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# Legislative Committee on Bill C-30

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#### **EVIDENCE**

Tuesday, February 27, 2007

Chair

Mr. Laurie Hawn



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**●** (1530)

[Translation]

The Chair (Mr. Laurie Hawn (Edmonton Centre, CPC)): I'd like to welcome you all to the seventeenth meeting of the Legislative Committee on Bill C-30.

[English]

Since we have a large panel this afternoon, we're going to have to move fairly quickly. The bells are going to ring at 5:30. Although we will go into that time a little bit, we need to move along fairly briskly.

I'd like to welcome today, in the same order in which I'll ask them to speak, from the Greenhouse Emissions Management Consortium, Ms. Aldyen Donnelly, president; from the International Emissions Trading Association, Mr. Andrei Marcu, president; and from the Montréal Climate Exchange, Monsieur Luc Bertrand, *président et chef de la direction*.

I also welcome by video conference Mr. Jos Delbeke—I don't see him in his chair yet—from the European Commission delegation to Canada; Ms. Vicki Arroyo, director of policy analysis at the Pew Center on Global Climate Change; and Ms. Louise Comeau, director of the Sage Centre climate project.

As is our custom, we'll give each of you about ten minutes. Please make it ten minutes and no more, in fact preferably less; that way we can move along quickly.

I see that Mr. Delbeke has now arrived. I'm not sure he can hear me yet, but he's smiling.

Mr. Delbeke—I think you can hear me now—you are number four in the batting order, so you can catch your breath.

The topic of the day, listed as "Tools: Emissions Trading", should be obvious from the list of witnesses.

Ms. Donnelly, the floor is yours.

Ms. Aldyen Donnelly (President, Greenhouse Emissions Management Consortium): Thanks for having me.

First, I should say that all of the opinions I express today are my own and may or may not reflect the views of the members of the Greenhouse Emissions Management Consortium.

When you look down, you'll see a handout. When I read through the blues for some of the previous meetings of this committee, it seemed to me that witnesses kept showing up and tossing numbers out at committee members. I don't know how, as MPs, you can decide who is right and who is wrong, so I've prepared a package that includes the data I looked at that has formed my opinions. I'm not going to walk through it for you today; I might refer to it once in a while, but it's more intended to act for you as a resource. Those are all numbers in the public domain and they're the numbers that have an impact on my way of thinking. I thought maybe instead of just saying stuff off the top of my head, I'd leave you with that resource and you might do with it what you will when it's time to form your own opinions.

The focus of this panel is emissions trading. My bottom line is I'm going to suggest that Canada should not, and probably will not even if we set out to try to, implement cap and trade or a greenhouse gas quota-based emissions market in Canada. When you look at the submission, you'll see that some of the front pages I've dedicated to walking you through the question of carbon taxes—"carbon taxes" being defined as "direct production and consumption taxes"—and I try to make a point in this submission that no matter what other people say to you, they haven't worked in Europe, where they've been tried.

The reason I say that is because I'm going to argue vehemently in favour of the creation of emissions markets and regulations that form the foundation of emissions markets, but I'm going to say that cap and trade is not the right place to start. I want to put direct consumption and production taxation to bed, away, because when you inevitably, in my view, decide that cap and trade won't work, I don't want you defaulting to the consumption and production taxes that don't work either.

So I'm not going to talk about taxes today, but that's why the first part of this submission has that focus.

In the submission—I won't go over it—I touch on some of what I'd call the dark side of the U.S. sulphur dioxide market and the European carbon dioxide allowance market. I won't go through it. It's there for you.

But stepping out from what's there, in a European carbon dioxide market, we have a problem as we enter phase two in Europe, which is the Kyoto commitment period. All of the European national action plans that I've seen to date do, unlike phase one, propose to cause emissions to be reduced in the industrial sector as a whole. But 100% of the European quota allocations place 100% of the burden to reduce on the electricity sector, and most of the European nations actually allocate excess allowances to oil and gas producers, aluminum producers, chemical producers, and large manufacturers.

That's a problem for Canada in two ways. First of all, however rational that might seem in Europe, in Canada, if we essentially lay a huge reduction burden on electricity generators and give oil and gas producers a free ride, all we're doing is taxing made-in-Canada energy, when it's consumed by a Canadian, to create a subsidy for our exports to the United States. That's an economy killer of the highest order.

The other complication that arises from the European allocation procedure is if we in Canada implement a cap-and-trade regime that assigns large obligations to reduce the oil and gas sector, then oil and gas companies will be competing in an international market with European oil and gas companies that have a free ride. So we're caught on both sides by the European allocation, which is strategic and really doesn't have a lot to do with the environment.

That's a market reason why I think we can't do cap and trade in Canada. There's another reason why I think we cannot do cap and trade in Canada. I'm not a lawyer, and I know there are differing opinions, but I would suggest that over time the federal government is likely going to find out that it's very questionable whether or not the federal government has the jurisdictional authority to impose a cap-and-trade market system on the provinces.

**●** (1535)

More important than the jurisdictional question is the practical reality that no province can afford to accede to federal jurisdictional authority to implement a cap-and-trade program. The reason is that when you think about how an inventory is developed, any region's greenhouse gas quota supply governs that region's combined rights to produce fossil fuels, plus consume fossil fuels, plus produce beef, pork, and rice; pulp and paper; aluminum; cement; iron and steel; glass; and pretty much everything else. So if and when provinces accede to a federal authority to unilaterally issue a greenhouse gas quota, the provinces have given up economic sovereignty—they've given up their place in the federation. And I know that at least three provinces, regardless of what their legal opinions are in the matter, are preparing to fight tooth and nail.

Where do we go from here? We've got a competitive issue with how Europe has done cap and trade. If we don't have a jurisdictional issue domestically, we at least have an emerging major federalprovincial dispute that will tie us up into doing nothing for a long time. What do we do?

My constant theme is we follow Massachusetts' and California's lead and we implement product standards, particularly, but not only, emission performance standards. We allow for credit trading and joint implementation so that multiple companies can come together to comply with the product standards. In fact the most robust, vibrant, and valid emission markets that exist today in North America and Europe are markets in which entities trade credits for overcompliance with product standards. Those are much more vibrant, robust, and valid markets than the emerging emission markets; they're much more robust, vibrant, and valid than the now aged, and still not working, sulphur dioxide allowance market.

In my submission I've described for you various different product standards that have histories of success. As I said, Massachusetts has been regulating emissions from a product standards standpoint since 1997, and when California passed Bill AB 32 in September, which

was passed into law by the governor in December, the legislature of California in that legislation actively rejected cap and trade and elected to pursue a product-standard type of regulatory approach.

My recommendations are encouraging you to hook up with other jurisdictions that are meaningful to us and that are moving forward; it's not about stepping back.

I think I'll close my remarks there, and we'll see what you want to talk about in questions and answers.

**●** (1540)

The Chair: Thank you very much. You saved us two minutes; good job.

We'll turn now to the International Emissions Trading Association and Monsieur Andrei Marcu, their president, who I understand just flew in from Budapest this morning.

Mr. Andrei Marcu (President, International Emissions Trading Association): Thank you very much, Mr. Chairman, for inviting me today. I'll try to be brief.

The IETA is a non-profit business organization dedicated to ensuring that the objectives of the framework convention on climate change and climate protection are met through the establishment of an effective global system for trading greenhouse gas emissions by businesses in an economically efficient manner with societal equity and environmental integrity.

We represent 147 companies, many of them either Canadian companies or with large Canadian subsidiaries, and 49% of our companies are large emitters. You'll find the TransAltas and the Lefarges and my old company, Ontario Power, among them. What is more significant in telling you who we represent here is that 30 of these companies in total emit 1.7 billion tonnes of carbon dioxide. That is equivalent to the combined emissions of Germany and Canada. We're not talking about people who are coming because they want to make money in the trading side. It's a combination of people who are service providers, whether they're banks or lawyers. But 50% of them, 70 companies, emit more than the combined emissions of Canada and Germany. That's just for reference.

There's not one silver bullet. Effective policy to reduce greenhouse gas emissions must be based on three essential elements: carbon pricing, technological development, and other policies and measures targeting the removal of barriers to behavioural change. Leaving out any of these elements will significantly increase the cost of action. To reduce greenhouse gas emissions with the lowest possible social cost, it is fundamentally important to set the price for greenhouse gases. A price signal is inherently more efficient than any command regulatory approach. Putting an appropriate price on carbon means that people are faced with the environmental cost of their consumption. This will lead individuals and businesses to switch away from high-emission goods and services and invest in low-carbon alternatives, often at comparatively low substitution costs. Experience with the EU ETS market demonstrates clear correlation between short-term energy demand and the carbon market with a resulting temporary reduction in demand and induced fuel switching.

An MIT and Eni Enrico Mattei Foundation study of the impact of the EU ETS phase one shows a real reduction of 80 million tonnes in the pilot phase so far. Emissions trading has demonstrated the ability to deliver effective environmental policy at a far lower cost than command and control or tax-based approaches simply by allowing the market to set the appropriate price. The EU ETS is driving abatement within the EU, while the dramatic success of the U.S. clean air market in addressing air quality provides an irrefutable example of the power of market mechanisms.

A U.S. congressional budget office analysis of the sulphur dioxide program concluded that the use of market mechanisms has saved \$2.5 billion of the original \$5 billion of estimated compliance cost and has also resulted in overcompliance. You will see in the stack of slides some that are attributable to American Electric Power. It emits about 140 million tonnes of carbon every year. It's the largest carbon emitter in North America, and they say about the same thing that we say.

Environmental markets minimize government interventions, setting the constraints and allowing the market to help with acid allocation. In using a price signal the overall societal costs of compliance are minimized, allowing for resources to be allocated to other priorities. The global GHG market has resulted in a change in the business culture that is taking place in the corporate community and society at large, where the price of carbon has become one of the parameters that is part of the normal decision-making process. The most difficult thing to change is culture. Everything else follows. The price of carbon is changing the mindset in the corporate boards of Europe, let there be no doubt about that.

The development and employment of a wide range of low-carbon technology is essential in achieving the deep cuts in emissions that are needed. Carbon prices give an incentive to invest in new technology to reduce carbon. Many observers believe that carbon capture and sequestration must play a critical role in GHG mitigation, but without an incentive there is little reason to invest in this technology. The price of carbon is a necessary condition to drive change in the economy. Other policies may be necessary to drive technological change in the required timeframe—because we do have a required timeframe—but carbon pricing is a fundamental requirement.

