment of CCS. Has your association been consulted on those regulations?

Dr. Rick Hyndman: Specifically on that, no.

Ms. Linda Duncan: So you have not been consulted yet on these imminent regulations.

Mr. Eli Turk: We've had broad discussions, and I'm sure when the draft regulations are available we'll be fully consulted.

Ms. Linda Duncan: Thanks.

You spoke in your brief about fairness and competitiveness and the cycle of capital stock turnover. I'm well aware of those arguments, because I sat with your association for 10 years on the Canada-wide standard for coal-fired plants and the Alberta negotiations on regulations for mercury.

The argument that was continuously put forward by your association was that we can't possibly regulate mercury, because it's not affordable and the technologies are not provable. Yet in the end, the Government of Alberta, to their full credit, actually issued a regulation, which will mean that all the coal-fired power plants in Alberta will be capturing mercury this January.

Do you think it's quite conceivable that the same scenario will play out that we discovered on mercury, that in fact technologies for the control of carbon may be far more affordable than forecast?

Mr. Eli Turk: Having formerly been a vice-president of business development for a technology firm, I have some firm views in terms of what's real technology and what isn't. As you point out, with the mercury, there was a certain time lag in terms of when it was commercially available. We actually hosted an international seminar on mercury technologies to take a look at where things were and to try to move it forward. We think we were pretty aggressive on that.

At the end of the day, is the technology real or not? I think it's really when you ask a supplier to supply technology and to guarantee its performance at a certain cost and take a penalty if it doesn't perform, and then it's real. If it's not, then it's not real; it's a prototype.

So there could very well be new technologies that are disruptive that do help with the situation. I don't discount that at all.

Ms. Linda Duncan: I'm not sure that answered my question, but I'll move on to Dr. Hyndman.

It's wonderful to see you, Dr. Hyndman. It's nice to have an Albertan at the witness table.

How much has your sector invested in R and D for pollution control and reclamation in the last year?

Dr. Rick Hyndman: I don't carry those numbers around, but I know that for environmental spending, depending upon how you define it, the number is quite big when you include all the things the industry does. I don't know what it is for pure R and D, but it's not a huge amount, obviously.

Ms. Linda Duncan: Dr. Hyndman, do you think the investment in R and D by the oil and gas sector and tar sands sector is equivalent to the R and D investment to expand production in the sector?

Dr. Rick Hyndman: Keep in mind that the companies are always trying to do things better. Most of the emissions come from burning energy, which is needed to produce the oil and gas. You can save money by improving your efficiency, so that kind of stuff is going on all the time.

On the production side, a lot of the R and D happens in the service companies on the drilling techniques and that sort of thing, so it's not very clear exactly what that is because it's spread out. We rely on technologies developed elsewhere in the world.

While it's not a Canadian company, Exxon Mobil just sank $700 million to $900 million into developing liquid fuels from algae, so that kind of basic R and D is going on. But I'm afraid I don't know how much is actually happening from the Canadian companies.

Ms. Linda Duncan: Do you think, to be equitable to all the sectors, if the Government of Canada is going to invest taxpayers' dollars to help develop and deploy cleaner technologies, it would make sense for it to contribute dollars to both the renewable sector and the fossil fuels sector?

● (1155)

Dr. Rick Hyndman: Sure.

Ms. Linda Duncan: So you agree it would be appropriate for the government to step up to the plate and actually invest the dollars that were promised in the renewable sector.

Dr. Rick Hyndman: The government and society have to pour much more money and investment into all kinds of energy supply technology. As I said in my opening remarks, it probably makes sense for Canada to focus on things that are particular to Canadian circumstances. We can't compete with what's going on with solar in the U.S. On wind, I don't know; some of the other countries are further ahead.

There may be things you can do that are particularly relevant to Canada so we can make our contribution to the global effort. We need to keep in mind our relative size and importance in all of this. We need huge investments globally to move this stuff forward if we're going to transform the energy system as required.

The Chair: Your time has expired.

Mr. Warawa, can you finish us off on the seven-minute round?

Mr. Mark Warawa: Thank you, Chair.

Thank you to both witnesses. I really enjoyed your testimony. It was very informative.

I just came back from Copenhagen, and over the weekend was at an environmental conference put on by Globe International—it's just weeks away from 192 countries, thousands of people, going to Copenhagen looking for a new international agreement on climate change—and I was very proud of our aggressive targets, a 20% reduction by 2020 and a harmonized approach with the United States.

It was my first time in Copenhagen. I always like to look ahead to see what they're doing. I flew through the night on Thursday, arrived there Friday morning, and Friday spent much of the day on a ship looking at the harbour and the turbines and seeing what Copenhagen was doing. They have a coal-fired generating plant right there in the city, too, also with turbines, so they realize there are some ways that they can clean up.

But I was struck by some of the efficiencies and their lifestyle. It's quite different from here in North America. To buy a vehicle, it's a 180% tax. Let's say you buy a $30,000 vehicle here in Canada. In Copenhagen, you would pay out of pocket maybe $80,000 to $85,000 because of that 180% tax. The sales tax is 25%, and fuel is $2.50 a litre Canadian. It's very expensive.

The targets that are being presented in Bill C-311 are European targets, yet the targets that Canada has set are aggressive considering our circumstances. So I really appreciated your testimony.

Taking this North American continental approach to the clean energy dialogue ongoing with the United States—the Untied States was represented at the conference, too, by the way—to me seems the logical way. In fact, the previous group of witnesses we had were scientists—this was a week ago, Tuesday of last week—and they acknowledged also that it was a good idea to have a continental approach, that Canada, and the United States, and Mexico have similar targets going into the international negotiations in Copenhagen and following.

So my question to you is how important is it that we have a continental approach? If we didn't, if we went the route of Bill C-311 and broke away from a continental approach and broke into a European target, what would that mean to your industries?

Dr. Rick Hyndman: Thank you very much for that question.

I would repeat, as I said earlier, that the 20% reduction from 2006 by 2020 is seriously more onerous and aggressive than the U.S. target of a similar amount because of our underlying trend in emissions. So the effort we have to make is not from history, it's from where we would otherwise be. So our business as usual down to that target is much bigger in proportionate terms than is a comparable target for the U.S. To go even further away implies that you're willing to just shovel money over the border somehow to make up for that kind of difference.

