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Chair

Mr. Laurie Hawn



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● (0905)

[Translation]

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

[English]

Thank you to the witnesses for coming.

I am obviously preaching to the people from the committee who aren't here, but if you could ask your colleagues to please be more timely, it would be much appreciated. We have a full agenda today.

This is meeting number 14 of the Legislative Committee on Bill C-30.

I want to welcome, from Alcan, Mr. Daniel Gagnier, senior vicepresident, corporate and external affairs; and Mr. Patrick Tobin, director, government and corporate relations. From the Canadian Steel Producers Association we have Ron Watkins, president; Denis Fraser, president and CEO of Mittal Canada; and Jim Stirling, general manager, environment and energy, for Dofasco Inc. From Interface Flooring Systems (Canada) Inc., we have Rahumathulla Marikkar.

We are waiting—but we'll start—for Mr. Avram Lazar, president and CEO of Forest Products Association of Canada; and from the Mining Association of Canada, Mr. Gordon Peeling, president and chief executive officer.

I've just been advised that Mr. Lazar is not here; he will be here another day. That gives us 10 more minutes.

What we do typically for witnesses is give you about 10 minutes—or less, please—to talk about your interest in Bill C-30. Obviously we're going to learn something about your industry or your company, but we'd like to keep it as focused as we can on Bill C-30, Canada's Clean Air Act, and what can be done to make that act stronger. Then we'll get into the round of questioning.

We will start with Alcan and Monsieur Gagnier or Monsieur Tobin.

It's Monsieur Gagnier, for 10 minutes, please.

Mr. Daniel Gagnier (Senior Vice-President, Corporate and External Affairs, Alcan Inc.): Thank you, Mr. Chair.

I will spare you the company commercial. You can read about it in the presentation. But I'd like to start off basically by outlining some of the things we've been doing and how we've approached the issue of clean air and greenhouse gas. [Translation]

I'll begin by talking about Alcan and greenhouse gas emissions. To us, climate change represents both a commercial challenge and a business opportunity. Our strategic approach has been driven by a win-win philosophy based on both environmental and economic benefits. The energy measures Alcan instituted in the early 1990s showed that it was indeed possible to reduce GHG emissions significantly, while maintaining economic growth. Our experience in Quebec has shown that governments and industries can work together in order to achieve voluntary reductions.

[English]

Concerning Alcan's early actions, the record will speak for itself. Total smelter GHG emissions from 1990 to 2005 were reduced by an actual 25%; smelter GHG emissions by intensity—and we measure both—were reduced by 45%; there was an 80% reduction in PFC emissions, which has a high concentration of greenhouse gases; and there were production increases of up to 40%. That's worldwide.

In Canada, from 1990 to 2005, total smelter GHG emissions were reduced by more than 30% and smelter GHG emissions intensity was reduced by 50%, while we increased production by 50%.

So we've established, I think, the bona fides of our approach to the issue of clean air. We have another 10% further in targets that were announced in Montreal at the beginning of this week, between now and 2010.

The next slides from the deck that you will see are merely proof points showing the trend lines on PFC emissions, on reducing emissions of air pollutants—fluoride emissions in particular—on polyaromatic hydrocarbons, and on total emission reduction by installation over the years.

• (0910)

[Translation]

Now, let's take a look at what we are doing today.

Process-related improvements to older technologies are continuing, and Alcan is intensively modernizing its Canadian assets with new technologies. Those efforts are leading to significant positive impacts in energy efficiency and reductions in GHG emissions. Alcan's AP35 series electrolysis technology is the most energy and GHG efficient technology in use today. And, while we continue to enhance that technology platform, we are also investing in its future, namely AP50, by building a US\$550 million pilot plant in Jonquière, Quebec.

To give you an idea of the potential convergence of this technology and other technologies, we believe that in five years, GHGs will have dropped and energy efficiency will have improved by 20%.

We are aggressively pursuing win-win opportunities in the downstream applications of products and their inherent energy and GHG benefits, through development, promotion and sales of a range of aluminum products, including a focus on end-of-life recycling benefits

These efforts and their results are proving that economic growth and competitiveness, and responding to environmental challenges, can be mutually supportive objectives.

[English]

On slide 17 in the long deck you'll find a chart on the cost of abatement that is very complicated, but I'll simplify it for you. Everything below the line shows things that we can achieve today, and if you look above the line, for nuclear, wind, forest, solar, coalto-gas shifts, and avoiding deforestation, you have a series of technologies that can be invested in and that will yield results.

On policy and regulations—slide 18 in the longer deck—to leverage existing solutions and encourage future solutions and build on early action to date, Canada and companies like mine need a smart policy framework. We need smart regulations and we need pragmatism in terms of the tool kit at our disposal that we can use.

The strategic combination of policy, regulations, and tax as an incentive to strongly encourage investment in technologies and energy efficiency will assist companies in leveraging business plans and investment cycles and we believe will contribute to win-win solutions.

We need a suite of approaches that recognizes what companies have already done. We need these approaches to be flexible, in the sense that all sectors deal with different realities, and while we need incentives on the technology front to do more, there's much that we can do and have already done. Sectoral approaches within Canada can be effective to build on, where provinces have already taken a lead, as they have done with the aluminum industry in Quebec, including voluntary measures within the tool box used by regulators.

[Translation]

Let's talk about our coordinated approach.

Federal-provincial cooperation is critical if we are to effectively regulate GHG emissions and emissions of air pollutants. Provisions on equivalency in Bill C-30 need to be passed to facilitate the avoidance of overlapping or conflicting regulations. Equivalency of effect will achieve the same results as equivalency of regulation in meeting overall policy objectives.

We support the federal government's power to regulate directly, when necessary, but advise caution in revisiting standards for a sector such as aluminum when it is already being well-covered provincially on both air pollutants and GHGs with significant results to date, and concrete plans moving forward.

[English]

On policy and regulations, slide 21, mandatory targets need to be an important part of the tool box, as they set clear, transparent, and consistent long-term objectives and represent a strategic intent regarding where we want to be. Long-term targets set clear mandates along the way to unleash competitive market forces. But we also need short- and medium-term targets that provide the foundation for an immediate call to action. Some of us have already started to act.

Finally, on market tools, the government needs to establish the rules and regulations of the market aimed at ensuring proper market functioning, including emissions trading and offsets, and then pull back to let the market forces operate effectively.

As for targets in the aluminum industry, for some industries like aluminum it will be important to measure both the actual and the intensity level of emissions to know where we are, until reductions from downstream applications are also recognized. To put the context around intensity targets, they merely allow us on an efficiency basis to continually improve and to set the benchmarks. That's why they're important. However, absolute reduction targets that don't take into account consideration of growth, capital stock turnover for product, and recycling opportunities can severely handicap the ability to leverage the inherent energy- and GHG-saving qualities of any material.

In conclusion, Mr. Chair, Alcan has been taking this challenge on both air pollutants and greenhouse gases, and the general challenge on environmental performance, seriously since 1990, and we've demonstrated many successful actions to date. If we want to be competitive—and there is an issue of competitiveness here—we will all have to take action and we will need smart, pragmatic approaches that foster environmental performance improvement while enhancing Canada's economic competitiveness.

Our message is that we've had that belief for some time and we believe that now is the time to act.

Merci beaucoup. Thank you.

• (0915)

The Chair: Now, for the Canadian Steel Producers Association, who will be leading off?

Mr. Fraser, you have 10 minutes for your organization.

Mr. Denis Fraser (President and Chief Executive Officer, Mittal Canada Inc., Canadian Steel Producers Association): Good morning, Mr. Chairman, committee members, and members of this panel.

[Translation]

First of all, on behalf of the Canadian Steel Producers Association, I welcome the opportunity to appear today on behalf of the Canadian steel industry.

We recognize the need for concerted action to protect the environment, and we believe it is possible to achieve environmental and economic performance that will generate sustainable growth and prosperity in the Canadian economy and the industry. Our companies have demonstrated a strong commitment to achieving substantial environmental gains, while maintaining an economic balance.

In my remarks, I will first highlight the strong performance of our industry in addressing clean air issues over the past 15- plus years, surpassing the Kyoto targets on greenhouse gas emissions and achieving large reductions of other emissions.

Next, I would like to advocate our approach to sustainable success, which combines environmental and economic performance. I would stress the need to continue investing in break-through "clean" technologies.

Thirdly, I would like to highlight some of our industry's efforts to contribute to a sustainable steel sector that will continue to benefit Canada.

[English]

It is unfortunate that too much of the general public perceives the steel industry to be a large contributor to Canada's air pollutants and greenhouse gas emissions. In reality, as Environment Canada's publication indicate, we produce only 1.8% of Canadian greenhouse gas emissions and 1% of air pollutants.

We're a small contributor in relative terms, but we have worked to have a larger impact on our footprint. We were an early mover in reducing emissions, even before 1990. And since 1990, a period during which Canadian steel shipments grew by 13%, our industry has reduced greenhouse gas intensity by 24%, and we have reduced absolute greenhouse gas emissions by almost 15%. Indeed, we exceeded the Kyoto target of a 16% reduction very early in 1991.

Similarly, we have reduced harmful pollutants significantly. For example, between 1993 and 2003 we reduced benzene emissions by 75%. We have a CEPA code of practice target of 90% by 2015, which we expect to meet in 2008, a full seven years earlier than the target set.

These statistics clearly show that our industry has made strong efforts over an extended period to improve our environmental performance. We will continue to improve, but we believe it is important that all sectors, and Canadians at large, work together in a manner that fairly and sustainably addresses the issue.

