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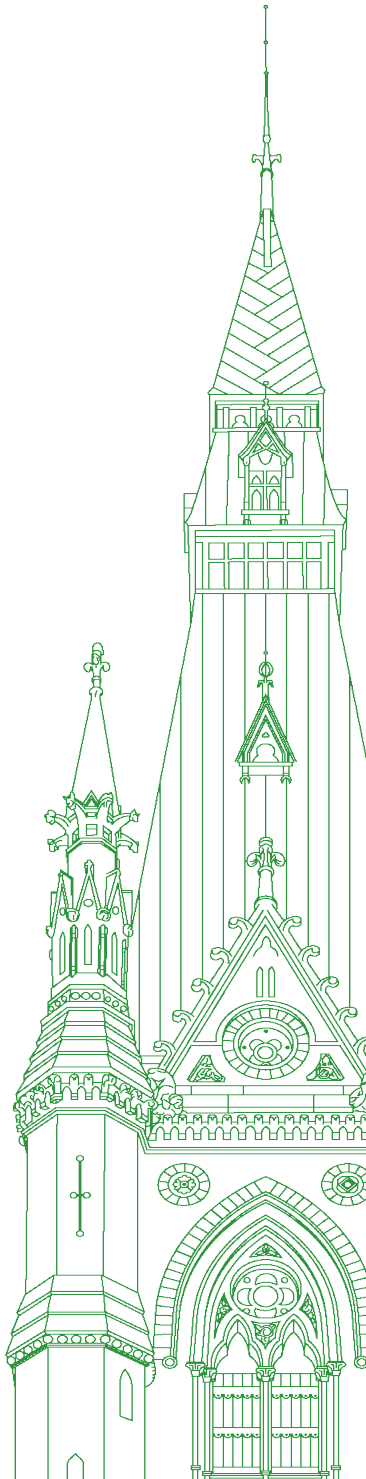

Chair: Mr. James Bezan

Standing Committee on Environment and Sustainable Development

Tuesday, December 1, 2009

● (1110)

[*English*]

The Chair (Mr. James Bezan (Selkirk—Interlake, CPC)): We'll call this meeting to order.

We will continue with our study on Bill C-311. This is the last panel we will have on Bill C-311.

Joining us today is an industry panel. I want to welcome to the table, from the Canadian Chemical Producers' Association, Gordon Lloyd, the vice-president of technical affairs. From the Canadian Petroleum Products Institute, we have Peter Boag, who is the president, and Tony Macerollo, the vice-president of public policy and communications. From the Canadian Steel Producers Association, we have Ron Watkins, who is president, and Katie Chan, manager of environment and energy. From the Cement Association of Canada, we have Pierre Boucher, the president and chief executive officer, and Bob Masterson, the director of policy.

I welcome all of you to the table. We are looking forward to your opening comments.

We are going to kick it off with Mr. Lloyd.

Mr. Gordon Lloyd (Vice-President, Technical Affairs, Canadian Chemical Producers' Association): I'd like to thank the chair and the committee for the opportunity to appear before you and participate in the review of this bill and of climate change generally.

Before I get into my remarks, I'll first note the four points I would like to leave with you.

First of all, CCPA and our members take climate change very seriously. Our members have gone well beyond Kyoto in their reductions. To keep improving and keep that track record, we need to stay globally competitive. Here government policies are critically important for us.

Most important in terms of government policy, we need the Canadian government to proceed in pace with the U.S. in managing greenhouse gases. Canada's system must be comparable to that of the U.S. for competitiveness reasons, to avoid U.S. border measures, and to recognize the overall integration between our two economies. This doesn't mean being identical to the Americans. There are differences in the Canadian situation that need to be recognized. Where we can, we should try to do things smarter than the Americans are doing, but moving with the U.S. is a far better approach than is developing a plan on our own.

In terms of this specific bill, we don't think Canada should lock into the targets that the bill requires. We don't know if Canada can meet those targets. Buying credits and not reducing emissions would be the result. That approach could cost billions of dollars. The recent Suzuki-Pembina study estimated it could be $6 billion by 2020, and we think those costs could be even higher.

We don't believe this bill is the right framework to manage climate change. I will outline a framework that we think could work, one in which the government is doing the right thing in moving in pace with the Americans, and one in which the government is on the right track but needs to move further along the road in improving the capital cost allowance and in using a technology fund.

First, I'd like to talk about the performance of CCPA members. What CCPA has achieved in climate change is shown in the first attachment. It's the one you got in the brief previously. Kyoto called for a 6% reduction. Our members have achieved a 65% reduction. We achieved these results under Responsible Care. I think many of you are familiar with Responsible Care. It's something we've recently improved. We've been trying to integrate it more with sustainability and to maintain Canada's leadership internationally among the chemical associations in Responsible Care.

Under Responsible Care, our members took climate change seriously right from the start. Back in 1992, after the UN framework convention started, we started to track and publicly report on our emissions. We've been improving our performance ever since.

Now that's what we've done. What would we like from the government?

Since we started tracking our emissions, we've been looking for a supportive government policy framework for climate change. The closest we've had so far is the understanding by the current government that domestically Canada needs to keep in pace with the Americans, and internationally Canada needs to insist that there be binding obligations on some of the developing countries that are major emitters and some of our major competitors. The government policy is sound in that area, but the government policy needs to go further in supporting technology development and new capital investment.

Much of what influences investment in Canada is, frankly, outside of government control, like international trade flows and developments in markets like China, Brazil, India, and the Middle East. Other important factors like the value of the dollar are things the government can try to do something about, but they really can't do much.

There are three broad policy tools that we think would be very powerful and that the government should be using. First—and here the government has it right—is proceeding in pace with the Americans on alignment. Second is improving the accelerated capital cost allowance. Third is using a technology fund as part of the compliance measures for climate change. On these last two points, we believe the government is moving in the right direction but needs to go further.

Before I talk about where we'd like the government to go further on those two points, I'd like to say a few more words about alignment with the U.S.

Alignment of Canadian climate change policy with the U.S. should be based on taking generally consistent approaches but not on being identical. This is critical for sectors like chemicals that are energy intensive and trade exposed, what have become known as the so-called EITE sectors. That's not a very good acronym; you can't even pronounce it.

The Canadian products sold into the U.S. represent about 57% of Canadian chemical production, so the U.S. is overwhelmingly important for us.

Earlier this year, CCPA saw that the U.S. was moving towards a cap-and-trade approach. We recommended that the Canadian government do likewise. We also recommend that Canada not propose a specific cap for the EITE sector at this time. Instead, we believe we should be informed by the cap the U.S. legislates for its EITE sector. Our cap should then be comparable to or possibly slightly lower than the one the Americans set for sectors like chemicals.

A lower Canadian cap is in fact justified. Canada's trade exposure is far greater than that of the U.S. Canada exports and imports roughly four times as much as the U.S. does. Also, as attachment 2 to our brief shows, it costs a lot more to reduce emissions in Canada than the U.S.

These factors would justify a less onerous cap in Canada, but that is not the only consideration. If the cap is less in Canada, there is a threat, which is very real for us, of border adjustments being added to our products at the border. If the Canadian cap is higher, our manufacturing costs will increase and imported products will be more attractive in Canada. This is a very difficult balancing act. It's a question of striking the right balance, and once we know where the US will land, that is the balance Canada will need to strike.

For alignment with the U.S., Canada seems to have the right climate change policy. For accelerated capital cost allowance and the technology fund, we think the government plan is in the right direction, but needs to move further and be improved.

Turning to capital cost allowance, Canada's environmental performance in chemicals has been driven by responsible care and new investment. Investment also drives improving climate change performance in the manufacturing sector generally. The chart in our submission as attachment 3 is a bit outdated. It is something we took from the Canadian Manufacturers & Exporters, but it is the most recent illustration we have of this point. I believe this committee has seen this chart before in presentations by others. It shows capital investment is the key to reducing emissions intensity in manufacturing. This fact is a critical foundation to build on for climate change policy.

A very important contribution this committee could make to climate change policy would be to recognize the link between new capital investment and improved environmental performance. Improving the capital cost allowance would have a significant impact in attracting new investment and returning to the levels of environmental performance that the chemical sector and others in the manufacturing sector had during the booming 1990s. CCPA has discussed our recommendations to improve the accelerated capital cost allowance with the finance and industry committees. They've understood the competitiveness and productivity arguments, but the environmental dimension of this issue is an important additional aspect that this committee can and should contribute to.

A solution the government could implement now, which all parties supported in an industry committee report in 2009, is extending the accelerated capital cost allowance for new machinery and equipment. While the measure has appeared as a line item in the past few budgets for a two-year timeframe, the timeframe we really need is a five-year period. This is an important policy from both a competitiveness and an environmental perspective. It is a climate change plan that can work, and we hope it would have this committee's support.

Finally, turning to the technology fund, designing a sound technology fund would be a very powerful tool to support greenhouse gas reductions. The fund should encourage investment both in transformative technologies and also in improved current technologies. It also should provide a compliance mechanism and some price stability.

Clearly, investment in technology will be the key to getting the climate change dilemma solved. There is broad agreement by just about everybody on that. We were encouraged that a technology fund was one of the compliance options in the government's *Turning the Corner* proposals, but we saw that proposal as having some fairly serious flaws. What we are promoting is a technology fund that is more in line with what Alberta is using, but with several important distinctions.

First, we think the price associated with contributions to the fund should not be fixed but should be adjusted over time with the price of carbon in the market. Second, we think there should be a limit on how much of your climate change compliance you can meet by contributions to the fund.

Certainly, a technology fund should be a permanent part of a climate change plan. We will have to be reducing greenhouse gases for the long term, 2050 and beyond.

In conclusion, CCPA members will have reduced their greenhouse gases by 65%; that is, actual reductions. This was mainly from technology investment and major plant investments. These came on stream in the 1990s when the manufacturing economy was booming.

● (1115)

As we move out of the current recession, investment should return. We need that in Canada. The better we have our policies aligned, the more it will return. Aligning our climate change policies with our major trading partner, the U.S., improving capital cost allowance, providing a sound technology fund—all of these will help.

We don't think spending $6 billion and sending it abroad, as we see this bill requiring, will help at all. The $6 billion estimate comes from the recent report that the Suzuki and Pembina groups produced. Their report assumes that international credits can be bought at $75, when they're actually selling in Canada, according to their assumptions, for $200. If the international price was closer to the Canadian price, the $6 billion cost would be much higher.

