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Chair

Mr. Laurie Hawn



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● (0905)

[Translation]

The Chair (Mr. Laurie Hawn (Edmonton Centre, CPC)): Good morning, everyone. We have quorum.

[English]

Welcome to meeting number 12 of the Legislative Committee on Bill C-30.

We have three witnesses today. Mr. Michael Cleland, president and chief executive officer of the Canadian Gas Association, will lead off. He will be followed by Mr. Matthew Bramley, director for climate change, for the Pembina Institute. Finally, we have Gordon Lambert, vice-president for sustainable development of Suncor Energy Inc.

I would point out to committee members that we have the procedure and House affairs committee meeting right after us at 11. We want to move along fairly quickly, since they are the whips and House leaders. We don't want to make our bosses angry.

So we'll move along fairly quickly. As a reminder for the witnesses, we'll be giving you each about 10 minutes—preferably 10 or less—to make some opening remarks and then we'll be putting it around to the members of the committee to ask questions.

I would give a reminder to all that this is about Bill C-30. We know people have a lot of things to say, but we'll try to keep it focused as much as we can on Bill C-30 and ways that we can make it better.

Without further ado, I would ask Mr. Michael Cleland, president and chief executive officer of the Canadian Gas Association, to make some opening remarks.

Mr. Cleland, the floor is yours.

Mr. Michael Cleland (President and Chief Executive Officer, Canadian Gas Association): Thank you, Mr. Chairman. I will endeavour to respect your time limitations.

Thank you and the committee for the opportunity to appear here with some comments on Bill C-30.

Just very briefly, the Canadian Gas Association is the association that speaks on behalf of the downstream end of Canada's natural gas system, the delivery end. In essence, we deliver natural gas to almost six million Canadian customers, businesses and residents alike, from coast to coast in Canada.

Today I will indeed focus mainly on Bill C-30, but I wanted to start by saying a couple of things about how natural gas fits into the system, about our record on GHG management, and then about Bill C-30. Then I will give a couple of other perspectives on the other part of the debate, which really doesn't come up very much when we talk about industrial emissions.

Just on natural gas, the numbers are in the documents we've left you. I won't go through those, except to say that natural gas accounts for a little over one quarter of the energy used by Canadians, and it's growing. It's growing particularly in power generation—particularly in distributed generation applications—and it has potential for growth in transportation, albeit from a very small base.

The reason for that is pretty straightforward. Natural gas, for a variety of reasons, is a very preferred form of energy. It's flexible; it's clean; it's reliable; it's in abundant supply; and it can make important contributions to both our air quality objectives and our climate change objectives. Natural gas should be an important part of Canada's strategy for dealing with climate change.

In terms of my industry's record on greenhouse gases, we're a relatively small contributor in a direct sense—from the industry. But we are part of the process; we would be part of any regulatory process or system that is put in place. We have in fact made some progress in the reduction of our GHGs: from 2000, about 6%, and actually a little bit less than that from 1990.

Let me turn to Bill C-30. First of all, on target setting in general, CGA strongly supports the idea of a framework that has short, medium-, and long-term objectives for targets. We think that sets the kind of long view that's essential, as well as the short view needed to get us moving. But should it go further? Should it include actual detailed targets in the legislation? I would argue that there are some important reasons for not doing that.

With respect to Kyoto per se, we've said before parliamentary committees, and I'll say again, that there is no physical way of achieving Kyoto, and we would argue that building Kyoto targets into Bill C-30 is indeed to set it up for failure when Canadians are asking us to focus on possibilities for success.

I would argue as well that in any event legislation is not the place for this type of detail. Legislation should set the framework, and the authorities to regulate and the detail should be incorporated in regulations. More detail at this stage means a less stable framework as we look forward.

Moving on to the natural gas distribution sector and the targets we might set, I won't go into the details except to say that we have done a lot of work with Environment Canada. We have the data in hand. We are in fact well on the way to understanding how we could comply with any reasonable regulatory framework, and we therefore urge you to get on with passing Bill C-30 and the government to get on with getting that framework in place.

I want to comment on the issue of intensity-based reductions. I know it's controversial. Our point is simply that an intensity-based system allows you to focus on what you can control, not what you can't control, and is simply a management system. An intensity-based system, depending on how big the numerator and the denominator are, can ultimately produce absolute reductions. We should try I think to get past that debate and focus on putting a practical management framework in place.

With respect to air contaminants—I know this hasn't been the main focus, but it is part of Bill C-30 and it's important—we think we need to be moving there as well. But we're not in a position, and I don't think most industries are in a position, to move as quickly, because we haven't done the homework. We've been doing a lot of homework on greenhouse gases; we need to do a lot more on air emissions.

In any event, air contaminants and local air pollution are more complex issues in some respects. Therefore, we would argue that it is entirely appropriate to include both air contaminants and GHGs in the same legislative framework, but they probably need to move on somewhat different tracks in a regulatory sense.

In the meantime, we are getting on with it. We have hired a third party to do an inventory of air contaminants from our industry, and we expect to be in a position to move on that front reasonably quickly.

There are two points on compliance options that I want to emphasize. I know they are being debated at this table. We would argue that there should be a menu of compliance options, and two in particular that we think are important.

First, within a domestic offset system, we should allow for offsets related to utility demand-side management programs—something that we and the electrical industry both do. Since 2000, gas utility efforts have reduced natural gas use by something over 700 million cubic feet. That's the equivalent of about 250,000 households' heat and hot water. We can do more on that with the right incentives. We think one of the incentives that would help us do more would be to allow demand-side management offsets as one of the suite of compliance options.

Another part of the compliance options that we would argue in favour of is a technology investment fund. This is something that can allow us to invest in the future. It can be structured in a way to give some upside cost protection to industry. I would only add that it's important that such a fund be able to invest in a variety of technologies, including, we would argue, downstream-related technologies.

I won't spend a lot of time talking about compliance assessment, monitoring, and reporting, except to say that as you think about Bill C-30, think about ways of making that more efficient, as well as

effective and transparent. There are a number of measures, in our submission, that would allow you to do that.

Finally, on equivalency agreements, CGA supports that as a mechanism that allows you to avoid overlap and duplication if the provinces want to step up.

One last thing is that there is a specific issue in Bill C-30, as structured, that in effect would require reporting every time somebody turns on their furnace. The release of a greenhouse gas, including CO₂, would need to be reported under the way it's worded at present. I don't think that's the intent. It's a minor thing, but it's probably something about which something should be done.

Mr. Chairman, wrapping up, let me just say that the other side of the equation, the non-industrial side, is that about half the energy we use in Canada is used in our communities. We have to come at that differently. It doesn't work in a regulatory framework. There are other things we can do and do more of. One of them is to significantly accelerate our energy efficiency and conservation efforts to take a more systematic approach, building on the good work that has been done over the past decade. We need to do more, though.

Building on that, we should include fuel switching as part of energy efficiency and conservation efforts. To put that in perspective, by using natural gas in a direct-burn application, as opposed to using electricity, you can get about a 50% increase in efficiency over the most efficient stand-alone electrical generation option. Notwith-standing the size of that prize and the opportunities it affords, a lot of energy efficiency programs across Canada, including in the federal government, don't treat fuel switching as a legitimate mechanism. We think it should be treated as such.

Finally, there's technology development. We strongly urge that we make sure we have the programs in place to support new technologies downstream as well as upstream. Downstream includes small-scale fuel cells, on-site renewables, combined heat and power, and making best use of the gas and electricity grids as they exist in our communities today. We can make a lot of progress in the next five years by doing a demonstration of those sorts of technologies.

Mr. Chairman, I'm over time, so I'm going to leave it at that and pass it back over to you.

• (0910

The Chair: Thank you for that. You had thirty more seconds, so that's okay.

We'll turn now to the Pembina Institute, and Matthew Bramley, the director of climate change, for ten minutes, please.

Mr. Matthew Bramley (Director, Climate Change, Pembina Institute): Good morning.

[Translation]

Thank you very much for your invitation to appear before you today.

[English]

Today I'm representing both the Pembina Institute and the Climate Action Network of Canada. I'd like to elaborate today on one of the recommendations contained in the package of proposed amendments to Bill C-30 that was submitted by some 23 Canadian environmental organizations.

The recommendation is that the bill require that regulations provide for, one, a fixed cap on absolute emissions that extends the Kyoto-level target to heavy industry for the 2008-2012 period; and two, an allowance trading system to facilitate efficient allocation of emissions reductions. This is an extremely important recommendation for us because heavy industry accounts for almost half of Canada's greenhouse gas emissions and because those emissions have been increasing more rapidly than the national total.

I prepared a seven-page technical document that describes how this recommendation could be implemented. It's entitled "Fair Share, Green Share: A proposal for regulating greenhouse gases from Canadian industry". Unfortunately, we were not able to prepare a French version in time for this morning, but we'll make one available in the next day or two. Meanwhile, the English version is available now on the Pembina Institute website and on request.

There's a strong consensus in Canada that greenhouse gas emissions from industrial facilities must be regulated, but a critical question remains. That question is how stringent regulated targets should be, and how quickly they should be applied. The government has indicated that targets should not actually reduce emissions below current levels until the 2020-2025 period, and that targets should not apply until the end of 2010. We believe this falls very far short of what is needed.