The idea of a comparable policy to that of the U.S. is important. Exactly how we align with the U.S., though, is an important question, in my mind. One thing that economists have pointed out is that all the benefits, in terms of getting efficient reductions in both countries, come from having the same carbon price, if we're talking about carbon pricing policy. There are no extra benefits that come from cross-border credit trading. If we put in the same price here as there, then we will get the same kinds of reductions going on in both countries and there's no necessity of having credits flow back and forth across the border. If you link up two countries in a cap and trade system, with very different targets of business as usual, then you set up a situation where you generate a steady-stream cashflow from the more onerous targets to the less onerous one. That's my concern about being fully integrated with the U.S. anytime soon.

So I think we need to align with the U.S. We need to have comparable burdens on our industry, we need to set a comparable price on carbon, and we could even tie our price to the U.S. price, but going further and linking up would create a serious flow of cash to the U.S. If we took on a target like the 25% below 1990, it would be just enormous flows of cash from Canada to the U.S.

● (1200)

Mr. Mark Warawa: Okay.

How much time do I have, Chair? One minute.

Could you elaborate very briefly, then, on this massive flow of cash? Sustainable development requires a balance between a healthy economy and a clean environment. If we have billions of dollars flow out of our economy to meet international targets that are extreme—European targets—and then we are also being disadvantaged in the United States, what would that do to the Canadian economy?

Dr. Rick Hyndman: Well, I think it drains the capital or resources we need to tackle the problem. What we have said now for seven years is that we need to be part of the global effort and to make a serious effort, but we'd be much better off putting our resources into advancing technology that everybody needs, and that we in particular need, rather than simply paying somebody else who's managed to get a less aggressive target.

So our answer is, sure, take on a burden, but put it into technology that the world needs a lot more investment in.

The Chair: Thank you.

We'll start our five-minute round.

Mr. Scarpaleggia.

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

Mr. Turk, you made an interesting point about what technology is and what it isn't. In terms of carbon capture and storage technology, it's unproven. So you would call it at this point, I guess, a prototype.

Mr. Eli Turk: Well, they're definitely proving out the technology. For example, the TransAlta project is looking at one that's being developed by Alstom, a chilled ammonia process. There's no doubt that it's a leading-edge project in the world. We have also the situation at Weyburn, Saskatchewan, where the project is a bit more on the commercial scale.

In terms of CCS, we're making a lot of progress in understanding it, and I think this project will prove out a lot of the technology. But yes, you're right, it's a nascent technology.

Mr. Francis Scarpaleggia: Dr. Hyndman, if I were the government, I'd be getting impatient with myself at this point, after 46 months of dialogue with industry, which came upon the previous three years of dialogue, which was leading somewhere...and which is going on with the dialogue with the Obama administration.

I would invite you into my office, if I were the government. If I were a minister, I'd say, okay, you're an economist and you have your econometric models, so what target can you live with? In which case you'd say, well, it all depends on what the other sectors would have as targets and what the U.S. would have as a target and what Europe would have as a target.

The picture I'm getting is that you say you'd like some certainty, but certainty appears very elusive. It's almost like nailing mercury to a wall. There will never be certainty in a world of 160-odd nations each driven by their own politics.

So I guess what's frustrating to me is that after all this talk, no one is coming to say to us, okay, this is a target we can live with. You're even saying that the government's 20% target by 2020 is too stringent.

What are we to make of all this? How can we progress on this bill when people aren't telling us what they want?

● (1205)

Dr. Rick Hyndman: Well, actually, we did agree to take on a target ahead of our competitors. As the oil and gas industry, we supported the famous “15 and 15” back in 2002, which Minister Dhaliwal committed to; and we subsequently worked on the policy with Mr. Dion, when he was minister; and it turns out that when the government changed in Alberta, they implemented Minister Dion's policy, and we have carbon pricing there that's ahead of our competitors. It's been there since the middle of 2007, and we've been supportive of that.

We think the same kind of policy could be implemented across Canada. We think it's important.

Just a snapshot of what that policy is—

Mr. Francis Scarpaleggia: May I interrupt? Do I understand that you're advocating for a carbon tax?

Dr. Rick Hyndman: Well, as I said before, the language in this debate is confusing. In my opinion, if you have a cap and trade system and you auction the permits, from an emitter's point of view, that's a carbon tax.

Mr. Francis Scarpaleggia: Exactly.

Dr. Rick Hyndman: So whether the price is set by a limit or whether it bounces up and down is a second order issue to the emitter. To the latter it's about how much you have to pay and the real issue is our competitiveness with other countries and our competitors.

So the Alberta policy set stretch targets, such as performance that's better than industry is expected to do, and then they said you can pay up, at $15 a tonne, into a technology fund and we'll use that money to advance technology. That's the essence of that policy.

Mr. Francis Scarpaleggia: In other words, we'll give it back to the industry, basically.

Dr. Rick Hyndman: Well, it's not really giving it back to the industry; it's providing support for projects that wouldn't go ahead otherwise. We're going to see a bunch of those come out in the next eight months.

Mr. Francis Scarpaleggia: I guess what I'm getting at is that when it comes to carbon capture and storage, the impact on greenhouse gas emissions will be minimal. If you read Jeffrey Simpson last week, he said that with all the investments that have been announced, and if everything works and we go from prototype to provable technology, you will see a reduction of 2.1 million tonnes per year. Canada emits about 720 million tonnes. So I don't know if carbon capture and storage technology is the answer.

My question is would your industry have invested in carbon capture and storage technology anyway? It requires government money.

Dr. Rick Hyndman: No, it's very expensive. The technologies for doing it are all known. It's just that putting them together hasn't been done very often, and the cost is exorbitant at this stage.

Mr. Francis Scarpaleggia: Here's an idea. I take your point about why we have to have similar prices of carbon or else there would be massive capital flows with Canadian companies buying credits and so on. But would there be capital outflows if the government said, look, we're going to have a target on the oil industry, a hard cap; you meet it, and if you want to do it through carbon capture and storage, you pay for it?

Dr. Rick Hyndman: Well, you could pick a low enough price of carbon, as we see in Quebec, at $3.30 a tonne, and $3 a tonne in the cap and trade system in the northeast electric sector, and then the cost might not be much. But the structure of the policy makes no sense. To say that we want you to support the economic growth of the country and to provide growing supplies for energy security for North America, but you can't emit, and there's no economic technology at this stage to produce the oil without emitting, it's a contradictory policy.