Canada's steel industry has managed to move the needle very significantly in the past two decades because our members showed tremendous early commitment to coupling environmental sustainability with financial performance and investment. We have successfully worked to reduce emissions of major air pollutants. From continual adaptation of environmentally efficient technology

to investments in energy efficiency, we have maintained that leadership role.

We're understandably very proud of these results, and we trust that in setting any new regulatory framework and targets, the government will fully recognize what has been achieved to this point. We further seek recognition of the practical limits to what more can be done in the short term. It would be wrong, we submit, to ignore this track record and to assume that large gains remain immediately or easily before us.

We believe it is vital for Bill C-30 to develop a policy framework that advances Canada's global environmental objectives with domestic policies that combine both environmental and economic sustainability.

(0920)

[Translation]

The two are inextricably linked. If we, as a country or an industry, are not economically viable, we cannot invest in advanced environmental technologies. We know that investment, innovation and environmental improvement go hand-in-hand. Over the past two decades, Canada's steel companies have invested billions of dollars in equipment and processes that have brought the environmental progress I just discussed. Without economic as well as environmental returns, the steel industry could not—in fact would not, have made those investments.

Looking forward, Canada and other countries will need to make major investments and work collaboratively to develop and implement break-through environmental technologies, if we are going to achieve major additional gains in sectors like our own. I emphasize break-through technologies because the scope of further improvement in the short term is very limited, given what we have already done.

For this reason, new legislation and regulations must take into account several considerations.

First, as I said at the start, there are practical limitations to achievable improvements in the short term. If appropriate and affordable technologies do not exist, they cannot be deployed. This is not a Canadian-only perspective. Our counterparts around the globe agree that it will take a quantum leap in technology to achieve the same kinds of greenhouse gas reductions in the future that we have achieved over the past 20 years.

A second reality we face is cost and complexity of capital stock turnover in our plants. Our business operates on 25 to 30-year investment cycles, with long pay-back periods. So do our competitors abroad. We cannot quicken the pace, since to do so would escalate our already enormous capital costs to uncompetitive and unsustainable levels. This would cause migration of investment out of Canada's steel industry.

[English]

If a standard is set that is economically or technologically unachievable, the impact will be seen in the marketplace. What is not made in Canada for our market will simply be imported. Canada has probably the most open steel market in the world; already over 50% of our steel is imported. It would therefore frustrate our economic and environmental goals if it became necessary to replace Canadian steel with products from other countries with lower environmental standards. This would raise, not lower, global greenhouse gas emissions, and we would not be earning the capital to reinvest in productive technologies for the future.

Let me be clear, we do not advocate for lower standards than our competitors in the other advanced nations. What I'm saying is that Canadian policies must recognize that we do not operate in an environmental or economic vacuum. Our legislative and regulatory framework needs to allow Canadian steel to be competitive and environmentally responsible at the same time, in an international as well as a domestic context. We're looking for a legislative and regulatory approach that is sensitive to our capital investment realities, our performance and commitment to date, and the need for breakthrough technologies in the future. This means setting realistic medium- and long-term targets, not unachievable ones in the short term.

The Canadian steel industry wants to be part of the solution and to partner with governments and others to do so. To this end, we are working, on many different levels within our industry, on critical issues such as energy efficiency and improved emission performance. In 2005 we negotiated a memorandum of understanding with Environment Canada and the Ontario ministry to work together on short-term and longer-term means to address reductions in greenhouse gases without undermining the competitiveness of the Canadian steel industry. The MOU provides a valuable framework for ongoing analysis and collaboration, which we wish to continue.

In addition, we focus seriously on energy efficiency, which improves environmental performance. We play an active role in the CIPEC program of Natural Resources Canada. We're working in conjunction with the Brussels-based International Iron and Steel Institute to benchmark best practices throughout the world, based on the best available technology economically achievable for individual steel processes. This is a critical principle that needs to be followed in the short term.

For the longer term, we're working in partnership with the Government of Canada in an international research program through the IISI to develop precisely the kinds of breakthrough technologies that other steel-making nations will need.

Let me conclude my remarks by highlighting a number of our specific concerns.

Most of all, we're asking you to appreciate that Canada needs a steel industry that is both environmentally and economically sustainable, one that can continue to generate the capital necessary to improve performance in both areas, just as we have for more than two decades.

Second, we ask that the government consider the relative size of the contribution our industry has made so far and the significant improvements we've already made.

Third, we ask that any regulatory regime not duplicate or contradict existing requirements for industry. Recognizing provincial governments' regulations through equivalency agreements would minimize the compliance burden on government and industry.

Fourth, we ask that regulations be developed that recognize the limits of science and technology that can be applied to our process in the short term. A failure to do so will simply tax the sector and push production to other countries. We also ask that you support policy and fiscal measures that stimulate investment in new technology, understanding that environmental improvement as well as reduction in energy usage will flow from investment in new products and processes.

Ladies and gentlemen, I thank you for the opportunity to appear before you this morning.

● (0925)

The Chair: Merci beaucoup, monsieur Fraser.

We'll turn now to Interface Flooring Systems (Canada) Inc., and Mr. Marikkar, for 10 minutes.

Mr. Rahumathulla Marikkar (Interface Flooring Systems (Canada) Inc.): Thank you, Mr. Chairman.

The cry for sustainable industry has emerged as industrial manufacturing process emissions poison the air we breathe, disrupt food chains, damage vegetation, and contaminate soils. Industrial wastewater is often returned directly to streams and rivers. Elevated levels of suspended solids and metals lead to water quality problems and potential risks to public health. The temperature and pH of effluent can also negatively impact the biological and chemical oxygen demand of living systems, damaging the global ecosystem.

Clean air and water acts were established in the 1970s to enforce reductions of harmful air emissions and water pollutants, with a particular focus on global climate change subsequently, but mainly to address acid rain. Interface targets beyond compliance to eliminate all toxic releases into air and water from our facilities around the world.

Interface Inc. was founded on what were then revolutionary ideas and introduced technologies and products scarcely heard of in the global commercial interior market. Over time, we have experienced growth through both strategic alignments and the acquisition of many companies. Interface has manufacturing facilities on four continents and sales offices in 110 countries.

Our current goal is to be the first name in industrial ecology worldwide. It means creating the technologies of the future—kinder, gentler, and responsible technologies that emulate nature's systems. We are completely re-imaging and redesigning everything we do, including the way we define our business. We are creating a company that addresses the needs of society and the environment by developing a system of industrial production that decreases our costs and dramatically reduces the burdens placed upon living systems.

Industrialism developed in a time of fewer people, less materialism, and plentiful natural resources. What emerged was a highly productive, take-make-waste industrial system that assumed indefinite supplies of resources and infinite sinks in which to place our industrial waste.

Although the capacity to move mountains of material with a resultant lifestyle used to be desirable, today just the opposite is true: the rate of material throughput is endangering our prosperity, not enhancing it. At Interface we recognize that we are part of the problem. In order to reduce the amount of material we take and the waste we create, we first need to analyze all our material flows—everything that comes in and goes out. Only then can we begin to address the task at hand.

Our experience with sustainability has shown that the cure to resource waste is profitable, creative, and practical. This also makes precious resources available for the billions of people who need more. For us, sustainability is not the veritable low-hanging fruit of recycling or changing light bulbs, although those are certainly important steps; what we call the next industrial revolution is a momentous shift in how we see the world, how we operate within it, which systems will prevail, and which will not.

While there is no one solution to the impact we now have on earth and its ecosystems, the company shares one vision: to lead the way to the next industrial revolution of the 21st century. We realize it's a daunting task, but it's making us competitive today and sustaining us for future growth.

Interface has laid out a path designed to achieve sustainability on seven ambitious fronts.

The first is to eliminate waste. The first step to sustainability, QUEST—quality utilizing employees' suggestions and teamwork—is Interface's campaign to eliminate the concept of waste, not just incrementally reduce it.

Second is benign emissions, a prioritized focus on eliminating emissions that have negative or toxic effects on natural systems. Interface has identified 192 stacks as point sources for air pollution in North America, Europe, and Asia. Although all Interface companies comply with current environmental regulation, our goal is to move beyond compliance and eliminate emissions completely. Interface's Cool Carpet products carry climate-neutral third party

certification, negating greenhouse gas emissions throughout the life cycle of the product.

• (0930)

Third is renewable energy, reducing the energy demands of Interface processes while substituting non-renewable sources with sustainable ones.

Fourth is closing the loop, redesigning Interface processes and products into cyclical material flows.

Fifth is resource-efficient transportation, exploring methods to reduce the transportation of both materials and people.

Sixth is sensitivity hookup, creating a community within and around Interface that understands the functioning of natural systems and our impact on them.

Seventh is redesign of commerce, redefining commerce to focus on the delivery of service and value instead of the delivery of material, and engaging external organizations to create policies and market incentives that encourage sustainable practices.

In order to conquer the above seven fronts, a holistic manufacturing model was developed by Interface in 1994. This 12-year journey has brought reassuring success and double-digit business growth. We have seen profits grow, exports increase, increased employment, and elevated quality and performance of product, while experiencing renowned brand recognition.

In the last twelve years, some highlights of the Canadian facility's achievements include a total savings through sustainability efforts of \$13 million U.S. and \$299 million worldwide.

We eliminated nine out of eleven air emission stacks at Interface in Belleville, and we revoked the certificate issued by the Minister of the Environment.

There was 69% of fossil-fuel-based energy reduction, 64% greenhouse gas reduction, and 92% reduction of indoor air pollution from our products. We received the Ontario Lung Association acknowledgement through Movement for Clean Air Now, C.A.N. DO, until the program was discontinued two years ago.

In 2006 we switched to 100% renewable electricity through the purchase of renewable energy certificates.