I'd like to emphasize four key points of context for answering this question of how stringent targets should be and how quickly they should be applied. First, not only does heavy industry account for almost half of Canada's emissions, but the two biggest contributors—electricity generation and upstream oil and gas—have increased their emissions by 35% and 58% respectively between 1990 and 2004, significantly more than the increase in emissions from individual Canadians. Clearly the situation is not acceptable.

Secondly, meeting Canada's Kyoto target is a legal obligation. This obligation has been a part of international law for two years, and we believe the time when we could have a debate about the target as a take it or leave it option has long since passed. The government must focus on meeting our legal obligations, not call them into question. Canadians want their country to be law-abiding.

Third, the overwhelming consensus of climate scientists is that cutting greenhouse gas emissions is not just essential but urgent. To play an adequate role in preventing dangerous climate change, Canada needs to reduce its emissions to 80% below the 1990 level by 2050, as other jurisdictions are now committing to do. To meet this target, Canada's emissions must fall to around 25% below the 1990 level by 2020.

Fourth, the Kyoto Protocol provides mechanisms for taking immediate responsibility for our emissions by investing in emission reductions in poorer countries while we begin the work of implementing deep emissions cuts at home. I'd like to make it as

clear as I possibly can that this has absolutely nothing to do with socalled hot air credits from Russia. Instead, I'm talking about the Kyoto Protocol's clean development mechanism, under which billions of dollars in investments are being made right now in specific emission reduction projects that have to go through a rigorous transparent process to show that the reductions are genuine.

Because greenhouse gas is spread all around the world, emission reductions are equally valuable in preventing dangerous climate change in Canada wherever in the world those reductions take place. Our proposal, then, is to set, for the 2008-2012 Kyoto compliance period, Kyoto-level absolute emission targets at 6% below the 1990 emissions level for each of the electricity generation, upstream oil and gas, and energy-consuming sectors. These targets could be met by combining on-site emission reductions with domestic or international Kyoto-compliant emission reduction credits generated from projects that generate demonstrable reductions beyond business as usual.

We also propose a compliance option of payments at \$30 a tonne of carbon dioxide equivalent, to an independently administered greenhouse gas reduction trust that would be mandated to reinvest all revenues in domestic offset credits from projects located such that revenues stay in their province of origin.

● (0915)

For the post-2012 period we'd like to see an announcement by government of an intention to gradually tighten targets to reach the vicinity of 25% below the 1990 emissions level by 2020; to limit purchases of international credits as needed such that the market price for domestic credits is at least \$30 a tonne of $\rm CO_2$ equivalent, rising to at least \$50 a tonne by 2020; and to auction a steadily increasing proportion of allowances.

This proposal has been designed to meet six key objectives. The most important of these is environmental fairness. The proposal meets this objective by requiring heavy industry as a whole to contribute to achieving Canada's Kyoto obligations in proportion to its share of emissions. Heavy industry accounts for close to half of Canada's emissions and would contribute close to half the reductions needed to meet the target.

The proposal ensures environmental fairness by requiring the most emission reductions relative to business-as-usual levels from the sectors contributing most to emissions growth post-1990, which is the internationally accepted base year for emission reduction commitments.

The proposal also meets the critical objective of economic feasibility, because it distinguishes sectors according to their ability to pay. I'd like to take a moment to justify that statement.

The proposed targets represent reductions in emissions relative to a business-as-usual projection of approximately 11% for the energy-consuming sectors, 36% for electricity generation, and 46% for upstream oil and gas. I'll discuss each of these in turn.

The target for the energy-consuming industries is obviously modest. The proposed emission reduction of 11% relative to business as usual is close to the 12% reduction proposed by the previous government that was broadly accepted by industry. These industries could face difficulty in taking on a more stringent target as they are relatively mobile and exposed to international competition.

The electricity generation sector can manage a more stringent target because the need to generate electricity relatively close to the consumer means the sector has little vulnerability to international competition, and in addition, electricity prices in Canada are often regulated. Costs should be reduced by widespread government support for electricity conservation, low-impact renewable energy, and cogeneration, helping reduce the quantity of emission reductions that electricity producers would have to pay for themselves.

Assuming that such government support existed and that coal phase-out in Ontario proceeded rapidly, the cost to the remaining coal-fired generators would be between about $0.6 \, \varepsilon$ and $1.3 \, \varepsilon$ per kilowatt hour. This could be compared to an average residential price of electricity in Canada of nearly $9 \, \varepsilon$ per kilowatt hour in 2004.

The upstream oil and gas sector also has relatively little vulnerability to international competition because its profit margins are large and because resources such as oil sands cannot be moved to a different country. Even though the proposed emission reduction of 46% relative to business as usual may seem large, it is similar to the 50% reduction that Shell Canada has voluntarily committed to achieve by 2010 for its first oil sands operation.

We calculate the cost to an oil sands producer would be only between about 58¢ and \$1.16 per barrel in U.S. dollars. This is a small amount compared to recent variations in crude oil prices.

The calculations of the costs I've just outlined are very straightforward, and I'd be happy to explain them during questions.

I'd like to add that our proposal also meets four other important objectives. It provides environmental integrity by setting targets in terms of actual emissions, not emissions intensity, and ensuring that all options for compliance represent real, near-term emission reductions.

It provides for urgent domestic action by signalling an emissions price of \$30 a tonne, designed to stimulate large-scale development of low-emission technologies such as carbon capture and sequestration.

The proposal provides for geographic balance via the guaranteed \$30-a-tonne domestic compliance option that would provide an alternative to investing in international projects.

Last but not least, it provides for certainty: price certainty for industry, by initially limiting the cost of emission reductions to \$30 a

tonne; quantity certainty in the form of a clear outcome for actual emissions levels; and broader regulatory certainty by including indicative information about targets and prices out to 2020 and by adopting a design that will be robust for the long term.

I'd also like to note that although the proposal is applied on a sectoral basis, it would not be very different if it were applied on a territorial basis because of the way the three key sectors are distributed regionally.

● (0920)

In conclusion, requiring that industry assume a fair share of responsibility for cutting greenhouse gas pollution will not only get us nearly halfway to Canada's Kyoto target, it will also put Canada on track to have the world's cleanest oil and gas production, a 21st century electricity system, and eco-efficient manufacturing. We believe this is the vision we need to be aiming for.

Thank you.

The Chair: Thank you, Mr. Bramley.

We'll move on to our third witness, from Suncor Energy Inc., Gordon Lambert, vice-president, sustainable development.

Before we start, I'll say that the briefs from Suncor and the Canadian Gas Association were sent out over the Internet, so everybody should have them.

Mr. Lambert, for ten minutes the floor is yours.

• (0925)

Mr. Gordon Lambert (Vice-President, Sustainable Development, Suncor Energy Inc.): Thank you, Mr. Chair, and thank you, members of the committee, for this opportunity to present some perspectives of Suncor Energy on the issues of climate change, clean air, and our energy future.

I would like to begin by suggesting that we have a need to reframe the dialogue on the issue of climate change. I think over the last decade one of the key reasons that we've not been able to make the progress that's required on this difficult issue is that it's been a discussion centred on equitable allocation of pain. That's pain between provinces, between sectors of industry, and within Canadian society. Of course, we all know equity is in the eyes of the beholder, and that's a negotiation that we feel is doomed to fail.

We think the more powerful platform to discuss these issues from is to focus on opportunities. Those are opportunities to develop new forms of renewable energy, biofuels, new technologies like $\rm CO_2$ capture and sequestration, and energy efficiency improvements in how we use energy across our economy. We also believe an opportunity mindset relates to the setting of mid-term and long-term emission goals and also goals related to technology advancement and development as a key enabler towards energy and environmental sustainability.

I would highlight in this regard the recent work by the National Round Table on the Environment and the Economy that looked at what Canada's energy future might look like by 2050. We believe this is a compelling piece of work that needs to be carefully studied as a platform for climate change policy looking forward. However, to create that energy future that's more climate friendly and also contributes to clean air is going to require engagement of capital markets. Private sector capital is the only vehicle that's going to allow for the significant transformational change that's going to be required.

We also believe that sustainable development is the right context for approaching these difficult issues. The notion that a strong economy, a healthy environment, and social well-being are interdependent, we believe, still sets the platform for creative solutions as we look at difficult issues. These aspirations are interdependent and they compel us to think more broadly and creatively about the solutions as we look ahead.

In addition, I'd like to focus on some foundational assumptions for sustainable solutions. First and foremost in Canada is that we have had a legacy of abundant and cheap energy that has shaped Canada in a fundamental way. This is the reason Canada is not like Europe in terms of our vehicle fleet, our urban density, the size of our homes, and mass transit. We accept that as Canadians and as a global community we cannot continue to produce and use energy in the same way we have done in the past. This is at the heart of our urban air quality issues, climate change, and even quality of life concerns as we continue to expand our urban footprints.

In saying that, we also need to recognize that we are all part of the problem and we all need to be part of the solution. When we look at the issues of climate change and urban air quality, it's not just bad guys and good guys. It's not simply a case of industry being the problem and consumers being viewed as separate from it. You can't separate the supply of energy from the demand for energy by each of us as consumers. Industry, including the oil and gas industry, should be viewed as an essential part of the solution. Where else in society do you find the depth of technical, business, and commercial expertise, and, most importantly, the access to investors than in industry? We're prepared to be a positive part of that solution.