Mr. Francis Scarpaleggia: It wouldn't say you couldn't emit.

The Chair: Thank you.

Mr. Woodworth, the floor is yours.

Mr. Stephen Woodworth: Thank you very much, Mr. Chair.

The place I'd like to start is back with Mr. McGuinty. He first suggested to you the false proposition that the government has no plan. The chair ruled that in order.

You pointed out that you had in your possession the “Turning the Corner” plan and that you were aware of certain enhancements to it.

Mr. McGuinty then suggested to you the false proposition that there's been no costing of the government's proposal, and I think your response may have been that you hadn't heard of it.

The National Round Table on the Environment and the Economy, in the person of Dr. Robert Page, testified before this committee that in fact that agency has done economic analysis. In fact, his evidence was to the following effect:

> Our reports demonstrate the massive scale of the energy and technology transformation needed to meet the government's current targets of cutting greenhouse gas levels by 20% from 2006 levels by the year 2020. The NRTEE has shown that meeting this target will be quite challenging in itself for Canada.

So as my first question, do each of you agree with those conclusions or not?

● (1210)

Dr. Rick Hyndman: Thank you for that question.

I actually participate in a lot of discussions about the NRTEE report. I think it's a good piece of work to illustrate the nature of the challenge. Economic models are economic models, so you can get more or less with them, but I think that it provides a very good indication of the extent of the challenge and the kinds of costs that would be faced to achieve that target in 2020.

Mr. Stephen Woodworth: You do agree with those conclusions, then?

Dr. Rick Hyndman: Yes.

Mr. Stephen Woodworth: And Mr. Turk, do you?

Mr. Eli Turk: Well, the whole question of costing and developing the models and so forth, of course, depends on what your assumptions are in terms of input costs and other variables. I am familiar with the national round table's work. Again, it was interesting work that was illustrative of some costing. Whether those ultimately are what the costs will be, we'll see.

Mr. Stephen Woodworth: The report, in fact, has been downloaded over 18,000 times since its publication in April. I highly recommend it to Mr. McGuinty and anyone else who's interested in costing of the government's plan.

I'm not sure, quite frankly, what the relevance is of asking you whether you're aware of the costing of the government's plan, but I would like to ask you something that you may be a little more aware of. I wonder if there has been any analysis by you or your industry of the cost of complying with the government's plan, that is, the 20% target by 2020. By that I mean costs to your industry in terms of the effect on employment, effect on consumers, and effect on your operations.

I'll start with Mr. Hyndman.

Dr. Rick Hyndman: Thank you.

I wish I were...had lots of the members here.

I mean, we've looked at them. I've tended to look at the policies in a fairly simple way. For instance, what kind of target, or allocation, for the industry is anticipated? What kind of price of carbon do we have? What's the gap between our emissions and the allocation? If you multiply that by the price, that gives you the dollar per barrel. When you multiply it up, you get the tens of millions of dollars of costs. Obviously, depending on the circumstances of the industry in terms of the prices for its commodity in the marketplace, the cost can be significant and affect investment in a big way. It can be less significant if we have high prices, as we had a year or two ago.

I don't have actual numbers for you here, but there are alternative places to invest in the world. One of our advantages in Canada is that we're a good place to invest. We have a huge investment in the oil sands in Alberta in particular, but also in gas supplies.

In particular, though, where we're most exposed on the competitiveness issue is on the upgrading of bitumen and on the production of natural gas. In both of those cases, we have to be comparable to the U.S. in terms of the costs we put on those activities if we don't want to divert the investment into the U.S. to do that upgrading or to produce the natural gas. The gas industry, as you know, is under some pressure right now from U.S. supplies.

Mr. Stephen Woodworth: I may be able to come back to the question of the U.S. situation, but I'd like to hear from Mr. Turk on whether or not his industry has done any analysis of the impact of the government's plan of 20% by 2020 in terms of costs, employment, and effect on consumers from his industry's point of view.

● (1215)

Mr. Eli Turk: Certainly some of our companies have done it individually. We haven't rolled it up as a national association, per se. I can say, though, in terms of looking at strategies to meet those particular targets, that we're looking at trying to find cost-effective but at the same time innovative strategies.

I can give you a couple of examples. We've talked about trying to build more hydro. We've talked about wind. We've talked about solar. Nova Scotia Power now is a world leader in terms of hydro power in terms of using...and they're just about to install probably one of the largest underwater sea turbines.

There are just all sorts of new technologies to try to meet that.

Mr. Stephen Woodworth: Thank you.

The Chair: Thank you, Mr. Woodworth.

Mr. Hyndman, you mentioned that CAPP has done some of the economic impact work. Did you put together some numbers on what's going to happen possibly within the industry?

Dr. Rick Hyndman: We haven't done a lot of.... As I say, I try to do some simple stuff to indicate the magnitude of the policy impact as opposed to trying to work through how it affects investment, which is a very tricky piece of economic analysis to do. It's classically very difficult to predict oil and gas investment.

There are some things you can focus on and see. For instance, where your competitiveness is really at the margin, there are things like upgrading, as I mentioned, and now natural gas. B.C. shale gas is competing with U.S. shale gas much closer to the markets. It's at the margin. If its economics get upset relative to the U.S., then that will disadvantage them and tend to swing investment south of the border. The same would go for the upgrading.

How much would it affect bitumen production? That's a tougher thing to gauge. It depends on people's expectations about world oil prices. Of course, we don't pass the costs on to consumers. Our prices get determined in that international market. The effect of the policy is solely on the industry; well, it does have repercussions on the employees and the government and so on.

The Chair: Thank you.

Monsieur Ouellet.

[*Translation*]

Mr. Christian Ouellet (Brome—Missisquoi, BQ): Thank you, Mr. Chairman.

Thank you all for being with us today.

I would like to begin by making the point that electricity has huge potential here in Canada. We all agree on that. We are especially familiar with hydro electricity, which can be developed further, and electricity produced using wind turbines. Furthermore, it is now possible to achieve very high steam temperatures—of about 380 °C—using solar energy. That is well known. Here in Canada, we receive a great deal of sun. This research is on the verge of being completed and will soon be able to be applied.

We also know that deep geothermy can provide electricity all across Canada, something that would make it possible to satisfy all our energy needs between now and 2050. Additional research is required, but it is feasible. Electricity could also be an alternative energy. We can replace energy used for cars, industry and heating. It is a very flexible energy that can replace other forms of energy.