**(1545)** 

The IETA works to ensure that the conditions necessary to the formation and operation of trading regimes are present in the design, operation, and review of emerging and existing schemes. These basic conditions are listed below. I believe you have them. I'll go through them very quickly: transparency in the design, regulation, and review of emissions trading schemes; the release of marketsensitive data in a transparent, equitable, predictable, organized way; transparency in the decision-making process of the regulator; a sufficient number of participants and sufficient demand for allowances to drive emissions reduction and to facilitate a competitive, liquid, transparent, deep, and efficient market in allowances, which minimizes the costs of risk management inter alia through a tight bid-offer spread; the absence of artificial barriers and constraints, to prevent willing participants; low transaction costs, predictable process timelines, and limited bureaucracy; the market should be free to deliver the required emissions reductions with the minimum of intervention within a known, fixed, and achievable constraint on total emissions; market design should avoid mechanisms that seek to directly manage, cap, or maintain the associated price for emissions and/or to manage the associated supply and demand of allowances, with a view to indirectly managing, capping, or maintaining the price for allowances; and finally, in order to have an appropriate price discovery, the demand created as an expression of the political will must be met by the availability of an adequate supply of offsets from all available sources of real and verifiable

In this regard, it is our view that the Canadian government has placed Canadian industry in a difficult situation in the course of the last five years. It remains impossible today for Canadian business to make capital investments informed by a price for carbon. This is a critical obstacle to the success of Canadian climate change policy. Climate change cannot be addressed without a significant realignment of capital spending, and in the absence of policy certainty, that will not happen.

In Europe the use of a pilot phase has allowed the formation of experience and institutions. By contrast, and this is very important, Canadian business is being asked to assess the viability of abatement targets without knowledge of the compliance possibilities that will be available to them.

Canada must move to establish a regulatory GHG market with sufficient scarcity to allow a functional market. If there is no scarcity, there is no market. However, the Canadian economy lacks the diversity and size to provide a Canadian carbon market with a ready supply of low-cost reductions driven by differential costs of abatement.

Canadian manufacturing has made significant strides in improving its carbon efficiency. Many of them have testified in front of your committee, Mr. Chairman.

Canada will remain an energy exporter for the foreseeable future. Fossil fuels will be a critical part of the economy for at least the next generation. That is found in any report, including the IETA report. The world cannot make an overnight transition to a non-carbon economy. As such, it is essential to the liquidity of a Canadian carbon market that credits from abatements outside the capped sectors be permitted.

IETA supports the industry-provincial offsets group initiative to provide a framework for domestic offsets. Given Canada's position, whatever targets the government will choose, be it long or short or Kyoto, Canadian business must have access to the flexibility of emissions trading coupled with domestic trading. To do otherwise would place them at a disadvantage with their global competitors who have access to these instruments, including less costly offsets. They must be provided with the flexibility to choose between make or buy options for reductions, protecting economically critical sectors.

On this score, it is fundamental that project-based reduction credits from the clean development mechanism and joint implementation be permitted. These units are produced project by project and they are third-party verified by accredited and internationally reputable verifiers.

Canada's climate and energy policy, Mr. Chairman, cannot be developed in isolation from the United States, our largest trading partner. In the United States it is now considered a question of when, not if, a carbon constraint will be introduced at the federal level.

I will point out that Governor Schwarzenegger is sitting on the same platform with Prime Minister Blair in California, in vowing to link an emissions trading system. I am pointing out the Chicago Climate Exchange. I am pointing out the 16 bills sitting in the federal Congress looking at cap and trade, driven by a very good Republican senator, Senator McCain, and Governor Schwarzenegger. We're not talking about people who are prone to a lot of light thinking.

**●** (1550)

I would like to close by saying that in addition to an emissions trading system, there is a need for additional policies and measures. A structured mechanism to invest in long-term technology may be necessary to drive the necessary technological change in the required timeframe, where the corresponding price signal necessary to stimulate that investment alone will be socially acceptable.

The design of any non-market mechanism for compliance should be carefully considered to ensure that it is as neutral in effect as possible if the carbon market is to meet the expectation for driving change. In considering the design of the proposed technology fund, there are clear challenges. It may readily be seen as reacting as a price cap, and a price cap creates difficulties for market functioning. Equally, it may preclude formal linking to other markets that do not have similar compliance options. The existence of an alternative compliance mechanism can draw liquidity from the market.

However, having said all this, we also recognize the fact that other policies and measures are and may be necessary. It's just a matter of designing them in such a way that they are compatible and work together with the market, as opposed to working against each other.

Thank you, Mr. Chairman.

**The Chair:** In the spirit of trading, we traded some of Ms. Donnelly's time to you.

I'd like to call on Mr. Luc Bertrand, president and chief executive officer of the Montreal Climate Exchange, for ten minutes, please.

Mr. Luc Bertrand (President and Chief Executive Officer, Montreal Exchange, Montreal Climate Exchange): Thank you, Mr. Chairman.

My comments will focus primarily on giving the committee a good sense of the structure that could be put in place very rapidly in the event the government decided to go towards an emissionstrading market mechanism. Essentially, my focus is going to be specifically on some of the main features and aspects, with regards to the mechanics of this market, in the hope that the federal government policy will be to put in place the required regulatory framework, so that this market could be created.

Essentially, the Montreal Climate Exchange is a partnership that the Montreal Exchange and the Chicago Climate Exchange entered into about a year ago. It's a market-based solution, admittedly, and we see this as being one of the solutions—admittedly not the only one, but certainly one of the market solutions that can be used to reduce greenhouse gases.

Essentially, the Montreal Exchange, just for your background, is Canada's financial derivatives market by virtue of an arrangement with the Toronto Stock Exchange that dates back to 1999. We decided back then that Toronto would focus on the cash business, and Montreal would focus on the derivatives business. Essentially, if there is a decision made by the government to launch an emissions market in Canada—and this is before 2009, because 2009 is the time at which our arrangement for the TSX comes to an end—the TSX could not do a futures market, and we could not do a cash market. We would certainly find ways to cooperate. But at the outset, I think all would comment that this kind of market would lend itself primarily to a derivatives market; hence the role of the Montreal Exchange, and hence the reason we took a leadership role in proposing the climate exchange that we are now proposing.

With regard to the Montreal Exchange, we currently trade futures and options in both equities and fixed income. On a daily basis, we do about \$70 billion worth of notional value. We run a book of about \$600 billion to \$700 billion of notional risks. All this is conducted through something called the Canadian Derivatives Clearing Corporation. I think it's very important for the members of the committee to understand the importance of a clearing corporation in a derivatives market, whatever that derivatives market is. Montreal, through CDCC, has the only derivatives clearing corporation in Canada. It's a double-A-rated Standard & Poor's institution. As I said, without that mechanism, essentially you don't get the counterparty risk that you need to have for a market to operate, whatever the underlying commodity or the financial instrument in place may be.

Also with regard to the Montreal Exchange, we are the operators of a company called the Boston Options Exchange. It's one of the six options markets in the U.S. We operate that out of Montreal. We are the first non-U.S. exchange recognized by the Securities Exchange Commission to operate a U.S. market.

We are also in partnership with the New York Mercantile Exchange, something we announced most recently. We're planning to open an energy market that will be based in Calgary.

Finally, if I can be allowed, I'd simply mention that we filed a prospectus to become a publicly traded company. I invite all the committee members to go to our website. You can access our prospectus and you can get detailed information on our company on our website.

With regard to our partner, the Chicago Climate Change, CCX is a leader in environmental finance. There's no doubt about that. The gentleman who runs it, Dr. Richard Sandor, is known to be preeminent in his field. They are also the operators of the European Climate Exchange, which is based in London. It's the largest climate exchange currently in business.

The reason that Montreal decided to partner with the Chicago Climate Exchange, first of all, is that this is going to be a global business. There are just no two ways about it. We've got to recognize that. Secondly, if you combine the strengths of two companies, like CCX and like Montreal Exchange, you have a situation in which we can rapidly launch a very sophisticated, high-performing exchange in a very short while with minimal costs. Chicago Climate Exchange brings intellectual capital that is unique. Montreal Exchange brings the infrastructure, self-regulatory technology, and the risk management. So this is why we decided that the fastest way, and the best thing to do, was to partner with the Chicago Climate Exchange.

• (1555)

Rapidly, and you've heard these before, the advantages of a market-based solution are numerous. It's cost-effective for companies in terms of managing costs. We think it will allow companies better planning with regard to their greenhouse emission programs, all because, of course, of a transparent price signal. That is the key thing.

Without a structured, standardized market, we're going to push the market either offshore or over the counter. But an over-the-counter market is opaque, it's tough to read, and it's unfair to the small players. So as much as we will hear different arguments in different

ways, the reality is that companies will want to monetize their credits in one form or another, or Canadian companies, independently of Canadian law, will have to hedge themselves against the environmental risk associated with greenhouse emissions.

So they're going to seek ways of doing this. If we don't provide them with a standardized environment to do so, then who will step in? It will be your large banks, your C.S. First Boston and your UBS Warburg, and I'm very careful here, because they're all partners in the Montreal Exchange. But it's going to be an over-the-counter market, very expensive, not transparent, and very difficult for all the emitters to be able to know exactly what the price signal is.

At the risk of repeating myself, the benefits of a regulated exchange, the transparency, the liquidity that it will bring to the marketplace, all this, of course, in a self-regulated and regulated environment.... I say self-regulated; the Montreal Exchange is an SRO—as is the Toronto Stock Exchange, for that matter—where we are responsible for regulating our markets according to very strict regimes imposed on us by the securities commissions in Canada, and the same rules would apply to the climate market here.

In terms of what we need from the government, we need definition of targets. We need definitions of eligible credits. We need an effective date of implementation. We also need adoption of measures and verification in conformity, and of course we need the government to select a registry, to register the credits.

Essentially, with regard to the Montreal Climate Exchange, we could be ready within months. We've already begun discussions with a regulator on the specifications of the contracts. Things are moving very rapidly, so as you can see, we are remaining very proactive in the hope that this market will be given the green light by the federal government.

I will stop here, sir, because I believe my time is almost up. I'll be very glad to answer your questions. Thank you.

**●** (1600)

[Translation]

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

[English]

We'll turn to our first video conferencing, the delegation of the European Commission to Canada.

Mr. Delbeke, willkommen. You have ten minutes, please.

Mr. Jos Delbeke (Director, Climate Change and Air, Delegation of the European Commission to Canada): Thank you, Mr. Chairman.

Do you hear me, Mr. Chairman?

The Chair: I can hear you. Can you see me?

Mr. Jos Delbeke: I can see you.

Good afternoon again, Mr. Chairman. It's a pleasure to be with you again, and I'm more than happy to share with you some of our experiences with the European emissions trading system.

We circulated some slides and documents, so I hope they are available to the members of your committee.

A lot has already been said. I would like to summarize my introduction in five points.