We have a zero-effluent facility through elimination of all processconnected sewage pipes. Carpet industries are known for a heavy amount of effluent, but the facility in Belleville is zero effluent. There are no effluent pipes attached to any process. Water usage is down by 93%, landfill use is down by 97%, and last year alone, 800,000 pounds of post-consumer carpet were recycled.

We have third party certification such as EcoLogo, EPP, climateneutral, ISO 9001, and ISO 14001, etc.; employee awareness and incentive programs that reward sustainable practices; and above average employee pay increases.

In essence, a sustainable business model means doing well by doing good. We encourage the enactment of policy regulations and incentives to achieve clean air. We also encourage governments at all levels to use the leverages they have at their disposal—for example, greener procurement.

I thank you for this opportunity.

• (0935)

The Chair: Thank you, Mr. Marikkar.

We'll turn to our final witness, Mr. Gordon Peeling, from the Mining Association of Canada. Mr. Peeling, for 10 minutes, please.

Mr. Gordon Peeling (President and Chief Executive Officer, Mining Association of Canada): Thank you, Mr. Chair.

The Mining Association of Canada is the national organization of the Canadian mining industry. It comprises companies engaged in mineral exploration, mining, smelting, refining, and semi-fabrication. Member companies account for the majority of Canada's output of base and precious metals, diamonds, oil sands, and uranium.

As an organization, MAC was honoured by the GLOBE Foundation, winning the 2005 industry association award for environmental performance.

Canada is one of the world's leading mining countries. We rank among leading producers of uranium, nickel, magnesium, titanium, aluminum, and zinc, among other minerals. The industry employs 388,000 Canadians and contributes \$10 billion in gross domestic product in mining and extraction, and a further \$32 billion in gross domestic product in mineral manufacturing.

The industry is investing around \$1.4 billion in Canadian exploration this year, and we're a main employer in over 100 Canadian communities, while we are world leaders in mining finance in large cities such as Toronto, and in exploration expertise in other major cities such as Vancouver.

The Canadian industry is also a major international player. For example, our TSX-listed mining companies have around 4,000 mining projects in play in foreign countries, and our industry has around \$50 billion in direct investment stock in other countries.

I really wanted to make three points. Number one, we are responding as an industry to the challenge. Three groups of our members—smelters, iron ore pellet plants, and the oil sands companies—are subject to the notice of intent to develop and implement regulations and other measures to reduce air emissions, and will be affected by this committee's deliberations.

I note that for the purposes of the notice of intent the government has included oil sands production within the petroleum sector. I have grouped my remarks to the committee under these three headings. First, it is important to note that our industry recognizes the need to reduce its impact on the environment. MAC member companies have been very active over the past 15 years, investing billions of dollars in process and environmental improvements. MAC's Towards Sustainable Mining initiative, to which all our members adhere, includes performance measures, targets, and externally verified reporting in a number of environmental areas, including energy use and greenhouse gas emissions.

In terms of specific improvements, MAC member companies have reduced the amount of mercury releases into the environment by 91% over the past decade. Cadmium and zinc releases have each been reduced by 71%, and lead by 68%. These reductions have occurred across all subsectors of the industry.

Even in the oil sands, where significant expansion has occurred, total releases of substances such as mercury, sulphur dioxide, lead, arsenic, and cadmium have declined significantly. Table 1 at the end of this paper provides further details regarding progress over the past decade by MAC members with respect to sulphur dioxide emissions. These significant improvements reflect the success of investment by mining companies in cleaner processes and technologies, in response to early-stage voluntary actions and Canadian laws.

The specific example of Inco in Sudbury is worth noting in this regard. The company is now known as CVRD Inco Limited and has recently commissioned a new facility that will reduce sulphur dioxide emissions from its Sudbury operations by 34%. This fluid bed roaster abatement technology is state-of-the-art and required a \$115 million investment on CVRD Inco's part.

Beyond these improvements in specific key pollutants, the industry has also improved its energy management practices, and consequently its performance on greenhouse gas emissions. For example, the metal smelting and refining industry has reduced its energy requirements from 50 terajoules per kilotonne of production output in 1990 to 42 in 2004, or a reduction of 18%. These improvements reflect industry investment in energy management and efficient process technologies.

In terms of absolute emissions, the mining industry, not including the oil sands, has more than met Canada's 6% greenhouse gas reduction target commitment to the Kyoto Protocol. Table 2 at the end of this paper provides further detail regarding industry progress on GHG emissions and intensity.

The oil sands sector has been investing in innovative ways to reduce energy use. Between 1990 and 2004 Syncrude, for example, reduced per barrel greenhouse gas emissions by 14%, reflecting investments in new technology and equipment.

● (0940)

The second area I want to address is paying attention to what drives investment. It's important to keep this particular critical factor in mind, in terms of what drives investment in Canada. In this case, targets must be achievable, and harder targets can be made easier through an effective regulatory and tax regime. In a global marketplace, companies invest in those regions where there are market opportunities, where the government has an efficient regulatory system, where the transportation network is modern, and where smart tax incentives are in place.

So in deciding the type and scale of requirements to be placed upon Canadian industry, committee members should consider the broad range of criteria that influence where global investments are made. This is doubly important when one considers that major emissions reductions are generally achieved through fundamental technology changes. Investments will occur over long time periods as new technologies are developed, perfected, and implemented.

A stable and transparent investment regime is also very important to companies as they look to invest. For example, in fairness to those mining companies that have taken action to reduce greenhouse gas emissions, we believe that Canada's approach should aim to reward investment leaders rather than penalize them. In this regard, historical improvements since the Kyoto base year of 1990 should be recognized, and future targets should not be arbitrarily inflated by assuming that past actions to reduce emissions can be repeated in the future.

It is also important that the committee take an integrated and life cycle approach to its environmental analysis. Care needs to be taken to integrate emission reduction requirements, particularly sulphur dioxide and greenhouse gases, as in some cases an investment to abate the former may require additional energy and the associated greenhouse gas increases that would go with that. In other cases, the only feasible methods for reducing sulphur dioxide emissions may be the use of carbonate-based chemicals, again leading to increased carbon dioxide emissions. Emissions targets need to reflect relative risk so that pollutants exhibiting the highest risk are targeted.

Emissions reduction targets also need to take into consideration the impact of the value chain. For example, in the case of our iron ore sector, the production of value-added flux pellets increases relative greenhouse gas emissions at the iron ore stage, though it reduces emissions by a significant amount at the downstream steel blast furnace stage. One must be very careful about rewarding or punishing producers in an arbitrary manner without considering the inputs and outputs of the entire production continuum.

Taking the continuum and life cycle point to the next step, it is also logical for Canada to develop targets that consider how to encourage increased recycling of electronic and other secondary feeds in Canada.

My final point on the subject of investment is that accelerated capital cost allowance treatment for clean technology contributes to a positive investment environment. A number of industry associations, including MAC, have called upon the government to consider a two-year write-off of investment in clean processes and technology. This was also the subject of recent recommendations of the industry

committee. Such treatment would further encourage our companies to invest in modernizing their smelters and refineries. Other opportunities exist in the areas of research and development, where current industry-government partnerships on issues such as carbon sequestration can be expanded and accelerated to improve the economics of new technological solutions.

My third and final message with respect to the climate change issue is to note that our industry is a global industry. Indeed, in terms of international presence, it is difficult to find a more global sector than Canada's mining and metals industry. The majority of Canadian output is sold abroad, and our leading companies are active investors and explorers in other countries.

Canadian mining, be it base metals, iron ore, diamonds, uranium, or oil sands, competes internationally with prices established on global exchanges in London and elsewhere. Companies compete on their ability to explore and access reserves and to control costs. Many of our international competitors operate in countries with significant competitive advantages and with less stringent environmental standards and without reduction targets under the Kyoto Protocol. In the case of the iron ore sector, for example, it is these competitors in Brazil and Australia, among other countries, who establish prices. Canadian producers are price-takers and unable to pass additional costs on to their customers.

In this sense, while we support progress on this issue, we ask the committee and the government to also consider the global context that surrounds each particular industry sector when establishing specific targets. Let's find solutions that are win-win, that improve our environmental performance without turning off investment and job creation.

Thank you very much for your attention. I appreciate the opportunity to be here today.

● (0945)

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

We'll turn to our question round, and I'll remind folks that we're going to stick pretty tightly to the schedule because we have a bit of business at the end as well.

Mr. McGuinty, for seven minutes, please.

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

Thank you, gentlemen, for showing up this morning and being with us. I'd like to go back to a line of questioning that I've been putting to a number of industrial sectors. Many of you have addressed this in your presentations, but I just want to get it on the record in terms of your views on three different fronts.

I'd like to get this from you quickly, since we've only got seven minutes. Could you address the three following elements in this question.

Question one: To what extent have your industry sectors already been actively engaged in the entire Kyoto process—that is nationally, here, and internationally?

Question two: The government has ruled out the participation of Canadian industry in international carbon markets. That's clear. We've asked that question four times now and have had four very clear answers. We're not participating in international carbon markets. The Toronto Stock Exchange president says this is going to cause very excessive costs for Canadian companies who may be trading only on a domestic market, for example. Can you tell me, and tell Canadians, in dollars and cents, what this will mean for your companies if you cannot participate in the international carbon markets?

Question three: Many of you have talked about the fact that that you've already met your Kyoto targets. You've exceeded those Kyoto targets. Can you help us understand how you would like to be treated in terms of credit for early action, the action you've already taken since 1990? I think maybe two or three of the presenters have said straight up that your Kyoto targets are met. Would you like to see the treatment of your sectors reflect that you should get credit for early action—and using 1990 as the baseline, not 2003, as the government is proposing?

On those three elements, please, I'd like to hear from you, if I could.

The Chair: If that's 12 questions all together, you have 25 seconds for each answer to each question.