In order to make the progress we need to make, we have to engage capital markets and private sector investment. There is no amount of government money that's ever going to fund the transformational change that's required towards real sustainable solutions over the long term. As we reflect on the target-setting discussions that this committee is deliberating on, I think the real concern we have is targets that would erode investor confidence and that would be unintended consequences. That would be unacceptable I think for all of us

• (0930)

Now I would like to cite a positive example of what engaging capital markets can look like. I would use wind power as the example.

In the year 2000, Canada was the lowest of any of the OECD countries in installed wind power capacity. Governments, collectively, declared the intent that wind power should be part of Canada's energy mix. There was an in-depth analysis by environment NGOs, industry, and government together to analyze why capital was not flowing to wind development in comparison to other countries. The wind power production incentive program and the recently announced eco-energy renewable incentives program were established, and they have contributed to substantial growth in this sector. Rather than provinces avoiding an equitable allocation of paying, they're actually competing for investment of wind power.

Suncor, with its partners, has now invested \$306 million in 147 megawatts of new capacity. This was not done to comply with an obligation; it was done because the signals were put in place that attracted capital to this segment of the energy sector.

An additional example of positive engagement is the recent dialogue on biofuels. Ethanol development was declared as a common objective of provincial and federal governments. Investors have been consulted on required policies and measures. There was a combination of carrots and sticks put in place, including financial incentives, excise tax treatment, and renewable fuel standards.

In response to this direction, Suncor has now invested \$120 million in a world-scale ethanol plant in Sarnia, Ontario. We're looking to double the capacity of that plant in the near future. We're also testing biodiesel with the Toronto Transit Commission in 1,400 buses

We have more capital expenditures and projects planned across Canada. I would suggest other segments of industry are looking at biofuels in a similar way, as a growth opportunity, and an exciting one at that.

As we pursue change through development of this act, I think it's also important to keep the end in mind. In that regard, we think the National Round Table on the Economy and Environment's greenhouse gas reduction study shows where some of these key opportunity areas are. They include: carbon capture, energy intensity improvement of industry, biofuels and alternate fuels, renewable electricity, and many forms of energy conservation.

We believe that in order to move that vision forward, we need to engage expertise that would focus on each of those individual wedges to carefully assess what policies and measures could be put in place that would attract the capital to make that happen.

In addition, we believe target setting should take the form of outcomes for each of the wedges that have been put forward. As with wind power, where we talk about megawatts of installed capacity by certain points in time, we believe that same approach to target setting could be taken in other areas. The CO₂ benefits of that would then be calculated as part of our progress towards Kyoto compliance.

Where do we go from here? In summary, we think we should use the Clean Air Act as an instrument to regulate very defined and targeted industrial energy efficiency and performance outcomes. Our industry sees the requirement for regulated internal energy efficiency targets, but those should be focused on bending the curve initially, as opposed to a hard cap. We believe we should initiate focused expert panels on the other key opportunity wedges as outlined by the national round table study. These could include areas such as $\rm CO_2$ capture and sequestration and mobilizing investor capital to make those opportunities happen.

Explore the full range of policy approaches: incentives, fiscal, regulatory.

● (0935)

Let's work to formalize a vision for Canada's energy future that ensures future generations have a healthy environment, a strong economy, and quality of life.

Thank you.

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

We'll start our seven-minute round.

Mr. Godfrey, go ahead for seven minutes, please.

Hon. John Godfrey (Don Valley West, Lib.): Thank you very much to all the witnesses.

I'd like to begin with Mr. Lambert's responding to some of the things Mr. Bramley has said. One of the points Mr. Bramley made in his presentation was, in the context of the oil sands, on the actual cost per barrel of meeting our Kyoto targets. He estimated that to be between 58¢ and \$1.16 per barrel.

Would you care to comment on that?

Mr. Gordon Lambert: As in many forms of analysis, the devil is in the details. I would not be able to respond until I understood more fully the assumptions that were underlying that.

I would also premise that by saying access to the Kyoto mechanisms and purchase of international reductions would be absolutely essential as an element of a plan of that type, but of course the cost of these emission reduction credits through the CDM is quite uncertain going forward, and, again, the assumptions that would be at play would be critical.

Hon. John Godfrey: Do you have any objection to international credit purchase through things like the CDM?

Mr. Gordon Lambert: We think you need as many tools in the tool box as possible. In fact, we'll need every tool at some stage of the game. What we believe, first and foremost, is that there is a need to advance new technology opportunities domestically, and it's one of the key reasons that CO₂ capture and geological sequestration, to us, are front and centre. We believe Canada could be a global leader in demonstrating how to do this on a material scale. We have the

geology, particularly matching oil sands CO_2 emissions with mature, conventional oil and gas reservoirs in central Alberta, to do something that would be bold and exciting and that could be taken elsewhere in the world.

Hon. John Godfrey: Some people, Mr. Lambert, have suggested that given the rapid rate of expansion of the oil sands, we ought to be working on developing carbon capture and sequestration before we allow for further expansion. In other words, there ought to be a precondition that that technology be established so that the future growth of the oil sands could be in a less carbon-intense fashion.

What would your reaction to that be?

Mr. Gordon Lambert: The lead times are going to be quite significant to put in place the gas-gathering system that's required. We're looking at large-scale collection and gathering systems, and we're also going to need to put in place facilities within our plant operations to treat that CO₂ in order to get the quality of CO₂ necessary for injection. It's kind of a chicken-and-egg dilemma. We would only install those CO₂ treatment and capture facilities on our sites as part of the growth of that resource.

Hon. John Godfrey: I didn't hear you deny the possibility of having the carbon capture and sequestration process accompany—indeed precede or at least accompany in a parallel fashion—the expansion of the oil sands, rather than having the oil sands expand first and then trying to figure out how to capture the stuff afterwards.

Mr. Gordon Lambert: The ideal, in our view, would be a parallel-path approach in which we would do both the CO₂ capture infrastructure and the development of the resource.

Hon. John Godfrey: Mr. Bramley pointed out that Shell Canada, for one of its existing plants, has set a voluntary target of 50% reduction of greenhouse gases by 2010. How applicable is this to other companies or other facilities? In other words, if Shell can do it at a rate of 50%, why shouldn't others do it at a rate of 46%?

Mr. Gordon Lambert: We're keen on understanding what Shell is planning to do to achieve that target. I know they are spending a lot of effort on meeting that. It will involve significant purchases of reductions internationally. Again, we're not sure exactly what the cost of that could be. Our own preference, quite simply, and you'll see that as a company, has been to invest within Canada in the renewable energy area—in wind power development, biofuels development, and new technology—and we'd like to see that as the way forward. Although it is not a quick and easy answer—it's more of a long-term approach—we believe that use of capital is more beneficial for the country in the longer term.

• (0940)

Hon. John Godfrey: At what point, with best efforts being applied—real urgency and real incentives and indeed real regulation—do you think the oil sands specifically could pass from intensity targets to hard caps? Understanding that hard caps might be arrived at through a combination of international trading through some of these other things you're describing, like ethanol, wind, and all the rest of it, at what point can you imagine us stopping the absolute growth of emissions in the oil sands, given all the oncoming technologies?

Mr. Gordon Lambert: I couldn't pin that down to an exact year. Some of this is based on what pace is innovation and technology deployment going to occur at during this timeframe. I can tell you that the pace of innovation is going to, quite simply, increase dramatically for many reasons.

But reducing the resource intensity of oil sands development is important to the industry. We see that the 2050 long-term objective for bending the curve is something that we think is achievable. The trajectory that was set out by the government on bending, flattening, and then lowering that trajectory we think is a good model to adopt.

The Chair: We have to move on. Thank you.

Mr. Bigras for seven minutes please.

[Translation]

Mr. Bernard Bigras (Rosemont—La Petite-Patrie, BQ): Thank you very much, Mr. Chairman. I would like to start by welcoming our witnesses.

A year ago, I was very struck when I heard a news item about Suncor Energy Inc.'s financial situation. For the quarter ending March 31, 2006, the company announced an increase in sales from \$294 million to \$1.3 billion a year. In addition, its profits increased from \$67 million to \$713 million. Suncor Energy Inc.'s economic and financial position is very rosy.

However, we would have liked to have seen a greenhouse gas reduction plan that matched your glowing financial results.

Since your profits are high, your sales are growing and the costs to reduce greenhouse gases are quite low, why would the company fear a very ambitious greenhouse gas emissions reduction target? Your financial situation is considerably better than that facing many other industries.

[English]

Mr. Gordon Lambert: It's not a matter of simply financial capacity. When you look at our plant operations, we have different vintages of facilities that we operate. Those facilities that have been built in the past quite simply aren't as efficient as the new facilities that are being brought on. We can't transform that older vintage equipment overnight. It just doesn't happen that way.

But it's important to note that if we had had the same energy intensity today as we did in 1990, we would be emitting more than 40 megatonnes of greenhouse gases more than we do today. So we have bent the curve very substantially through just continuous improvement orientation.

The next generation of oil sands facilities, though, are going to be substantially more efficient than the current ones, and we do see technologies coming into play in the very near to medium term that are going to make some significant improvements. So the money is going to go toward reducing our energy intensity going forward.

• (0945)

[Translation]

Mr. Bernard Bigras: The Alberta Chamber of Resources has forecast an increase in greenhouse gas emissions caused by tar sands production of some 285%.

Could you confirm for us that there will be an increase in greenhouse gas emissions caused by tar sands of some 200% over the next few years?