Have you assessed the economic potential of all the possible development options associated with the non-polluting production of electricity, Mr. Turk?

Mr. Eli Turk: You made reference to hydroelectricity. As I said at the beginning of my presentation, there is tremendous potential in that regard in British Columbia, Manitoba, Quebec and Newfoundland and Labrador. It is essential that we develop that potential. There are regulatory issues to be resolved, but we must develop it.

As regards renewable energy, we need every single one of these new energy sources. At the same time, there are some technical and economic issues that need to be addressed. In technical terms, when the sun shines, there is more energy, and when it is windy, there is also more energy. There is a lot of work to be done in terms of integrating current systems, because they were not designed to incorporate these types of technology; but we are in the process of doing that. When we are able to make the necessary technical changes, there will be additional wind and solar energy available.

In terms of the economy, in Ontario, for example, we pay 80¢ a kilowatt-hour for solar energy, whereas the cost of hydroelectricity and other technologies is 4¢ or 5¢ a kilowatt-hour. So, there are economic issues to be addressed there.

As you were saying, there is incredible potential. Our companies are all leaders when it comes to developing these forms of energy. We have not yet completed an economic analysis, but we have looked at the economics on a case-by-case basis. For example, solar energy costs about 80¢ a kilowatt-hour. We would like to see the technology evolve, in order to bring down the cost. That will certainly happen over time.

● (1220)

Mr. Christian Ouellet: You did not talk about geothermy, which is very important, because we may now be at the same stage we were for hydrocarbons 35 years ago in Canada.

We have started to produce solar energy, and we are now at the same point we were 30 years ago in terms of hydrocarbons in Alberta. If we were able to extract oil from the oil sands, we can surely produce other forms of energy.

Before the government tabled its plan, did it ask you about the job creation potential?

Mr. Eli Turk: Are you asking me whether there were discussions about job creation in the renewable energy industries, or in general?

Mr. Christian Ouellet: I am talking about non-polluting electricity in general.

Mr. Eli Turk: Well, I don't have precise figures on that, but there were discussions with the government. We demonstrated that this would have a very positive economic impact. Of course, we would have liked there to be some economic development in terms of equipment production here in Canada. When Hydro-Québec carried out a project, one of the conditions was economic development in the province.

Mr. Christian Ouellet: Perhaps the government delayed its announcement yesterday, because you had not gone far enough.

Are you in a position to provide us with numbers on job creation potential associated with all different forms of electricity?

Mr. Eli Turk: We could give you a rough evaluation; yes, that would be possible.

Mr. Christian Ouellet: Mr. Chairman, can we be given those figures?

An hon. member: Yes.

Mr. Christian Ouellet: Mr. Hyndman, I am referring now to Bill C-311. It talks about economic potential. When the government decided to change the reference year from 1990 to 2006, were you relieved? The fact is that, even though the government invested money to get the process going, the oil companies benefited.

When I went to Calgary with another House committee to meet with companies like Shell, we were told that, given the state of current discoveries and research, it will not really be possible to make significant reductions in CO_2 emissions per barrel of oil that is produced. The amount of water used has dropped from 6 gallons per barrel to about 4½ gallons, but the amount of CO_2 cannot really be reduced further. Is it your view that in order to reduce greenhouse gas emissions, the only real solution is to limit oil production?

[*English*]

The Chair: You only have two minutes, because Mr. Ouellet's time has expired.

Dr. Rick Hyndman: Okay.

First of all, on 1990 versus 2006, that's of relevance for how you look at how the country is doing. There is no country in the world using 1990 as the basis for assigning targets to industry—no country. The U.K. used 2003 to 2005. Australia is using something more current. The U.S. is proposing to use something current and even looking forward. So that's not about the allocation to industry; that's just how bad you look as a country.

Where are the possible reductions in the oil and gas sector? There are two big areas that are possible, and some work is going on now and some was done in the past to do this. We had large flaring and venting reductions up until recently, and now they have stabilized and even gone up a little bit, so more work needs to be done on that. There are fugitive emissions, which are not trivial—leaks of gas from pipes in gas plants and pipelines and so on—so there is work that can be done there.

The big other one is in the way in which we produce the oil sands in situ resource—not the mining but the ones where we put steam in the ground to produce the oil. There are a lot of different kinds of activity going on as to alternative ways, lower energy ways of producing that, and that is one of the areas we need to focus on: technology, because you could get a step change in the emission and the energy intensity producing in situ with some alternative technology. But it takes time to prove it out, to try it on different reservoirs, and then scale it up and see if it works.

That is the most promising area in the oil sands that I am aware of.

● (1225)

The Chair: Mr. Braid, you have the floor.

Mr. Peter Braid (Kitchener—Waterloo, CPC): Thank you, Mr. Chair.

Thank you very much to our witnesses for being here this morning and this afternoon.

Mr. Hyndman, if I could start with you, if I understood correctly at the very beginning of your presentation you indicated that you support the notion of a cap and trade system. Was that correct? Did I hear that?

Dr. Rick Hyndman: Like most economists, or almost all economists, I support the notion of carbon pricing. As I've said several times, I find the vocabulary—cap and trade, carbon tax—quite confusing and not particularly useful. And it is important to look at the details of how you do carbon pricing.

Mr. Peter Braid: I was encouraged to hear our Liberal colleagues resurrect their notion of a carbon tax earlier, by the way.

Are you aware that, when the government announced its intention to establish an offset system in the spring, we opened up a consultation process?

Dr. Rick Hyndman: Yes.

Mr. Peter Braid: Did you participate in that consultation process?

Dr. Rick Hyndman: No, I didn't.

Mr. Peter Braid: Okay. Was there a particular reason why?

Dr. Rick Hyndman: Well, this is my own personal belief, and time is limited; I don't think offsets are the central part of the problem. The central part is pricing emissions broadly and going after them. The offsets are a small part of the total.

Mr. Peter Braid: But it's all part of the same process, is it not?

Dr. Rick Hyndman: It is. And I don't have any objection to a properly designed offset system; I just think it takes far more work to get a tonne of reductions there than if you go after the main sources, the emitters.

Mr. Peter Braid: Okay.

Is it fair to say that you have a fairly good understanding of the direction that the federal government is going in with respect to our public policy direction to tackle climate change?