In the international effort to reduce greenhouse gas emissions, the cost differences between various countries is something that deserves more attention. It is important and needs to be kept in mind. Attachment 2 to our brief shows various cost curves for Canada and different countries. The Canadian carbon costs will be very high, much higher than the U.S. estimates. The national round table report that came out in the spring says the same thing, and so does the Suzuki-Pembina report.

The public shouldn't be misled into thinking it will be cheap and easy to deal with climate change in Canada. The costs will be high. The best way to minimize those costs, in our view, is through the policies we've suggested, not through meeting mandatory targets, as the bill requires.

To sum up, we're serious within CCPA and our membership about reducing greenhouse gas emissions. Our track record shows that. We don't think the bill is serious about it. It's a recipe for sending money out of the country. We recommend an alternative framework for a government policy that could work, one in which the government is doing the right thing—keeping pace with the Americans, moving further in improving accelerated capital cost allowance, and using a technology fund.

Thank you, and I look forward to participating in the discussion.

● (1120)

The Chair: Thank you, Mr. Lloyd.

Mr. Boag.

Mr. Peter Boag (President, Canadian Petroleum Products Institute): Good morning, Mr. Chair and members of the committee. It's our pleasure to be here this morning to provide a petroleum refining perspective on GHG emissions reduction policy.

Let me first say a few words about our organization. CPPI is an association of 11 companies that refine and market petroleum products used in transportation and for residential, commercial, and industrial purposes. Collectively they account for over 80% of Canada's crude oil refining capacity and petroleum marketing operations. They are major contributors to local economies and the national economy, and they are a component of Canada's critical domestic energy production infrastructure, ensuring a reliable supply of high-quality fuels essential to the national well-being.

As a group, CPPI members have a strong track record of energy efficiency gains and GHG emissions reductions. In the 10-year period from 1995 to 2005, CPPI member refineries achieved an overall 12% reduction in energy consumption. Energy efficiency at these refineries improved by over 1% each year, resulting in a comparable GHG emissions reduction—absolute reductions, while increasing production.

I'll focus my remarks today on three points: the need for consistency and alignment with neighbouring programs, in particular the critical importance of alignment with the United States, our major trading partner, but with others with whom we trade as well; the importance of aligning targets and mechanisms with technically and economically feasible compliance pathways; and the requirement for flexibility and transparency in carbon pricing systems, be it cap-and-trade or any other approach to pricing carbon. The end goal must be emissions reductions at the lowest possible cost to the economy and our society.

Canada is a trading nation. Much of our economy is energy intensive and trade exposed, including the petroleum refining sector. The concept of jurisdictional consistency and alignment of reduction targets and burden is critical, but that is not to say identical, for it's essential to recognize that Canada's economy is unique in the world, in particular its significant resource and energy component, much of it export focused—so alignment, yes, but with the recognition that a one-size-fits-all approach will have negative unintended consequences for our unique economy. We believe the government understands this and has adopted the right approach in pacing and informing its approach on U.S. developments, especially as it relates to trade-exposed sectors.

Turning to the specifics of the petroleum refining sector, where petroleum products are imported into and out of Canada on a regular basis from jurisdictions as far away as Europe and Africa, we need to make sure that Canadian refineries are not up against competitors that are not constrained by the same environmental requirements and costs.

There has been much discussion recently about alignment between Canadian and American plans for climate change. In principle, this is a matter of importance for the Canadian economy given that the U.S. is our largest trading partner, and we are pleased that the government has made this a priority. However, the challenge will be to find an alignment approach that recognizes the fact that the U.S. is a net energy importer and Canada is a net energy exporter.

As a case in point, current U.S. climate change legislative proposals do not recognize the U.S. refining industry as a trade-exposed sector. They impose what we would see as a clearly discriminatory GHG emissions reduction burden on refiners that CPPI members would oppose. Studies clearly indicate that this approach, if implemented, would result in a substantial increase in petroleum product imports, at the expense of the domestic industry and lost jobs, yet the impact on global refinery emissions would be negligible. It's a recipe for emissions shuffling, not for global emissions reductions.

That said, the Canadian petroleum product producers, suppliers, and users all share a responsibility to minimize the environmental impact of energy production and consumption, including its global carbon footprint.

That brings me to my second point: ensuring that compliance with any emissions reduction target and regime is technically and economically feasible within the chosen timeline. Compliance pathways that will enable obligated parties to reasonably meet the GHG emissions reduction target requirement must exist.

A key component of this is recognition that many industrial sectors—refining for one, and we certainly heard the experience of the chemical sector—have already made significant progress in recent years.

● (1125)

I've already mentioned our track record of energy efficiency gains and emissions reductions since 1995.

Overall, Canada's industrial emissions are well down from 1990. The technical and economic challenges for significant further reductions are enormous. And in a business planning context, 2020 is a blink away. I want to emphasize, as my colleague did, the importance of new, transformative technology as a driver in improving Canada's GHG emission performance. Any climate change solution will require considerable effort to stimulate and support investment in new technology development and deployment.

Here are some of the going forward challenges specific to our sector. First are fixed process emissions. For a typical refinery it's roughly a split of two-thirds combustion emissions and one-third what we call fixed process emissions. Fixed process emissions result from the chemical processes that are core to the production of high-quality, clean fuels. There are no known technological means to reduce them, other than turning down the dial on production.

Second, the Canadian refining sector is subject to a variety of regulations regarding the composition of transportation fuels that bring with them trade-offs in terms of environmental priorities.

Perhaps the best example of this is the desulphurization of fuels, which has been an ongoing process in Canada over the past decade, and one that continues today as the focus moves to marine and off-road diesel fuels. Without question, these cleaner fuels make a significant contribution to cleaner air. The removal of sulphur is a key driver behind the more than 90% reduction in noxious vehicle tailpipe emissions achieved over the past 20 years. Desulphurization of gas and diesel fuel has benefits, absolutely, but at the expense of higher GHG emissions because of the more intensive processing required.

Third, let's face it, the refining sector's greatest impact on GHG emissions comes from the consumption by Canadians of the refined petroleum products we produce. Transportation accounts for a significant proportion of Canada's GHG emissions—up to 40% in some provinces. This means that success in Canada will depend on major emissions improvements in the transportation sector. But clearly, refiners have no control over the demand for our products. This is driven by vehicle efficiency and the vehicle-buying preferences and driving habits of Canadians. Up to now, I know of no jurisdiction in the world that has succeeded in curbing the growth of the transportation sector in any sustainable way.

The last point I would like to raise today is the issue of flexibility and transparency in whatever carbon pricing systems are implemented. Flexibility drives the competitiveness issue for energy-intensive, trade-exposed sectors like refining. Cap and trade now has momentum as the tool of choice around the world, and while CPPI members still have mixed views on the relative merits of cap and trade versus a carbon tax, I'll focus my comments here on cap and trade, given the current momentum, with emphasis on the trade component, which is as important, perhaps even more important, as the cap itself.

Credit trading will be an essential part of the framework, and the flexibility of trading will be crucial to success in achieving the goal of emissions reductions at the lowest possible costs. And let's not be naive about those costs. The 2009 National Round Table on the Environment and the Economy, NRTEE, report, “Achieving 2050”, estimates the cost of carbon at $100 a tonne in 2020, rising to $300 a tonne in 2050. The recent Pembina-Suzuki report estimates a 2020 carbon price of between $100 and $200 a tonne, depending on reduction target. So on flexibility we have a number of questions and concerns.

Will the framework allow access to emission rights in other jurisdictions? Will it allow an emitter to accumulate or bank credits so that they can be used at a later time? Will it allow credits to be lent from one time period to another, providing the end result meets the reduction objectives? Will it allow free emission credits for the industrial sectors that are trade exposed and subject to trade distortions or unbalanced imports until the cap-and-trade systems of competing jurisdictions achieve equity with Canada?

● (1130)

On the issue of transparency, I'll focus specifically on the transportation sector. Will the refining sector be burdened with the ownership and management of emissions from vehicles as well as those from our industrial processes, even though we have no control over vehicle efficiency and the vehicle buying habits and driving preferences of Canadians? We expect full transparency from the government on the impact on consumers of GHG emission reduction requirements in transportation.

Related to the issue of flexibility and transparency is just the pure administrative burden as well. Here, single-window reporting is a key requirement and a key expectation to minimize unnecessary costs to industry.

In closing, I urge you to consider all of the complexities and linkages between energy, the economy, and the environment as you consider climate change legislation, some of which I have described here today from the perspective of the petroleum refining sector.

Finally, I want to dispel the myth that some utopian, carbon-free economy fuelled by magical green energy sources is just around the corner and that the journey there will be painless. The technical and economic challenges are enormous. In truth, all energy sources will need to play a role in fulfilling Canada's future energy needs—wind, solar, hydro, biofuels—absolutely, but conventional petroleum fuels will continue to be a part of Canada's energy mix well into the future. Canadians' requirement for clean, reliable, economical petroleum fuels is not going to disappear in the next few years. As legislators, you need to reflect this as you consider legislation to address the challenges of GHG emission reductions.

Thank you. I look forward to the discussion and your questions.

The Chair: Thank you.

Mr. Watkins, would you bring your comments for the steel industry.

Mr. Ron Watkins (President, Canadian Steel Producers Association): Good morning, Mr. Chair and members of the committee.

The Canadian Steel Producers Association is pleased with this opportunity to contribute to your deliberations.

[*Translation*]

The Canadian Steel Producers Association represents 10 members who produce steel in five provinces, from Quebec to Alberta.

[*English*]

In 2008, our industry produced approximately 15 million tonnes of steel. It had shipments of $13.5 billion and employed some 30,000 people. While production is down significantly this year, a competitive domestic steel industry is essential to our economic and environmental future. This includes steel products for a greener economy, ranging from wind power to lighter and stronger steels that improve vehicle mileage.

Our climate change policy position reflects a number of principles that are important to our industry.

First, we see climate change as a global challenge that requires significant and concurrent action by all major emitting nations.

Second, targets, regulations, and compliance mechanisms must recognize the competitive and technological realities facing our industry and minimize trade and investment distortions.

Third, climate change plans must integrate environmental and economic objectives, including provisions to accommodate sustainable industry growth.

Fourth, the requirements to reduce emissions must be equitably shared among all sources, including industry, transportation, and consumers.

And fifth, Canadian governments must work to avoid overlap and duplication in establishing climate change regulations. Both the regulators and the regulated will benefit from a single set of regulatory requirements.