I have read your brief. On page 2 and page 5, you boast about the fact that the intensity of Suncor Energy Inc.'s greenhouse gas emissions is 25% lower than it was in 1990. If a 285% increase in the absolute value of greenhouse gas emissions caused by tar sands production is forecast, are you not misleading people when you put forward such figures, because they do not portray the situation accurately?

[English]

Mr. Gordon Lambert: First of all, we report publicly on our greenhouse gas emissions on an annual basis, and have for many years, for more than a decade. Most recently, we just issued our 15th annual greenhouse gas report, so we're not hiding anything from anyone. Anyone can go and find out what we're doing on this issue.

But it is true that as production volumes from the oil sands grow, we're not repealing the laws of physics. Greenhouse gas emissions go up. They go up less than they otherwise would have, and that's a societal choice.

We're not the owners of the oil sands resource. The people of Alberta and Canadians are. We want to develop it as well as it can be done and to do it better over time as well. But the development of the oil sands resource is a choice that Canadians have, and it doesn't come without environmental consequences.

On the flip side, we're heavily regulated, one of the most heavily regulated industries anywhere.

[Translation]

Mr. Bernard Bigras: I would like to turn now to the carbon market. An article in this morning's *Le Devoir* said, and I quote:

Moreover, the Toronto Stock Exchange is of the opinion that targets based on reducing GHG intensity rather than on absolute reductions, as provided for in the Kyoto Protocol, is not the best approach if we want an efficient market.

That comment was made by some representatives of the Toronto Stock Exchange yesterday. Does your proposal to have intensity-based rules rather than absolute rules for the reduction of GHGs not compromise efforts to set up a carbon market in Canada?

This question is to all our witnesses.

[English]

The Chair: May we have short answers, please.

Mr. Gordon Lambert: First of all, I think that question was a good illustration of what I was highlighting in my presentation, the difference between a negative orientation versus a positive one.

We think new technologies like CO₂ capture are where the real reductions are going to occur long term. And let's have the dialogue about what's necessary to attract the capital needed to make that happen, as opposed to punitive targets that would erode investor confidence and undermine our ability to finance the environmental improvements we're talking about today.

Mr. Michael Cleland: I have two comments on that. First of all, there are going to be a lot of impediments to the development of a carbon market in Canada. Canada is way too small to be a carbon market itself, so until we can develop links to the rest of the world, it won't work. A number of other impediments are going to be there.

But let's also be sure we don't have the tail wagging the dog. The objective is not to have a carbon market. The objective is to reduce the greenhouse gas intensity and ultimately the greenhouse gases in the economy.

The carbon market can be facilitative. The issue is, let's get the signals in place that make people's investment decisions move in the right direction. Over time, a carbon market will likely emerge.

(0950)

Mr. Matthew Bramley: I would add that there is value in being able to link with other carbon markets. The world's largest carbon market is currently in the European Union, and the European Commission has made it clear there wouldn't be any possibility of Canada being able to link to the European market if we have intensity targets.

But I think the biggest problem with intensity targets is that they have a track record of abuse by governments. We've seen the intensity targets for greenhouse gases set by the Bush administration and by the Government of Alberta, which have been presented as representing major steps forward, as major emission reductions, whereas in reality they allow emissions to continue to increase.

We need targets that can be easily understood by everyone; that are related to the environmental goal, which is emissions, not emissions intensity; and that maximize accountability.

If the government wants Canada's emissions to continue to increase, it can still set absolute targets, but at least everyone would be clear as to exactly what was intended.

The Chair: Thank you.

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

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

Thank you to the witnesses.

I would encourage the witnesses to take a look at the testimony we received last night from three of the panellists who presented on the IPCC reports. I think it's actually the latest condemnation of the economic model we've driven forward in the last 100 years. They're

very conservative estimates by these 2,300 climatologists, but the results of the studies are that action is needed and it's needed urgently.

Yet when I heard some of the testimony today, it felt as if we have the luxury of time. We can develop carbon sequestration over time. There are estimates of \$60 per tonne by some within the industry and \$30 per tonne by some outside the industry.

Mr. Bramley, you spoke to this recently.

I recently had an argument with the Premier of Alberta because he said Alberta had been the most aggressive when it came to seizing and controlling emissions of CO₂, and he claimed a 19% energy efficiency improvement over 1990 levels. Alberta's CO₂ emissions went up nearly 40% while those improvements were being made.

How intellectually honest is it to suggest you're being aggressive in reducing emissions when emissions have gone up almost 40%?

Mr. Matthew Bramley: Well, we always have to be very careful with the word "reduction" because a reduction is always a reduction below something. The kinds of reductions often talked about are reductions that are only in a very relative sense below some future projection of rapidly increasing emissions. I would say they very often do not represent reductions in common-sense understanding.

The Alberta target is an interesting one to pursue for a moment. It is a target to reduce the emissions intensity of the Alberta economy by 50% over 30 years, from 1990 to 2020. We calculated that if the Alberta economy continued to grow in the present decade and in the next decade at the same rate that it grew in the 1990s, Alberta would meet the target of reducing intensity by 50%, while actual emissions would grow somewhere between 65% and 85%. I think it's a pretty clear illustration that we're not getting to the kinds of destinations the scientists say we need to get to with that approach.

When the Alberta target was announced, the government created the impression in the media coverage following the announcement that somehow this was simply a delay of Kyoto targets and it was in fact going to be much better than Kyoto, only delayed by 10 years. The reality is obviously very different.

It's an example of the abuse of intensity targets. For honesty's sake and for transparency's sake, I think we need to have targets expressed in terms of actual emissions that everyone can understand.

Mr. Nathan Cullen: I have a question for Mr. Lambert.

I think you referred to Kyoto compliance at one point when answering an earlier question. Does your company believe Canada should honour its Kyoto obligations?

Mr. Gordon Lambert: Quite frankly, we try to focus on what we have control over, which is our pursuit of technology, renewable energy, and biofuels, helping to create the energy future that we think is going to be required.

Yes, we pay attention to the Kyoto Protocol and the mechanisms. But given the lack of general progress on policy development within Canada, we haven't found it very productive to look to governments for guidance.

Mr. Nathan Cullen: You've probably been wise up to this point.

The question I have is with respect to when you talked about a social, environmental, and economic pyramid that you almost rely on

I spoke to the mayor and the council of the regional district of Wood Buffalo up in Fort McMurray, and they've asked for a moratorium on future expansion. What's currently on the books right now for new investment money going into the oil sands?

• (0955)

Mr. Gordon Lambert: I don't have that figure in front of me.

Mr. Nathan Cullen: Is it tens of millions, hundreds, or billions?

Mr. Gordon Lambert: Yes, it's certainly in the tens of billions of dollars.

I think it's important, though, to reflect on this. What's driving that growth? It's the demand for transportation fuel for planes, trains, and automobiles. There are currently no substitutes for hydro-based transportation fuels. Until we start tackling the demand side of this equation as well, the requirement for oil is going to continue in the world

Mr. Nathan Cullen: Do you believe in the principle of the polluter pays, in the sense that we've now identified CO₂ emissions as a form of pollution that causes harm?

I'm from northwestern British Columbia. We've seen the pine beetle, and it's now in your neck of the woods. We've seen the economic and social ramifications of this pollution. Do you believe that cost should be captured by business?

Mr. Gordon Lambert: The polluter-pays principle is a very good discussion to have. I think it's important to define how to draw that circle. If we draw that circle solely on the production side of the equation and ignore the demand side of the equation in terms of who the polluters are, we're never going to get the level of engagement in our society that's going to be necessary for the transformational change we're talking about. In other words, I'm suggesting that for each of us, when we drive our automobiles, if we don't become conscious of the fact that we're contributing to greenhouse gas emissions, both from our tailpipe and from upstream, then we're going to have a serious problem on our hands.

I'll finish with a reminder. If you look at greenhouse gas emissions from a barrel of oil, 20% are related to its production, 80% are related to its end use.

Mr. Nathan Cullen: Mr. Bramley, I'm confused. You've put out some numbers of what the investment costs would be, like 58¢ to \$1.16 a barrel. I'm sure industry will dispute that, but even if it were twice or as much as five times what your estimate is, why wouldn't industry make those investments? If oil is at \$50, \$60, to upwards of \$80 a barrel over the last couple of years, why not invest in that if it's such a marginal cost of the total?

The Chair: A short answer, please.

Mr. Matthew Bramley: The quick answer is that the industry does not face the regulated emission reduction requirement and the consequent price on emissions that would drive it to make those changes.

In addition, there's really no mystery about those dollar numbers I quoted. A typical oil sands production is emitting 100 kilograms of carbon dioxide per barrel. You can simply multiply that by a 46% reduction, and then multiply it by either something in the range of \$15 a tonne for international credits or upwards of \$30 a tonne for carbon capture and storage, and you come very easily to the numbers I've stated. I don't think there's anything particularly mysterious about those numbers.

The Chair: Thank you very much.

We'll move on to Mr. Warawa for seven minutes, please.

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

Thank you to the witnesses for being here today.

I appreciate the testimony that has already been provided. What we've done with Bill C-30 is broken it up into topics, and the topic today is the focus on large industry, oil and gas. That's what I want to focus my questioning on.

I find it interesting that we're focusing on the 50% of large industry—oil and gas—and there have been comments made on the other 50%, which is us as consumers. As consumers in Canada, in the world, we are fueling this hunger, this thirst for this energy. That's what's fueling the expansion. China has a huge hunger for all this energy.