Mr. Garnier.

Mr. Daniel Gagnier: Let me put a card on the table. I'm the chairman of the International Emissions Trading Association. I just want to declare my position before we start.

The Kyoto Protocol basically was the incentive that got Alcan to accelerate its efforts in this area. The decision made by the board and the executive committee in 1997 was, let's not wait; the sooner we learn how to do this, the more advanced we will be and the more of a competitive advantage we'll have. So the Kyoto Protocol was a catalytic action. It was something we took seriously and decided to move on. If you look at it going forward, I think the important issue with Kyoto is what do we do after 2012. Otherwise, if we don't have a new set of targets, whether we reach the ones we have or not, it's going to fall apart, and carbon markets will not have an incentive to properly price carbon.

On carbon markets and international markets, I don't want to be parochial—I'm a good Canadian and a good Quebecker—but it doesn't matter; we're going to do it anyway. We've accessed the European trading system, we've accessed the Asian trading system.

If Canada has a domestic market, we'll access that one. I do believe, however, that in terms of competitive advantage it doesn't make sense to merely have a domestic carbon market going forward. You're going to need a North American market in order to offset some of the other blocs that are working.

Second, you have to look at carbon markets as, one, the most efficient way of setting a pricing signal for carbon, and two, as a value enhancer for people to reduce greenhouse gas emissions. Now, the Europeans are still learning, but they've had one up and running and they will reform it. It will continue. The forward price for carbon for 2009 this morning was about $\[mathebox{e}13$. So there is a pricing mechanism.

On meeting or exceeding the Kyoto targets, yes, we have. Credit for early action was something we gave up on in the round tables that we sat on for five years, and we said, quite honestly, drop it. But there is a way that government in regulation, in setting targets for specific sectors, can recognize what companies have done, and that is that you don't have to go back to 1990, but if you're a leader and you've exceeded your target, you can set your base year differently. You can say, okay, for this industry they've met targets, so their base year will be 2000, not 1990. For people who have not met their targets, you can allocate the base year differently. There are ways in which, from a regulatory perspective, you can recognize what industrial sectors have done and then allow them to get that benefit for early action. That's up to the regulators.

• (0950)

Mr. David McGuinty: Who's next?

Mr. Gordon Peeling: Let me just echo Dan's comments with respect to the credit for early action. That's a point we have continuously made, because we have been committed to energy efficiency since the 1970s, as an industry, and we have set long-term targets of 1% per annum improvement in our energy efficiencies. Those, of course, set the stage for us, in actual fact, to start measuring our greenhouse gas reductions that went with that energy efficiency improvement and to then move to more absolute reduction targets. So although we want credit for early action-and I think that's a very elegant point, that you can set different starting points as to when the base year is-we do find it frustrating that the government never seemed to want to make a distinction between those who had engaged in early action and the laggards. And consequently, it had one system to apply to all, which really was a penalty for those who had moved early and a reward for those who had done nothing.

That being said, there are ways to deal with this. It's not that we don't want targets. We remain committed to targets. We will continue to improve our processes going forward. And we want reasonable targets in that process. The bigger ones are going to have to come through process change, and that's going to take long-term investment, so things like the investment fund aspect become extremely important.

Let me say, with respect to the trading system, that a thoughtful approach, from our point of view, would be that we need a design for an emissions trading mechanism, because there is a risk of creating market distortions or of allocating improper caps to specific sectors and facilities. That process has to be done extremely well. A mechanism would require a sufficiently large market, a measurement and verification process, consistency of application, and a low administrative burden. The design of a domestic greenhouse gas emissions trading mechanism needs to be capable of eventually linking to international markets. Regional markets for air pollutants may be feasible in some regions. We can think of SO2. You don't necessarily need to stop at greenhouse gas in terms of cap and trade systems or emissions trading systems, and so on.

We do think that if the government wants to restrict itself in the first instance, we would have concerns about the liquidity of that market and the size of that market. But starting there, at some point, as Dan has also indicated, you have to link to the international trading system to get a big enough pool to operate in.

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

[Translation]

Mr. Bigras, you have seven minutes.

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

First of all, I would like to welcome our witnesses.

The Chair: Mr. Marikkar, we have to move on, I'm sorry. The time was up, so we'll get a chance to come back to that, hopefully. [*Translation*]

Mr. Bernard Bigras: Thank you for being here today.

Mr. Gagnier, I'm rather surprised you advocate this morning that we drop the concept of credits for early action. This week, Hydro-Quebec representatives appeared before the committee, and said that the equity principle should be respected. I think it is critical that we ensure that businesses that have achieved considerable GHG reductions, not only intensity-based reductions but absolute reductions, can be rewarded.

I would like you to explain how we could integrate the equity principle into a sector-based approach, insofar as we drop the rather hasty measures often requested by industries. We know that the aluminum industry is strongly linked to the energy sector, particularly in Quebec. How do you reconcile the fact that Hydro-Quebec is demanding rapid measures—both in the system and in the approach—while your industry, which is so closely linked to the energy sector, is not making the same demands?

Mr. Daniel Gagnier: In the area of electrolysis, we have a competitive edge in terms of green energy because we own our hydroelectric power plants. There are two ways of doing the calculation. There is an indirect calculation, where we look at energy sources for industrial processes. When you talk about Hydro-Quebec in particular, or BC Hydro, both have a competitive and geographic edge because of the hydroelectric basin. That is quite natural. So both provinces have an edge. Alberta does not have that edge.

In Alberta, direct emissions are generated in both the primary and secondary aluminum manufacturing processes. We would say there is not a single government in Europe, Asia, Australia or anywhere else which would tell us we were so energy efficient they would give us all the credits we wanted, retroactive to 1990. Those are Kyoto Protocol countries that have a margin, an envelope of credits to allocate. If you allocate all credits to companies that responded quickly and delivered significant GHG emission reductions, you will have fewer left to encourage the others.

We therefore believe that a more pragmatic and a more realistic approach is needed in considering what means should be applied. For example, the steel sector—which has invested hundreds of millions in reducing its GHG emissions—could be told that targets will be established by industry, but with a baseline of 1996 or 2000, rather than 1990. This would effectively compensate the sector for what it has already achieved, and put the emphasis on the future by asking what the sector plans to do in the coming years.

• (0955)

Mr. Bernard Bigras: This morning, you said that you could handle absolute targets, but the option you are advocating is an intensity-based one.

This week, representatives of the Toronto Stock Exchange said that an intensity-based approach could create problems. Even the Pembina Institute said straight out that the European system was based on absolute emissions, and that it would be very difficult to incorporate a Canadian carbon exchange if we opt for an intensity-based approach.

How can you advocate an intensity-based approach when some industries say that it would create administrative costs, additional costs with the market, while the EU says there would be a problem if Canada chose to go with an intensity-based approach.

I would like to hear your views on this.

Mr. Daniel Gagnier: We have done both calculations. There are some standards, such as ISO 14064, which Alcan has worked on, which establish benchmarks and standards to guide our GHG reduction audits. We do two calculations. First of all, we do the intensity-based calculation, which is important because it is a mark of continuous improvement. You become the benchmark in the industry.

For example, if we were to become the international benchmark for the aluminum industry, the International Primary Aluminum Institute has calculated that if the industry were to apply the average best practices of all aluminum smelters in the world, by 2017 the aluminum industry would be neutral in terms of carbon emissions. So that means we have to raise the rest of the world up to the same level of operational excellence. We do our calculation on the basis of current levels, which do not cost any more because we use a formula. So when we issue our figures, we issue both sets of figures at the same time. If you end up with a cap and trade carbon exchange, you won't be selling intensity but absolute levels.

Alcan went to the United Kingdom, France and other countries to sell absolute credits. However, in Canada an intensity-based approach makes it possible for us to continue improving emissions per pound, per kilo and per tonne of aluminum produced in our system. So we do both at the same time.

Mr. Bernard Bigras: Excellent.

I have one last question. On page 18 of your brief, in the last paragraph you stated, and I quote: "Sectoral approaches within Canada can be effective to build on where provinces have already taken a lead, such as with the aluminum industry in Quebec [...]"

We have always promoted a territorial approach to fighting climate change because we believe it is the most effective. You seem to be saying that on one hand you favour a sectoral approach, but on the other hand would like territory to be a consideration, that is, you would like efforts made by some provinces to be taken into account.

Do you believe there is a way—and here, I don't want to cite the European model, which establishes a critical approach, a sectoral approach and a territorial approach—to reconcile these two approaches, the sectoral approach and the territorial approach, to make the system more fair?

(1000)

Mr. Daniel Gagnier: Yes. In Quebec, an agreement was negotiated with the government. This was an executive agreement, audited by a third party, that established a reduction target of 200,000 tonnes of CO₂. We delivered over 600.

The approach you could use in Alberta would be completely different, because your industrial focus is oil and gas. There again, targets may vary, but basically we need to have GHG emission reductions at the end of the day.

[English]

The Chair: Thank you. We'll move on now.

Mr. Cullen, for seven minutes, please.

Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP): This is just a point of clarification on what's happening. How much time—?

The Chair: I believe it's just the commencement. I don't think there's anything going on. We'll check.

Mr. Nathan Cullen: Okay, thanks.

Thanks, gentlemen, for being here this morning.

Over the witnesses we've seen so far, I believe this is our 13th or 14th meeting on this particular bill and two and a half years of study. I was handed a document yesterday that showed a New Democrat member raising the issue of climate change in 1983 in the House of Commons. We've been at this quite a while.

The debate that seems to be shifting right now between Kyoto or not Kyoto seems to have moved more towards precise action and what is the best course of action. The question of economic pain over meeting our international obligation seems to be shifting as well. From the witnesses we heard this morning, as Mr. McGuinty pointed out, most have talked about meeting or exceeding their industrial targets while growing as industries—the steel industry, the mining association, and Alcan in particular.