Unfortunately, Bill C-311 provides no indication of how these principles and several crucial features would be addressed in practice.

I would like to comment on certain of these key issues from a steel industry perspective. In doing so, I won't comment on some of the additional points we also support that have been raised by our colleagues, including issues related to trading systems, for example.

First, as an industry, we account for fewer than 2% of Canada's total GHGs, and we have made significant improvement over many years. Since 1990, emissions are down over 20% in absolute terms and 25% in intensity. In other words, we grew throughout the period but still reduced below the Kyoto numbers. This betters the Kyoto target, and we are committed to continuous improvement with near-term technological and economic constraints.

Second, steel-making is inherently energy intense. It requires a lot of heat to create virgin steel from iron ore, coal, and other materials, through the integrated or blast furnace method. The other popular method, the electric arc furnace method, applies high-voltage electricity to remelt scrap steel for essential products such as rebar and pipes. This method is less intense from a CO_2 emissions perspective, with the added environmental value of recycling large volumes of steel scrap—a true life cycle benefit for our product. Last year our industry recycled almost 8 million tonnes of scrap steel. As noted, both of these production methods are energy intensive, thus the GHG regulations on our energy inputs will also directly affect the cost of producing steel.

Third, our sector is highly trade exposed. We compete principally in the NAFTA market, but we compete against many others. We must also compete globally for new investment capital. Globally the dominant player in steel trade is China, which today produces close to one-half of the world's steel, more than the next 10 countries combined. A decade ago it was only 15% of this total, less than NAFTA.

China has become a major factor in global steel markets, backed by a national steel policy and, frankly, a web of market-distorting subsidies and other support. Environmentally it has an even more disproportionate impact, both directly and indirectly. Thus comparable action on GHGs by China and other major steel producers is essential, both to achieving significant and balanced reductions globally and to avoiding further economic distortions.

Within North America our market dynamics call for a high degree of Canada-U.S. regulatory compatibility due to the impacts on trade and investment. I will return to this point.

The fourth factor is technology. As mentioned above, our members have already invested in capital equipment and processes to make substantial improvements in energy efficiency and therefore in greenhouse gas emissions. We will continue to make incremental improvements, but the scope for large-scale gains in the near term is limited by commercially viable technologies. We also have a relatively high proportion of fixed process emissions that are irreducible with current technologies.

● (1135)

For the longer term, we are part of a global steel industry effort that is actively working on a range of CO_2 breakthrough technologies to reduce steel emissions by over 50%.

Putting these factors into a policy and regulatory perspective, I would emphasize the following.

First, steel is a primary example of an energy-intense, trade-exposed sector. New CO_2 regulations will impact us directly, and also indirectly, since our major inputs, iron ore, coal, energy, and transportation, will also bear new CO_2-related costs. These will flow through to us as consumers of those particular products and services. If our GHG regulatory costs significantly exceed those facing our competitors, there will be both economic and environmental impacts. Carbon leakage is also economic leakage. That is why Canada's cap-and-trade policies must include provisions and allowances that adequately address the challenges facing the EITE sectors. This factor has been recognized in recent major studies, and it is also reflected directly in the draft plans of the EU, Australia, and the U.S., the latter also including border adjustment measures as a further potential mechanism.

Second, CSPA agrees with the need for a high degree of regulatory alignment between Canada and the U.S. to minimize trade and investment distortions. If our obligations are significantly more demanding, we will be less competitive in the market and in attracting investment to Canada versus the U.S., for example. Conversely, if Canada's regime is judged by the U.S. government as less demanding, we stand to be subject to U.S. border measures. The need for compatibility includes not only caps and timelines, but also important implementation conditions at the sectoral level.

Third, turning to technology, we seek policies to facilitate investments in near-term process improvements and other measures directed at longer-term global efforts to develop new low-carbon breakthrough technologies for steel-making. This has implications for fiscal measures, such as capital cost allowances, conditions for the earlier proposed technology fund, and, in some cases, direct spending on government R and D programs.

Finally, the bill includes provisions that allow subnational jurisdictions to set different climate change policies. This creates potential overlap, duplication, and inconsistency, which will make compliance more costly and investment planning more complex. We encourage the federal and provincial governments to agree, in effect, on one set of rules and compliance procedures.

In summary, Mr. Chair, while our steel industry is a relatively small part of Canada's GHG emissions, we have a significant record of progress to date. We are committed to doing more within a regulatory plan that integrates environmental, economic, and technological factors in our sector.

I trust the steel industry perspectives assist you in your deliberations.

● (1140)

[*Translation*]

Thank you, Mr. Chairman, members of the committee.

[*English*]

The Chair: Thank you.

Monsieur Boucher.

[*Translation*]

Mr. Pierre Boucher (President and Chief Executive Officer, Cement Association of Canada): Mr. Chairman, members of the committee, good morning.

My name is Pierre Boucher and I am the president of the Cement Association of Canada. I am accompanied today by Bob Masterson, who is our policy director.

I thank the members of the committee for giving us this opportunity to present the viewpoint of the cement industry on Bill C-311.

[*English*]

The Canadian cement industry has been very engaged in productive consultations with the Canadian government on its environmental agenda. We fully support the efforts of the government to address global climate change.

As you may know, cement is a fine grey powder that is mixed with water, crushed stone, and sand to make concrete. Cement is the glue that holds the concrete together. Cement is a strategic commodity and vital to Canada's infrastructure. Cement is the key ingredient in concrete. Little is built without concrete.

Globally, 2.5 billion tonnes of cement are produced annually. Global cement production is expected to double to five billion tonnes by 2050. In Canada, 14 million tonnes of cement are produced annually, 10 million tonnes are consumed in Canada, and four million tonnes are exported to the U.S.

[*Translation*]

Every year Canadians on the average use 30 million cubic metres of cement, that is, one cubic metre for each Canadian man and woman.

[*English*]

Cement is an energy-intensive industry. When considering cement emissions reductions, it is important to take into account that 60% of the total emissions associated with cement production are fixed process emissions. These fixed process emissions are a direct consequence of the chemical reaction resulting from heating limestone, the raw material required to make cement. These process emissions cannot be reduced.

The remaining 40% are combustion emissions associated with the use of coal or petroleum coke, our primary energy sources. This 60-40 split is important to fully understand where emission reductions can take place. The good news is that the cement industry can reduce its combustion emissions.

The Canadian and global cement industry is moving forward to implement its plan to reduce combustion emissions. These are: continual improvements in energy efficiency; increasing the use of blended cement and cement substitutes; substituting coal and petroleum coke with low- and zero-carbon energy sources; and research on manufacturing processes and materials.

Regrettably, a number of policy and regulatory barriers at all levels of government impede or squarely prevent the implementation of the cement industry's plan on climate change. Key barriers include: fractured and non-integrated approaches to policy making and the uncertainty in the adoption of harmonized environmental and energy policies to address the specific challenges facing the cement industry; lack of government policy support for fossil fuel substitution with low- or zero-carbon energy sources; a costly, lengthy, and incoherent permitting process; and a slow building code and standards developing process.

Paradoxically, European governments recognize and facilitate the implementation of the cement climate change plan. As an example, in Europe the fossil fuel substitution rate is as high as 80%, but averaging approximately 40%, while the Canadian average is a mere 7%. Quebec, however, is a real leader in this field, and this year we will replace fossil fuels at a level of over 25%.

In order to mitigate investment and emissions leakages, the cement industry calls on the government to address the following issues while developing its climate change regulations.

The Government of Canada must take a coordinated and harmonized national and continental approach to climate change. Cement is an energy-intensive, trade-exposed industry and a price taker. Therefore, we cannot sustain multiple price signals and multiple regulatory regimes within Canada or the U.S., our largest trading partner. The Canadian cement industry must remain globally competitive.

As we speak, British Columbia and Quebec apply a carbon tax on cement production. As a consequence, cement imports, mainly from Asia to Canada, are increasing because cement imports do not have to pay these carbon taxes. The end result is the following: (1) a net increase in global emissions from cement production in countries that oftentimes have less stringent environmental regulations; (2) a net increase in global emissions resulting from the transportation of cement from Asia to Canada; and (3) the creation of an uneven competitive playing field.

The Canadian cement industry cannot be subjected to both a cap-and-trade regime and carbon taxes. All this simply leads to investment and emissions leakages.

In addition, a one-size-fits-all recipe for climate change does not work. The cement industry has been calling for a sector-based approach, since it is essential to take into account the specific characteristics of the cement sector when designing a climate change regulatory regime. The cement industry has developed its globally applied greenhouse gas reporting protocol that will facilitate benchmarking of the North American cement industry.

In the study of Bill C-311, we encourage the committee to take into consideration the following.

First, the Canadian cement industry operates in a global market and faces competition from around the world. These forces are magnified in the Canada-U.S. context. The U.S. is the Canadian cement industry's single export market and of course Canada's most important trade partner. In designing greenhouse gas regulations, the government must align Canada's trade and climate change efforts to those of the U.S. on such issues as price signals and on mid- and long-term climate objectives to avoid disruption of cross-border trade due to differences in the approaches to greenhouse gas mitigation.

● (1145)

Thirdly, the Canadian cement industry cannot have divergent environmental policies imposing unnecessary regulatory frictions or allowing uncertainty when it comes to decisions of where to invest and create jobs.

To conclude, we firmly believe that the cement sector approach based on harmonization and alignment with the U.S. will result in real emissions reduction and sustain the domestic and continental competitive position of the cement industry. Again, this is dependent on getting climate change regulations right.

In addition, all levels of government must also introduce and/or modernize complementary regulatory regimes, fiscal policies, and programs that support the implementation of our climate change plan. The government must now decide on emissions reduction targets for the cement sector and continue to develop a plan with Canadian stakeholders and the U.S. government.

[*Translation*]

Close cooperation between the cement industry and the government is necessary if we are to implement our common plans and strategies to reduce greenhouse gases.

I thank you for your interest and your attention.

[*English*]

The Chair: Merci.

I want to thank all of you for your opening comments. I really appreciate it.

We're going to go with our seven-minute round, and to kick us off, Mr. McGuinty.

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

Thank you, ladies and gentlemen, for being here today. I would like to begin by asking the same question I ask all the witnesses who have appeared here on Bill C-311. So I put the question directly to Mr. Lloyd, Mr. Boag, Mr. Watkins, and Mr. Boucher: do any of you have in your possession a domestic climate change plan for Canada? If you have a copy of that plan, can you share it with us?