First, the carbon market, which in Europe we call the EU ETS, the emissions trading system, has been up and running since January 1, 2005, for 25 European member states. That means that it is, in our view, the largest cap-and-trade system in the world. It has mandatory caps on emissions—on absolute emissions—from the 10,000 largest emitters in the EU. It covers half the emissions of the EU. And the exchanges that happened in 2006 were about 20 billion euros.

Now, what are the key design elements of the EU ETS? It is a simple cap-and-trade system for direct emissions. It was very important to keep simplicity in the system, because we studied other experiences, and they showed us that simplicity mattered a lot if we were to have a clear and easy message that would be understood by all economic operators.

It has broad sectoral coverage. That means that all big installations—power, steel, pulp and paper—are covered in the EU. But it does not cover emissions from transport.

It has robust monitoring and independent verification, with sanctions to ensure compliance and use of the market. It is an integral part of the international system for tackling climate change. We had almost free allocation. And most of all, the system is driven by the private sector and is providing incentives for emissions reductions.

My second point is about the experience so far. What have been the stages through which we have gone? We are currently in the middle of the start-up period, 2005 to 2007. We're almost coming to the end of that start-up period. We have registries established. Allocations were done almost for free. We had fairly good market development. I think we are exchanging today almost 100 million tonnes a month. Emissions reductions, however, have been set at too low a base—I will come to that in a minute—but it was, in our view, necessary to have a smooth and easy start-up for the system.

Today we are preparing for the Kyoto period, starting on January 1, 2008. The first commitment period of the Kyoto Protocol is being prepared for by having allocation plans for companies, and our member states are taking care of those. Today, 14 of the 27 national allocation plans have been approved by the European Commission.

There is a very important slide in the package that we sent to you, Mr. Chairman, showing the development of the quantities and the prices, and I think it's very important that we spend a few minutes on that. On the quantities, you can see that we had steady growth in the allowances exchanged on the market. On the prices, there is a curve showing quite steady development from a level just below 10 euros up to a peak of 30 euros, and then there is a quite sudden drop, from 30 euros to half that level, in about April of last year. Then we see the dark line that shows declining prices. Today the spot prices are about one euro per tonne of carbon dioxide.

#### **●** (1605)

What happened? In May 2006, for the first time, we had verification of the emissions of all companies, and the verification

was done at the company level. In fact, what turned out in April was that the database with which we worked was not ideal. What is now of importance is that today, in preparing for the first commitment period of the Kyoto Protocol, we can work in a reliable, verified database, and that is what you see in the price curve, where today the forward prices for the first commitment period are around 15 euros and I think market operators are expecting around 20 euros for the period of 2008 to 2012. In a nutshell, the prices have been volatile for the pre-period, but we are very confident that with a better database, consisting of verified data, we will no longer see this volatility in the market.

A third point I would like to make is the European emissions trading scheme is primarily focused on Europe by definition but is an open scheme. It is linked to the Kyoto instruments of joint implementation and CDM, and our companies and member states are currently planning expenditures of up to three billion euros for the first commitment period. That means this is the heart of a solid cooperation with developing countries, and it really represents a transfer of technology.

We also have the possibility to link up the European trading scheme with similar systems in the world, whether they are covered by the Kyoto Protocol or whether they are schemes outside the Kyoto Protocol. The procedures are different, but the principle of linking with other schemes is well established.

What are the lessons learned from our scheme? As I said, having simplicity in the scheme is very important and having the global perspective, a global carbon market in perspective, is key to anything we are doing in Europe, and we would hope to link up our system to as many players as possible.

It is very important that we can maximize compatibility with other systems in order to have this process of linking up, but it is very important that we have mandatory caps set for all participating companies. Only these mandatory caps allow us to have a simple system.

The European system does not have what are sometimes called "safety valves", or price management, and the European system is strongly based on the private sector to verify its own emissions and have third parties involved. The lessons to be learned are that we have simplicity through focus on mandatory absolute caps and no price management.

To sum up, we are now reviewing our emissions trading scheme. We are going to extend it to include international aviation. We are going to have more sectors covered, and we are going to have more harmonized procedures, because it is fair to say that among the 27 member states we currently have in the European Union, we need somewhat more harmonization in order to maintain sound competition within the internal market among all players.

Thank you, Mr. Chairman.

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

We'll turn now to the PEW Center on Global Climate Change, Ms. Vicki Arroyo, the director of policy analysis, for ten minutes, please.

Ms. Vicki Arroyo (Director, Policy Analysis, PEW Center on Global Climate Change): Hi. Thank you for inviting me to speak to your panel today. I appreciate your flexibility in rescheduling my visit, due to my mother's medical emergency, and I'm grateful for the opportunity.

My name is Vicki Arroyo and I'm director of policy analysis with the PEW Center on Global Climate Change. The PEW Centre is a non-profit, non-partisan, and independent organization dedicated to providing credible information and straight answers and solutions in the effort to address global warming.

Forty-two major companies participate in the PEW Center's Business Environmental Leadership Council, or BELC as we call it, making the BELC the largest U.S.-based association of corporations focused on addressing the challenges of climate change.

Many different sectors are represented, from high technology to diversified manufacturing, from oil and gas to transportation, and utilities to chemicals. These companies represent \$2.5 trillion in market capitalization and employ over 3.3 million people and they work with us to educate the public and policy-makers on both the challenge and the solutions to climate change.

We're working to advance effective, pragmatic policies, both in the U.S. and internationally, and our work is informed by our ongoing relationship with the BELC.

I direct the centre's analytical program, including work on science, economics, and domestic policy. Our basic view is that domestically we need mandatory caps, a cap-and-trade program as the cornerstone, and internationally we need binding commitments for all major economies to ensure environmental effectiveness, protect against competitiveness impacts, and provide access to lower cost reductions.

I'd like to start by congratulating your committee on taking up these initiatives. For years, we in the U.S. looked to Canada for its leadership on mandatory reporting and on working on alternative design approaches for offsets, and it's heartening to see the issue moving forward again.

I'm happy to report there's been tremendous movement in the United States as well in recent months, galvanized by a variety of factors, including the compelling science, increased public awareness from things like Al Gore's movie and the press, states' leadership, the Democratic Party's takeover of Congress and its priority for addressing climate change, calls for more and more business leaders to address climate change, and emerging presidential candidates making this an issue.

As you heard from Mr. Marcu earlier, the U.S. policy picture is changing rapidly, with new proposals being submitted almost weekly on Capitol Hill in the early months of the year. Older proposals are being revised to allow for phased reductions into the future, often with an ambitious long-term reduction target by 2050, informed by the science.

Most of the federal proposals cover six greenhouse gases and are economy-wide, covering large sources and fuels. There is some focus on the utilities sector, for example, with Senator Feinstein's and Senator Carper's bill, because of their familiarity with cap and trade and their wish for regulatory certainty.

All proposals provide for an absolute cap, although one is set on an intensity basis. Many provide for offset allowances from sequestration, non-covered domestic and international sources. There is broad support here for bills with offsets, as long as the sources of emission reductions, both domestic and international, are real, quantifiable, and verifiable.

There are several proposals I could mention, but I thought giving an outline of just one that you may have heard of may be helpful. The Climate Stewardship Act, sponsored by Republican Party senator and presidential hopeful John McCain and independent senator Joe Lieberman, with co-sponsors including Democratic Party presidential hopefuls Barack Obama and Hillary Clinton, creates an economy-wide cap-and-trade program covering 85% of U.S. greenhouse gas emissions. It proposes to hold emissions to 2004 levels in 2012, to reach 1990 levels in 2020, and get 28% below 1990 levels by 2030 and 60% below 1990 levels by 2050. It allows for use of offsets up to 30%. Again, offsets here have been considered one cost control mechanism.

Allocation right now is determined in the bill by the administrator, but it's likely that is going to be a political decision made by Congress before the bill finishes. It provides credit for early action, banking, and borrowing. Because it's important to stimulate technology development, there's also a technology title with incentives for advanced energy technologies, adaptations, and the like.

It's important, in addition to a price signal, because alone, a technology push and technology incentives are not enough; you need a price signal, as we've heard before.

Variations on the cap-and-trade theme are being offered by many influential senators and Congress people: Senator Boxer, the chair of the Senate's environmental public works committee, and Senator Bingaman, of the energy committee. I mentioned Senator Feinstein as well as Senators Kerry and Snowe.

#### **●** (1610)

Only one bill allows for continued growth in emissions through 2020. It's a target based on intensity and includes a very low safety valve of \$7 a tonne of carbon dioxide. That's an upstream bill based on the recommendations of the National Commission on Energy Policy. Many people feel that we're beyond this bill now, and we're likely to see something more aggressive.

At the Pew Center on Global Climate Change, we're concerned with this approach, in that it allows for a continued emissions growth, and we're concerned that the safety valve will hinder linkage. As you just heard from Mr. Delbeke, linkage is a critical feature of a functioning global market.

We're also concerned that the low price of \$7 a tonne for carbon dioxide will not necessarily encourage sufficient innovation in bringing important technologies, such as capture and sequestration.

The House now has many bills and many more active committees than in the past. There is a new select committee on global warming set up by House Speaker Pelosi. Chairman Dingell's committee on energy and commerce is moving forward with hearings. There is an active science committee, and even the oversight committee on ways and means is having hearings now on climate change.

There's a bipartisan Olver-Gilchrest bill that's similar to the McCain-Lieberman vehicle, which I describe below. It has a more aggressive target, but there's no technology title.

As you may have heard, Speaker Pelosi called for a climate bill in the House to be debated on the floor by July. At the same time as we see momentum building in Congress, there are some interesting developments with business leaders signing up to promote action.

You might have heard about our work with the U.S. Climate Action Partnership. On January 22, the CEOs of ten leading firms, such as GE, Dupont, Duke Energy, and Caterpillar, joined with four NGOs, including ours, to call for mandatory legislation—specifically an economy-wide cap-and-trade program with support for key technologies and targeted sectors, such as transportation and coalburning electricity generation.

After they made this call in January, and since the findings of the recently released fourth IPCC assessment were so compelling, every week, more and more companies and trade associations seem to be joining the ranks of people calling for mandatory policy. They see the science and they want to act.

They need regulatory certainty for the investment decisions that they're making. They want to help design meaningful and pragmatic policy, and they want a seat at the table. They prefer federal policy to a patchwork of state activity. And indeed, as you heard, the states in the U.S. are ahead of the federal government.

Climate change is a bipartisan issue throughout the states, with Republican governors such as George Pataki, who led the RGGI partnership, and Governor Schwarzenegger, who led efforts in California. As of yesterday, Governor Schwarzenegger joined with four other western governors, agreeing to plans to cut their emissions and allow for trading.