Dr. Rick Hyndman: I think so, yes. It remains to be seen what gets announced, but our perception is that the government is starting from the work we've been doing for seven years with the federal government. It's changed a little bit here and there, and we had "Turning the Corner". As I said, it needed some important changes and we expect the government is going to address a number of those, but we hope the basic structure of putting in place pricing and investing in technology will survive whatever debates go on.

Mr. Peter Braid: Notwithstanding the fact that the process still needs to be finalized and regulations announced, are you still preparing, as industry, for that eventuality at this point in time?

Dr. Rick Hyndman: Oh, indeed; yes.

Mr. Peter Braid: Clearly, once the process is finalized, moving forward to our goals of reducing greenhouse gas emissions by 20% by 2020, that will create some need for economic transformation.

Dr. Rick Hyndman: I think the target is an indicator of the nature of your ambition, but the policies and the pricing system you put in place as a core driver and in other parts of the overall policy are important for how industry and the rest of the country react and do things.

Mr. Peter Braid: With transformation comes opportunities as well, economic opportunities. In conclusion, could you just touch on what you think some of those may be?

Dr. Rick Hyndman: Someone's costs are another person's income. Any time you force companies to do something that's costly, somebody gets a job out of that. So that side of it is an economic opportunity. But how you lay those costs on society can be more destructive or less destructive than the jobs you create.

In terms of the things we need to do to address climate change, our basic orientation is let's get going on pricing. Let's ramp up with the rest of the major economies of the world. Let's invest in technology. If we're successful in advancing technology, then we'll be in a position to start deploying that as the world steps up its effort and raises the price of carbon over time.

For those new technologies and for the renewable technologies that equally should be supported, the opportunity is to develop and deploy the new technology in the energy system, which is the transformation of the energy system.

That's all opportunity on that side, but if you don't put the policy in place right and you disadvantage Canadian industry competitively, you will destroy more jobs in the rest of the economy than you're creating in this new opportunity in the energy system transformation. We need to look at both sides of the ledger on the job creation thing, on the new stuff versus what you're doing to the rest of the economy, depending on how you lay the costs on it.

● (1230)

The Chair: Thank you.

Mr. Trudeau.

Mr. Justin Trudeau (Papineau, Lib.): Thank you, Mr. Chair.

Mr. Hyndman, as an economist you probably are aware of the difficulties of predicting future technology, whether you look at the prediction, in the early 1960s, that the United States would go to the moon and how impossible that seemed from a technological standpoint; or whether you look at the potential consequences that we heard from industry around the Montreal Protocol on reducing CFCs for the ozone layer, which was going to cost industry tremendous amounts of money. Then they made the switch and it ended up being efficiencies and savings.

Predicting the future is very difficult in terms of what we're going to be able to innovate and solve because we're forced to think of new ways of doing things. That's one of the goals, I think, around your emphasis on pricing. If we know that things are going to get a lot more expensive, we're going to start aiming higher and force ourselves to innovate to find solutions.

Now, I appreciate your candour on the issue of pricing, on how pricing is going to be an essential element of how we're going to get to move forward to meet these climate change challenges.

Bob Page, when he came to us, talked about $100 a tonne as being the number we'd have to look for as a price on carbon with the current targets that the government has put forward.

In the different iterations of the plan we've heard over the past four years from the government, first of all, if everyone remembers, it was the “made in Canada” plan. Kyoto was made somewhere else, so we needed a made in Canada plan. Then last year we “turned the corner”, and now we've turned the corner apparently into the “made in Washington with support from Beijing” plan.

What numbers around pricing were in those previous plans? What numbers around pricing has the government indicated to you we're looking at in terms of per-tonne costs? And are you getting the predictability and stability that you're asking for out of the current government's plan—if there is one?

Dr. Rick Hyndman: Thank you for the questions, Mr. Trudeau.

Let me start with your point on technology. I think it's an important one and a good one.

We don't know what the breakthroughs are going to be. There may be some fortuitous breakthrough that allows us to have lots of energy and low emissions beyond the stuff we already know. But it's important to keep in mind that going to the moon had no price tag on it. The Cirque du Soleil man spent $30 million to go to the space station, so I don't think that's a broadly applicable technology for most of us.

With the Montreal Protocol, of course, the companies came up with the solution and they were able to charge their customers the higher cost for the substitutes for the ozone-depleting substances. Those are quite different from what's required in getting rid of carbon dioxide.

Mr. Justin Trudeau: The principle holds, though.

Dr. Rick Hyndman: Yes. I take your point, and that's why we're for pricing. It will start unleashing creative and innovative actions by people around the economy, and the broader it applies the more we're going to get out of it.

With regard to pricing, “Turning the Corner” had a projection of $65 a tonne for 2018 or so. We haven't heard anybody else—certainly nobody south of the border—talking about those kinds of numbers.

I think Mr. Page's number of $100 a tonne is dependent on Canada meeting a lot of its target through purchasing foreign credits. That's not getting to 20% below 2006 emissions; it's getting halfway there or so, and buying credits for the rest.

I guess what we have been pushing is let's get going. We have to start in Alberta. Saskatchewan is talking about doing the same thing, and B.C. has surpassed it by applying it across the board. If we get way ahead.... If we had $100 a tonne and the U.S. had $20, we'd have a lot of problems in managing our electricity prices, our industry costs, and all of those things. We'd be in real economic trouble trying to do that.

Our argument is that it's okay to get going ahead of the U.S. in the way that we have when the costs are manageable, but any ramp-up has to be contingent on the U.S. and other major economies doing it. After all, if they're not doing it, we're not getting anywhere globally.

● (1235)

The Chair: Your time has expired, Mr. Trudeau.

Mr. Watson.

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

Thank you to our witnesses for appearing today. This is an important discussion on Bill C-311.

As a launch point, let me start where you finished when you said let's get going. You've described the targets already—creating disharmony with respect to our government's target relative to the United States. Looking at the remainder of the bill, is there a pathway in Bill C-311 that allows you to get going or that gives certainty to either of your industries?

Dr. Rick Hyndman: I confess that I haven't memorized all the other aspects of it. I consider the 2020 target to be a fundamental flaw, actually, in the whole approach.

If you talk about putting an emission pricing system in place as opposed to a particular form of it, we've been working on that, as I say, for seven years, and the government still has its work-in-progress on the details. I think we can get going along that path.