Mr. Lloyd.

● (1150)

Mr. Gordon Lloyd: I think what we have is an understanding of elements of a plan. As I said in my remarks, I think the approach the government is taking, of moving on pace with the Americans, is the right way to go, the way we need to go. We can't have the details of the plan until we know how the Americans are in terms of being able to match that with them, where we can be different, where we are the same. It's a delicate balancing act.

Mr. David McGuinty: So we don't have a plan. You don't have a copy of a plan in your hands?

Mr. Gordon Lloyd: We have elements of the plan that the government has, but no, we don't have a one-pager that is a plan.

Mr. David McGuinty: Thank you.

Mr. Boag.

Mr. Peter Boag: My comments would be essentially the same as Mr. Lloyd's. Certainly we've been in discussion with government over the last number of years. We've seen elements of plans. Some parts of it are out with respect to vehicle emissions requirements, but as Mr. Lloyd has said, and as I said in my remarks, I think we're taking a prudent approach to ensure that we pace and inform the ultimate plan in Canada with what's happening in a continental context.

Mr. David McGuinty: Thank you.

Mr. Watkins.

Mr. Ron Watkins: That is essentially the situation. I think you—

Mr. David McGuinty: Thank you.

Mr. Boucher.

Mr. Pierre Boucher: We have the *Turning the Corner* framework, which we studied and certainly discussed at length with the federal government on all the issues. We're also working with provinces, certainly with British Columbia, Ontario, and Quebec, on their plans, which are intimately linked with the western climate initiative plans.

Mr. David McGuinty: I will turn to the first theme of my questions, to all four of you this morning. All of you, directly or obliquely, referred to the need for national coherence and then you talked about continental coherence. I presume you're implying international coherence. Can you tell us how your sectors are reacting to this reality?

Someone mentioned that Quebec and B.C. have carbon taxes. Ontario is about to bring in emissions trading legislation; it will be joining the western climate initiative with other provinces. We have a 20% target from 1990 levels in Quebec, a 15% target in Ontario, a 13% target in British Columbia, and targets in virtually every province. Targets for eight of the provinces, when you average out their actual emission reduction targets, are 14% below 1990 levels from 2020.

When you call for coherence in Canada, the reality is—and I think you've all said this—that your own sectors have already met the Kyoto targets and beyond. Can you tell us how you expect the government to move forward now that we have, virtually, your sectors going it alone, provinces going it alone, and emissions trading systems being designed and finalized through the WCI and through the northeastern governors organization, for example? Can you tell us how you're going to deal with this incoherence that, by the way, has all happened in the last 46 months—all of it—since the arrival of the Conservative government? All of these measures have been brought in since their arrival. As a result of what we, in the official opposition, now describe as absolutely no leadership, your sectors are now going to be penalized, according to your own testimony, because we have provinces and sectors going it alone.

What would you recommend happen now, especially as we're about 10 days away from final texts being presented to 192 governments in Copenhagen who hope to ink—ink—at least the legal framework for a binding treaty? What's your advice to the government on how to move forward?

Mr. Pierre Boucher: There's surely a distinction to be made between economy-wide targets. I think Quebec has expressed theirs, and so has the United States. Canada is at least deliberating upon choosing an economy-wide sector target. The cement industry is much more interested in knowing the cement sector target, and we're working diligently with the provinces, Quebec and Ontario, on all these issues. We will want to determine our sector target for cement. That is fundamental for us. We'll have to get down to discussing the specificities in order to take into account the characteristics of the cement industry itself.

As far as carbon taxes go, it was clearly mentioned by the Quebec government, just a few days ago, that its carbon tax would be dropped when the cap-and-trade system comes into place for the industrial sectors. It has decided, certainly, that it will be adopting a sectoral approach to determining each industry sector's reductions. It has also clearly expressed that industry has done quite a bit. It will be focusing not only on the industrial sectors in Canada, but also on the housing industry and the transportation sectors.

● (1155)

Mr. David McGuinty: I'll take it that Mr. Boucher was the only person who wanted to answer that.

Let me table a second theme for your consideration. I have one minute left, so maybe you can weave this into your answer.

We've heard expert testimony telling us that Canada's approach through intensity targets will not be fungible with the United States Senate bill, which is calling for absolute reductions, in a trading system. So the two won't connect. That's number one.

Number two, I want to ask how it's going to be possible. And this is our position in Copenhagen: we're going to meet the government's weak targets, apparently, exclusively using domestic reductions—no international credits, only Canadian offsets. The United States is contemplating massive use of international credits, and we all know that every country that has achieved its Kyoto reductions has done so by buying at least 20% of its credits offshore, its reductions.

Can you explain, on both of those fronts, how your sectors see us as congruous with the United States?

Mr. Gordon Lloyd: I'll go first on this one. I had some answers to the other one, too, but we all have to take turns.

As I said in my testimony, when we saw that the Americans were going to a cap-and-trade approach, we recommended that the Canadian government do the same. It looks like that's what the Canadian government is doing. The government has increasingly emphasized the fact that its 2020 target is an absolute target. The intensity target was, as we understood it, an interim measure along the way to getting there. And it looks like that interim measure's time has really passed. That's our understanding of where the government seems to be going. That, to me, was reinforced by the article by Minister Prentice that was in the paper yesterday.

We agree that it is important that we be able to trade with the Americans. That was one of the main reasons the Canadian Chemical Producers' Association recommended that we adopt a cap-and-trade approach in Canada, because trading with the U.S. is essential.

Your other point about the difficulty industry is facing with all these measures happening in the provinces is a valid point. We are worried about that too. Again, our hope is that once we end up moving forward at pace with the Americans and have a national approach in Canada, that will be folded into how Canada approaches things, just as the U.S. states are probably going to give way to the overall American approach.

The Chair: Thank you.

I'll just remind witnesses that we have a set amount of time for each committee member. I ask that we stay within that timeline. If there is extra information you wish to give on any of the questions, we encourage you to submit it in writing. Just keep a notepad going, write down the questions you want to follow up on with the committee, and we'll look at the answers in written form. I have to be judicious in making sure that we maintain our rounds.

With that, we'll go to Monsieur Bigras, *s'il vous plaît*.

[*Translation*]

Mr. Bernard Bigras (Rosemont—La Petite-Patrie, BQ): Thank you, Mr. Chairman. I'm going to try to be brief and get straight to the point.

I would like to draw your attention to section 7 of the bill we are reviewing today which aims to set greenhouse gas emission limits by province. In Canada we have a good range of varied industrial sectors. However in reality Canada's economic base is not the same from one ocean to the other and this is true even as regards the reduction of greenhouse gases.

I'll give you an example. The Quebec manufacturing sector, which forms our economic base, has reduced its greenhouse gas emissions by at least 24% since 1990. However, going by the federal approach, Quebec's manufacturing sector businesses will probably be placed on the same footing as the oil sector businesses. It seems to me thus that there is an inherent inequity in the system.

Would Quebec businesses not benefit from a common but differentiated approach domestically, just as the federal government is proposing on the international scene? Would that not be in their economic interest, in light of the fact that Quebec has made the commitment to reduce its greenhouse gas emissions by 20%? We know very well that the marginal effort will be more difficult in the manufacturing sector, which will force the government to set higher targets in the transportation sector. As Mr. Boag said, 40% of greenhouse gas emissions come from the transport sector.

Basically, would you not agree that Quebec's good record and ambitions mean that consequently there is much less pressure on its industry than that exerted in the rest of Canada, on one condition, which is that there be targets set by province and not sectoral targets from sea to sea?

● (1200)

Mr. Pierre Boucher: What concerns us more is a target for each industrial sector. Insofar as the cement sector is concerned, we advocate that our sector be treated in a unique manner taking into account its specificities everywhere in Canada, in the United States and throughout the world. We advocate that there be a target for the cement sector which could be the same throughout Canada.

Mr. Bernard Bigras: So you are certain that in its next plan the Government of Quebec will set a very high bar for the manufacturing sector and will not take into account the efforts it has made in the past, because that is currently the problem. In this sector, industries made efforts in the past but these were not recognized. The efforts that were made, and the available technology, are not taken into account. We know that in your sector there are limits to how much greenhouse gas emissions can be reduced.

For Quebec to reach its 20% reduction objective, manufacturing sectors are not the ones that will be affected in the future; it will most probably be the transport sector. Indeed as the representative of the oil industry said, that sector accounts for 40% of greenhouse gas emissions. To reach the greenhouse gas emission reduction objective the industrial sectors will most likely, as they have reduced their emissions by 24%, not be the ones affected, but the transport sector will. So there are chances that the Quebec industrial sector will be spared, to the extent that Quebec controls its emission reductions.

Basically what I'm trying to ask you is this: should we not have a common and differentiated approach, just as Europe has adopted, taking into account our industrial structure, our past reductions, our population, energy efficiency, technological possibilities and available renewable energy?

Mr. Pierre Boucher: That is what I am saying, insofar as the cement sector is concerned. A cap and trade system is conceivable to take into account all of the aspects you just mentioned.

Indeed, certain sectors should make greater efforts, in particular the transportation sector in Quebec. More efforts are required. It has been clearly said I believe by the Quebec government that the greatest effort will have to be made in the transport and housing sectors, as the industrial sector has indeed contributed a great deal.

Mr. Bernard Bigras: In a federal framework, I wish you good luck.

In the steel sector you reacted very well when the Buy American Act was passed, so that the steel industry will probably be penalized during the next few years.

We didn't hear you talk about the fact that at least two out of three projects being studied in the various chambers in the United States would impose a “carbon tariff” on the countries or industrial sectors in Canada that would not reduce their greenhouse gas emissions.

Isn't there a danger that targets will be set that are not rigorous? We are talking about harmonization. In reality these targets in Canada aren't absolute reduction targets. They are intensity targets.

Last week at least two economists came to tell us that a North American cap and trade emissions market is a good thing, but on condition that it be harmonized. We can' t have a cap and trade system in the United States based on absolute targets while the federal government continues—even though it was claiming the opposite yesterday—to adopt intensity targets. They are not planning reductions at the source.

[*English*]

Mr. Mark Warawa (Langley, CPC): I have a point of order.

The Chair: Go ahead, Mr. Warawa, on a point of order.

Mr. Mark Warawa: Mr. Chair, we've heard inaccurate information in an attempt to confuse the witnesses. The fact is, Chair, that the government's position on greenhouse gas emissions is not intensity based. They are absolute targets of 20% by 2020. For a second member of the opposition to now try to confuse the witnesses by making false claims is not appropriate, Chair. The targets are absolute targets of 20%.