Let's start with Mr. Peeling. The concept that to meet hard targets, to meet an international standard that the country agrees to, equates to economic pain—is this a simple quid pro quo, that if a country sets out a target that has something to do with GHGs, then the economy must suffer for that target being set?

Mr. Gordon Peeling: It's all in the manner of setting the target and the tools that are in the tool box and how to achieve the target. The more inflexible it is, the tougher it's going to be for industry.

That's why I made the three points of keeping in mind the capital stock turnover, the investment climate issues, the tool box, and how you incent the industry to get beyond. We're in a 30-year capital cycle. Our technologies are in place for a long time, and to move to that next level of technology—and in many cases they don't yet exist and we're investing in those—that clearly needs a push.

We need those things. So it doesn't need to be pain. With the right tool box, it does not need to be pain.

Mr. Nathan Cullen: Which is what many of us have believed and hoped for a while.

Even with the conditions under which your mining association has operated where the government set some targets, the government of the day didn't do much in terms of those many—There were quite a few round tables and discussions. The consultations went on for years. But there weren't a lot of economic incentives. There weren't a lot of tax-shifting incentives. The industry was, in a sense, left to its own devices. Yet the numbers that you pointed out today showed significant progress towards energy efficiency and lowering greenhouse gas emissions. I can only imagine if progressive policies were in place how much more could get done.

This is the point on which I wanted to turn to Mr. Fraser as well. You talked about an increase. The industry grew by 13% while lowering greenhouse gases by 15%.

Mr. Denis Fraser: Yes, and what allowed that was the use of better technology. As Mr. Gagnier communicated for the aluminum industry, it's pretty much the same thing for most of us involved in what we describe as heavy industry. We continue to progress through the application of the best technology available.

And just to reinforce the message in your prior question to the mining industry, it's all in the manner that the targets are going to be set. Once the target is set that respects the limit of known technology and what is justifiable from an economic sense, the pain will be alleviated in an appropriate economic environment to sustain that. But if you go beyond what is possible with what mankind knows today, it is just a tax.

● (1005)

Mr. Nathan Cullen: Understood.

But just to understand in terms of those tools available, we've clearly heard that international trading is important as a tool in the tool kit. We've also heard that under your own numbers, an absolute reduction in greenhouse gases while economic improvements happened was possible, and is possible into the future. I think that's important, because there's a dialogue going on that apparently industry in Canada can't see their way to an industrial hard cap, to an absolute reduction in greenhouse gases, because it'll suffocate the economy.

But we've just heard from some of the largest industrial sectors this morning that you have achieved a reduction in absolute greenhouse gases while also achieving economic growth. So I think it just needs to be disbanded.

I need to turn to Mr. Gagnier just for a moment. In Quebec, the power generated is done almost primarily by hydro. How is that an advantage for your company in terms of energy costs, and also in terms of pollution emitted?

Mr. Daniel Gagnier: There's a pecking order in terms of emissions, from nuclear to heavy oil and coal. And in each area there are technologies that will help decarbonize or capture and store carbon. So we have to move into those areas. That's why Alcan is advocating that the government provide the right kind of environment for investments in carbon capture and storage and clean-coal technology.

But our advantage is only an advantage if you look at the full cost of what you use from your resources. For many years Alcan took the cost of its hydro-electricity and said, we have lots of it; we'll make aluminum, and if we're not terribly efficient at using that energy, we're still going to be profitable. Today we have a system in place where we can't do that. We can't do it with power. We can't do it with water. So we are really looking at full-cost pricing so that we can be much more efficient, as you raised, in how we use the resources.

We have reduced, for example, the use of water. We have lots of water in Canada. We've reduced the use of water by over 90% in our industrial processes. But we did that because we believe that water has a cost

Mr. Nathan Cullen: Let me understand something. In terms of the creation of Alcan in Quebec, one of the key pieces was the ability to generate low-cost power and low-polluting power. It turns out to be an advantage. We didn't know that 60 or 70 years ago, but we know it now. The water, though, is a commodity owned by whom?

Mr. Daniel Gagnier: The water is owned by the people. It's owned by the state. Alcan's rights in Quebec, and in B.C., are basically agreements that provide to Alcan the economic stewardship, and the environmental stewardship, of those hydraulic basins. If we don't do that better than anybody else can, then at some stage the people and the state will take them away from us.

To date we're running two hydraulic basins, one of them the size of Switzerland. And we are good economic and environmental stewards of those resources. That's why the communities and the provinces support that kind of activity. We've invested, just since I've been with Alcan, over \$150 million in maintaining those systems.

So we invest, we use private sector capital to keep those infrastructures up. To use an example, during the Quebec floods in

the Saguenay, a lot of dams broke. Thank God, none of the Alcan dams went, because it would have been disastrous. Lac-St-Jean is our reservoir.

The Chair: We'll have to move on. Thank you very much.

Mr. Warawa, for seven minutes, please.

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

Thank you for the witnesses being here. Thank you for the handouts and the very good presentations.

Mr. Gagnier, you've said in your presentation Canada needs a smart policy framework, smart regulations, and pragmatism, a tool box. We need to know where we're going. The government has worked hard on Bill C-30, and that's what we're discussing today. I'm sure each of you has looked at Bill C-30 and the notice of intent. I'm sure you're all aware that includes short-, medium-, and long-term targets that will be set. The short targets are intensity based for greenhouse gas emissions, to be announced very soon. And they're hard caps, on the short, relating to pollution levels.

You've also mentioned the frustration in the lack of direction being provided by the previous government, and you've moved ahead on a voluntary basis, where Bill C-30 takes us from a voluntary to a mandatory regulation regime.

So do you agree that we should be moving from the voluntary? There is the memorandum of understanding, and each of you has made mention that you've been actually doing the work anyway. But are you sensing much more clarity in direction from this government? And I don't mean that politically, but are you sensing a much clearer direction that we are moving to achieve greenhouse gas emissions through Bill C-30? Are you happy with the basic structure?

● (1010)

Mr. Daniel Gagnier: I think I will make my comments in a non-partisan way.

We need regulation. That's the first thing. Alcan's call is, give us a regulatory framework. It doesn't have to be the most intrusive, but it has to be a path on the road to an outcome. It took us 10 years to learn how to do this, so whether it's a government here or a government in Europe, we're all learning. What we want basically is to put in place something that provides some consistency. We have to invest over \$10 billion to renew the capital stock. We have to build a \$550 million plant in Joncquière; we're building a \$150 million plant for spent potlining treatment in Quebec; we have to modernize Kitimat, so there's \$2 billion. I could go on and on. Those investments aren't going to be made if our government, any government, says we don't know what we want to do in terms of regulation.

Regulation for us—and you may not have heard this from many people in business—is absolutely fundamentally critical to how we're going to make our investment decisions. The sooner we have it, the sooner we know how you as politicians are going to enable that investment climate and that environmental target setting, the faster we can move.

Mr. Mark Warawa: Mr. Peeling, could you comment on the importance of certainty in the market for investment?

Mr. Gordon Peeling: Yes, absolutely. I would echo much of what Dan has said. It involves bringing clarity to this process so that industry understands the terms and conditions, and the realities, under which it has to invest and renew its capital stock, the investment it needs in new technologies and processes, and the enabling infrastructure to achieve that.

Some of this will be in pre-competitive and government-supported research as well. Government has to be a partner in this process, but setting a level playing field. We've been taking the lead in this because managing our energy costs, which are significant, is hugely important. That's why we've invested a lot of time and money over the years in managing energy, and we think we can still make improvements with the existing technology, but we also need that support and the infrastructure that's going to really require new processes and technology in the future. Certainty is absolutely key to the investment picture.

Mr. Mark Warawa: We've heard from witnesses generally on the importance of having that clear framework, and we believe Bill C-30 provides that, but as a government we're open to how to strengthen it and make it better.

We've also heard from a few select people that there is a silver bullet in making an additional charge for manufacturing. For example, yesterday I believe it was, or on Tuesday, it was said that adding an extra dollar per barrel in the oil sands would be the silver bullet to help us meet the Kyoto target. What we've seen over the last 10 years were dramatic increases in Canada in greenhouse gas emissions, yet our goal is to be down here. Is there a silver bullet, or do we need a very clear plan that will take us down here—not immediately, but on a very clear trajectory, provide an inertia that will bring us to that goal?

Mr. Daniel Gagnier: If I may, I don't believe in silver bullets. I don't even believe in aluminum bullets.

What I do believe is that there's going to be a cost, and some pain, for everybody. That starts with consumers making the right choices and changing the way you design products and the way you do many things. I think it was Gord Lambert who testified before the committee that it may be helpful, it may solve their problems, to add \$1 to the cost of a barrel of oil. But I would point out to you what other jurisdictions have done in trying to reform the tax system in a way that you have revenue neutrality, but you shift taxes to look after areas where you can incent a change in behaviour. They call it ecological tax reform. What, for example, the Europeans have done is gotten rid of manpower taxes in some areas and shifted that to other areas, while maintaining a neutrality in terms of their overall tax load.

My big fear, and I'm not a politician, is that if we just think of taxes and taxes, and taxes and levies, at some stage people are not going to change their behaviour, and they're just going to get fed up.

So I believe there are no silver bullets. You're going to have to make a lot of bullets and get a lot of tools in this tool kit and be able to make sure you get the right kinds of behaviour from different sectors and from the consumer.

● (1015)

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

I'll only point out to members that a couple of witness groups here may be feeling unloved.

Mr. Godfrey, for five minutes, please.