As I said, I think putting a target in place that would require a 50% reduction in the GHG intensity of GDP in this country by 2020 would be an enormous diversion of attention. We'd use all our time arguing about the target and who's going to pick up the costs and all of this, and we wouldn't even be able to get going. We'd still be here years from now arguing about it.

Mr. Jeff Watson: Your thoughts, Mr. Turk?

Mr. Eli Turk: As I said in my opening comments, I think we need to have targets with a reasonable idea of how we're going to get there. I think we need to have a little more view in terms of how we can realistically get to those targets.

As you pointed out earlier, if we have a big disconnect in terms of what's happening here and in the U.S., you know, from the simple physics of our industry, there's not a lot of places we export to. We export to the U.S. and back and forth. There would be a real disconnect if we didn't have a continental approach. We think that's an important component of anything going forward.

Mr. Jeff Watson: The government agrees that Bill C-311 is fundamentally flawed and that the approach is wrong. I think that's why we're talking an awful lot with respect to things like the clean energy dialogue, and talking about harmonization that recognizes the integrated nature, not just of your particular industries, but of an entire range of industries and their supply chains. They're North American now.

I come from the auto industry; we recognize that there isn't really a Canadian car or an American car, but a North American car and a North American consumer for that car, and there has to be a North American business case for building that car. The key with harmonization is avoiding a patchwork of standards, a balkanizing of the market.

For example, we've chosen to regulate tailpipe emissions through CEPA; that allows us to avoid a province-by-province disharmony in terms of a standard. We're harmonizing with the reformed U.S. CAFE standards, which creates an investment advantage for the industry while tackling the need for greater fuel efficiency in our vehicles. I think that's the right approach.

With regard to the disharmony in terms of target and pathway that Bill C-311 is proposing, can you give us a sense of the cost? You've talked about some of the areas that are probably most exposed for the industry. Can you give us a sense or a quantification of what the loss would look like? How much investment would potentially be lost? How many jobs are we talking about? Can you give us some sense of what the cost of such a move would be if we adopted this bill in isolation from the United States?

● (1240)

Dr. Rick Hyndman: Thank you, Mr. Watson. I think we can give some examples.

If Canada were to commit to that target with the implication that somehow it's going to be mapped down onto the various sectors of the economy, I can't imagine anybody building another upgrade or refinery in this country. The uncertainty would stop anybody from putting that kind of capital in. Depending on the interpretation of what might apply to the production side of oil and gas, you might get a real slowdown in investment in major long-lived capital projects like the oil sands.

Mr. Jeff Watson: What would it mean to existing refining capacity? Is there any potential to put existing refineries at a disadvantage?

Dr. Rick Hyndman: We are exposed to competition at the import points, so if the refineries in Canada faced a huge carbon charge relative to their competitors in the U.S. or offshore, then we'd see a lot more imports coming in and refinery runs going down. Whether any refineries would close, I don't know. They certainly would be facing real competitive pressure from suppliers outside the country.

The Chair: Thank you. Your time has expired.

Mr. Jeff Watson: Could they provide something to the committee in terms of a quantification, if that's possible?

The Chair: Does CAPP have any documents that be given to the committee?

Dr. Rick Hyndman: We don't deal with the refineries. That's the CPPI, but—

The Chair: Maybe that in case we'll—

Mr. Jeff Watson: CPPI could be a future witness, perhaps, Mr. Chair.

Thank you.

The Chair: Mr. Calkins is next.

Mr. Blaine Calkins (Wetaskiwin, CPC): Thank you, Mr. Chair.

I appreciate the opportunity to have another Albertan at the table.

Mr. Hyndman and Mr. Turk, I appreciate your interventions, wisdom, and guidance here.

Through your associations and industries, when it comes to discussions, whether they're within the industry, with the government, or at an international level, you're constantly going through a series of negotiations. Whether it's negotiations for acquisitions, negotiations dealing with industry challenges, negotiations with landowners, or negotiations with government, there's constantly a set of negotiations.

As we prepare for Copenhagen and as we prepare our country for the discussions with our largest trading partner—a trading partner with whom we have integrated markets, as has been discussed already, whether it's our energy or consumer markets—does it make sense to any of you that we would play our negotiating hand out before those negotiations basically even start? That is what Bill C-311 would do. It would be the equivalent of playing Texas hold'em and showing everybody at the table our two cards.

Dr. Rick Hyndman: I think it's worse than that. I think it's turning in your aces and pulling out deuces.

To take on a target that is so much more onerous than any other country would even contemplate just puts you in a very awkward situation in dealing with how you're going to align with the U.S. You couldn't have a policy with a comparable effect on your industry that delivered anything like the reductions you're talking about. That's a big challenge—20% off from 2006 levels.

How are you going to reconcile these things? You either have to sacrifice industrial growth and have some output shift or force the costs on some other part of the economy, which the general public is not anxious to pick up.

Mr. Blaine Calkins: Mr. Turk.

Mr. Eli Turk: I think we need to look at what's going on continentally and internationally in terms of context. That's an important element.

Again, electricity underpins a lot of the other sectors of the economy. In relation to cost burdens, it has a huge impact on competitiveness.

So to answer your first question, what's happening continentally and internationally has to form the context of what we're negotiating. There's no doubt about it.

● (1245)

Mr. Blaine Calkins: Mr. Hyndman, you said that if this bill were passed we would see no new upgraders built, that we would see a dead stop in investments in the refining industry in Canada. Wouldn't it also undermine the investments that we're already making in carbon capture and storage, like the carbon trunk line, the announcement directed west of Edmonton? There's a proposal on the east side of Edmonton to take carbon south into my constituency.

As a matter of fact, both of these lines would take carbon dioxide into the constituency that I represent, to use for enhanced oil field recovery. This bill would essentially kill all of those processes and undermine the investments that are already made, would they not?

Dr. Rick Hyndman: There are balancing forces. But there is no set of policies with enough public support to get you anywhere near this. It would raise the level of policy uncertainty dramatically. We wouldn't have a framework to ramp up with our competing trade partners. We wouldn't have people investing in the fundamentals of the product and not worrying about whether it was being produced in Canada, the U.S., or somewhere else. This policy uncertainty gets us into a debate over how we're going to come up with something to meet a target that's un-meetable.

Yes, I think it would have a negative impact on investment.