We're a good country to put an investment in. We have a peaceful country. It's a good place to invest. I think that's why we see the investment coming to Canada, why the United States is looking at Canada, why the world is looking at Canada. I believe we are number two in the world, second to Saudi Arabia, in terms of natural resources for that good, clean energy.

But they are connected. And I think, Mr. Lambert, you alluded to that. You said we all need to do our part. So as a consumer I am trying to reduce the amount of energy I use. Each of us, I'm sure, has that responsibility to try to reduce.

But we're focusing today on how large industry, oil and gas, can actually reduce. I think what Mr. Bramley is saying is make large industry reduce the amount now. Don't let it gradually go in that direction; make them do it now. I don't want to put words in his mouth. He can clarify that in a moment.

There is an urgency. We've heard that. Climate change is happening, so we have to change. We've seen the charts. We've seen the graphs where emissions have gone up, climate change is happening, and we need to meet this target down here.

Capture, sequestration, I think, is where we're hoping your industry will go. You've made comments about that, that you want an incentive. You want a carrot and a stick. In the past we've used voluntary; we've used MOUs; we've said all sectors of industry will be part of reducing greenhouse gas emissions. But you've put a warning out there that we have to be careful that it's not just a stick, that it is a carrot.

You've also said that it will take time to build the infrastructure. You've studied. I've gone up to Fort McMurray. I saw the oil sands. I've read the material from Pembina. They've been very involved with this.

Our plan is to present regulations. We have notice of intent to regulate. The short term will be intensity-based and the mid term and long term will be real caps. That's the plan. Those short-term targets will be announced shortly. Are you concerned that that is too big a stick? I hope not.

Mr. Bramley, maybe you can comment too. Are we on the right track with Bill C-30, or do you feel it's too regulatory?

(1000)

Mr. Gordon Lambert: No, I'd say offhand that it's on the right track in terms of imposing regulated performance obligations on companies that would get us bending the curve toward a stabilization kind of goal in the mid-time period.

But I'd say in parallel with that regulated efficiency target would be an urgency to advance on the technology opportunities, so engaging at provincial and federal government levels with industry to really get aggressive on making CO₂ capture and geological sequestration happen in some sort of public-private partnership. That approach characterized the development of Canada's oil sands in the early days. Certainly, it was prior to climate change being on the radar screen, but that was a joint public-private collective effort to get the technology in place to develop the oil sands. Let's do the same thing now on CO₂ capture and geological sequestration.

Mr. Matthew Bramley: First of all, I have a problem with the emissions trajectory that was laid out in the notice of intent that accompanied the Clean Air Act announcement, because it has a target for 2050, which represents substantial emissions reductions—not, I would add, ones that are sufficient from the perspective of science, but nonetheless substantial emissions reductions by 2050. At the same time, the notice of intent foresees emissions from heavy industry remaining at or above current levels until as late as 2025. I simply don't see how that 2050 target could be credibly reached if we're delaying...or if we've got a back load in the action so far into the second portion of that period.

Second, I would come back to the very straightforward calculations I presented today. The oil sands producers can immediately take responsibility for a Kyoto-level target of emissions—

Mr. Mark Warawa: Mr. Bramley, could you answer my question?

If we have capture and sequestration, in what timeframe do you realistically see that as being in place? That's the question.

Mr. Matthew Bramley: There are already 18 megatonnes of carbon dioxide being captured and sequestered at a single site in

Texas right now. There are over 3,000 miles of mainline carbon dioxide pipeline systems already in existence in the U.S. This is not a technology that is 15 years down the road; it's a technology that exists and is already being deployed on a large scale. If this is what the industry wants to use to cut its emissions, that is only going to happen if the industry faces a price on emissions that is upwards of \$30 a tonne. That is what the target of the regulatory system will have to be.

● (1005)

Mr. Mark Warawa: In what kind of timeframe do you see that infrastructure in place and functioning?

The Chair: Please give a short answer.

Mr. Matthew Bramley: The work to put it in place could begin immediately, as soon as the clear expectation of a sufficiently high carbon price is there.

The Chair: Thank you, Mr. Bramley.

Mr. Holland is next.

Mr. Mark Holland (Ajax—Pickering, Lib.): Thank you, Mr. Chair, and thank you to the witnesses.

My first question is to Mr. Bramley.

A question was posed around the effectiveness of Bill C-30, but you didn't get a chance to answer. Would it be fair to say at this point that Bill C-30 really represents a series of minor amendments to CEPA, and that the work of this committee, in your opinion, might be that we have to make substantive amendments if we're to put forward a real action plan for dealing with climate change?

Mr. Matthew Bramley: I'm certainly troubled by the fact that the federal government does not currently have a comprehensive climate change plan. It has made a series of isolated announcements that do not address all the key sources of emissions in Canada. Bill C-30, as it stands, is essentially a set of fairly technical amendments to existing legislation; it's certainly not a climate change plan.

By the way, a climate change plan would have to be much more than simply a bill. In fact, we know the government could act immediately using existing legislation, CEPA, if it wanted to move ahead immediately to put in place regulated greenhouse gas targets. Given there is this opportunity to amend Bill C-30 and make it stronger, I see that opportunity essentially as one of turning what is currently "government may" legislation into "government shall" legislation—in other words, to put in some requirements to give increased confidence to Canadians that the federal government will be obliged to put in place some of the elements one would expect to find in a credible climate change plan.

Mr. Mark Holland: You spoke to the ability of the oil sands to achieve the Kyoto targets within the Kyoto period—by 2012, that is. It certainly has been said, and I know your organization has said, that over 50% of the growth in greenhouse gas emissions would come from the oil sands on a business-as-usual model. The type of growth contemplated by the government is upwards of, say, five times the current production of the oil sands by 2015; if that kind of growth were to occur, emissions would obviously be much more severe, yet the Pembina Institute put out a recommendation of carbon neutrality by 2020. I'm wondering if you could comment on how that would be achieved.

Mr. Matthew Bramley: In our analysis of how that sector could become carbon neutral by 2020, we considered a number of scenarios that combined purchasing offsets—in other words, financing emission reductions elsewhere to offset the industry's emissions—with deployment of carbon capture and storage at various different levels. I don't have the exact range of results in front of me, but to achieve that target, the middle range of the numbers was in the low single figures of dollars per barrel of oil.

Mr. Mark Holland: On the clean development mechanism and international trading of credits—perhaps we could hear from all the witnesses on this—I seem to get concurrence that a preference is to reduce emissions domestically, but that all options need to be utilized.

Would you speak as well to the ability, through using the clean development mechanism or other methods of international trading credits, to promote Canadian technology and utilization of Canadian technology and to assist, perhaps, with some of our foreign aid development goals?

Mr. Matthew Bramley: First and foremost, investing in real emission reductions in developing countries through the CDM is a perfectly legitimate way to take responsibility for emission reductions that are not achievable, in the very immediate timeframe, within Canada. It has a positive benefit on protecting Canada from climate change, because as we understand, emission reductions protect Canada from climate change wherever they take place.

There is no doubt that it's an opportunity also to export Canadian technologies. Unfortunately, currently only about 12 projects out of some 500 registered CDM projects have any Canadian involvement. This is a consequence of the lack of sufficient progress towards putting in place regulated targets for industrial emitters in Canada.

But I would agree with you as well that we should look at the CDM as a kind of specially targeted form of foreign aid, targeting investments that help Canada's environment but that also help developing countries get access to much-needed resources to get onto a more sustainable development path.

● (1010)

The Chair: I would ask the other two witnesses to be really brief, if you would.

Mr. Michael Cleland: I agree that the CDM mechanism is a good idea and that it's an important part of the Kyoto framework, but it's a part. The transaction costs for CDM projects are high, including a lot of senior executive time to actually pull them off. Hopefully that will come down over time.

The other thing is that unless the investment is close to their core business, it's hard for a lot of businesses to say that's where they should go. Your core business is your production process, your marketing process. For some businesses it's a natural; for others it would be quite a stretch.

Mr. Gordon Lambert: The dilemma we have as a company is that the CDM is an important instrument, and we see it as a part of the tool box, but it's actually an easy way to go forward, as opposed to doing the heavy lifting required to develop the new technologies we've been chatting about today. It's a case of what the best long-term answer is. We believe it is going to be developing and deploying new technologies, and not using CDM as a substitute for them

The Chair: We're going to Mr. Jean, but before we do, I'll just remind folks that the topic today is large industry, oil and gas; it's not tools. It might be argued that CDM is a tool, so we'll just try to refocus a little bit.

Mr. Jean, you have five minutes, please.

Mr. Mark Holland: Let me make a point of order, if I could, just on that point.

It would be a tool used by oil and gas in this instance. Oil and gas was commenting on how they might use that tool to meet the reduction target, so I think it is extremely pertinent, and I was happy to hear from the industry in terms of—

The Chair: I understand. Let's just make sure that everything is related, one way or the other, to large industry, oil and gas.

Mr. Mark Holland: How is that not related?

The Chair: I'm not going to get into an argument with you, Mr. Holland. As I've done in the past, I'm trying to keep people focused on the topic of the day, knowing there is going to be some variance in it. We have been very lenient and will continue to be. This is just a reminder that the primary topic of the day is oil and gas. CDM can be part of it, but it's just a part.

Mr. Jean has five minutes.