Hon. John Godfrey (Don Valley West, Lib.): Let me simply begin by going back to the notice of intent to regulate for Bill C-30. It is stated under targets for GHGs, "Short-term (2010-2015)", that it would be based on emissions intensity and not until 2020 to 2025 would there be a switch from intensity targets to absolute targets. It's what the legislation would support.

I'm hearing from all the witnesses that you're there, and maybe we just have a lucky bunch of witnesses here. In fact, if we were to ask you to accept the Kyoto target in absolute terms from 2008 to 2012, you could meet it. Is there anybody at the table who couldn't meet it?

You're all there. You're past the intensity argument. You can meet your Kyoto targets. One thing that comes through is that you're already ahead of where you ought to be.

Let me ask you this question. Is it true that the sooner we establish a hard cap system for everybody and a domestic trading system that integrates with other systems and allows you to trade the excess, the more it would be to your economic advantage, because right now you can't sell the stuff? Is that a fair comment?

Mr. Daniel Gagnier: Yes, it's a fair comment, but we didn't do it to sell the stuff. If we had a cap and trade system and a domestic market that was liquid, we would basically be giving an incentive to our plant managers, who are very creative people, to go after additional greenhouse gas reductions and use those credits. It depends on how you design the system, both the emissions trading system and the offsets.

It's the same thing with the CDM. If Europeans use the CDM and get those credits or half credits back into their economy, then they're going to develop a competitive advantage. On a CDM basis, I think it would be a mistake for the government to say Canadian-based companies cannot take part in CDM. It's the one international kind of mechanism wherein I think we have the potential to do things.

Hon. John Godfrey: I want to pursue that line of questioning.

When some people generalize the international trading system as being about Russian hot air, and I mention no names, your answer is that the clean development mechanism is legitimate and desirable from a Canadian business point of view.

Mr. Daniel Gagnier: It is, unless we want the Europeans to eat our lunch.

The Chair: Mr. Peeling.

Mr. Gordon Peeling: I have one quick comment.

To be absolutely clear, if you look at the subsectors in the mining industry, for our iron ore pellet plants we have one plant that would be under-meeting the Kyoto target within the timeframe. We have another one that would not meet its target because of the nature of the steel product demand for an acid flux pellet, which has a higher greenhouse gas intensity. These are the most energy-efficient pellet plants in the world, and it depends on what the steel plants want.

It's why I made the point that if you draw an arbitrary line and you don't understand the continuum between iron ore and a steel plant, the fact that it makes an acid flux pellet is actually a huge benefit at the steel end in terms of greenhouse gas reductions, but it looks bigger at the iron ore side. It's why the system has to take those things into account, because if you isolate it there, you're going to penalize the plants that are already the most efficient in the world.

• (1020)

Hon. John Godfrey: One technical answer would be to group the whole process line.

Mr. Gordon Peeling: Yes.

Hon. John Godfrey: I'm getting agreement from everybody.

Some companies, such as Pembina, have suggested you should be disaggregated from electrical production and from upstream oil and gas because you're in a different situation. Does it make sense to you?

Mr. Daniel Gagnier: It doesn't make sense to me, because we have no ability to pass on the costs of either electricity or any uptake in oil and gas. For example, we have no economic margin here. We don't set the cost of aluminum on the market. It's set by the LME.

Mr. Denis Fraser: I'd like to express a slightly different point of view on the international trading system than what my colleagues here have expressed.

I'm part of a large international group, Mittal. We operate in 60 different countries, so we're seeing both sides of the equation. A lot of steel is produced in countries that are not signatories to the Kyoto accord and that have demonstrated very little, if any, interest in pursuing avenues like the ones we're committing to under Bill C-30. We're concerned that the simple conclusion that you can adopt an international trading system and buy your credit will simply overtax some industries, the steel industry, and just move the production elsewhere. It's very easy to offshore steel production, and it is a concern that is significant for our industry.

We'd rather see policies that encourage and foster reinvestment in technology in the country so we can further advance our own ability to achieve increasingly more difficult targets. The Chair: Thank you, Mr. Fraser.

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

Mr. Brian Jean (Fort McMurray—Athabasca, CPC): Thank you, Mr. Chair, and thank you to the witnesses for coming forward.

I would like to read a quote that I received from the Library of Parliament. It says, "Canada could not conceivably meet its emissions reduction target through domestic measures alone without essentially bringing its industrial economy to a halt." The chief economist for the Canadian Manufacturers and Exporters and the president of the Canadian Association of Petroleum Producers agree. Does anybody here disagree with that? Great.

I think everybody agrees that we want to have cleaner air for Canadians and get rid of some pollutants. Obviously, Bill C-30 goes beyond GHGs, which is all Kyoto deals with. It deals with indoor air, which is amazing, actually. It's an amazing step by any government. But there's a balancing act: economy versus cleaner air.

I want to go on to the cost of meeting Kyoto, just very briefly. I was doing some calculations. I asked the Library of Parliament to do some research on what it would cost for a Kyoto commitment—and just to buy credits, not to meet our domestic changes, and they actually come out to say that the president of the Greenhouse Emissions Management Consortium says it would be a minimum of \$26 billion to \$38 billion. It could cost up to \$38 billion over the Kyoto time period of five years. That works out to \$2,500 per taxpayer, or something in the neighbourhood of \$5,000 per home.

We heard evidence from people from Quebec who the Bloc brought forward—one particular gentleman was very impressive—that for infrastructure dollars invested, you get a huge return in benefits in terms of greenhouse gas emissions and emissions generally. And \$36 billion, quite frankly, could buy a lot of infrastructure in this country, where we're in a deficit position. It could also buy a lot of technology that we could sell internationally to people so they could reduce their greenhouse gas emissions.

Gentlemen, would anybody disagree with that?

Mr. Denis Fraser: I don't disagree with that. And it just basically adds to the comment I made in my prior remarks that this is a lot of money that deserves to be reinvested in our economy—with the appropriate framework, so we can achieve the goals, but through economic means. I think largely what you've heard this morning is that the manufacturing industry over the last 15 to 20 years has acted very responsibly and has reinvested in adopting ever more proficient technology and has achieved a lot of results. Actually, it has achieved the Kyoto accord goals.

● (1025)

Mr. Brian Jean: I don't have much time. Mr. Gagnier, I'll just make one further comment.

Every house in Canada could just about be refitted with new windows for energy efficiency at \$5,000 per home. There are smart houses. I think of all the opportunities we have domestically to use this credit money—only credit money—to help us here in Canada.

I'll ask Mr. Gagnier.

Mr. Daniel Gagnier: Let me be as clear as I can be. Nobody on this side, I think, is suggesting that the government should inject any funds into the market, but companies can make their own choices—

Mr. Brian Jean: Which market, sir?

Mr. Daniel Gagnier: I mean the carbon market, whether it's domestic, whether it's North American, wherever. This is a question of competitiveness and economics for individual companies. It's too easy to say that if we met the Kyoto targets it would cost us \$36 billion if we had to go get them in the carbon market.

Well, Alcan is some days, questionably, in terms of its intent—But we're not stupid. We would not go into a carbon market unless it was competitively advantageous for us and it allowed for the transfer of value and the reduction of greenhouse gas at a facility level, and this is what we're after.

So nobody is saying that government should invest. I would not want the Canadian government to buy Russian hot air. I wouldn't buy Russian hot air. So if you look at carbon markets, I think the only recommendation I can make to you is that you need to better understand how the market works, because the alternative to the market is a carbon tax.

Mr. Brian Jean: I have some more questions, and we have a chairman who keeps us really tight.

We've heard the cost of carbon sequestration. The Pembina Institute said it was somewhere in the range of a dollar per barrel for oil, for instance. I did a little research on that, and 25% is only the transmission cost; 75% is the cost to capture and to store it. I was very surprised at that. But I have heard other evidence that suggests it could be 10 times that amount, because the technology is not there yet.

Is that fair to say that we don't know where it is? There is some technology—Norway has it, and some other countries have it—but the reality is that nobody has done it on massive scales like this. And if you increased the efficiency of your capture—instead of 50% you go to 100%, for instance—it drives up the price substantially.

The Chair: A very short answer, please.

Mr. Daniel Gagnier: It's an unproven technology. There are pilot projects. I would steer you toward the Norwegian example. They probably lead in this area, and you'll get the parameters from them.

The Chair: I'm sorry, our time is up. I don't want to ruin my reputation.

[Translation]

Mr. Lussier, five minutes.

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

Gentlemen, you have made some excellent comments this morning. I will begin by putting a question to Mr. Fraser.

In your brief, you state that 50% of our steel is imported, and that the mills producing that steel are not required to comply with very stringent environmental measures.

What countries are those mills in?

Mr. Denis Fraser: They are in a number of countries. I have personally visited facilities in Brazil, Kazakhstan, and perhaps most importantly—we should all understand the significance of this—China.

Steel production in China will soon account for almost one-third of world steel production. China is a formidable competitor, for all kinds of structural reasons that support the economy. China is a competitor which is very difficult to deal with, because we are in effect competing against the state. If in addition we create an economic environment that burdens us with additional taxes or additional economic disadvantages because of the need to comply with environmental requirements, it will become very difficult to justify the additional investment that would make it possible to achieve the goals we are discussing here this morning.

Mr. Marcel Lussier: Thank you.

Mr. Marikkar, you provided very impressive figures on your companies that are engaged in greenhouse gas reduction efforts in a variety of ways, such as energy use reduction, pollution reduction, reduction of water use, and fibre recycling.

What do you expect Bill C-30 to deliver in terms of incentives making it possible for you to continue improving your performance?

● (1030)

[English]

Mr. Rahumathulla Marikkar: In terms of Bill C-30, to improve the air quality in general, it's to incent with market-based mechanisms. I think Mr. Gagnier mentioned that at one point.