Mr. Blaine Calkins: I just returned from a meeting of parliamentarians in Europe. One of the representatives was talking about the United Nations Framework Convention on Climate Change. He was talking about the numbers and the predictions, and he said that what we've seen during the global economic recession is a decrease in the amount of carbon dioxide emissions. I said that without the transformative technologies to get us to the next step, if a recession implies a reduction in carbon dioxide, then a reduction in carbon dioxide implies a recession. He didn't like my comment.

Would either of you like to address this?

The Chair: Mr. Hyndman.

Dr. Rick Hyndman: The recession-induced reduction is like the Russian solution, where their economy collapsed and their emissions went way down. If you force a reduction in carbon dioxide that cannot be met by capital stock turnover in implementing more efficient equipment and new technology, then the only way of achieving such a reduction is to cut output. That's simple arithmetic.

The trick is to get a plan that is achievable, one that you can use to develop and deploy technology that will reduce emissions over time. But trying to go faster than you can, without being disruptive to your existing capital stock or trying to force things on consumers that they won't accept, actually slows you down.

The Chair: Thank you.

Your time has expired, Mr. Calkins.

I have a question before we start our third round, Mr. Turk. You said that 20% of the electricity in this country comes from fossil fuels. What percentage does that represent of Canadian greenhouse gases?

Mr. Eli Turk: In terms of the total, we're about a third of the emissions in terms of industrial emissions.

The Chair: We are making the investments in carbon capture and storage. We are starting to see some of that take place in coal-fired electricity.

What about moving those coal-fired plants to renewable fuels, such as biomass? There has been some interest in producing biomass carbon-neutral fuel from waste products. To me, switching from coal to a biomass product sounds like a fairly simple solution.

Mr. Eli Turk: There has definitely been an increase in activity in terms of biomass. It is something that has been done for quite a few years in the forest industry.

The key question, of course, for places in western Canada, where you have anywhere from 200 to 600 years of coal, is how you are going to use that effectively going forward. If China, India, and others are going to be using coal as well, the key question is how we actually find the technology that burns coal in an effective manner.

There is no doubt about it; there is a push to increase biomass, but there is a limit, also, to the fuel in terms of biomass.

The Chair: Thanks.

We have about 11 minutes left, so we are going to do a quick round for all four parties. I am going to hold everyone to three minutes.

We'll go to Mr. McGuinty.

Mr. David McGuinty: Gentlemen, just to follow up on something Mr. Calkins said, in fact—not in speculation, but in fact—emissions decreased in this country between 2003 and 2006. They augmented by 4% in 2007 alone. They've continued to increase since the government's arrival.

Dr. Hyndman, I think I heard you say something about these targets being in excess of any other targets around the world. What is the European target?

● (1250)

Dr. Rick Hyndman: In my view, the right way to look at a target is how much you have to do to get from where you would otherwise be to where you're trying to get.

Mr. David McGuinty: Right. So the Europeans have announced that they're going to hit their 20% hard reductions from 1990 by 2020. They said that they are prepared to go to 30%, depending on the outcome of Copenhagen.

Dr. Rick Hyndman: Right.

After 1990, Eastern Europe's economy collapsed and their emissions with them. Germany folded East Germany into Germany; so, wow, they have a lot lower emissions. The U.K. switched from coal to gas and deindustrialized; got into the banking industry. So their emissions actually fell for things that had nothing to do with their making an effort to reduce greenhouse gases—

Mr. David McGuinty: Dr. Hyndman, I was practising corporate law in Europe during that time, and I can assure you that I have heard those myths put forward a number of times. The Germans and the Germany Treasury ate an awful lot of cost in terms of supporting East Germany's joining West Germany. I lived in Britain, in London, and I saw the costs incurred by the British Treasury and the British people.

So to assert that the Europeans achieved this without pain, because the wall fell, is exactly the kind of myth that the Republicans in the United States perpetrated for a decade and that this government has been perpetrating for four years. I don't buy that for a second. I just wanted to make sure that we got on the record that it isn't true that these targets being put forward by the NDP in this bill are the most aggressive in the world.

I also want to remind you—I think you said something about 2005-06—that of the 182 signatories to the Kyoto Protocol and the UNFCCC, Canada is the only Annex I country to have formally abandoned 1990 as the baseline year.

Dr. Rick Hyndman: Right.

I disagree with you on the extent of reductions from climate change-specific actions in Europe. I mean, it is true that they tax their gasoline consumers heavily and that they have lots of mass transit and all that stuff. They do a lot of good things. But the big reductions in emissions came from closing down Eastern Europe's industry and from switching from coal to gas. And they did that not primarily for greenhouse gas reasons—

Mr. David McGuinty: Who cares?

Dr. Rick Hyndman: Well, it doesn't matter who cares. I'm just saying that their business as usual gave them lower emissions in those two countries. Their population is basically stagnant. They don't have growth in energy-intensive resource industries in most of Europe.

Their business as usual is basically going along at a flat level. They have to do a 30% reduction to get to 30% below 1990 or less. That compares to 50%; I'd say their reduction is far less than that, and ours is a 50% reduction from business as usual. It's far more onerous.

The Chair: Thank you.

We'll go to Mr. Bigras.

[*Translation*]

Mr. Bernard Bigras: Thank you, Mr. Chairman.

Mr. Turk, I would like to come back to one of your statements. You said, and I quote: "[…] any plan that results in increased costs for some, but not others, will not be accepted by the public." I come back to that sentence because that is the very reason why Quebec is opposed to the government's plan which, in actual fact, is intended to provide massive assistance for carbon capture and storage technologies. The oil industry has said that it would not be in a position to commercialize that technology without federal government assistance.

Have you done an assessment of what investments in this technology would mean for the Canadian public?

I would also be interested in your reaction to comments made by the president of Alstom Power, who said this last week with respect to the Project Pioneer: "The considerable size of the project shows that we are no longer in the testing phase, but ready now for commercialization." So, we are no longer talking about research on this technology; we are talking about commercialization.

How much public funding will be required to commercialize this kind of technology?

Mr. Eli Turk: Alstom Power may say that it is ready for commercialization, but as I said at the outset, we need to define what is meant by commercialization. Will the project be carried out at a certain cost, based on a certain performance and a penalty for costs? I am not sure we have reached that stage just yet.

● (1255)

Mr. Bernard Bigras: Are we still in the testing phase or are we in the commercialization phase?