There's a lot of leadership at the state level, and their reaction is very laudable, but we certainly don't think it's enough. They would prefer a federal program. Our businesses would also prefer a comprehensive federal program, and given the nature of greenhouse gases, it obviously makes more sense to deal with this both at the national and indeed international levels.

So while much of the debate in the U.S. is focusing for the moment on the need for domestic action, there's growing recognition of the need for the U.S. to re-engage in the international negotiations and help lead and develop an effective and inclusive post-2012 framework.

Last year the Senate Committee on Foreign Relations passed a resolution sponsored by Senators Joseph Biden and Richard Lugar, the committee's top Democrat and Republican, calling for the U.S. to participate in negotiations under the UN Framework Convention on Climate Change, with the aim of establishing mitigation commitments for all major emitting countries.

We believe that the key to engaging all major economies is a flexible framework, allowing countries to take on different kinds of commitments. We also believe it's essential that this future framework be market-based, with emissions trading and a modified version of the clean development mechanism. While the CDM has had problems, it is working and it's the core concept. The core concept is a sound one, wherein developing countries' marketable credits for verified emission reductions create a strong market incentive for clean investment.

Both Canada and the United States strongly supported the inclusion of market-based mechanisms in the Kyoto Protocol, and we know that the issue has become clouded because of Russian hot air. But Canada can be an active player in the global carbon market without ever touching a single Russian tonne. Many companies and countries are investing right now through CDM in real and verified emissions reductions.

By investing wisely, Canada can make progress towards its own reduction goals, while helping developing countries along the path of climate-friendly development.

Thank you.

**●** (1615)

The Chair: Thank you very much, Ms. Arroyo.

Our final witness statement is from Louise Comeau, the director of the Sage Centre's Climate Project. Ms. Comeau, the floor is yours for ten minutes.

## Ms. Louise Comeau (Director, Sage Climate Project, Sage Centre): Thank you, Mr. Chair.

I, along with my colleagues at the Climate Action Network, welcome this opportunity to talk to you about the contribution emissions trading can make to the cost-effective reduction of greenhouse gas emissions.

Let me begin by restating what everyone here says they accept, but which I sometimes think not everyone truly appreciates: before long, within the lifetime of our children, the earth will warm at least two degrees. It doesn't sound like much, but don't be fooled. It is a calamity, an environmental crisis, an economic disaster—at least it will be, if met with continued half measures and indifference. If we know what costs \$1 today to fix now will cost \$5 to fix in the future, why would we possibly reject the idea of doing everything reasonably possible to take action right now? How can we logically and intellectually rationalize doing less than what we know to be necessary and realize is possible?

There is a massive gap in logic taking place. For me, this inexplicable resistance to Canada's full participation in both an international and domestic emissions trading system is the perfect example of this gap in logic.

Let me make three points is support of why Canada's policymakers must urgently employ an emissions trading system, and why Canadian politicians must quit trying to make emissions trading a four-letter word.

First, we need an emissions trading system because the problem we face—call it carbon pollution—doesn't care a whit for national borders. Climate change is like no other environmental problem. Reducing emissions at home will not change the climate at home, as emission reduction will when we cut smog and acid rain pollution. For the security of Canadians and for our environment, Canada has a vested interest in ensuring that greenhouse gas reductions occur both at home and abroad. Like all other problems that are transnational in nature, we need a transnational approach. We need an international system of emissions trading to address the international reality of climate change.

Second, I believe by far the most important or at least the most logical reason is that we won't make substantial progress until we employ the financial incentive of the business sector. When will we surely make progress? It will be when businesses can make money from not polluting—and trading is all about that. Canadian companies that operate globally can generate credits through their business activities as part of their day-to-day operations. These credits don't need to be purchased. Companies like SNC-Lavalin, Alcan, Inco, and TransAlta, just to name four, operate internationally and can benefit in this way. Companies like these can generate credits through project-based changes that lead to fewer greenhouse gas emissions being generated than original project designs may have anticipated. These credits are assets on the books of Canadian companies and can be used to meet domestic targets or be sold to generate revenue.

If we're making carbon scarce, then we're making carbon valuable. Look at the practical experience; it tells you this is working. The clean development mechanism has more than 1.8 billion tonnes of potential credits in the project pipeline; more than 500 projects, valued at 740 million tonnes to the end of 2012, are already registered; 32 million tonnes of credits have already been issued, and 37 million tonnes are waiting for final approval. More than 110 methodologies have been completed, with more in development.

Those who argue we should not let business offset emissions by simply buying credits don't get it. The way we incentivize business to lower emissions is by putting them in a market where they can make money from keeping emissions low. If this works for precious metals, it can work for carbon.

A final point, as the Prime Minister has argued, is that we need to engage not only the United States, but also emerging high-growth economies like China, Indonesia, Brazil, and India in the fight against global warming. It's good enough; I totally agree. What better way, and the surest way, is there of engaging these nations than through emissions trading? So why would we oppose it?

My third argument is that emissions trading, as proposed under the Kyoto Protocol, could become one of the largest sources of international development for emerging economies and the poorest of the poor. International trading mechanisms, like the joint implementation and clean development mechanisms, have an important role to play in driving emissions reductions and in introducing new job-creating technologies.

**●** (1620)

In fact, I would also argue that Canada has foreign policy interests for also participating in the carbon market, particularly where a low-carbon project contributes to international development objectives where a low-carbon project could also be deploying a Canadian technology, or improves Canada's international competitiveness, expands trade, or otherwise advances our national interest, as in cutting greenhouse gases or other pollution affecting Canada through atmospheric transport.

Canada may deprive Canadian business of these opportunities because it is not building the infrastructure needed to register these tradeable units. A domestic target for industry that allows participation in international mechanisms but that does not include a Canadian registry for recording international transactions will deprive our economy of business development and international reduction opportunities.

The price of international carbon credits and allowances provides an important price discovery benchmark that we can use to assess domestic approaches, whether industry-led or by governments. Clearly, existing technologies can deliver reductions at prices ranging from \$10 to \$25 a tonne. It makes one wonder why a tax-free transit pass at \$2,000 a tonne would be an acceptable government expenditure, while business claims that anything over \$15 a tonne requires a switch to long-term technology solutions.

Driving companies to invest in these existing technologies requires an absolute cap to the Kyoto target level, as the Pembina Institute recently proposed. The government must resist industry demands for weak, near-term targets with over-reliance on a technology fund to generate hot-air credits for long-term R and D. Such fraudulent arrangements undermine true price discovery, and if current proposals by industry that are under consideration by government proceed, emissions from the oil sands could increase 180% to 300% over the next decade, while emissions intensity improves 16%—a worsening intensity improvement, by the way, than in the last ten years. Industry proposals and Government of Canada analysis of target options and emissions trends resulting from these target options must be transparent, and must be reviewed by third-party stakeholders and, I would argue, this very legislative committee before regulations are finalized.

In short, I say to everyone here that we have an obligation to put politics aside and do the smart thing. We need to urgently put in place new transparent targets for business to lower emissions. We need to match that with full participation in an emissions trading system that will financially reward business for lowering their emissions. Nothing else makes even a whit of sense.

Thank you.

**●** (1625)

The Chair: If I could ask all of the presenters to send your briefs to the clerk, electronically if you could, that would be helpful.

We'll start our round of questioning. I will point out that Ms. Arroyo has to leave at five, so any questions that you want to put to her, take that into consideration. We'll be pressed for time, so I'm going to be pretty hard on the clock. We'll start with our sevenminute round.

Mr. McGuinty, please.

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

Thank you very much, ladies and gentlemen, for coming to testify.

I'm hard pressed to know where to start.

Ms. Donnelly, I don't think I'll be asking you any questions. Having heard your testimony and that of the other witnesses today, along with the testimony of other eminent economists, I can say that I don't at all share your view that a cap-and-trade system, or international emissions trading, isn't the way to go. In fact, I think of all the witnesses we've heard, your group is the only group that remains of the view that this is a system not worth pursuing.

I do want to again go back—just for the record, for our guests—to the announcements made by the government that we will not participate in any international carbon market. It has confirmed that four times in a row. It's very hard for us in the opposition to understand and to reconcile how this can be, and from so many aspects. We heard from the Montreal Stock Exchange, I think, and we saw the memorandum sent to the Prime Minister and the Minister of the Environment by Richard Nesbitt from the Toronto Stock Exchange on December 21, warning the government not to take such a stance, begging them not to take such a stance. And yet the announcements were made.

Going forward and keeping this very positive, so leaving aside the cheap talk about our trying to meet Kyoto targets leading to collapse like that in the U.S.S.R.—this is the kind of fear-mongering that's coming right now from so many commentators in Canadian society—I'd like to turn to Mr. Marcu in particular.

Mr. Marcu, there's one line in your presentation that you did not read. I don't think you did it deliberately, but you did actually skip it. I'd like to read out that line from your brief:

The debate over the nature and difficulty of targets is secondary—the real success of the US Clean Air program lies in the market's ability to drive overcompliance.

You also made reference to the studies that emanated in the post-U.S. Clean Air Act experience to show us that, under that system, the cost of reduction—unlike a tax-deductible transit pass, for example, at \$2,000 a tonne, as we've just been reminded—actually surprised economists, when they looked back, with regard to the reduction of sulphur dioxide and other gases causing acid rain.

Can you help Canadians understand what this term means, "drive overcompliance"?

**●** (1630)

Mr. Andrei Marcu: In very simple terms, it means that you do more than you have to do because you gain from it. The market approach of the cap-and-trade system should awaken the entrepreneurial spirit in every business person who has a cap, and drive him to reduce more than he can, to make his enterprise more efficient from an energy and a process point of view. In the process, he will eliminate the greenhouse gas emissions because he can monetize those greenhouse gas emissions. He can compare the cost of investing in reduction processes with the price he'd get for those reductions in the market.

So it's a very simple cost-benefit analysis. There's nothing magic about it.

In the deck I've provided here, you can see the numbers from American Electric Power. These numbers show that emissions between 1995 and 1999 were allowed to be 33.2 million tonnes, but the actual emission was 26.2 million tonnes, for a net sulphur dioxide benefit of 7 million tonnes.

Now, that is quite a significant reduction, and that doesn't come from somebody in the green movement; it comes from the largest carbon-emitting company in the United States.

Mr. David McGuinty: Perhaps I can turn to another theme that came through in your presentations. It dealt with debunking the fiction, I think, of those who would have Canadians believe the myth that this is all about offshoring billions of dollars in Russia—in the black market, no less, or so I'm told. I think some would characterize it this way, and I think it intentionally misleads Canadians into believing this is what it involves.

I want to go to the question of offsets, and I'll address this to Vicki Arroyo in particular.