We have green procurement policies within governments, and there are also many private sector organizations that look for greener products. We have a mechanism with EcoLogo to certify the top 20 products. And if there is a market-based mechanism, we take out the rhetoric and we start moving industries in the right direction on their own, and it will also pull the others toward it. Regulation-wise, we encourage the policy-makers to regulate the bottom 20 in each sector. It has to be considered sectorally, and then I think we will have a better direction.

[Translation]

Mr. Marcel Lussier: Thank you, Mr. Chairman.

Mr. Peeling, in your brief you mentioned the performance of your companies. However, your list does include one poor performer. You frequently state "excluding tar sands". You say that Syncrude has reduced its emissions by 14% through intensity-based measures.

How will companies in your group respond when they note that their GHG reduction performance runs to some extent counter to the trends apparent in other tar sands operations? Is there a dialogue between the two? The targets of all groups should be aligned.

[English]

Mr. Gordon Peeling: There's considerable dialogue going on between those sectors. In fact, in many cases when we were looking to be more energy efficient in our processes, we were looking to benchmark our activities against the oil sands companies because they were leaders in being energy efficient in their operations. And yes, their numbers go up because of the absolute growth in investment in this industry.

This brings me to a point that I would have responded to an earlier question, in the sense that although within the sectors and subsectors we may well be ahead of our Kyoto targets in some areas, we're challenged, even though we're energy efficient in others. The reality is that Canada cannot get to that point without engaging consumers, each one of us, in our individual choices day to day. That's going to be a longer process of both educating the public in those individual choices they make and incenting the public with respect to public transportation, the automotive sector, with smaller cars, being more energy efficient, alternative fuels, you name it. That's just part of the reality that we deal with.

We have oil sands members. We have iron ore pellet plant members. We have smelting, refining. Canada has always wanted, in the development of its resources, to go as far down the value-added chain as it possibly can in creating jobs and getting into the semi-fabrication and manufacturing area to capture the best out of our resource base. You have to understand that this first process of going to metal or to pellet plant and into the steel are the most energy costly of all the steps in that process, so we need energy, as Dan has indicated. We took it for granted for a long part of our history that this energy was available and everybody was facing the same costs, but we need to be much more efficient in our use of that.

The Chair: Thank you, Mr. Peeling.

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

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

I thank the presenters for their presentations today. There is certainly some great advice.

From a business point of view, I guess, competition is always a concern, and competitiveness. If someone would care to answer, what would be the likely effect on trade and competitiveness of Canadian industries if Canada introduced measures to meet its Kyoto obligations, but other major economies and trading partners, such as the United States, which is a major trading partner for us, did not?

I'm just wondering how the competition factor plays out here, Dan.

● (1035)

Mr. Daniel Gagnier: A number of U.S. companies have recently banded together under USCAP, the United States Climate Action Partnership, including GE, Alcoa, Duke Energy. Basically what they're saying is that we need a cap and trade system, we need regulation. I fundamentally believe that given the interdependency of our two economies, we need to make sure we don't harm ourselves and that basically we have a harmonization between us.

That's why I said initially that whatever we do, we have to make sure we move in lock-step, or reasonably in lock-step, so we can learn by having a domestic market, so we can learn by having sectoral targets. In the final analysis, we're going to have to make sure that on a North American basis we have a competitive bloc on which we can act.

Mr. Fabian Manning: Mr. Fraser, would you care to comment on that?

Mr. Denis Fraser: I would echo the same thing, that an alignment with the U.S. is extremely important. As I alluded to in the past, there's a lot of steel travelling across the border; there's a lot of industrial activity of all sorts that make the continental market—the U.S. and Canada—one economic entity. Departing significantly from the policies and the economic environment that is present in the U.S. could have a very detrimental effect on the Canadian industry.

On the other hand, it's an opportunity to work and enlarge our view of how we can attack the environmental issues, in concert with actions that are being taken by the Americans.

Mr. Fabian Manning: Would the continental market be more positive than the international market?

Mr. Denis Fraser: To me, a continental market makes a lot more sense. The regulatory framework in the U.S. is known to us; it's a known quantity. There are a lot fewer opportunities, if I might say, to cheat the system or circumvent the measures. As you get into the world scene, it's much more difficult to have confidence that the flow of economic money, with carbon credits, would be significantly put to good use. It would be a shame for us to buy a lot of carbon credits in the world and, in the end, to have the world not reduce its emissions.

Mr. Fabian Manning: Mr. Peeling, would you like to comment on that?

Mr. Gordon Peeling: Yes. I'll be very brief.

It's absolutely important for us in terms of that connection to the U.S. market, but in many ways our view is a slightly different one. Although they're our primary market for our products, we're competing against the rest of the world for that market in the United States. The burden we might bear in Canada becomes important when the bulk of that competition for the U.S. market may well be China or other jurisdictions that do not have a Kyoto burden.

So the message here, going into the next round of negotiations beyond 2012, is that the Canadian government, with others, should be looking to ensure that there is at least some burden, even if it's not equalized burdens, between developed and developing countries. You have to start putting everybody on a level playing field. We have a part playing field right now. That's one thing.

The other reality is that there is a component of the U.S. industry that we do compete with, absolutely. It's better to have a level playing field than not, so that's a key point for us.

The Chair: Okay. We'd like to move on now to the final round. We'll keep it pretty tight here.

Mr. Holland, five minutes, please.

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

Thank you to the witnesses.

The first question is about the opportunity side of this. I think we're talking a lot about the fear and the problems that this may cause for industry, but there's also an opportunity side. Somebody mentioned that this doesn't have to be painful if the right tool kit is in place. One of the things when we talk about a cap and trade system is the ability for companies to draw an economic benefit out of doing the right types of activities, and actually incent those types of activities and make them economically advantageous.

I'm wondering if you might want to talk about some of those opportunities. There are also opportunities in developing technologies that not only reduce emissions but also improve efficiency and improve productivity. So some of these things can actually be drivers, as I think some of you have explained, of new methods of doing things that make you more productive, more competitive, as well as deriving an environmental benefit.

I don't know if any of you want to comment on those specifically, about the opportunity side of this equation, while we're talking about all the things that are bad.

● (1040)

Mr. Denis Fraser: I think the industry has demonstrated self-discipline when it comes to efficient energy use, taking actions from an investment perspective that foster not only achieving the goal of improving emissions but also improving efficiency, productivity, and reducing energy input.

If I can come back to the issue of pain, pain is just a relative term. If you can guarantee that the rules will be the same for everybody in the world, then there's no such thing as pain; then it's a challenge. The minute you have rules that are set differently against competitors that are formidable on a worldwide scene, then it becomes a big issue and becomes pain. So we have to remind ourselves that pain is only defined in a sense of relative competitiveness among the players on the world scene.

Mr. Daniel Gagnier: We're investing \$300 million a year on R and D. By converging a number of technologies and investing another \$550 million in this commercial-sized plant in Quebec on AP50, we're looking at 20% efficiency gains, elimination of PAHs and fluoride emissions, and a reduction of CO₂.

Now, we want that in five years. If we invested less, we'd probably have to wait 10 years or 12 years for it. So we have to move faster, and we need that regulatory certainty to be able to do that. That's where you get the gains.

Mr. Mark Holland: I need to go on, because my time is limited.

Obviously what this committee is trying to do is take Bill C-30 from a series of just minor amendments to CEPA into something that really does give you an array of choices, both through cap and trade and perhaps other things that are in that tool box, to use the term you've been using.

You mentioned that the new technology is really the principal driver of your ability to reduce emissions and to make a substantive dent in getting to whatever those emission targets might be. Can you tell me what role you see government playing in that regard? We have the technology partnerships program—something along the lines of a green version of that? What role do you see government playing in assisting the research and development process, if any? How important do you see that being?

Mr. Daniel Gagnier: I think it has to do with helping industry manage the risks of unproven technologies. I don't think you're necessarily talking about giveaways here, but more like partnerships between the public and private sectors. In other words, if there's a reasonable opportunity from carbon capture and storage or clean coal technology, then if we can have partnerships to help make that happen and share the risk, we're going to gain economically, we're going to gain on a technology basis, and we're going to gain on an environmental basis.

Mr. Mark Holland: To the witnesses, gentlemen, how critical do you see that this moves quickly toward reasonable caps?

Mr. Daniel Gagnier: Long term is very critical, because beyond 2030, if we don't have new technology, then we're going to be scratching our heads.

Mr. Denis Fraser: In addition to what was said, there is a lot of international effort researching means of production that will be more effective. IISI, our worldwide association, has a program that gathers resources worldwide to advance the technology and identify best practices. That's an area where we're not competing; we're collaborating for the benefit of the environment. Being able to directly and indirectly support these efforts is extremely critical for achieving the goals on a long-term basis, because technology and large investment are going to be the foundation of our success.

The Chair: Thank you, sir.

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

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

Thank you, gentlemen, each of you, for being witnesses here today.

Kyoto was adopted in 1997, and it's going to be tough to fight. It was a catalyst for early and consistent action for each of your industries, and certainly we're hearing a lot of success stories.

Of course this contrasts to the lack of early action by the previous government for eight years from the adoption of Kyoto, of which seven were budget surplus years, so there was no funding problems for them. It was seven years of majority government, which is the best climate to impose your political will, if you have the political will to do it. There were six years with the current CEPA tools, which they keep saying are sufficient to do the regulatory job. Clearly the previous government shouldn't get credit for early action. Broadly speaking, it sent the wrong signals to industrial players.