● (1205)

The Chair: Go ahead on the same point of order.

I didn't see it as a point of order, though; it was more debate.

Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.): We might as well correct the record. If Mr. Warawa is saying we have an absolute target by 2020, what he's saying is we have absolute targets for every industry in Canada by 2020.

The Chair: Committee members, as I've stated before, I want to make sure that when we raise points of order, they are actually points of order. This is debate; I'm going to give the floor back to Monsieur Bigras.

You have one minute left.

[*Translation*]

Mr. Bernard Bigras: I demand that the point of order not reduce my speaking time.

[*English*]

The Chair: It didn't. You were at one minute; I stopped the clock.

[*Translation*]

Mr. Bernard Bigras: Fine.

Basically, this 20% greenhouse gas emission reduction target is all well and good. First of all, I don't see why the government is claiming that it is a 3% reduction with regard to 1990, if these are absolute targets. You see, there is an inherent contradiction in what they have been saying.

So I would like to hear what you have to say on the fact that the government is adopting intensity targets while on the other side of the border they are adopting absolute greenhouse gas reduction targets. Isn't there an inconsistency in the whole system?

[*English*]

The Chair: Go ahead, Mr. Watkins.

Mr. Ron Watkins: Monsieur Bigras, thank you for your question.

From our point of view, the reference point is what is happening at the sectoral level between ourselves and our U.S. counterparts in terms of what the regulatory obligation will be. I think their system is clearly moving in the cap-and-trade direction. I would add that they, of course, have also introduced other measures to deal with the external trade issues, and that aspect also certainly needs to be tracked for its impact on us as producers. That's the comparability that, frankly, is important to us. It's that alignment, so that we're facing essentially the same challenge.

The Chair: Moving right along, we'll go to Mr. Bevington. You have seven minutes.

Mr. Dennis Bevington (Western Arctic, NDP): Thank you, Mr. Chair, and to the witnesses for coming here today and sharing their interesting and important points of view on this subject.

I want to focus back on the bill, because that's what we're here for.

Mr. Lloyd, you indicated that you didn't support the bill. I've been listening to everything that's been said here, and I don't understand in what way Bill C-311 will not allow flexibility in determining which industries are going to provide the greater carbon dioxide reduction targets. Could you tell me a little bit more about why you think this bill is not appropriate?

Mr. Gordon Lloyd: Sure. The main problem we have with the bill is that it requires us to meet certain targets way off in the future, and we have no way of knowing whether we're going to be able to meet them. If we can't meet them, the bill is a recipe for buying credits internationally. In our view, a much better solution is for the government to take that same money and invest it in technology.

Mr. Dennis Bevington: Does it say anywhere in this bill that the chemical industry is being targeted for particular reductions? Are you not going to be part of a larger government plan that has total reductions coming from all industries?

Mr. Gordon Lloyd: We'll be part of a larger government plan. But when I say we don't know if the chemical industry can meet them, I mean the same thing Canada-wide. We simply don't know if Canada can meet those targets so far off into the future.

Mr. Dennis Bevington: So it's more your concern with the overall targets, not with the impact on your industry.

Mr. Gordon Lloyd: The main concern is that this bill would drive us to spend all kinds of money internationally. Emissions trading is a useful element in addressing climate change. But in our view, there should also be a larger investment in technology, and a technology fund is something that's very important. Investment through promoting ancillary capital cost allowance improvements would also be effective. That would be a better way to spend the money than the $6 billion or more that in 2020 we'd have to spend abroad under the terms of this bill.

Mr. Dennis Bevington: You have indicated a 65% reduction in CO_2 emissions. What has that done to your bottom line? Does that improve your sales or take away from them?

Mr. Gordon Lloyd: It was positive. We were able to do that because in the nineties, when things were booming, we invested in new technology and equipment. We want a return to those times, and that could happen with the technology fund that we've talked about, and with improved accelerated capital cost allowance.

Mr. Dennis Bevington: I want to go on to the petroleum industry. What we've seen in the U.S. over the last three years is an almost 20% reduction in the use of crude oil. The barrels per day have gone from 21.7 million down to 18.8 million. So your industry has accomplished large absolute reductions in the U.S. What's the situation in Canada?

● (1210)

Mr. Peter Boag: In product sales or emissions?

Mr. Dennis Bevington: In product sales. How much petroleum are we producing today compared with three years ago?

Mr. Peter Boag: Our petroleum production today is relatively equivalent to what it was three years ago. We've seen some ups and downs over the last couple of years, particularly as the economic circumstances in the country have changed and with some changes in the overall product mix. Diesel is down now because of reduced demand under the current economic circumstances. Overall, we've probably seen over the last three years a 4% or 5% drop in demand. It's different in the United States, where demand has gone down significantly as a result of reduced economic activity.

Mr. Dennis Bevington: So if trends continue, your ability to match up to absolute carbon reductions is not going to be that difficult. If you see an increase in your product volume, then you're going to have difficulty. Expansion in your industry is the question. Is your industry going to expand in the next 20 years, or are you going to decline?

Mr. Peter Boag: That's a good question.

Do you want to add to that?

Mr. Tony Macerollo (Vice-President, Public Policy and Communications, Canadian Petroleum Products Institute): It's a function of demand, simply put. It's a function of demand from your constituents. It's a function of demand from many of the other industry sectors that use our products.

I really want to come back to the issue of Bill C-311, to very specific points of disagreement.

One, we're not talking Kyoto anymore; we're talking Copenhagen.

Two, the rules are going to change. The rules have changed since Kyoto. The U.S. pulled out.

Three, you've given a phenomenal amount of regulation-making power to the government with no accountability or parliamentary oversight. Regulation-making power is done by cabinet. The only mechanism you have is the Standing Joint Committee on Scrutiny of Regulations. We have specific examples of how that produces unintended consequences in other areas of fuel combination.

Finally, Canada is one economy. To say that you can apportion it from province to province fundamentally defies what we have been doing since Confederation, whether it be forms of equalization, whether it be specialized programs—

Mr. Dennis Bevington: Okay—

Mr. Tony Macerollo: Money went to Quebec from the federal government for—

Mr. Dennis Bevington: Thank you for your answer. I appreciate it.

I want to move on, Mr. Chair, if I have time.

The Chair: You have just a few seconds.

Mr. Dennis Bevington: I'll turn to the steel industry.

My question to you as well is with regard to your main competitor, which is China. Are we exporting any steel to China?

Mr. Ron Watkins: Essentially, no.

Mr. Dennis Bevington: So basically, if we're having trouble....

Do we have any trade agreements with China that would stop us from putting a carbon tariff on their products coming into this country?

Mr. Ron Watkins: The issue of carbon tariffs goes to what is and is not possible within the WTO. I mean, China's essential trade obligations are its WTO obligations—which it sometimes doesn't always respect; nonetheless, that is the trading framework.

With respect to the issue of carbon taxes, for example, certainly the starting framework would be the WTO. That would apply, presumably, to measures that other countries would take as well.

The Chair: Mr. Bevington, your time has expired.

We'll wrap up our seven-minute round.

Mr. Warawa, you're batting cleanup.

Mr. Mark Warawa: Thank you, Chair.

Thank you, witnesses.

I have a lot of questions, but Mr. Macerollo, you were cut off by the NDP. I'm going to give you a couple of minutes to summarize what you were hoping to say.

Mr. Tony Macerollo: I've actually made most of my key points.

Mr. Mark Warawa: Okay.

Mr. Tony Macerollo: There is one other point that I think needs to be made, however, with respect to transportation fuels.

Transportation moves people, goods, and services. It's the lifeblood of our economy. We are an export-oriented country, and we are not the United States. We don't have Thanksgiving Day weekends where families, if they haven't been laid off, are congregating all across the country to go to denuclearized families, in essence, because we live in individual communities across a very large land mass.

I will say that what has been most disappointing over the last, frankly, 20 years of discussion on climate change is that you have subjected industry—collectively, all of you—to about four or five different plans, with no ability for businesses to do the planning that is required to make the investments that are necessary. If there have been improvements, they've been a function of cost-effectiveness. It makes sense if you can lower your energy costs.

What we've seen, quite frankly, in the last four years, at least, if not longer, is a lot of bickering on who has a better plan. There's not one opinion poll out there that says that any of you got it right. You would have thought that a minority Parliament would have been the perfect opportunity for a multi-partisan approach to this. And that's been very unfortunate.

● (1215)

Mr. Mark Warawa: Thank you for that challenge. I appreciate that.

What we've heard from every witness, even those who support Bill C-311.... Some of the environmental groups said they acknowledge that a harmonized approach with the United States, because it's our number one trading partner, would be the preferred way to go.

There was a logic in Europe for why 27 European countries, all with different abilities and some uniqueness, came together with a European target and a European commitment. Canada and the United States together have a harmonized approach and a continental target. We came up with our target of 20% absolute reduction two years ago. The United States has adopted a very similar target, which President Obama will be taking to Copenhagen.

The question I would like to ask—and what makes the hairs go up on the back of my neck—is about what the cost of energy will be for Canadians if we adopt Bill C-311. We heard from the witnesses an encouragement that we have to adopt energy prices similar to Europe's. If we're accepting European targets, we'd be looking at $2.50 a litre for gasoline. We heard that the electricity prices in Denmark were six times what we pay. There would be a massive loss of jobs. We heard that it would be a major burden on industry and therefore there would be a loss of jobs. There's a lot of concern.

Is there any truth to that? If Canada were to adopt the European targets, move away from a harmonized approach, and have massive increases in energy prices, what effect would that have on industry, all your industries?

Mr. Lloyd.

Mr. Gordon Lloyd: Well, that would be very negative. In fact, I think the attachment to the CCPA brief, which is based on Environment Canada's work, shows that it would be even worse than you portray, because in Canada, because of the costs, it's more expensive than it is in Europe to achieve the same reduction targets. It would be even more problematic than it is in Europe. That is something that....

We do not want to move to targets we can't afford. That's why we've emphasized these approaches: let's use the technology fund; let's use accelerated capital cost allowance; and let's get the investment in the companies so that they will achieve what we achieved back in the 1990s.

That's the approach to take. Adopting the European style of targets is not something we can afford right now, and it will be even more expensive for us than it is for them.

Mr. Mark Warawa: Mr. Boag.

Mr. Peter Boag: As we put a price on carbon, I don't think there's any doubt that in the end energy prices will go up. How much will they go up? That's a matter of speculation.