Mr. Brian Jean (Fort McMurray—Athabasca, CPC): Thanks, Mr. Chair.

Did Mr. Holland cut into my time at all?

The Chair: You have five minutes.

Mr. Brian Jean: Excellent.

I want to ask Mr. Lambert a couple of questions.

Mr. Lambert, your company, Suncor, started in northern Alberta in 1965. Is that correct? Was it sometime around then?

Mr. Gordon Lambert: Yes.

Mr. Brian Jean: We listened to Mr. Bramley say that oil sands can't be moved to another country; that we have control of the oil sands and can't really move the production to another country. But oil is internationally traded, and the price is based on a world market. Is that correct?

Mr. Gordon Lambert: Yes.

Mr. Brian Jean: What is the range in cost per barrel of the oil sands in today's dollar? What does it cost to produce a barrel of oil today?

Mr. Gordon Lambert: In the ballpark of \$20 to \$30 a barrel.

Mr. Brian Jean: Saudi Arabia is the number one producer in the world, with the number one reserves; we're number two. What does it cost in Saudi Arabia to produce a barrel of oil?

Mr. Gordon Lambert: It's \$2 or \$3.

Mr. Brian Jean: So it's quite a bit more expensive to produce a barrel of oil in Canada.

Mr. Gordon Lambert: Yes.

Mr. Brian Jean: I've been in Fort McMurray for almost 40 years now. I remember something I'm not allowed to mention in Alberta, the national energy program, which was brought in by the Liberal government some time ago. What it did to our community and to Alberta's economy generally—I just want to talk about it very briefly. There were 25,000 people in the community at that time, I think. My parents were in business. Every private business in the area closed down within probably four or five years, putting many people out of work and into bankruptcy. It was based on something that you talked about, which was investor confidence.

I would just like to ask you what you see as the most important thing we can do as a government, on policy, in relation to what we're doing now on Bill C-30. Is it in relation to investor confidence?

• (1015)

Mr. Gordon Lambert: That's absolutely fundamental. If we impose a punitive target or a price on carbon that ends up being punitive, and shareholders aren't captive, they will simply exit the industry, which then hinders our ability to actually make the changes we're trying to make. It would definitely be one of those unintended consequences that would undermine progress on the environment.

Mr. Brian Jean: This is the last question on this. In 1986-87, Dee Parkinson was, I think, your president and CEO. At that time, Suncor actually considered closing its doors because of the profitability or lack thereof. Is that not correct?

Mr. Gordon Lambert: It was in 1987, yes.

Mr. Brian Jean: How many employees, currently, does Suncor have in northern Alberta?

Mr. Gordon Lambert: It depends on whether you count full-time and contract workers. At any point in time, on our site, we'll have upwards of 10,000 workers in total.

Mr. Brian Jean: Do you know the mix of those people, as far as where they're from in Alberta or Canada?

Mr. Gordon Lambert: They're from across Canada, from all regions. There are even international skilled trades workers on site as well.

Mr. Brian Jean: Are there benefits to sequestration, over and above just being able to capture greenhouse gases? For instance, my understanding is that doing sequestration will actually be more efficient than pumping other products such as clean water into the surface for gas recovery. Is that correct?

Mr. Gordon Lambert: Yes, there's substantial use of water flooding of conventional oil reservoirs as a way of improving efficiency of extraction. CO₂ can be used as a substitute for water flooding, and we can get incremental conventional oil recovery as a result.

Mr. Brian Jean: Is that looked on as a number one prospect right now for the energy companies in northern Alberta?

Mr. Gordon Lambert: Because there's a revenue stream that's generated through CO_2 injection into reservoirs of that type, it does tend to be quite attractive. But if we're trying to maximize CO_2 recovery and avoidance of greenhouse gases in the atmosphere, we'd also be injecting CO_2 into storage reservoirs, which primarily would be depleted gas reservoirs. But of course there's no revenue stream that accrues if we store CO_2 .

Mr. Brian Jean: So, in essence, as gas is being pumped from around the province, or even from Saskatchewan, as the case may be, the faster the sequestration technology is advanced, the more advantageous it is to the industry as well as to the earth.

Mr. Gordon Lambert: Yes, and we think there's an opportunity for innovation in new uses of CO_2 as well that we just haven't really found yet, but that will happen once we have the CO_2 supply available.

The Chair: Thank you.

Thank you, Mr. Lambert.

We'll move on to Monsieur Lussier. Vous avez cinq minutes, s'il vous plaît.

[Translation]

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

You state in your brief, Mr. Cleland, that natural gas accounts for 26% of the energy used in Canada and that this percentage is growing.

In which area do you think this growth will occur in the years ahead? Could vehicles fuelled by natural gas be one part of this growth?

[English]

Mr. Michael Cleland: The biggest area of growth is in power generation, and I suspect, looking forward, in distributed generation, in combined heat and power applications. It's growing as a share in other parts of the economy, including residential and commercial, and could grow more, actually displacing electricity.

There's some growth in vehicles, large heavy-duty vehicles, in urban areas, with some very good urban air quality benefits, but it's from a very small base.

[Translation]

Mr. Marcel Lussier: What about cars?

[English]

Mr. Michael Cleland: It's a lot harder. They've tried with police fleets and things in the past. Original equipment manufacturers have tended to shy away from it. The big opportunities going forward are large vehicles such as buses.

[Translation]

Mr. Marcel Lussier: Thank you.

Mr. Bramley, you say that you are in favour of a carbon market and that carbon credits should be administered territorially.

Could you talk a little more about this idea of administering carbon credits territorially?

Mr. Matthew Bramley: We wanted to suggest an alternate way of reaching the targets for those who are not comfortable with funding projects abroad, the purchase of credits provided for by the Kyoto Protocol. The idea is to be able to pay \$30 a tonne into a fund that would be independent of government. The money would be reinvested in projects that would result in reduced emissions locally, within the province where the payments are made. If it were impossible to find enough reduction opportunities in the province in question, there would be a subsidy to enable polluters to remain within the \$30-a-tonne maximum. In this way, we could achieve some geographical balance, for those who are concerned about this issue, while reassuring the industry about the price per tonne.

• (1020)

Mr. Marcel Lussier: You do not see any opportunity for interprovincial trading?

Mr. Matthew Bramley: On the contrary, the provincial option is just one of a number of possibilities.

Mr. Marcel Lussier: It does not rule out-

Mr. Matthew Bramley: Not at all, we would still be able to do this elsewhere in the country or elsewhere in the world.

Mr. Marcel Lussier: In your presentation, Mr. Lambert, you talked about distributing the efforts equitably. Are the polluter-payer principle or the territorial distribution idea part of your philosophy? What do you think about the famous tax that the Quebec government has just placed on the oil companies, which is a few cents per litre of gas? This tax has been passed on to consumers by the oil companies. [*English*]

Mr. Gordon Lambert: Well, I think the price signal does need to flow through to the end use of the product. If it's an attempt to try to shift behaviour or to change the behaviour of consumers, a price signal is likely going to be needed.

[Translation]

Mr. Marcel Lussier: How do you define "equitable distribution of effort"?

[English]

Mr. Gordon Lambert: That's the ultimate challenge, isn't it? As I mentioned earlier, equitable distribution of effort is in the eyes of the beholder. I think it needs to be an approach that's comprehensive to the production and uses of energy. The national round table's work

on energy 2050, to me, is inclusive of a broad range of interests and opportunities.

The Chair: We have to move on to Mr. Manning for five minutes, please.

Mr. Fabian Manning (Avalon, CPC): Thank you, Mr. Chair, and I certainly welcome our guests and thank them for their testimony here today.

Recent polling has shown that Canadians' number one priority is a clean, healthy environment, but just after that, Canadians want a strong economy. I guess our job here as legislators and your job as business is trying to find that medium ground where we can have both

The oil sands certainly have received a lot of attention lately, creating an immense amount of employment opportunities, but in some corners of the world, creating some concerns with the environment. We have had official opposition members threaten to close them down. But then on the other side of that, last January, we had the former government engage in secret meetings with the United States looking to expand the production by four to five times.

I'll pose the question to Mr. Lambert first. We're trying to find the common ground so that we can have a healthy environment, but also have the strong economy we need to have in order.... I find it difficult to understand how we're going to correct the concerns we have in the environment unless we have a strong economy behind that. So my question to you is this. What do you believe are the keys to creating that environmentally sustainable economy in Canada?

Mr. Gordon Lambert: Yes, and just to reinforce that, I think we do have a significant dilemma in front of us. On the one hand, we want abundant, cheap energy. We get blasted, too, for high gasoline prices anytime they go up. And we also want a clean environment.

To be honest, the only way to square that circle is with technology and innovation. In other words, it can't be the case that we just continue to produce and use energy the same way in the future as we have in the past. I think you do see those signs of innovation starting to come on to the market. I mean, ten years ago, hybrid vehicles were felt to be a dream, and now they really are penetrating the transportation market.

On the oil sands, I mentioned CO₂ capture, which we're actively working on. We're also part of a consortium looking at deep geothermal energy. This is dry rock geothermal energy that would actually be emissions-free energy, and not just for the development of the oil sands; imagine it for central heat and power for our communities. This is drilling at tremendous depths, in the order of 5,000 metres to 7,000 metres. Again, it's very exciting as an opportunity, and we want to aggressively pursue that.