Ms. Arroyo, you made a number of points about the huge energy that's now going into a climate change response in the United States today. Frankly, I think it's fair to say that it took the current President a long time to accept the science of climate change.

I'm just trying to get to this question of offsets. You talked about making sure they are real, quantifiable, and verifiable, and Ms. Comeau in turn talked about the need for verifiability. Mr. Marcu mentioned the verifiability. I think he said that 147 companies are now participating.

But first, Ms. Arroyo, what is the feeling in Washington now about verifiability? And could you then also help us understand where the thinking is going in the United States with regard to post-2012 participation in the United Nations Framework Convention on Climate Change?

Ms. Vicki Arroyo: Thank you for the question.

There's a lot of interest in offsets, as I mentioned earlier, as a cost containment mechanism. I'm looking at some in front of me, and many of them, such as the Bingaman bill, the bill from Senators Feinstein and Carper—which is more focused on the utilities sector-the McCain and Lieberman bill I mentioned before, and others allow for the use of emissions offsets as a cost-savings mechanism. Some have criteria already set up in certain categories in which people feel the emissions are more credibly verifiable. There is biological sequestration; industrial offsets that aren't covered, for example, in the first program, so you can go to non-coverage sectors; certain forced-management practices; and even international credits through a mechanism like the CDM itself or through a comparable mechanism that would allow people to verify what's coming in. Many people are considering them because they are a tool for cost containment. Certainly businesses of the kind we work with on the Business Environmental Leadership Council like to see the use of emissions offsets.

The Chair: Thank you.

**Ms. Vicki Arroyo:** Many of them also support the idea of the U. S.'s re-engaging in a post-Kyoto timeframe. We see that we need federal mandatory policy here. We need the U.S. to step up and do something credible and meaningful, and then hopefully that will be a prelude to rejoining what happens after the first phase of Kyoto in a constructive way.

• (1635)

The Chair: Thank you, Ms. Arroyo.

We'll have to move on to Monsieur Bigras.

[Translation]

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

First, I think that today's panel is probably one of those with the biggest experts in the field of emissions trading systems. I think that's entirely to the committee's credit.

Mr. Delbeke, of the European Commission, will be pleased because I'm going to cite a paragraph from a 2005 Commission document entitled "EU's Actions in Fighting Climate Change", which reads as follows, on page 6:

The system should enable the EU to meet Kyoto targets at an annual cost of between 2.9 billion and 3.7 billion euros, which represents less than 0.1 percent of its gross domestic product (GDP). To meet similar targets without such a system, it would have to spend 6.8 billion euros a year.

Mr. Marcu, isn't this estimate by the European Union proof that the emissions trading system is a powerful instrument for fighting climate change? Doesn't it overturn all the disastrous scenarios, including those put forward by the government in the past few months and years, according to which the Canadian economy might risk collapse?

**Mr. Andrei Marcu:** Thank you for your question, Mr. Bigras. I'd like to answer you in French, but I hesitate to do so. So I'll answer you in English.

[English]

Regarding the efficiency of the EU emission trading system, the emission trading system is the cornerstone—and I'm responding on behalf of Mr. Delbeke here almost. We clearly see it as a successful experiment at this point. It is not an experiment without its issues. Mr. Delbeke and I have agreed and have disagreed over the years. But it is certainly a market that is working, and the working and the market has been started in record time. There's absolutely no doubt about it. And it is making companies pursue reductions, and changing the mindset of the corporate boardrooms of Europe. On the RWE board and the Shell board and the BP board and the Endesa board, people know what the price of carbon is every day, and they make decisions based on that.

So is it an efficient way to drive change? Yes, it is a very efficient way to drive change.

[Translation]

Mr. Bernard Bigras: Thank you.

My second question is for Mr. Delbeke, of the European Commission. As you probably know, Canada is preparing to adopt reduction targets based on intensity, not absolute figures.

What recognition would Europe give to a Canadian emissions trading system based on reduction intensity rather than absolute figures?

[English]

**Mr. Jos Delbeke:** I think I underlined in my introduction that in Europe we were also going through a long discussion as to whether we would go for absolute or for intensity targets. And in the end we came to the conclusion that the absolute targets were creating a system that was capable of having much more simplicity and many more straightforward incentives to the operators in the system.

If I may link it up to the previous comment related to the costeffectiveness potential of the scheme that we have created in Europe, we have had new estimates. The new estimates that were adopted on the occasion of the January 10 paper that I introduced last time have shown that the cost savings are at least as high as the ones that were quoted, and depend very much on the scope of the system, on the broadness of the system.

So linking up with other systems is a key element of driving costs down within Europe and, as we have studied it, potentially also in the wider world. So having compatible systems seems to us a key element for the future.

Thank you.

**●** (1640)

[Translation]

Mr. Bernard Bigras: Thank you.

My third and final question is for Mr. Bertrand.

On page 8 of your document, you talk about defining demand, and thus about implementing a GHG emissions reduction regime for industry.

Do you think that reduction targets based on intensity would facilitate the introduction of a carbon market in Canada or have the consequence of making it more difficult, as Mr. Delbeke has just said?

Mr. Luc Bertrand: Thank you, Mr. Chair.

We think that an intensity-based system would add another element of uncertainty to the market.

Now someone could argue that it is good to have an element of uncertainty in a derivative products market because ultimately it operates on assumptions of volatility and uncertainty. However, in this case, to ensure that there is real liquidity, if the government offered companies that must reduce their GHG emissions more clarity and certainty, the market would be much more efficient, deeper and more transparent. That's our impression.

Without a doubt, we would prefer the market to be built on an absolute basis. We've tried to analyze what the market dynamic would be if we adopted reduction targets based on intensity, and we believe that such targets would constitute another element of uncertainty for users. In our view, that might undermine liquidity over the long term.

Thank you.

[English]

The Chair: Thank you very much.

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

Mr. Paul Dewar (Ottawa Centre, NDP): Thank you, Chair.

Thank you to the witnesses, both here and abroad.

One of the issues we have been dealing with and discussing, and which certainly has been brought up by Sir Nicholas Stern and others, is the cost of not doing anything. And a lot of what we're discussing here are real costs, and that's what we're grappling with.

I'm going to turn my question to you, Mr. Bertrand, and I want to ask you about the costs of not acting. We've heard different numbers around that.

Yesterday we heard that Governor Schwarzenegger announced—and I think we heard it in one of the testimonies—that five western U.S. states were signing on to an MOU for a regional cap-and-trade system. And we also have the carbon exchanges that are already up and running. We've heard about Europe and London. And we're hearing that the U.S. government is moving.

I'd like to hear from you, your perspective on the cost to Canada and what Canada and Canadian companies stand to lose if we are left behind. In other words, if we don't engage in this system that's emerging everywhere else, both in North America and in Europe and indeed around the world, what's the cost to us?

Mr. Luc Bertrand: I must confess, it's very hard to tangibly give a number. But I think the greatest tragedy, if we don't do something in Canada, is that the market is going to go elsewhere. That's the bottom line. The market is either going to go over the counter, as I explained in my presentation, which is an opaque market among.... It's an interbank business, and no one really knows what goes on there; it's a huge market in the financial derivatives business today. That would be too bad, because the OTC business is really for the large player, so the smaller emitters who would feel compelled to do something, for a host of reasons—perhaps because of being afraid that another country would retaliate, or whatever may be the situation going forward—will not have access to a transparent price discovery mechanism, and we will be putting at odds a whole segment of our industry that will not have access to the over-the-counter business.

Likewise, my sense is that the real cost is that business is going to go offshore; Canadian companies will take their business elsewhere.

You probably often read of the extraordinary growth we have seen in the derivatives business in the last ten years or so. There's a reason for it. It's because derivatives have become a central part to a risk management approach, not only for life companies and pension funds and mutual funds and so on; it's become central to how CFOs and treasurers of companies manage their risk. They do it because it's cost-effective; otherwise they wouldn't bother, because it gets really complicated.

I think it's fair to say that managing cost with respect to greenhouse gases using an effective derivatives market, which we could build, provided we're given the proper regulatory environment by the federal government, will be an added tool for Canadian companies to manage the risk associated with this activity.

• (1645)

**Mr. Paul Dewar:** In doing so, what is the importance of the linkages you mentioned with Chicago and with other markets that are presently established? We can't do this in isolation.

Mr. Luc Bertrand: I think the second biggest mistake we could make is not to have an infrastructure that would allow fungibility, meaning that the products here could be fungible into products in the U.S. or Europe or elsewhere; that our criteria would be different; that our certification and so on would be. I can appreciate that it can't be 100% fungible or analogous to another jurisdiction's, but if it is very different, then I think we're putting our own companies at a disadvantage compared with non-Canadian companies against which they have to compete.

**Mr. Paul Dewar:** Mr. Marcu, what is your take on the importance of acting now and not waiting, and what the opportunity costs will be if we don't?

Mr. Andrei Marcu: I have testified in front of other committees and commissions, and in front of Mr. Delbeke's commission on a group called "environment, competitiveness, and energy"; essentially, he's looking at how these three elements play. A market-mechanism emission trading system is another tool to help companies that deal with a carbon-constrained world stay competitive globally; it's as simple as that. At this point, there are European companies that have access to this, there are Japanese companies that have access to it, and Canadian companies are simply not acting right now because they don't know what the regulatory system is.

When I was in Ontario Hydro many years ago, we started and then we stopped, TransAlta started and stopped, and many Canadians companies started and stopped. We were leaders in this, and I would submit that as a result of inaction, we have lost that lead.

It's a pity, because it will be a choice. The way the U.K. government has spent a couple of hundred million pounds to make sure that London is the centre of trading.... And by God, it is the centre of trading—anything you want to do in carbon trading—and they haven't done this because they're nice people; they've done it because they know this is a strategic commodity. Why shouldn't Montreal or Toronto be the North American centre?

**Mr. Paul Dewar:** So the cost of not doing anything is that we'll be left behind and trying to catch up a little too late.

Mr. Andrei Marcu: I would hesitate to get into the economics of Nicholas Stern, but what I will get into is the economics of the Dutch government, which has completed its purchase program at prices that are well below what others are purchasing at today. Again it's a matter of whether you are getting into this market sooner rather than later.

**Mr. Paul Dewar:** Just quickly to my friends from Brussels, I want to know what the value of the market presently is, what you see the value of the market that you have in front of you is, and what the opportunities therefore would be for us.

**Mr. Jos Delbeke:** Today the spot price on the market is one euro for allowances traded this year, but most importantly, as I tried to indicate, the expectations and the forward prices on the market for the Kyoto period is around fifteen euros today and is expected to increase. So the early birds are best served.

The Chair: Thank you, Mr. Delbeke.

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

Mr. Mark Warawa (Langley, CPC): Thank you, Chair, and thank you to the witnesses for being here.