I'll refer specifically to the fuel that most of you are familiar with, and that's gasoline. It's impossible to predict what the pump price of gasoline will do. The variety of factors and variables at play, and ultimately the competitive markets, determine what the price at the pump is.

But what I can say is that when you combust a litre of gasoline, you emit two and a half kilograms of carbon dioxide, so when we look at the prices of carbon in terms of the input cost to the process—not the price at the pump, but the input price to the cost of the process. I mean, it's two and a half kilograms per litre.... Whether the carbon price is $30 a tonne, $50 a tonne, $100 a tonne, or $300 a tonne, you can do the math as well as I can in terms of what the potential input cost to the production process may or may not be.

● (1220)

Mr. Mark Warawa: Mr. Watkins.

Mr. Ron Watkins: To come back to what I was mentioning earlier, energy is a key input cost for steel producing, whichever method we use, so to the extent that you have much higher energy costs in Canada compared to the U.S., say, or compared to China, for example, that would clearly have a direct competitive impact. In some respects, it's sort of less, the difference between Europe and Canada, because the steel trade is much less there than with those other two jurisdictions, for example.

Mr. Bob Masterson (Director, Policy, Cement Association of Canada): Sure.

Energy costs are very important to the cement sector. In fact, 40% of the plant operating costs are energy costs split fifty-fifty between electricity and fuel.

One of the things we'd like to bring to your attention is that in all the discussion of the U.S. bills, especially the Waxman-Markey American Clean Energy and Security Act, there are provisions in there to take into account the indirect costs on manufacturers, on steel, cement, and others, that will arise due to what are anticipated to be significantly increased costs of electricity.

They're working at another level of discussion than the one we're having here and they're getting down to the nuts and bolts of what the impacts will be on the various sectors. It's the discussion we are trying to have here in Canada as well.

The Chair: We're going to our five-minute round, so I encourage witnesses to be very succinct in your responses.

With that, Mr. Scarpaleggia, could you kick us off?

[*Translation*]

Mr. Francis Scarpaleggia: Thank you, Mr. Chairman.

You are all here to testify on Bill C-311. You represent the most important industrial sectors in Canada.

Did you consult your unions with regard to your position on Bill C-311? Do they believe as you do that this bill would devastate your industries and consequently exert downward pressure on the number of jobs in your companies, in your industries? Did you consult your unions, who are stakeholders as well, clearly?

[*English*]

Mr. Peter Boag: I can comment from a CPPI perspective. I receive my input and my guidance from my member companies, so I don't directly deal with their unions. To what extent they have included their unions in developing their position, I cannot say.

[*Translation*]

Mr. Francis Scarpaleggia: I believe that that is an important and relevant question. Would anyone else here know whether the position of his association is informed in one way or another by the opinion of the unions?

[*English*]

Mr. Ron Watkins: Yes, we have discussed the aspects of climate change policy with the United Steel Workers, which is a principal union in our industry. We have not discussed specifically Bill C-311, but in terms of the issues and the concerns that I've brought forward in this discussion, we've equally had that kind of policy discussion with the unions.

[*Translation*]

Mr. Francis Scarpaleggia: Do the unions share your concerns?

[*English*]

Mr. Ron Watkins: I'm not sure what their ultimate position would be, for example, on Bill C-311. As I say, we talk to them about the importance of addressing the competitiveness concerns, the sectoral—

[*Translation*]

Mr. Francis Scarpaleggia: I will move on to my second question.

The chemical industry representative mentioned earlier that that industry had made enormous progress with regard to reducing greenhouse gases. Of course I imagine that the industry did so voluntarily, on its own initiative and because of its environmental conscience.

Did you ever negotiate targets in your sector with any federal government? Even on a preliminary basis, did you ever agree with any federal government on certain targets in your sector, even if they were not made public? Perhaps you did not have time to divulge those targets or they could not be ratified in a legal manner. Did you negotiate targets with any federal government, ever?

● (1225)

[*English*]

Mr. Gordon Lloyd: No, we haven't negotiated specific targets with the federal government. What we have done is emphasize to them the point that we need to move in pace with the Americans—

Mr. Francis Scarpaleggia: No, no, Mr. Lloyd, I'm not talking about this government; I mean any government. Have any of the sectors represented here today ever sat down with a federal government—maybe, Mr. Macerollo, you might know—and said, “We agree to these targets”?

Mr. Gordon Lloyd: No, we haven't done that with any federal government.

Mr. Pierre Boucher: We're certainly in the process of educating not only federal governments but provincial governments on the specific issues that relate to the cement sector. We are in the process of educating them so they have a better knowledge of what the issues are, and we will certainly be able, eventually...because we must do that to determine the sectoral targets. But we are not there yet.

Mr. Francis Scarpaleggia: You never had discussions, ten years ago, with a government and arrived at some kind of consensus as to what your industry's targets should be in the short term. Has that never happened?

Mr. Pierre Boucher: Not on the sectoral level, certainly not.

Mr. Tony Macerollo: I can say that this is a function of history, but we did begin negotiations with one of the previous governments, but it was not concluded because there was an election.

The Chair: Thank you. Your time has expired.

Mr. Woodworth, you have the floor.

Mr. Stephen Woodworth (Kitchener Centre, CPC): Thank you, Mr. Chair.

Witnesses, I appreciate your presence here. It's very instructive that representatives of the steel industry and representatives of the cement industry have joined the chorus of witnesses we've heard from who have stressed the great importance of harmonization on a North American basis. I think it's instructive that representatives of the steel industry and the cement industry have talked about the existence of competitive forces from around the world and have raised great concern that we get the balance right between economic costs and environmental benefits. I say that because it illustrates that this is not just an Alberta concern; it's not just an oil sands concern, as it's sometimes painted. Anybody with a job in a trade-exposed industry that consumes energy should be concerned, it seems to me.

Mr. Boucher, you spoke about the cement industry being trade exposed and energy intensive. Would you agree with me that these are concerns for anybody with a job in an industry that's similarly situated, trade exposed and energy intensive?

Mr. Pierre Boucher: I definitely would. That is why we're saying for the cement sector these fundamental characteristics must be taken into account in designing the cap-and-trade system. It's all in the details, which are important, talking about free allowances, auctioning processes, etc. We're not at this level of detail with this audience, but all these issues are being discussed with many levels of government right now. When we get into the details, all of these issues will be discussed. In Australia, in Europe, and even to some extent in the United States right now, we're at that level of detail in very specific forums.

● (1230)

Mr. Stephen Woodworth: That, I think, is our government's concern. This cuts across all sectors that are trade exposed and energy intensive.

The other thing I've noticed is that not a single expert this committee has heard from knows of any country in the world being asked to reduce emissions at the drastic rate and cost that Bill C-311 requires. Not a single country in the world is being asked to bear such a cost.

Mr. Lloyd, you made an interesting point about the fact that international credits in Canada are selling at $200 rather than the $75 the Pembina report assumes. I have some real difficulty understanding that. I'm wondering if you might be able to help Canadians understand why carbon costs are so much higher in Canada, for example, than they are in the European Union.

Mr. Gordon Lloyd: There are probably a number of factors. For one thing, we probably don't have as much low-hanging fruit to go after as some of the Europeans do. We tend to have more modern plants. We also tend, particularly in provinces like Quebec, to already be using hydroelectric power, so we don't have low-hanging fruit in terms of making improvements in there to go forward. Those are some of the factors that I think go into that.

I'm not sure what all the factors are, but what I did find very interesting was the Environment Canada study from which, in our submission, I provided the chart about how much more expensive to achieve any given reduction level it is for Canada than for just about any other country. When you go off into the 2050 timeframe, we kind of get a bit closer to some others. I think people probably have less confidence in these forecasts for 2050 than they have in those for 2020 and 2025. Our costs, in the range you'd have the most confidence in, are higher than anybody else's. I've given you some reasons why I think that applies, from my experience, but that may not be complete.

Mr. Stephen Woodworth: Thank you very much.

I guess I'm also wondering, if there is a difference in the price of a carbon credit, say $200 in Canada as compared to $75 worldwide, what effect will that have on, for example, the steel industry? I don't know if anyone has done that calculation, but what does that do to your exports, your industry, and your competitiveness? How many jobs might be at risk in a scenario like that?

Mr. Ron Watkins: We haven't done that specific calculation. We have had a look at the *Turning the Corner* plan; we at least tried to get an estimate of what the cost exposure would be, so to speak, of the obligations this would have imposed on us. And even at much lower carbon prices than $200, it was into the tens of millions of dollars. I think what's important to understand is, first, that's bottom-line cost; that just flows right through to the bottom line. But, second, looking to the future, it changes the investment dynamic.

So the trade impacts are important and would be real, but we also have to have—and this is the longer-term concern—an investment environment in Canada that will continue to attract investment, because there are options.

The Chair: Excuse me, your time has expired, Mr. Woodworth.

[*Translation*]

Mr. Ouellet, you have five minutes.

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

Mr. Lloyd, you said earlier that over the long term the emissions reductions provided for in Bill C-311 were very high, but that you did not know how they could be realized. The long-term targets contained in this bill are on the order of 80%, which represents more or less the same targets as the United States will be adopting for the period between now and 2050. That is what Europe and all of the other stakeholders adopted. Contrary to what Mr. Woodworth just said, witnesses have indicated that in Europe, using 1990 as a reference year, the target is 34%.

This bill only refers to a 25% target using 1990 as a reference year. So, we are not talking about 80% within a few years. In the long term everyone agrees. That seemed to be what was bothering you earlier—we don't know how we could reach such a high target. However, everyone has the same target.

Something else was said which is that the Kyoto Accord is no longer being discussed, but rather the Copenhagen agreement, which will be much more demanding. The reductions will be much greater and all countries are preparing for them.

Could you tell me, Mr. Lloyd, why you believe that such a bill would favour the United States?

● (1235)

[*English*]

Mr. Gordon Lloyd: I think on the issue of long-term targets, to have them as aspirational or objective is one thing, but to have them where the law demands that you have to meet them is another thing completely, and that's what this bill does. If we can't meet them through technological improvements and investment in new plants, it would require us to buy them from abroad, and that's the fundamental problem with this bill.

[*Translation*]

Mr. Christian Ouellet: Mr. Boucher and Mr. Watkins, you work in different sectors and you are asking that we respect various sectors when the time comes to set the overall volumes of greenhouse gas reduction targets. However, when we were told earlier that the most important sectors in Canada were represented here, I thought that we had forgotten to invite the forestry sector, which is also very important.