Mr. Eli Turk: We are in the commercialization phase. In terms of whether the technology is commercially available, that is another matter.

Mr. Bernard Bigras: If public money were to be invested, it would have to be invested in commercialization, rather than research.

Mr. Eli Turk: Project Pioneer is a societal issue. It is important to support the development of these technologies. We have seen this in other industries as well. Commercialization of certain technologies may require some financial support.

Mr. Bernard Bigras: How do you explain this strategic choice on the part of the government, which is prepared to provide financial support for the commercialization of a technology such as carbon capture and storage, when other environmental industries are having trouble making ends meet and have been waiting for years for the Wind Power Production Incentive Program to be funded?

There is no money available for environmental technologies, but there is lots available for the industry that is developing carbon capture and storage technology. How do you explain that unfairness in the distribution of public funds to these two sectors?

Mr. Eli Turk: Over the years, a great deal of money has also been invested in renewable energy. There have been some geothermal energy projects. A whole framework was put in place to try and encourage the production of wind energy. We do not only advocate CO_2 capture and storage; we are in favour of all the other technologies and encourage development of renewable energy. We have also recommended developing hydroelectric energy.

[*English*]

The Chair: You're out of time.

Ms. Duncan, you have the floor.

Ms. Linda Duncan: Thanks, Mr. Chair.

Mr. Turk and Dr. Hyndman, you both have testified that there would be monumental cost implications for your respective fossil fuel sectors if we had to meet the targets in Bill C-311.

Those targets, by the way, are not invented by the NDP, they are the targets that the world climatologists have said we have to meet. The Canadian lead climatologists testified to us a week ago that these are the bare minimum targets that we have to meet. That's why they're chosen.

An independent assessment of coal-fired power in Alberta and also in Ontario has shown that coal could readily be replaced by 2020 by affordable proven renewable technologies.

When we talk about cost, the thing that troubles me when the fossil fuel industry and the government talk about the cost of reducing greenhouse gases, they talk about balancing with the environmental impact. But what they fail to talk about is the cost to health and environment of the NOx, the SOx, the particulate, and the heavy metals associated with the fossil fuel industry. The cost about to be imposed on the consumers of Alberta is 100% of the cost of a massive power line to send coal-fired power expansion to southern Alberta and for the expansion of power plants.

I would like your comment on that. It sounds more like it's about the sustainability of the fossil fuel industry as opposed to a sustainable supply of transportation and home heating and electricity for Canadians. It sounds to me that it's far more about a narrow analysis of what the implications might be for the fossil fuel industry if we don't continue to subsidize and downgrade our standards.

Perhaps you both could answer that.

Dr. Hyndman, you mentioned that it would be a great bar to the continued upgrading of fuel in Alberta. Yet the very reason why all the upgraders have been cancelled in Alberta is because the Government of Canada chose to fast-track the approval of pipelines so that the product can be processed in the United States. So I'm seeing that as a bit of a specious argument.

Dr. Rick Hyndman: I'll take the last one first.

The reason why some of the upgraders have been cancelled is because of the underlining economics of it. It's already marginal or worse to upgrade the oil, the bitumen, in Alberta relative to adding an upgrader onto a big refinery in the U.S.

I mean, the pipelines can ship light crude oil or bitumen. The existence of the pipelines is not what kills the upgraders. It's the underlying economics and the challenge they have.

● (1300)

Ms. Linda Duncan: And regulatory uncertainty.

Dr. Rick Hyndman: Yes, but there is regulatory uncertainty south of the border as well.

I think if we were to add on something that multiplied the regulatory uncertainty in Canada, my point was that this would be a death knell for anything, and soon, such as for upgraders where people just say, "I can't invest; I'm not going to put down billions of dollars in this environment until I know what the costs are going to be relative to my competitors."

I think the policy is not about the sustainability of the oil and gas industry that you talked about in your earlier point. It's about supplying energy to Canadians. We don't have any easy answers. If there were easy answers, we would do them. But they're aren't any easy answers to replacing coal in the next ten years in Alberta.

What is it that we're going to meet it with? Wind is getting up to the limit on what that system can take. It's a thermal system. Unless with every coal plant you put another gas-fired turbine next to it to meet the fluctuations in supply and match the demand.... You know, you can't just build out wind indefinitely.

I'm in Mr. Turk's territory here, but I spent a lot of time in electricity in a former life, and I know that there are system requirements. And oil and gas? I don't see anybody giving up gasoline and diesel yet. So the development of the Canadian oil supply and the oil sands is providing a secure source in North America. It's an economic opportunity. We're doing what we can on technology and on implementing what is already available to reduce the emissions intensity of this activity. But—

The Chair: I'm going to have to cut you off there, Mr. Hyndman.

One more question.

Mr. Warawa, take us home.

Mr. Mark Warawa: Thank you, Chair.

Again, thank you for your very enlightening testimony.

The fact is that the target set in Bill C-311 came before the global recession and came before President Obama's new administration in the United States. It came with no obligations on the major emitters. So the targets now in this new reality are unrealistic and, as you've said, do not provide a good policy.

The fact is that before we became government, the Liberals were in government for 13 years. They set targets and ended up 35% above those targets, with growing emissions. The fact is that this government is committed to targets of 20% reductions by 2020, and none of the witnesses have supported Bill C-311 as being a good policy that would cause us to remove ourselves from a North American approach.

In summary, are we on the right track by having a North American approach, North American targets, as we go into a new international agreement? In summary—yes or no—should we have a North American approach?

Dr. Rick Hyndman: Obviously, we need to align with what's going on in the U.S. As was stated earlier, our automobile industry is integrated and our energy systems are integrated. We need to reflect that in the policy we put in place here. Yes, we need to be comparable to and aligned with the U.S.

Mr. Eli Turk: Yes, we obviously need to take into consideration our largest trading partner. As I said, for our sector the integration of the North American electricity grid is a key component, so a North American perspective is very important to any kind of solution.

Mr. Mark Warawa: Thank you.

The Chair: Thank you, ladies and gentlemen.

I want to thank Mr. Hyndman and Mr. Turk for coming in and making presentations.

There was a request from Mr. Ouellet and Mr. Watson for some additional information, so I ask that you forward those materials to the clerk if you have them available to you.

With that, I'll have a motion to adjourn.

Thank you, Mr. Woodworth.

We're out of here.

The meeting is adjourned.

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