Time is short, so I will get right to it.

I'm going to be asking Ms. Donnelly a question regarding Canada's leverage on international negotiations. Before I do that, I just want to verify. I'm reading testimony that you provided to the committee on Bill C-288 on December 5. You shared, when you were representing GEMCo, that you are the largest carbon credit buyer in Canada and the third largest in the world. Is that still the case?

**(1650)** 

**Ms. Aldyen Donnelly:** The first statement is still true, and the second one is probably no longer true.

Mr. Mark Warawa: Okay, but you're the largest in Canada.

Ms. Aldyen Donnelly: Yes.

Mr. Mark Warawa: Okay, thank you.

We've had a number of witnesses make comment regarding the availability of the carbon market. The carbon market is part of the Clean Air Act.

Just as a quick comment to all the witnesses, I encourage you to provide recommendations to the committee. Thank you for the written submissions we received, but many of them do not have actual recommendations on how to strengthen Bill C-30, and that's what we're looking for.

Mark Jaccard, a professor at Simon Fraser University, was one of the witnesses here. He said buying credits is an option often discussed—and that's what we're discussing today—but little understood. He said:

Buying international credits in a four-year timeframe is virtually impossible because you have to buy it from someone. Someone somewhere has to have done some greenhouse gas reductions and we have to be able to verify that they did that. That is really difficult.

I'd like to read a paragraph here of some of the comments that were made when you were before the committee on December 5. This is regarding the state we find ourselves in.

We all agree that the ultimate goal is to reduce greenhouse gas emissions to deal with climate change. We've heard from Mr. Delbeke the same ultimate goal, but is the emission trading system that Canada is part of—the international, the domestic, the actual market that is available there—fair?

You've said:

In Kyoto, round one, the European Trading Zone (ETZ) negotiated a share of the Upper Atmospheric Reserve that was 7.7% larger than the ETZ's capacity to discharge GHGs at the time of the negotiations; Canada, by comparison, accepted a national quota allocation that was 13.3% smaller than Canada's capacity to discharge GHGs at the time of the negotiations. Overall, the Kyoto Protocol created a GHG quota supply that was 14% larger than the covered nations' capacity to discharge GHGs in 1997. Almost 170 nations ratified the Kyoto Protocol. When we treat the ETZ as a block, that reduces the total to 140 nations. of which only three-Canada, Japan, and New Zealand-have accepted GHG quota allocations that are lower than their 2008 through 2012 forecast GHG emissions. In the original 1997 agreement, two more nations—the United States and Japan-initially accepted GHG quota allocations that were below their 2008-2012 emission forecast. In November 1998, realizing their error, U.S. negotiators notified the EU and other parties that the U.S. would not ratify the treaty unless the EU agreed to renegotiate a more balanced quota distribution. The U.S. team gave the EU until December 31, 2000 to return to the negotiating table. The EU refused. A couple of years later, Australian negotiators pulled out of the treaty having also determined that the Kyoto distribution of GHG quota was unfair.

Is that still the case? What leverage does Canada have to shift international negotiations so that we're working within a fair market?

**Ms. Aldyen Donnelly:** We have huge leverage, because you're looking at a global market with 160 countries and only three buyers. Everybody out there is crying for us to get into the market, because they have nobody to sell to but us. There's no market if we're not in it, which means we can reshape the market to make it a valid greenhouse gas market.

Through the back door, I want to respond to you and have you kick this over to Mr. McGuinty. The situation that you just outlined is the whole reason that other experts agree with me that cap and trade is not it. You might invite them to be witnesses to testify. They include Alan Greenspan, Dr. Robert Shapiro, and Governor Arnold Schwarzenegger, who signed a bill in December that says no cap and trade, but product standards, product standards, product standards. The first people to reject cap and trade and to introduce product standards as the leading environmental regulatory strategy were Governor Bill Weld and Paul Cellucci, then lieutenant-governor.

If you're in Massachussets or California, they are going to stipulate that if you sell gasoline in one of those states, you account for your emissions and you comply on a retail level. Cap and trade may come in later, but to do cap and trade without a product standard is the same as having an ultra-low-sulphur diesel regulation that says refineries must refine and make low-sulphur diesel, but gas stations can still sell high-sulphur diesel. You put a product standard in first, and that's the same as saying gas stations must sell low-sulphur diesel, so that when the refiners are compelled to make low-sulphur diesel, they have someone to sell it to.

• (1655)

Mr. Mark Warawa: How much time do I have?

The Chair: You have 45 seconds.

**Mr. Mark Warawa:** When you were here, you also made a comment that if we did want to buy these credits, the CDMs, 51% of them were to buy an illegal substance, which was HCFC-22. Could you comment on that?

**Ms. Aldyen Donnelly:** I checked again this morning, and 51% of the forecasted CER supply in the CDM market is made up of CERs that are issued to plants that make freon, a substance that we have decided is so damaging to the environment that it's illegal to make it here. It will be illegal to import it into Canada in 2010.

I'll add another fact, which is that 18% of the CERs that will be issued to projects in the CDM program are being issued to hog producers in South America who confine, on average, 100,000 hogs per farm. They're getting CERs because they capped some lagoons back in 2001, and the specific company that is selling those CERs is the single largest competitive threat to Canadian hog producers. I, for one, am not going to raise my electricity rates so Canadian hog producers end up subsidizing their single most important strategic competitive threat.

An hon. member: Hear, hear.

The Chair: Thank you, Ms. Donnelly.

Ms. Arroyo, I know your time is short, so you can govern yourself accordingly in terms of when you have to go. Thank you in advance.

Mr. Godfrey, for five minutes, please.

Hon. John Godfrey (Don Valley West, Lib.): I'd like to direct this question to you, Ms. Comeau. Would you care to comment on the last comment by Aldyen Donnelly?

**Ms. Vicki Arroyo:** I confess to not understanding the comments with respect to emissions trading in California. Clearly there was just an announcement yesterday of a five-state initiative in that regard, so I think the issue of emissions trading is clearly one Governor Schwarzenegger is moving forward on.

With respect to HCFC-22 and the HCFCs as a result, frankly, those are very powerful greenhouse gas pollutants, and the destruction of them is a very powerful contribution in the near term. Their destruction is just as legitimate and frankly very verifiable reduction from the market perspective, so I don't see why we shouldn't pursue it. It is, in fact, a short-term opportunity, and given the capacity to quantify them and their significant greenhouse gas potential, we should be pursuing that.

**Hon. John Godfrey:** Mr. Delbeke, or anybody actually, there are 168 countries and three buyers. Is that true?

**Mr. Jos Delbeke:** I was also surprised by that statement in the following sense. We see that within the EU, there are lots of buyers and lots of sellers. We should not be overly concentrated on who, as a country, is buying or selling. The point made before on cost effectiveness is that companies can sell and buy and look for the lowest-cost opportunity.

On the numbers for the EU that were quoted, the EU has been reducing its emissions in absolute terms today, and is continuing to do that up to minus 8% by 2012, and up to minus 20% in 2020. The commitment is there and currently our emissions already have been brought down below the emissions that we had before.

If I can just take the opportunity, Chairman, on the HFC-23 project, we in the EU made a strong distinction between, on the one hand, the refurbishing of existing plants in China—which is really worth doing, as these are old plants—and new plants with this type of equipment. We have to have state-of-the-art technology in the new investments, and I think that makes a really different case for refurbishing instead of new plants when it comes to CDM projects.

Thank you.

**●** (1700)

Hon. John Godfrey: Mr. Marcu.

**Mr. Andrei Marcu:** Yes, I would complement what Mr. Delbeke says, that this is governed by all plans. It is a very powerful greenhouse gas, and it is not an illegal substance. It is governed by the Montreal Protocol. It is not an illegal substance, and as such it's not floating out there in the way that seems to be implied.

A voice: Under Canadian law-

Mr. Andrei Marcu: If I may complete this, Mr. Chairman....

If you look at some of the slides I provided you with, you can see that there are a number of governments and companies that are purchasing this. I will also point out to you that as a matter of fact, most of the money coming into the market at this stage.... We're talking about \$3 billion from Morgan Stanley, Goldman Sachs. There is a lot of U.S. money coming into this market right now. So there are not three buyers; there's Endesa, RWE, the Government of Spain, the European Carbon Fund, the World Bank.... There is a large number of buyers in this market.

Hon. John Godfrey: Is Mr. Delbeke still there?

Can you give us an estimate, Mr. Delbeke, of about what proportion of the EU's total 2008-2012 Kyoto commitment will be met through the purchase of CDM or JI, roughly?

**Mr. Jos Delbeke:** We have to see, of course, what the market is coming to, but we expect that some 80% of the changes are going to happen among European companies within the EU. That's what we currently expect.

The Chair: We'll go to Mr. Jean for five, please.

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

Very quickly, to Mr. Marcu, I understand that some of your members are not unanimous in relation to your position on trading. Is that fair to say—your Canadian members?

**Mr. Andrei Marcu:** Mr. Jean, this has been approved and consulted in a unanimous way with the members of the Canadian working group of IETA, which includes Shell Canada, Nexen, TCPL—Trans-Canada PipeLines, Ontario Power, Alcan, Holcim, St. Lawrence Cement, Lafarge.... I can go on and on.

**Mr. Brian Jean:** In particular, Suncor and Ontario Power don't support your position on trading, and others. It's not a unanimous position.

Mr. Andrei Marcu: I would not agree with that, Mr. Jean.

**Mr. Brian Jean:** Ms. Donnelly, I would like to hear more. You were going to talk a little bit about the Montreal Protocol and the emissions that are actually illegal in this country.

**Ms. Aldyen Donnelly:** Under the Montreal Protocol, the developed nations agreed to phase out production of freon for refrigerant use by 2010. We put in declining allocations: nobody can make more this year than last year. Canada's imports and manufacture of freon actually stopped in 2002, though they didn't need to stop until 2010.

Today 50% of the freon that's made in the world is made in the United States of America, and the United States, under its commitment to the Kyoto Protocol, has to shut down all of that production capacity by 2010.

For the three years leading up to when the CDM-JI board issued credits to the Asian manufacturers, in fact, the newer, long-term refrigerant substitutes had taken hold in the market, and world freon sales were diving. When the CDM-JI board—and I don't consider this a conspiracy—decided to issue credits to freon swing plant owners in Asia, the swing plant owners were making CFCs and were either going to shut down, make new refrigerants, sustainable ones, or switch over to freon.

You can look up the reports. The largest swing plant owners in Asia, since they started selling CERs, have tripled their profits. They make \$2 on CER sales for every \$1 they make on freon sales. The U. S. EPA says that greenhouse gas emissions will be three billion higher over the next ten years because of that decision.