Why not consider horizontal reductions rather than vertical ones? In other words, your respective materials are used in the same places. In one case, they are used to make roadways and sidewalks and the like, and in the other case, they are used to build buildings and bridges. Rather than saying that the cement sector and the steel sector should reduce their emissions, why not consider the "building" or "bridge" sectors? You could then specialize, because obviously cement will never equal steel and steel will never equal wood.

Mr. Pierre Boucher: In fact, it is necessary that we advocate the use of the best material for the right application. Certainly the life cycle as a whole is important in the choice of materials. For instance, where cement is concerned we know that if there were more roads made of cement we would be reducing greenhouse gases and so we would improve air quality. If we use more cement in buildings, especially multi-residential buildings, we know that over the life cycle of the building...

Mr. Christian Ouellet: What you are saying has not been proven. I'm sorry, but you are talking to an expert here. I do not agree, I don't accept that as the truth.

Mr. Pierre Boucher: The Government of Canada carried out that study.

Mr. Christian Ouellet: I don't agree on the longevity aspect.

Mr. Pierre Boucher: So, the longevity and durability of all cement structures are already recognized. This is a very durable material which has fundamental and important environmental qualities.

Mr. Christian Ouellet: So you would not agree to considering horizontal reductions?

Mr. Pierre Boucher: I'm going to repeat this, each sector has its own particular characteristics. If we don't take them into consideration the result will be regulations that are poorly adapted to reality. What everyone wants in all countries of the world...

Mr. Christian Ouellet: You defend your sector very well.

Mr. Pierre Boucher: In all the countries of the world this has already been recognized. We are examining the situation sector by sector because people recognize that there are differences. I tried to express them a bit.

Mr. Christian Ouellet: Mr. Watkins, I have a short question. When you were talking about China earlier, did your figure of 50% include the steel from Taiwan?

[*English*]

Mr. Ron Watkins: No, it's just the number for China.

[*Translation*]

Mr. Christian Ouellet: That is all I wanted to know, Mr. Chairman.

[*English*]

The Chair: Mr. Calkins, the floor is yours.

Mr. Blaine Calkins (Wetaskiwin, CPC): Mr. Chair, I certainly appreciate an opportunity to ask some questions.

Just to set it into context, we in this committee have been studying Bill C-311 for what feels like forever, but it has been a couple of months. So far we've heard from countless environmental non-government organizations. We've heard from those influences representing the European Union and other countries, the United States of America, which would obviously give their two cents on how Canada should run its own domestic internal affairs, but which I look at through the eyes of a bit of a skeptic. And we've had the forestry sector and the electricity sector before us. Other than that, this is, finally, the first opportunity to ask real questions of Canadians who actually represent industries, who represent real people who have jobs and are accountable to society.

An hon. member: Hear, hear! Well said.

Mr. Blaine Calkins: I am going to ask you, Mr. Lloyd, Mr. Boag, Mr. Watkins, and Mr. Boucher—

An hon. member: [*Inaudible—Editor*]

Mr. Blaine Calkins: I thought I had the floor, Mr. Chair. I certainly maintain my composure when I'm listening to other questions.

● (1240)

The Chair: You have the floor.

Order.

Mr. Blaine Calkins: Mr. Lloyd, Mr. Boag, Mr. Watkins, and Mr. Boucher, how many people work for the various member companies in your organizations? Can you give us a number, whether that is in direct jobs or in indirect jobs?

Mr. Gordon Lloyd: Our sector is a lot more capital intensive than it is labour intensive. I'll get back to you with my numbers on this, but I don't have a good sense of how many folks work in the chemical sector. It is probably about 600,000, but that could be off base.

Mr. Peter Boag: In the refining sector directly, there are about 16,000 employees from coast to coast. We operate refineries from Newfoundland all the way to B.C.

Mr. Blaine Calkins: Do you have any idea about indirect jobs?

Mr. Peter Boag: For indirect jobs, that would certainly probably run up into the tens of thousands beyond that.

Mr. Blaine Calkins: Mr. Watkins.

Mr. Ron Watkins: My estimate is that in normal times, so to speak, it would be in the range of 30,000 people. The indirect jobs would reach back to sectors like mining and even transportation. For example, we're the biggest user of the St. Lawrence Seaway system, so the indirect impacts would also be substantial. We're clearly well down right now because of the economic crisis, but in normal times those would be the numbers.

Mr. Blaine Calkins: Mr. Boucher.

Mr. Pierre Boucher: In Canada we have 15 cement plants. We employ approximately 2,000 people directly. Indirectly, for concrete, there would be 15,000 people, but you must understand that cement equals concrete and concrete equals construction, economic development, so induced jobs are hundreds of thousands of dollars. No cement, no construction.

Mr. Blaine Calkins: That's right.

Would each of you say that is more or less relevant to, say, the Pembina Institute and how many people they hire, or the Suzuki Foundation and how many people they hire, or any of the other environmental non-governmental organizations and how many people they hire?

I'm asking this question, obviously, as a bit of a cynic. I don't expect you to know the answer, but I think I've made my point.

I'd like to get on, Mr. Lloyd, to the question that you had, and I'm actually quite excited about the points you brought up. I think where Canada stands to gain the most from this is through the development of technologies that deal with being cleaner, being more efficient, as we move forward. Most Canadians would agree with that. It makes more sense to me, as an Albertan, as a Canadian, that we invest in our own industries, invest through technologies to make our own industries stronger. Obviously, that will give us a technological advantage, which we can use. It will enhance our education facilities, research facilities. It will enhance our ability to export these technologies around the world. I would actually like to see a plan that goes forward investing more into that technology.

Could you just reiterate for the committee some of the problems you see with the technology as it was proposed before, and where you'd like to see that go in a new type of agreement?

Mr. Gordon Lloyd: The technology fund that was originally proposed in *Turning the Corner* was a very short-term measure, and it basically disappeared by 2018. It also very rapidly shrank in terms of the amount of compliance you could use for it. We were very disappointed, actually. We thought it was a very good idea that was turned into something that was not very useful.

Alberta, on the other hand, has a technology fund that's starting to get up and running now. They've appointed a board of directors. There's a representative, a retired vice-president of research from NOVA, who's on it. They have the kind of technology fund that we think can work, and we hope that's where the federal government moves to.

The Alberta fund is pegged right now at $15. I don't think that's realistic in the long term, and we'll probably see changes in that in Alberta. If the price of carbon goes up to what we expect, the carbon price in the technology fund should probably be informed by that. But that is a mechanism where, when you can't reduce your emissions to the targets you're assigned, you can put money into that fund and it will go to help develop the technology that's going to be necessary to improve our environmental performance in climate change.

We think that's an absolutely super approach. We hope that stays in the government plan, but we hope it's done much more along the Alberta lines, as we recommended. It probably shouldn't take the whole amount of your compliance. There are other aspects in this as well. There probably should be some limits on it, but we think a significant amount of your compliance should be able to be done through contributions to the technology fund. We think it's really a good idea that initially wasn't very well designed but can be improved greatly.

● (1245)

Mr. Blaine Calkins: Great.

The Chair: Sorry, your time has expired.

Moving right along, Mr. Trudeau, you have the floor.

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

I'd like to talk about and look at the early adoption side of things. Might we just go across the different industries and hear approximately how much your various industries have reduced greenhouse gas emissions from 1990 to today?

I think, Mr. Lloyd, you mentioned about 65% in your brief.

Mr. Gordon Lloyd: Yes. If you look at chart 1 in our submission, we did tremendously in the 1990s, and we did that because we were putting new plants in, we were investing in technology, and the economy was such that it supported doing that.

Mr. Justin Trudeau: Thank you. I'm just looking for the number.

Mr. Boag.

Mr. Peter Boag: It was 12%.

Mr. Justin Trudeau: You reduced it by 12% from 1990 levels.

Mr. Peter Boag: Yes.

Mr. Justin Trudeau: Mr. Watkins.

Mr. Ron Watkins: For us, it was 20% absolute; 25% intensity.

Mr. Justin Trudeau: Okay.

Monsieur Boucher.

Mr. Pierre Boucher: There was a 6.4% reduction in intensity and an increase in greenhouse gases because of our volume of production.

Mr. Justin Trudeau: Fair enough.

Mr. Gordon Lloyd: I was just looking at our number. Our number was 65%.

Mr. Justin Trudeau: Okay, 65%.

In three cases, we hit the Kyoto targets of 12% from 1990 levels by 2012, correct? In terms of the targets that were set and the line that was driven by Kyoto, whether it was industry, or economic circumstance, or capital upgrades, you were able to hit rather ambitious targets even though we weren't making tremendous efforts as a society to hit those targets. I think we can all agree on that. Is that fair enough?

Mr. Peter Boag: I would say that, but I would want to qualify that this achievement, certainly in our sector, was met with a tremendous effort to do that. I wouldn't want to minimize the effort or the cost it took to get to that 12%.

Mr. Justin Trudeau: Thank you, Mr. Boag. I appreciate that.

Most likely that was the low-hanging fruit, things that you could upgrade. Further reductions, you might say, particularly in the order of Bill C-311, would be significant challenges, I'm sure.

I'd like to talk a little bit about the government's targets of 2006 as a baseline level and a further reduction of 20% from that. How easy is it going to be for you all to reach the 20% from 2006, without looking at any credit for early adoption of what you've done during the 1990s, for example?

Mr. Gordon Lloyd: That will be a challenging target. We probably won't be able to meet it by actual reductions. That's why being able to contribute to a technology fund is so important. The better capital cost allowance treatment we get, though, the better we'll be able to have new investments that will help us actually meet it through reductions.

Mr. Justin Trudeau: Thank you.

Go ahead, Mr. Boag.

Mr. Peter Boag: It will be very challenging, if not impossible, for the refining sector, in part because of the split between combustion and process emissions, which I mentioned earlier. For one-third of those emissions you can't eliminate and reduce those emissions other than by turning down the production dial at a refinery.

Mr. Justin Trudeau: Thank you very much.

Mr. Watkins.

Mr. Ron Watkins: It is indeed difficult. To the point on fixed emissions, in our sector it's over 60%, so it would be very challenging indeed.

[*Translation*]

Mr. Justin Trudeau: Mr. Boucher, clearly, this is going to be difficult.

[*English*]

Mr. Pierre Boucher: It would be more than challenging. It would be quite impossible.