We're looking for the kinds of policies and partnerships with governments that are going to help encourage the investment that's needed to get there. It's not going to be done through punitive regulation and hitting us over the head harder. That's not going to be the motivator. It has to be a collaborative effort, a joint effort, and one where we really roll up our sleeves to make this happen.

(1025)

Mr. Fabian Manning: I'll ask Mr. Cleland.

Mr. Michael Cleland: Can I just add to that? You talked about two things Canadians are looking for from their energy system. One is that they want it to be affordable, or maybe cheap, but at least affordable. They also want it to be environmentally sustainable. The other thing they want is that it be reliable. They want it to meet their needs all the time—in the middle of a cold winter, or whenever that happens to be.

The right condition for keeping those three things on the screen is policy that provides a steady push in the right direction. Sharp inflections, shocks, things that upset the investment environment, or things that, frankly, push technologies into the environment faster than we can learn how to apply them are bad policy.

We need to act. Mr. Cullen talked about acting urgently. Agreed. We need to get going and get that price signal flowing through to investors and consumers.

The Chair: Did you want Mr. Bramley to comment?

Mr. Matthew Bramley: I just think it really stretches credibility to suggest that an additional cost to the oil sands producers on the order of \$1 a barrel would be in any way punitive or would somehow get us away from a balance between environment and economy. We heard from Gord Lambert that the production cost is \$20 to \$30 a barrel. I'm not sure what the price is currently, but I think it's been in the fifties and sixties recently. Clearly there are enormous profit margins in this industry, and it's very difficult to see why \$1 a barrel would be a dramatic shock to anyone.

The Chair: Okay.

We'll move on to Mr. McGuinty for five minutes, please.

Mr. David McGuinty (Ottawa South, Lib.): Thank you, Mr. Chair, and thank you very much to the witnesses.

I'd like to go right to the question that I think is probably on the minds mostly of the oil and gas and energy sectors in this country: how much is it going to cost to comply?

I'd like to go back to two questions I put to our Minister of the Environment in this committee maybe 10 days ago. I asked the minister directly whether he had any idea of what the size of the international carbon market would be, and he could not answer or would not answer. Then I asked him directly whether we'd be participating in an international carbon market. His answer was that we're not looking at participating in an international market. I asked him to repeat that for the record, and he said we're not interested in participating in carbon markets overseas.

Today we learned that on December 21, the president of the Toronto Stock Exchange sent a letter to the minister and the Prime Minister advising both that the cost of compliance for Canadian companies would be excessively high if we were to have a mere

domestic market. The document goes on to say that Canadian companies would be disadvantaged with a domestic market only, because the cost for each tonne of greenhouse gas would be excessively high, especially because of the small size of the Canadian market.

Similar remarks have been made by Clive Mather, the president and CEO of Shell Canada, who is asking Canada to remain a signatory and a full participant in Kyoto and to participate in the international carbon market it's creating.

Now can we hear from all three witnesses about the effect if Canadian oil and gas companies, energy companies, cannot participate in the burgeoning European market and the start-up markets in roughly 18 or 20 American states? And do you believe that it is intelligent for this country to shut down our eventual and potential participation in international carbon markets when we know that the cost of compliance for the energy sector in this country is going to be higher, whereas in countries that are signed on and are participating—including, potentially, the United States—their companies are going to benefit from lower costs in terms of compliance? Is that an intelligent thing for us to do at this stage, given what we know about the burgeoning international carbon markets?

• (1030)

Mr. Gordon Lambert: I'd like to reiterate a comment that I made earlier in my remarks, about needing all the tools in the tool basket. How aggressively we use each one of these tools is going to be something we have to be quite careful about, so we don't think any doors should be closed.

We do support,though—and I want to reinforce this, based on the technology theme that I've been stressing this morning—the possibility of establishing a technology fund as an additional compliance mechanism for Canadian companies, as part of our regulatory approach. The Canadian Association of Petroleum Producers has been advocating for a technology fund as a compliance mechanism. Companies could pay into that fund and have those funds used to support deployment and advancement of new technologies domestically.

Mr. Michael Cleland: Mr. McGuinty, I have just a couple of things on that. I won't comment on Mr. Baird's comments or what the import of them was.

I would say that, all things being equal in the first instance, we should first be looking at how we reduce our own domestic emissions. We have to change the structure of the underlying capital in the economy. All other things being equal, that should be where we want to go.

We also need a suite of other compliance options. Exactly consistent with Mr. Lambert's comment, we need as complete a basket of compliance options as possible.

Mr. David McGuinty: Mr. Cleland, I have to interrupt you, because my time is really short. I just want to know what the position of your sector is now with respect to a mere and single Canadian domestic emissions trading market, which is not ultimately fungible and connected to the international markets. Is this going to help your oil and gas and energy sector reduce the cost of compliance by reducing GHGs using an international trading system?

Mr. Michael Cleland: We would want to have access to as complete a set of options as possible, including a clean development mechanism and including other markets as they develop in parallel.

Mr. David McGuinty: So it would be beneficial to Canadian industry to participate in a fully fledged international carbon market. Is that how I understand it?

Mr. Michael Cleland: It's beneficial to Canadian industry to have the most cost-effective ways available to reduce emissions, which might include that option.

The Chair: Our time is up. We're at five minutes.

We're going to Mr. Paradis-

Mr. David McGuinty: Have we heard from Mr. Bramley at all, Mr. Chair?

The Chair: Mr. Bramley, you have fifteen seconds.

Mr. Matthew Bramley: Very quickly, then, the motivation for emissions trading is clearly cost reduction, first and foremost. I'm troubled that when the government rules out the use of the international carbon market, it makes achieving our international obligations much harder than it really needs to be.

The Chair: Your time is now up.

Mr. Warawa, on a point of order.

Mr. Mark Warawa: I didn't interrupt when Mr. McGuinty made a statement, but I believe it was misleading. In response, Mr. Bramley is now repeating a statement that I believe is incorrect. The minister did not say we will not permit an international carbon trading market. He made it very clear that Canada will not send billions of dollars overseas. He would not use taxpayers' dollars. So if the question is whether it would help industry to be involved with an international market, that would be fine, but to make a statement that the government will not, Mr. Chair, is to make an incorrect statement. I just wanted to clarify that.

The Chair: I think it's a matter of debate, and I don't want to get bogged down in matters of debate like that.

We are going to move on to Mr. Paradis for five minutes, please. [*Translation*]

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

This question has already been raised. So far, in Canada, because of our affordable energy prices, we have not always used energy intelligently or effectively. Some examples that come to mind are using diesel fuel to heat houses or using huge quantities of natural gas for tar sands production.

My first question is to Mr. Cleland.

What steps could the government take to ensure that the right fuel is being used in the right place? Do you think the proposals contained in Bill C-30 could encourage efficient energy use? Could you explain the CGA's clean energy in Canadian communities proposal? What type of plan would this proposal include?

• (1035)

[English]

Mr. Michael Cleland: I'll answer the question in two parts. First of all, the regulations that might arise under Bill C-30, or Canada's Clean Air Act when it's passed, if they create a signal to investors to invest in greenhouse gas reductions...as long as it's even-handed in its application, it will tend to make people make the right choices. That's one step.

My point earlier on, and thank you for the question on that, was that the other half of the equation, the other 50%, is something that doesn't lend itself to treatment under direct regulation of that sort. We put forward some ideas that essentially involve having the federal government, in cooperation with the provinces and industry, contributing to investment in local energy technology, such as combined heat and power systems, hybrid systems involving on-site renewables, and energy efficiency, to get at the other 50% of the equation. What's important is a level playing field among fuels to make sure we use the right fuel in the right place.

The Chair: Mr. Paradis.

[Translation]

Hon. Christian Paradis: I have another question for Mr. Lambert. It was raised a little earlier.

How do you think we could ensure that the exercise the government is currently involved in can help change our economy in the right way, and not simply force people to meet targets in the short term? Earlier you said that setting targets that cannot be met could undermine public confidence. But given that the situation is urgent, we must take steps to transform our economy.

I would like to hear the industry's point of view on this issue.

[English]

Mr. Gordon Lambert: This is where I think the national round table work on the wedge model, as it's come to be known, could be very valuable. I think what we could do is engage subject matter experts in each of those individual wedge areas and explore in detail what the barriers are to implement and make progress in each one of them. Let's use wind power as the good model we could then use in other areas. That was a dialogue among governments, the private sector, and NGOs about what was necessary to accelerate wind power development in Canada. We did get the policy signals right, it did start to move, and we started to go forward. Let's take that and apply it to each of the other areas we've been talking about today.

[Translation]

Hon. Christian Paradis: Would any other witnesses care to comment on this question?

[English]

Mr. Matthew Bramley: I would come back to something that Gordon Lambert said earlier, which is that what we need to do here to move toward deep reductions in emissions is to mobilize private capital to achieve a transformation in the economy. To do that, we need to set regulated requirements to reduce emissions to a sufficiently stringent level that the price on emissions drives a major change in investment decisions. That must be the test for whatever it is that is included in the Clean Air Act or in the government's broader climate change plan.

The Chair: Mr. Cleland.

Mr. Michael Cleland: Could I come back to a point that I think is the fundamental question? What do we do to create that transformation in the economy?

I would emphasize that 50% or more of the energy we use is used in Canadian cities and communities, our houses, our buildings, and the underlying infrastructure. The kinds of changes we're talking about by 2050, call it a 50%, 60%, or 80% reduction of greenhouse gases in absolute terms, won't work if we only do it in industry. We have to restructure our Canadian communities over the next 50 years, and that's got to be part of the puzzle.