Regarding the other discussion around early action, you testified that essentially you picked the low-hanging fruit for improvement in your sector, so you've achieved your first round of deep emissions reductions. I'd like a comment from each of your sectors about how long you think the next technologies for each of your sectors will take to develop to achieve the next round of deep reductions.

Can you give us some timeframe? Are we talking about five, ten, fifteen, or twenty years?

• (1045)

Mr. Daniel Gagnier: In the last five years, the gains that I talked about were on the back of the AP50 technology—

Mr. Jeff Watson: Is that for marginal or deep reductions?

Mr. Daniel Gagnier: These were deep reductions of 20% energy efficiency in an industry that had been achieving 1% a year. This was a big pop.

As for the longer term, if you're looking out to 2030, for example, we're going to have to have some technological breakthroughs, inert anodes or something, that will fundamentally change the way we make aluminum. We're also going to have to get involved in life cycle analysis, looking at what the best application is in terms of

downstream greenhouse gas saving capability of different materials, from plastics to steel, to aluminum, to composites.

Mr. Jeff Watson: Would some of the other sectors please comment?

Mr. Denis Fraser: You have to look at a 10- to 15-year horizon, but I would not leave you with the impression that there is nothing that can be done even on a shorter-term period. The steel industry has identified cogeneration at the integrated site as a significant opportunity.

It's important to repeat, as Mr. Gagnier said, that the regulatory regime and economic environment must be brought to more certainty, so that these investments can be brought forward to achieve the goal of significant improvement.

Mr. Jeff Watson: Mr. Peeling, Mr. Marikkar.

Mr. Gordon Peeling: The issue for us is that we can continue to make process changes at the margin, and we will do better than we are currently doing.

As an example of big technological change, there's the development of hydromet for nickel recovery, which is at a pilot plan stage in Newfoundland, at a cost of \$250 million, and moving to a \$1.1 billion full-scale plant. The technology will take five years to prove once that gets built. Then it will take considerable time to actually get implanted anywhere else in the industry.

That's only one of our product lines. So some of these things are well beyond the 2010 to 2015 period, and that's where government assistance is needed.

I'm not sure that government assistance is needed there. Where it is needed is when you get into pre-competitive areas, such as carbon sequestration, where no individual company can justify the total carriage of that research, because it can't capture the benefits. This is where you need partnerships. Those are longer-term solutions that will have a transforming effect on the end result.

Mr. Jeff Watson: I'm going to interject since I only have about a minute left here.

On the question of pain or no pain, you've taken early action. Imagine the scenario if you hadn't acted in 1997 and right now were faced with this committee, saying it would be a Kyoto target timeline.

I want to bring this around to what other sectors might be facing here. What would your options look like right now, knowing what you've just come through over the last number of years? What would your options look like in that short-term timeframe and time window? What would they be? Would you feel some pain if you hadn't acted earlier?

Mr. Daniel Gagnier: It would probably be painfully expensive to achieve the same result under very tight pressure. As I said before, it's taken us 10 years to educate people on how to do this and put in the resources. So the sooner you start, the more you can do.

Mr. Denis Fraser: But we would be able to offer economically feasible and justifiable solutions for very large gain, as we demonstrated over the years, which is questionable at this time. The issue is how much time you allow yourself, and whether you are going beyond what is technologically proven today.

The Chair: Thank you, gentlemen.

Mr. Scarpaleggia, you're giving up some of your time to Mr. McGuinty.

Mr. McGuinty.

Mr. David McGuinty: Thank you, Mr. Chair.

Can I go back, Mr. Fraser, to something you said, and maybe get some response from Mr. Gagnier afterwards?

I thought I heard you imply that participating in international carbon markets would accelerate the offshoring of steel manufacturing in other countries. I think you made some remarks about the verifiability and trustworthiness of the clean development mechanisms. We now know that there are over 500 international projects under the clean development mechanism, including 12 or 13 out of Canada. We had TransAlta tell us just the other day that their own CFO, corporate board of directors, shareholders, and investors would never let them get away with fraudulent or financially unsound projects.

So let me just get something straight. There are 168 signatories to the Kyoto Protocol. There are about 184 countries internationally in total. Can you give me some indication of which countries that you referred to are not signatories to the Kyoto process and would be seeking to cheat, using your language?

● (1050)

Mr. Denis Fraser: It isn't so much a perspective. I did not communicate clearly what I meant by the situation.

You cannot look independently at target setting and a trading system. I think the trading system gives us confidence that we can set just about any target for an industry, and there is an easy solution. I'm trying to speak to the complacency around that. Once you go around what's technologically feasible, it becomes a tax to industry, and I have to compete against China, Brazil, and Russia, which have not taken the same discipline in the process and therefore have not exposed their industries to the same amount of pain.

Remember, I said that pain is a relative term. If everybody has the same rule, the same level of difficulty, and has to achieve the absolute same level of technological proficiency, it doesn't become an issue of competitiveness. The minute you have large participants in the world system that are not subject to the same rules, the comfort of the trading system—becomes a higher risk for us to create conditions that will constitute progressively offshoring our own production capacity.

Mr. David McGuinty: But you've been competing for 40 years in international markets where environmental, regulatory, and labour standards are lower than in this country. I would argue in return that

the Canadian standard has driven your competitiveness in the international market place. It's not new that China, India, Brazil, or Russia are perhaps operating under laxer environmental standards. This is nothing new to your industrial sector, or for that matter to any Canadian industrial sector. In fact, the Mining Association of Canada, which is leading the world right now, and the Canadian Chemical Producers' Association, which is leading the world right now through it's Responsible Care program, are trail-blazing and showing that the rest of the world has to be pulled up to international standards

In closing, I'd also suggest to you that the Kyoto process is all about engaging those countries and bringing them up to higher standards on the environmental, regulatory, and other fronts so we can enhance global standards overall and deal with our one single atmosphere.

Mr. Denis Fraser: I entirely agree with the position you're expressing. To the extent that the goals that are set and the environment that is created can continue to foster an environment where you can continue to invest economically in new technology, we will increase productivity and achieve greater energy efficiency. At the same time, as we've demonstrated over the last 20 years, we will also achieve very large and significant reductions in emissions.

So your point is well taken and valid. The only thing we're advocating is that we have to be careful in the way we set up the targets, because we can overstep economic feasibility and therefore have no economic mechanism to defend ourselves with.

Mr. David McGuinty: I understand completely.

Thank you very much, Mr. Chair.

The Chair: Thank you.

We'll move on to Mr. Lauzon for the final five minutes, please.

Mr. Guy Lauzon (Stormont—Dundas—South Glengarry, CPC): Thank you very much, Mr. Chairman. It's a pleasure for me to be here. I'm here as a guest, you might say, just filling in for a colleague, but I find it a very interesting topic, and in some ways I wish I were part of this committee.

As a novice, when I look at the witnesses here, it's obvious that you represent well-managed, very forward-thinking, well-established companies, and I commend you on how effective you've been in meeting your targets. But I can't help thinking about the companies that aren't in your enviable position.

There was a recent quote in a newspaper by Professor Mark Jaccard from Simon Fraser University. His assessment was that you would have to destroy one-third of the buildings and equipment in your economy in the next four years to meet the Kyoto target. Some people might think he's a gentleman who has that opinion in isolation. But further on in the same article they quote Buzz Hargrove. I guess he's not NDP anymore; he's a Liberal spokesperson. But he said it would be devastating for the whole community; it would be suicidal for our economy; you'd almost have to shut down every major industry in the country, from oil and gas to the airlines and the auto industry, and that just doesn't make sense.

Mr. Fraser, I understand your point of view so well, but it just doesn't make sense to me that you would set those hard targets right away, and if you couldn't meet those targets, people who buy your product would have to find it somewhere, so they would go offshore to buy it. We would lose employment. When I first read the professor's quote, I thought maybe that was a bit much. But then Hargrove substantiated it.

What is your opinion? Do you think it would be that devastating?

Mr. Denis Fraser: I'll give you just one statistic to complement what you're saying. If I shut down the entire steel industry, it would be 1.8%.

Mr. Guy Lauzon: If you shut down the whole aluminum industry, it would be 1%.

Mr. Denis Fraser: I can understand why you people want some reasonable long-term targets and some time to meet them. I guess I'm hearing that you want some targets that are reasonable and attainable over a fixed period of time, but in order to meet these hard targets we'd have to shut down a third of our economy.

Mr. Guy Lauzon: In essence, one has to look the cost of the carbon emissions, and consumer habits have a lot to do with it.

That's not the main subject here, but you cannot set targets and put the burden totally on industry that has demonstrated that it's done a lot already. We can demonstrate very easily that even by shutting it down completely you'd still be short of the objectives being set.

So the issue is a difficult one that we're not backing away from. We'll do our share, but we cannot do others' share.

Mr. Denis Fraser: I want to say a word for your 2,600 employees. You have 2,600 employees in your company and \$1.5 billion in sales. I think this committee should consider that when we are making a decision as to which approach we should take.

Mr. Guy Lauzon: The steel industry has 35,000 employees and represents nearly \$15 billion in sales.

The Chair: I think we'd better consider what we're-

Mr. Peeling, do you have a short comment?

Mr. Gordon Peeling: The manufacturing sector in total, which includes us, accounts for about 40% of Canada's total emissions. We keep leaving the consumer and the individual out of this. Until we bring the consumer in, which is maybe the longer-term part of this solution, we're only going to get part of the answer.

The Chair: Thank you very much.

Thanks to all the witnesses for being here. There was some very good testimony and some very good questions. We appreciate it all.

Before we break, Mr. Cullen, you had a notice of motion. Do you wish to proceed with it?

Mr. Nathan Cullen: No, thanks, Chair.

The Chair: Thank you very much.

Thank you again, witnesses and members.

This meeting is adjourned.

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