Mr. Justin Trudeau: With the various plans and the *Turning the Corner* framework attempt to do various things, what kind of support, directly, has your industry received from this government in terms of helping you and encouraging you to reach these targets they are putting forward?

Mr. Gordon Lloyd: The most positive thing has been the accelerated capital cost allowance. The fact that it hasn't gone to the five-year term and is stuck at two-year terms has limited the effectiveness of that. But certainly the two-year terms have been better than nothing. We were very pleased that there was all-party agreement at the industry committee and it was implemented.

Mr. Justin Trudeau: But as you said, it's still not going to be enough to help you reach that.

● (1250)

Mr. Gordon Lloyd: No.

Mr. Justin Trudeau: Is that sort of a similar...?

Mr. Peter Boag: I would echo Mr. Lloyd's comments in terms of the kinds of things that are out there within the tax system that facilitate investment. But to go back to some of my earlier remarks, Mr. Trudeau, we're not looking necessarily for that kind of support. We're looking for some flexibility in how we can move this, recognizing that there are trade-offs. We're probably moving in the next few years to another round of further desulphurization of fuels, which is great. It brings tremendous benefits to clean air. But the cost of that in terms of environmental trade-offs is that it also, then, requires more processing, more effort, and higher emissions on the GHG side.

Mr. Justin Trudeau: Thank you.

I think what we've seen is that the targets, whether we're talking about the Bill C-311 targets or these targets proposed by the government, are nothing unless there are concrete measures and proper help for achieving the kinds of things we're trying to do.

The Chair: I have to cut you off.

Mr. Watson, the floor is yours.

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

Thank you, of course, to our witnesses for appearing today.

Canadians who are tuning in and listening to the hearings today might get the impression that what this committee is discussing is the government's climate change policy. We're in fact talking about Bill C-311, which is the NDP's bill with respect to climate change. While we appreciate the general discussion on climate change policy, we could have been talking, for example, about the Liberals' failure to meet their minus 20% target over 1988 emissions by 2005 that was in their first red book, for example. But we're not here to talk about that. We are talking about Bill C-311.

Mr. Lloyd, I appreciate your comments with respect to the accelerated capital cost allowance, not only to inform the work this committee does but because of course we are in pre-budget discussions with respect to the upcoming budget in the new year. I assume that you've already made a presentation to that committee, but we can certainly make that a discussion as well. I will point out that it was originally a unanimous resolution by the industry committee that was supported by all parties. Unfortunately, the three opposition parties at one time or another have voted against those measures in budgets.

Going on to Bill C-311, one of the things we've heard in testimony already before this committee, which I think is very important.... It's not the government's opinion; it was an industry opinion. We had the Pew Center on Global Climate Change and Environment Northeast before this committee talking about the negative consequences of widely dissimilar targets between Canada and the United States.

Just to get us onto a page where we are comparing apples to apples, the Government of Canada's target, translated to a 1990 baseline, is roughly minus 3%. The U.S. target, depending on which one you take.... Neither target reaches minus 10%. It's a single digit over 1990. The NDP's targets are about minus 25% over 1990 levels by 2020.

Both organizations talked about serious trade problems that could arise and said that this could create political problems as well. I think one of them they mentioned was the flow of investment out of Canada and into the United States if we had a significantly more rigorous target within a cap-and-trade system than the United States.

Can you comment on what widely dissimilar targets within that kind of system would mean to your industries? Can you confirm whether that would mean a capital outflow for the purchase of credits, for example, on the U.S. side, where it might be cheaper? Can you walk us through what that will mean for your sectors?

Mr. Boag, I don't know if you want to start. Or maybe Mr. Lloyd does.

Mr. Gordon Lloyd: I think it's important that we have targets that are very similar in our sector to the Americans, for the reasons you've outlined and that I talked about in our submission. If we're much less onerous than the Americans, we're going to face border measures, and we're very concerned about that. They're a hugely important market for us. If we're much higher than the Americans, it's going to be competitively difficult in Canada. So we have a very narrow window to play with. And it's also a sectoral window.

One of the reasons it's important to move in pace with the Americans is their system is so much in flux. There was speculation in *The Economist* magazine a couple of weeks ago that some of the manufacturing sectors may not be covered in the States. That's not their current legislation, but we need to wait and see how that fleshes out.

Mr. Jeff Watson: Before I go to Mr. Boag, just so we're not being euphemistic about it, competitive disadvantage means job loss, does it not?

● (1255)

Mr. Gordon Lloyd: Yes.

Mr. Jeff Watson: Okay, thank you.

Mr. Boag.

Mr. Peter Boag: For our sector, the situation would be the same. This is a sector that's already under tremendous stress in a North American context. I would emphasize that in terms of refined petroleum products, there is no unique Canadian market. It is a continental market, with a free flow of fuel products across our border and for products into and out of North America. So this is an industry that's already under tremendous stress. We see a considerable amount of refinery rationalization in the United States. Utilization levels have dropped below a level that a number of refineries are no longer economically viable.

And we see all the kinds of stresses already in Canada, with respect to the investment environment for refineries. A couple of years ago a potential new refinery in Sarnia was on the table. That decision has now been made to not do that. We've seen a significant retraction in Atlantic Canada, where a new refinery was proposed for Newfoundland. That's gone. A new refinery for New Brunswick—that's shelved for the foreseeable future. So those are the kinds of things that ultimately influence the investment plan for our industry.

Mr. Ron Watkins: To elaborate on the points by my colleagues, clearly there's that issue of Canada versus U.S., and if we were put in a position where we had to, in essence, either face a carbon tax in the U.S. or buy carbon credits to somehow match up, that has a direct economic consequence for producers here.

Even if Canada and the U.S. more or less move in lockstep, the other factor, frankly, is this growing dominance of China in terms of world steel trade, and that's really a core factor in our industry. If China is not facing obligations such as we are, that trade and investment impact is important to us as well.

The Chair: Sorry, Mr. Watson, your time has expired.

Before we move to our last questioner, I just want to remind committee members that this is our last panel of witnesses. We are going to be moving to clause-by-clause next. Please submit your amendments to the bill, if you have any, by five o'clock today.

With that, last but not least, Mr. Braid.

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

Thank you very much to all of our witnesses for being here and for all of your presentations this afternoon.

I'll start with two questions. The first one is for you, Mr. Boag, and the second one is to Mr. Lloyd, and if we have additional time after that I'll proceed from there.

Mr. Boag, in your presentation, you indicated that one of the things we also need to look at in terms of the importance of reducing greenhouse gas emissions is to consider changes and improvements to the sector of the economy that uses your product, or much of your product, and that's the transportation sector.

Is it fair to say that you applaud the federal government's recently announced changes to improve tailpipe emission standards?

Mr. Peter Boag: Certainly, as I mentioned in my remarks, as refiners we ultimately have no control over the demand for our product, but one of the ways you can alter that demand and ultimately alter the emissions is to improve vehicle efficiency. Certainly, that's one of the steps we see as part of an overall approach to the transportation sector, steps to improve vehicle efficiency, again, though, in line with what's being done in the broader context of what is a highly integrated North American market.

Mr. Peter Braid: Which is exactly what we're doing.

Do you have any other thoughts or recommendations with respect to enhancements or improvements we can make to the transportation sector? I know it's somewhat outside your area of expertise, but any other...?

Mr. Peter Boag: I'm not an expert, obviously, in those sorts of things, but certainly our view, and the view of a number of provinces we're trying to work with who are looking at fuel issues, is that you can't look at fuel exclusively, that transportation emissions, ultimately, are based on—we use the description of a three-legged stool. Yes, you've got fuel carbon intensity, you've ultimately got vehicle efficiency, and then you've got driving habits and vehicle uses.

So you really do need to take a systematic approach that looks at all three of those legs of that stool if you're going to be serious about driving down transportation emissions.

Mr. Peter Braid: Mr. Lloyd, you placed a great deal of emphasis on the importance of investing in new and transformative technologies to reduce greenhouse emissions and make industry more competitive. Could you touch on some of the immediate technology opportunities in your area? Could you also give us an idea of opportunities over the short and mid term, which I would define as three to five years?

Mr. Gordon Lloyd: Most of these opportunities are medium and long term rather than short term. Breakthroughs such as the Dupont adipic acid process for producing nylon made for spectacular improvements in the 1990s. These things have huge payoffs. The chemical industry is looking at catalysts that I think will be helpful in those areas. Solar energy is something that Dow is looking at. Some of it is more near term. We provide chemicals that go into making insulation and other things that improve ordinary energy efficiency. That's not high-tech, but these incremental improvements could be important and short term. That's happening all the time, and that's where we think we need to put our support.

● (1300)

Mr. Peter Braid: Mr. Watkins, could you tell us about opportunities for transformative technologies in the steel industry?

Mr. Ron Watkins: The World Steel Association, which is the global industry association, has a very aggressive program called the CO_2 breakthrough program. It is looking at technologies like carbon capture and storage, which is potentially applicable in our industry. I think it's often thought of only in an oil and gas context. Electrolysis, hydrogen—a number of technologies are being researched around the world. Here in Canada, at McMaster, there's research on carbonization, which will produce significant benefits, not more carbon. We're trying to pursue these technologies collectively through the World Steel Association. We also participate in the Asia-Pacific partnership with six other countries, including the U.S., China, Japan, and so on. There's a lot going on.

Mr. Peter Braid: Thank you.

The Chair: Witnesses, if there were any questions you wanted but never got, I encourage you to put them in writing and submit them to the clerk as quickly as possible. We are soon going to be proceeding to clause-by-clause on the bill.

On behalf of the committee, I want to thank all of you for your insight, your thoughtful presentations, and your conversation today. Mr. Lloyd, Mr. Boag, Mr. Macerollo, Mr. Watkins, Madam Chan, Mr. Boucher, and Mr. Masterson, my thanks to all of you for appearing.

Did you have a question, Mr. Bevington?

Mr. Dennis Bevington: Yes. I wanted to check on the status of the minister.

The Chair: I believe we sent the letter requesting him. He is trying to look at his schedule to make himself available to appear before the committee.

Mr. Dennis Bevington: He has to do it before the 10th.

The Chair: Yes. We are trying to get him here, but it all depends on his schedule.

Mr. Bigras.

[*Translation*]

Mr. Bernard Bigras: Did you at least receive an acknowledgment from the minister?

[*English*]

The Chair: There have been discussions. They're aware of it.

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

Thank you, Mr. Watson. The meeting is adjourned.