The Chair: We'll move on to Mr. Scarpaleggia for five minutes, please.

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

What I hear from a lot of business witnesses is that we have to keep talking with the government and other stakeholders. I never hear, "This is what we can live with", "This is our bottom line", or even "This is our opening bid and we're open to negotiation". It seems to me the previous government held consultations with industry, with both your industries. I get the sense that we're into avoidance.

My question is to you, Mr. Lambert. The original projections for oil sands development have been exceeded, have they not, by a great figure? For example, what would the prediction have been for annual oil sands production back in 1998 or thereabouts, or 2000? What would it have been in barrels per day?

● (1040)

Mr. Gordon Lambert: Whose prediction?

Mr. Francis Scarpaleggia: It doesn't matter. Take an average or the one you accept. It doesn't really matter.

Mr. Gordon Lambert: We could use the National Task Force on Oil Sands Strategies that in the mid-1990s estimated one million barrels a day by 2020.

Mr. Francis Scarpaleggia: What are we headed for now by 2020?

Mr. Gordon Lambert: We were at one million barrels a day in 2005.

Mr. Francis Scarpaleggia: What are we headed for in 2020?

Mr. Gordon Lambert: Whose crystal ball is the right one?

Mr. Francis Scarpaleggia: Is it double?

Mr. Gordon Lambert: Certainly there have been announced plans that would put us in that range.

Mr. Francis Scarpaleggia: When the government ratified Kyoto, it was looking at a certain prediction for oil sands production. We're going way above that by now, I would think.

Mr. Gordon Lambert: Yes, ratification of Kyoto happened in-

Mr. Francis Scarpaleggia: In 2002.

My next question is this. Do you see the price of oil going up significantly in the future, or do you see it going down? Do you see the oil sands at all at risk of having to slow down their development because of dropping petroleum prices?

Mr. Gordon Lambert: I can predict with 100% certainty that I can't predict the price of oil.

Mr. Francis Scarpaleggia: With growing demand worldwide that is skyrocketing, which we hear about every day, and as you said at the beginning of your testimony, since there are no real alternatives right now—we're wedded to oil—and we have China and India coming on stream, do you see the price softening?

Mr. Gordon Lambert: We sure don't see demand globally softening. What we don't have a clear picture of is the supply side of the equation. I would say that oil sands strategically in the world is a critically important resource.

Mr. Francis Scarpaleggia: A critically important resource in a tight market. What's your marginal profit on a barrel of oil sands oil?

Mr. Gordon Lambert: I mentioned previously that in terms of cash cost per barrel we're in the \$20 to \$30 range.

Mr. Francis Scarpaleggia: How much are you selling it for?

Mr. Gordon Lambert: Capital costs, I should also say, are under very severe upward pressure right now, which is the other limitation as to how aggressively that resource could be developed.

Mr. Francis Scarpaleggia: I just hear that everything is going well, the market's strong, our profits are good, but leave us alone. That's the message I hear from a lot of industry sectors, especially from the oil industry. It's as if we can't do anything, unless we are giving you money to develop technology.

Mr. Gordon Lambert: We just completed the largest ethanol production facility in Canada and commissioned it in June this past year. We're currently building our fourth wind farm. Suncor Energy, and that's the company I'm here today to represent, is creating Canada's energy future, and not just in the hydrocarbon energy realm. It's investing real money in creating jobs and opportunities for Canadians across Canada.

● (1045)

Mr. Francis Scarpaleggia: Shell said it can reduce its emissions by 50% by 2010 and that it's prepared to buy some credits to do that. Why can't Suncor do that?

Mr. Gordon Lambert: The climate change plan. Our focus primarily is first and foremost on our internal energy efficiency. Second are renewable energy investments, which we are making in Canada as an alternative to purchasing credits. Third are new technologies, which includes the CO₂ capture and geological sequestration. We're working with a consortium, and this is tough, hard work. The engineering designs of these projects, or these opportunities, have tremendous complexities to them. I also mentioned deep geothermal. We're not standing still or playing defence on this issue at all.

The Chair: Thank you.

We'll move on to Mr. Watson for five minutes, please.

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

Mr. Lambert, you talk about new technologies being a key part of moving forward on deep domestic reductions. Some have suggested around this table over the course of our hearings that the Kyoto target and timelines be enshrined in Bill C-30 as the short-term target. I want to focus on that scenario in the short term. Can carbon sequestration be widely applied and immediately deployed in your sector to achieve measurable reductions in order to meet that type of a target in the short-term window?

Mr. Gordon Lambert: I'd cite the national round table study as showing carbon capture and sequestration being one of the largest opportunities that Canada has for material reductions.

Mr. Jeff Watson: So in the next four years, that could be widely applied for measurable reductions.

Mr. Gordon Lambert: The question came up earlier on timeframe. We'd probably look at more like a decade to have that fully up and functional and different sources being tied in over time.

Mr. Jeff Watson: So it's more like a decade. Fair enough.

You've said that the clean development mechanism is the easy way to comply. Would that be a lower-cost option than putting in carbon sequestration, for example, in the short-term window?

Mr. Gordon Lambert: Yes, and it's important, as we talk about emissions markets, to understand what they don't do. They are not a substitute for foresight. They are an easy-to-use instrument. But with the technologies we're talking about, you require longer lead times, and you're not going to make these investments based on the short-term price of CO_2 in a market. These have to be taken as a public-private imperative, and we have to really look at them from that point of view.

Mr. Jeff Watson: If the Kyoto target is four years and carbon sequestration requires ten years, would the industry be more likely to go for carbon sequestration or credits?

Mr. Cleland, you may want to jump in on that.

Mr. Gordon Lambert: If we get into a punitive mode we'll be pushed into a box where least-cost compliance is going to be success, and least-cost compliance is not going to be the mindset necessary for the long-term solutions we're talking about today.

Mr. Michael Cleland: Timeframe is critical, and in the very short timeframe of the next four to five years, for most industries the only option is some sort of offset or external credit, because you can't make the physical reductions—

Mr. Jeff Watson: Would you be concerned in that scenario about the capital outflow in the short term, when Canada should be investing in long-term reductions?

Mr. Michael Cleland: If it's moderate and sending an early signal now to get going, that's probably a good thing and we need to get on with it. If it's forever, we need to make sure we're investing in domestic reductions. It's a question of proportion.

Mr. Jeff Watson: I have a question for all the panellists here. Should short- and medium-term targets be negotiated with industry or assigned to industry?

Mr. Bramley, do you want to start?

Mr. Matthew Bramley: As someone mentioned earlier, there have been literally years of consultations with industry on greenhouse gas targets. Fair enough. Many studies have been done on the cost of different levels of targets, so the time has come to draw all the information together and set some targets. As Mike Cleland says, get on with it.

Mr. Michael Cleland: There are two steps. There needs to be a discussion with industry to make sure we understand what the numbers are and what's practical and realistic. Negotiation is negotiation. At the end of the day, government is the regulator. Government needs to call it and say let's move on.

(1050)

Mr. Jeff Watson: Have you a comment, Mr. Lambert?

Mr. Gordon Lambert: There should be sufficient dialogue to ensure the targets establish creative tension and don't erode investor confidence. But having that understanding, I agree we should move on and set targets for internal energy efficiency that are going to ensure improvement.

Mr. Jeff Watson: That's everything, Mr. Chair. Thanks.

The Chair: Thank you very much.

I do want to thank the witnesses. Mr. Bramley, Mr. Cleland, Mr. Lambert. It was a good discussion, with some good points on various sides. Thank you very much for coming to share them with us.

For the committee, we need to talk about the forest products folks who said initially they could not come on a certain day because they wanted to send the CEO only. We have them now. I'll get the clerk to chat about that because he has better information.

The Clerk of the Committee (Mr. Chad Mariage): Thank you, Mr. Chair.

The Chair: The clerk will bring us up to speed on the latest developments with the forest products folks, who can now come, I believe.

The Clerk: Thank you, Mr. Chair.

I was in contact in initial conversations with the Forest Products Association of Canada. We invited them to appear on Thursday, 22. They informed me at the time that they wanted to have their CEO, Avrim Lazar, here or nothing. This was essentially the way they put it

There was some discussion at the subcommittee about this, and it was decided that we would continue on with the four witnesses who had already confirmed.

Then yesterday I received a call from them saying they would make themselves available on the 22nd, with someone other than the CEO. But if the committee would invite them on another day, such as the 27th, which is on CO_2 capture, the CEO would make himself available for that day.

That is the situation.

The Chair: The question then is, do we want them on the 22nd, with somebody other than the CEO, or on the 27th in the morning, with the CEO?

Mr. Cullen.

Mr. Nathan Cullen: I don't particularly mind whether it's the CEO or someone who can speak. Having them in at either time will work; it doesn't matter.

The Chair: Is there any strong feeling?

Mr. Godfrey.

Hon. John Godfrey: I'd like to hear from the CEO, if we can fit him in on the date that works for him.

The Chair: That is the 27th in the morning. Right now we have three, so he would be the fourth witness. Do we have any problems with that on the government side?

Mr. Mark Warawa: That's fine.

The Chair: Okay, we'll invite Mr. Lazar for the 27th in the morning.

Thank you.

This meeting is adjourned.

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