**Mr. Brian Jean:** I understand perfectly, and your position, quite frankly, is very refreshing.

We've heard about a domestic trading scheme and an international trading scheme. I'm interested in the advantages and disadvantages of a domestic, a continental, and an international trading scheme. From my perspective, and from what I've heard from some witnesses, it seems that a domestic one, although it possibly would not allow for a large enough market, would indeed drive technology and results much quicker here in Canada.

I would like to hear what your position is on all three. By continental, I mean Mexico, the United States, and Canada, which may be large enough for it.

**Ms. Aldyen Donnelly:** I agree with that, but, again, in spite of suggestions otherwise, all I'm recommending is that we do exactly what California has signed into law. So if you want my draft or Bill C-30, go pick up Bill AB 32 and change some words.

I'm recommending something that could functionally be a Canada-California-New Mexico-Massachusetts market starting on January 1, 2009. But if we knew we were doing that, we'd all start trading into it yesterday afternoon.

A quota market is a supply management system. It's a quota market when you create a market in which what you trade is quota. You have all of the problems you have with any international quota market. Governments issue quota to whom they want, and you have to decide whether or not you like somebody's quota and don't like somebody else's quota.

If we go to product standards, everybody accounts for their emissions in the nation in which the energy is end-used, and every credit's a real credit. California's going to do it, and all of us who sell into California are going to have to comply with their law anyway. Let's just create a California-Canada-New Mexico-Washington market to start and then take it from there.

#### (1705)

**Mr. Brian Jean:** Would anybody else like to comment? I'm looking for some advantages and disadvantages on domestic, continental, and international trading schemes.

Mr. Bertrand.

**Mr. Luc Bertrand:** It's not a question of the advantages and disadvantages; it is that this is a global market whether we like it or not. If we do not structure a marketplace or allow a marketplace to develop where Canadian emitters are allowed to have a product line that is fungible with what else goes on in the world, we're going to isolate them.

To me, ultimately, the best solution is that we adopt protocols that are as standardized as possible with those of other nations in terms of defining the protocols and defining the nature of these contracts, the nature of the carbon dioxide that we want to reduce.

My concern from a markets perspective is that if we don't move forward, we're going to push the market elsewhere, and everybody loses then. So it's not a question of whether we like it or not; it's what's going to happen that is more the issue, as far as I'm concerned.

The Chair: Okay. We need to move on.

Mr. Bigras, for five minutes, please.

[Translation]

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

I'd like to go back to the European model. When I read the documentation on that model and on the carbon market, I quickly realized that the market was highly fragmented. There are six exchange platforms, as a result of which the exchanges offer very different products. Some exchanges offer cash contracts, others derivative contracts. So we can only observe that the European market is highly fragmented. However, when you talk about fragmentation, you're inevitably talking about increased costs.

What type of model do you believe we should favour in Canada? Would it be a model focusing on greater exchange concentration or a model similar to that adopted in Europe? Despite major European potential, they say the market in Europe is very small. Does this require specialization by exchanges or greater concentration?

I don't know whom to ask my question.

[English]

Mr. Andrei Marcu: I will take that if you'll allow me, Mr. Bigras.

It is a market for carbon, and it's a market of ideas, and it's a market of products. There are a number of exchanges in Europe—I think six or seven, we lost track—and most of them are our members who offer this service, and various companies are members. The European Climate Exchange, which is related to the Montreal Climate Exchange, is the predominant exchange at this point, but there are others.

At some point in this market, there is going to be a rationalization, and there will be a limited number of players. There will continue to be over-the-counter trading and slowly they will be moving to a model with some over-the-counter trading and some exchange trading. That is a typical model that happens in any commodity.

It is normal that at this stage you see a lot of people getting into the market, and over time you will see a rationalization and probably one or two of these exchanges surviving. I wouldn't want to even speculate as to which ones out of them. Indeed, it is a large number, but it's a normal phenomenon at this stage of the market.

**●** (1710)

Mr. Luc Bertrand: Mr. Chairman, my view is that there will be consolidation.

[Translation]

There will be a consolidation of platforms in Europe, but you nevertheless have to understand that Canada is a small jurisdiction in economic terms. You have to be realistic.

In addition, over-the-counter activity is already significant and will continue to be so. Our challenge is to ensure that we can build a standardized and transparent market that is also accessible to all players and all persons concerned. The worst thing we could do right now would be to make a decision that would ultimately favour a single elite group of major emitters.

We propose a platform with the Chicago Climate Exchange. We're going to try as far as possible to meet the standards of the CCX, which I sense will be the dominant platform in the United States, once the U.S. Congress has decided this question. That will likely happen because draft legislation to that effect has already been tabled.

The Montreal Exchange has tried as far as possible to harmonize its practices with those found in Europe and the United States. That's why we decided to associate with the CCX. There will be over-the-counter activity, and that's understandable. It may be another market, such as the Toronto Stock Exchange, that will do it, but as regards specifically derivative activity, it's not just a matter of knowing which exchange does it. That exchange also has to be able to offer counter-party risk management, that clearing corporation I told you about earlier. There's only one in Canada, and it's the property of the Montreal Stock Exchange. Without that clearing corporation, there won't be any liquidity. That has to be clearly understood.

To answer your question more specifically, I'd say there will continue to be a large over-the-counter market, and you can't do anything about that, but we at least have to try to adopt another, more transparent vehicle, a standardized market such as that of the Montreal Stock Exchange.

[English]

The Chair: Thank you very much.

We'll move on to Mr. Manning.

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

I'd like to follow up on the previous questions to Mr. Delbeke. Since you're undergoing a review now of your experiences with the carbon markets in the EU, maybe you could elaborate on what Canada can learn from those experiences, both positively and negatively.

**Mr. Jos Delbeke:** First, simplicity and certainty for the market operators matter a lot. We have seen that a long-term signal and stable market conditions are critical; hence, a mandatory and absolute cap system is the most efficient way to go.

The other part of the question is whether or not we have a fragmented market in Europe. I think we have not been concentrating very much on the traders and the trading institutions. In fact, we have left that to the private sector. But we see in Europe that a tonne of carbon dioxide is being traded, a tonne of greenhouse gases is being traded all along the EU. There is one price and there is one basic exchange system, even if the trading institutions are different. We see that as a highly integrated market in which tonnes of carbon dioxide are being traded between Lithuania, Spain, Poland, Germany, and the UK. In that sense, simplicity again matters a lot.

Thank you

Mr. Fabian Manning: Thank you, Mr. Delbeke.

I have a question for Ms. Donnelly. Air quality in Canada has worsened over the past decade. We've seen many reports, and many witnesses have come forward and advised us of that. According to the OECD, in a recent study Canada ranked near the bottom. I'm just wondering if you could put forward some ideas on how we should address that in the short, medium, and long terms.

**Ms. Aldyen Donnelly:** Again, obviously in terms of emissions trading, I support market measures, and we should get started right away. The one thing I would throw out there is that if we're running a refinery or an electricity generation unit, and we have to comply with NOx and SOx and fine particulate standards, 80% of our immediate least-cost solutions to those challenges are solutions that drive up our greenhouse gases.

In greenhouse gases, it's the opposite. If I have to drive down my greenhouse gases, 80% of the first measures that I'm going to do to drive down my greenhouse gases will also drive down the other measures. I strongly believe in a multi-pollutant approach, but if you're going to get something right, get the greenhouse gas side right, because you're getting a side benefit in the reduction in pollutants to the extent that you're keeping your money at home, whereas when you're working really hard on short-term objectives for NOx and SOx and PM10, you could be driving greenhouse gas emissions up.

The other thing I would say is this. While I have concerns about the CDM market, I'm a strong advocate of international trading. We should absolutely have the right to employ in Canada reductions that originate in plants that would have been legal to build and operate and to make products that are legal to sell in Canada. It's an easy criterion to build into a domestic rule for international credits. When you do that, I think you'll find that at least most provinces will overlay a discriminatory provincial regulation over any rule the federal government writes, because a dollar we send offshore is minus a dollar out of our GDP, and a dollar we spend at home gets us a local air quality improvement and it has a \$2.50 multiple.

So any government acting prudently will have favour keeping the money at home. That's not opposing international trading entirely. It's just having a rule that discriminates to some extent.

**●** (1715)

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

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

Ms. Donnelly, you mentioned a couple of things at the outset. You said that having a domestic trading system would somehow—I can't remember the exact phraseology—penalize consumers of hydroelectricity and subsidize producers and I guess consumers of oil and gas. I didn't quite get that. Could you...?

Ms. Aldyen Donnelly: I'm glad you raised that. First of all, I want to say that what I'm about to say isn't a criticism of Europe. If you look at the national action plans that have been proposed for 2008 through 2012 in Europe—and I excerpted key information from the U.K. plan as an example in my submission to you—for the most part, they are, and I'm distinguishing between the EU allowance market and the Kyoto quota market when I say this—

**●** (1720)

**Mr. Francis Scarpaleggia:** What's the difference between an allowance market...? I don't understand the terminology.

Ms. Aldyen Donnelly: The European Union has created an allowance market that is separate from the Kyoto market, but slightly linked. Between 2008 and 2012, overall, it's fair to suggest that when they come into compliance with their domestic EU cap-and-trade rule, most European countries will cut emissions a further 5% to 7% from what they were in about 2004. It's also true that what I call the European trading zone's Kyoto quota supply exceeds Europe's existing emissions by about 11%. So domestically, Europe is creating a market that is driving emissions down, but how you deal with that is completely different from your question of what the Kyoto market means to you. Those are two different stories, two different discussions.

Going back to the domestic European market, which is valid—I'm not saying this is wrong—most of the countries have shorted the allowance allocation to electricity generators in the order of 30% and then issued business-as-usual allowances to everybody else that's a major emitter. If Canada were to then jump into that market, there would be implications for our doing a domestic allocation that's not the same as theirs. However valid that allocation is for Europe, and I agree it's valid, it's not a valid allocation for Canada; so there's a dilemma here. I'm saying that's one of about ten reasons for us to think more along the lines of the California model than the European model. It's not a criticism of the European model. Circumstances are different.

Mr. Francis Scarpaleggia: It seems to me that when you create a trading system, those sectors that have reduced their emissions, such as the hydro-electric sector or the aluminum sector, stand to benefit tremendously by selling their credits to other sectors that have not reduced their emissions. So sectors like the hydro-electric sector make windfalls.

Ms. Aldyen Donnelly: Again, let's do them separately. In Europe the only companies that have to reduce to comply are electricity companies. Nobody else has to reduce. If we laid off the whole national target on electricity companies in Canada and did not oblige oil and gas producers to reduce, we'd essentially be taxing Canadians for their right to consume made-in-Canada energy. I don't need to walk you through the politics of that.

The dilemma is that Europe has given European oil and gas producers all the allowances they need to operate on a business-as-usual basis, because they've elected to lay off the whole reduction obligation on electricity companies. If we then do an allocation in Canada that causes Canadian oil and gas producers to have to buy offsets, by definition the day after we do that.... If I have two oil wells up north and one is owned by a large European oil and gas producer and one is owned by an independent Canadian oil and gas producer, five minutes after I'm completely linked to the European market but have a reduction obligation on the Canadian oil and gas producer, that means the European can buy the Canadian well at  $40 \, \phi$  on the dollar.

Europe hasn't done anything wrong. It has just created a situation that's very difficult for us.

The Chair: Okay. We're going to have to end that there.

Mr. Watson, for five minutes, please.

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

Thank you to the witnesses for their presentations.

Mr. Delbeke, I'd like to start with you. You made a comment earlier that investing in China was worthwhile, environmentally, in terms of investing in projects to clean up their air. I want to ask you a question of responsibility here. Should companies or nations outside of China bear the responsibility for cleaning China's environment?

**Mr. Jos Delbeke:** I would address the comment in the following way. What I think is not sufficiently present in the discussion we have had so far is that no one is forced to buy CDM credits, because the system is open. It's a free decision of every single company or market operator to go for CDM credits. They go for CDM credits

because they think that is a cost-effective way of securing the compliance the system is imposing on them.

So it's a free choice, first, to go for it. Second, in that context, we have to take a very pragmatic view and reduce emissions where it is the cheapest. Since cost-effectiveness leads to a reduction of emissions wherever in the world, it has the greatest impact because we went for the low-cost solution.

I think that all systems, the European system as well as any other systems we have observed, have a de facto balance between what they do domestically and what they do externally. That balance creates an overall cost-effectiveness that is quite attractive for both sides—those who are delivering the credits and also those who are reducing their emissions.

Now that I have the floor, I cannot resist making one correction on what I heard from the previous speaker—

**Mr. Jeff Watson:** Actually, Mr. Delbeke, I have some other questions I'd like to get to, and I actually have a minimum amount of time in which to ask them.

In terms of investing in projects in China, for example, there are some interesting other possibilities. China has an expensive space program. They have an expensive nuclear weapons program. They are undergoing a multi-billion-dollar facelift for their Olympics.

In some respects, we're setting up a system in which companies that aren't able to make a target in the short term are going to have to look at investing in projects. Let's just take a Canadian company that chooses—as you say, it's a free choice—to invest in a CDM project in China, thereby helping to underwrite the cleanup of their environment over there. Interestingly, competitively, on the other side of it, China is in a position to launch \$10,000 cars into our market, which could hurt other Canadian companies.

We end up in some interesting situations with this type of a trading system. Ms. Donnelly, you raised the issue of investing in projects that helped the largest hog competitor compete with or out-compete our own people here. Does this not concern anyone here, that in this rush to clean up the global environment we're also creating some difficult competitive positions for our own industries here at home?

Ms. Donnelly, do you want to comment on that?

• (1725)

**Ms. Aldyen Donnelly:** You know, a lot of what we're trying to address here are expectations. The average Canadian electric utility that's investor-owned and that has a triple-A credit rating wouldn't be buying credits from those hog producers, even if you made it legal, because we don't derive benefit in the long term by taking our own hog producer electricity customers out of business.

But you would think that government would be thinking about those things, yes.

**Mr. Jeff Watson:** Mr. Marcu, you said that there needs to be a significant realignment of capital spending. You go on in your presentation to say: "The world cannot make an overnight transition to a non-carbon energy economy."

Clearly, there's a lot of capital investment that has to go on in Canada. There has been some discussion about whether the Kyoto target and timeline is something that would be put into an amendment to Bill C-30 to enshrine it as a short-term target. Can we achieve the kinds of capital investments we need to transform our economy if such a thing is undertaken right now, or would we see, in the short term, an exodus, or a potential exodus, of capital invested in other parts of the world, if you will?

The Chair: May we have a quick answer, please?

**Mr. Andrei Marcu:** Mr. Watson, you cannot decarbonize your economy overnight. You can start to inform the people who make the investment of the best way to make that investment. The only way, at least that I know, is to have a price mechanism. If you don't have a price mechanism, you make a cost-plan type of decision, because we are driven by a market economy, and that is driven by price. It may not be the ideal situation, but that's what we have right now.

The Chair: Okay, thank you.

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

**Hon. John Godfrey:** Mr. Delbeke, I have a feeling that you were a little frustrated there.

Is it true, as Ms. Donnelly has asserted, that in Europe, only electrical companies have to reduce their greenhouse gas emissions?

**Mr. Jos Delbeke:** Thank you for the question. That's exactly what I wanted to address.

It is not true. In fact, all installations have received less allowance than what their expected emissions are. But it is true that the power sector has been asked to make deeper cuts compared to other sectors, because the power sector is somewhat less exposed to international competition compared to the oil sector, the gas sector, pulp and paper, and other energy-intensive activities.

**Hon. John Godfrey:** Thank you very much for that helpful correction.

I'd like to explore, perhaps with Monsieur Bertrand and possibly with Mr. Delbeke, the difference in price, currently, between a tonne of carbon dioxide equivalent on the Chicago exchange, which I think is about \$3.50 U.S., and the European price, which I understand is about \$20 U.S. a tonne. Could I have an explanation of the difference?

And I have a question as to whether the Chicago credits would meet Canadian standards. There does seem to be quite a price spread here.

**Mr. Luc Bertrand:** I think the discrepancy in pricing comes from the fact that one is a voluntary system and the other one has a mandatory framework, which of course is the European. When discussing pricing, it's very important, especially when referring to the futures business, which price point we're looking at. Admittedly, normally and as a rule the near-term price, which would be the cash price, will be lower than the far-out price, the forward price.

We're seeing a forward price in Europe of around 18 euros—I guess the trading range on the forward, 2008 price of carbon has been varying between 15 euros and 20 euros—which I think is an interesting indication of what the market is thinking. The cash price or the price per tonne for near-term months is admittedly a lot lower, for understandable reasons. The market has gone through a major readjustment as a result of some miscalculations, though the market is proving to be very efficient in that respect.

But to compare the price of a voluntary system with that of a mandatory system is like comparing, unfortunately, apples and oranges. They're not the same thing.

● (1730)

**Hon. John Godfrey:** Mr. Marcu, I notice, if I may interpret your body language, that when Ms. Donnelly talked about a dollar not spent here as a dollar out of our GDP, if it's spent in some other place, you looked a little startled. Also, when it came time for the discussion of the California model, there was a.... Do you have comments on either of those points?

**Mr. Andrei Marcu:** You have to remember, Mr. Godfrey, that I am not a trader by background. I am an electrician, so I come from an industry background. This trading thing is relatively new to me. However, this much I know: we trade globally and we don't make everything in Canada. We are better at doing certain things and we sell them, and we're not as good at other things and we buy them. It's a global system. We cannot be part of the global energy system of trading.

By the way, the price of oil is not set between London and Calgary; it's a global price for oil. I'm a little bit puzzled by that interpretation.

In terms of Governor Schwarzenegger and this California-Massachusetts-Ontario-Canada connection, I remember Governor Schwarzenegger, who is very difficult to miss, sitting with Tony Blair and talking about a California-to-U.K. or -EU linking. I remember that the northeast is all part of RGGI. I remember that there are five governors who announced yesterday that they will have a western governors emission trading cap-and-trade system. So I'm a bit puzzled that we would try to use California and the northeast states as an example.

Let me conclude on one thing: we have never said that emissions trading is the only bullet. It's part of a toolbox, and that toolbox will apply to certain sectors of the economy, while other sectors have better tools. I want to make that very clear. We are very responsible and we understand that very well.

The Chair: Thank you.

We have time for one more. Mr. Paradis has deferred to Mr. Warawa, so it's Mr. Warawa for five minutes, please.

Mr. Mark Warawa: Thank you, Chair.

This is a question again for Ms. Donnelly. We'll be giving you the last word on this.

You've made it very clear that Canada is in a situation in trading where the EU has a very distinct advantage over Canada. My question, though, is what is available on the market. When Mr. Bramley was here, he said that there were approximately 150 tonnes of CDM credits available. You went on to share that taking out the hot air quota substantially reduces it, by...I think the figure you used was 91 megatonnes. Then you were saying it would be unrealistic to expect that Canada would be able to buy one half of all that's available on the market, when you have other countries that may be looking at this market. Then you said that one half of what is available is also this illegal substance, HCFC-22.

I did some research and found that HFC-23 is a byproduct of HCHC—22, and it's even worse; it's almost 12,000 times as potent as carbon dioxide. And this is what is being proposed: that if we don't buy hot air, we're going to ask Canada to buy half of that, which is unrealistic, and half of it is to buy an illegal substance.

Could you comment on that?

**●** (1735)

**Ms. Aldyen Donnelly:** To get to your point, the credits are issued to the HCFC-22 manufacturers because they're combusting HFC-23, instead of discharging it to the atmosphere. So that's how the credit is derived, but that creates a subsidy for the manufacturer of HFC-22, which is the substance that is considered so damaging. I can write that up to explain it to you.

I went to the UN FCCC site this morning and went through the projects. If we said we're not going to buy freon tonnes, which I would recommend, and we place no other criteria on our purchasing—so we didn't look for Canadian content, we bought from the hog

producers, who I'm not comfortable buying from—then, as of today, the maximum potential supply we could pick up on that market as far as I can tell is about 20 million tonnes, or 4 million tonnes a year.

So for us to get more than 5 million tonnes a year out of the marketplace, we'd have to get our little boots on and be working really, really hard to develop a bunch of new projects in the international marketplace. The supply that is not yet already attached to a European or Japanese progress report is not large right now.

**Mr. Mark Warawa:** And you still feel that Canada should be negotiating a fairer quota?

**Ms. Aldyen Donnelly:** I think in five years' time, people are going to wonder why we thought we would be negotiating international quota assignments at a UN table. That's like saying we're all going to go to a table and agree not to produce any more cars until we agree to an international quota allocation that our competitors agree to.

I think the problem is the structure. I think if we went to the table and said we should all agree to some new product standards, greenhouse gas emission fuel cycle product standards for electricity, natural gas, gasoline, and diesel, and we should sign a treaty around our commitment to jointly implement those product standards, then we could all make a very robust derivatives market out of those commitments, and now we have a fair and free international treaty.

Mr. Mark Warawa: Thank you.

**The Chair:** We thank all the witnesses very much for your time, your input. It was certainly interesting. We didn't all agree, and that's what life is about, coming to compromise. So thanks very much.

This meeting is adjourned.

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