



House of Commons  
CANADA

# Standing Committee on Environment and Sustainable Development

---

ENVI • NUMBER 030 • 1st SESSION • 38th PARLIAMENT

---

EVIDENCE

**Wednesday, April 6, 2005**

—  
**Chair**

**Mr. Alan Tonks**

All parliamentary publications are available on the  
"Parliamentary Internet Parlementaire" at the following address:

**<http://www.parl.gc.ca>**

## Standing Committee on Environment and Sustainable Development

Wednesday, April 6, 2005

• (1605)

[English]

**The Chair (Mr. Alan Tonks (York South—Weston, Lib.)):** Members of the committee, we have a quorum.

We welcome our witnesses today. Pursuant to Standing Order 108, we have, from the Canadian Environmental Law Association, Paul Muldoon, the executive director and counsel; from the University of Ottawa, Stewart Elgie, professor in the faculty of law; and from the Pembina Institute, Matthew Bramley, the director of climate change.

Members of the committee, by way of introduction, may I suggest that inasmuch as we will obviously now be dealing with the CEPA legislation and will ultimately have, as we've been informed, the climate change plan presented to us, could we attempt to extract information relating to how the climate change plan can be evaluated against the tools, if you will, for meeting the Kyoto commitments, in combination with what CEPA may have in terms of the legislative framework. Our witnesses are experts in that area, and perhaps our line of questioning can bring out elements, if you will, of how the committee can play its role in making recommendations to either improve the climate plan and those tools that will be in it, or the tools that are provided by legislation in CEPA.

With that, thank you for allowing me to make that bit of a direction, and I hope it isn't presumptuous.

We will hear first from the Canadian Environmental Law Association, Paul Muldoon, the executive director.

Paul, if you would like to begin, please do so.

**Mr. Paul Muldoon (Executive Director and Counsel, Canadian Environmental Law Association):** Thank you.

Good afternoon, and thank you for the invitation to address you this afternoon.

What I would like to do is to make just a few comments about the Canadian Environmental Protection Act and the proposed changes in Bill C-43, and then take the kind invitation of the chair and look at it as a tool for implementation of a Kyoto plan.

Having said that, I would first like to reiterate something that is perhaps obvious, but worth repeating: Canadians have long been waiting for a comprehensive climate action plan since the UN Framework Convention on Climate Change was signed and ratified by Canada. Certainly, Canada is legally bound to implement this international obligation and, in our view, stands in a good position to provide a global model of how to do it properly.

The government tabled in Parliament the omnibus budget implementation bill, Bill C-43. This bill is necessary for the appropriation of public revenues to implement certain provisions of the budget. However, in my view, it also includes a non-fiscal measure—part 15—which proposes changes to the Canadian Environmental Protection Act. The government's explanation for this is that they feel these changes are necessary to regulate greenhouse gas emissions from large industrial sources.

There are three points I would like to make absolutely clear in my presentation. Again, these are more preambular in nature, and I'll get into CEPA in a minute. The first is that, in my view, large final emitters of greenhouse gases should be controlled and regulated. Second, CEPA, the Canadian Environmental Protection Act, is a viable vehicle, as it is, to accomplish this goal. Third, the targets for large final emitters should be strong and sufficient to meet or exceed the Kyoto Protocol.

Of course, large industrial emitters account for 50% of Canada's greenhouse emissions; therefore, I think it's reasonable that a regulatory approach is used, and it's reasonable that those targets should focus at that stringent level.

It is our view that the Canadian Environmental Protection Act as it now stands can be a vehicle to regulate greenhouse gas emissions. Given the overwhelming body of scientific evidence regarding the long-term effects of greenhouse gas emissions on both the environment and health, in our view, greenhouse gas emissions would meet the definition of toxicity provided in CEPA, as it currently exists. Once a substance has been found to meet the definition and is added to the list under schedule 1 of the act, this would empower the federal government with extensive powers to prevent or control the substance's production and release into the environment.

The act also provides a basis for emissions trading regimes under other parts of the statute. It therefore follows that the federal government has the necessary powers today, or at this time, to move forward on the regulation of greenhouse gas emissions from industrial sources.

While it is generally agreed that CEPA can provide this legislative mechanism to achieve the necessary regulatory aims for greenhouse gas emissions, what is disconcerting to us about Bill C-43 is the way these amendments came about.

Let me take it from two points of view, and please, excuse me, but I'd like to step back.

As you know when the Canadian Environmental Protection Act was initially passed in 1988, it included a five-year parliamentary review. That review commenced in 1994, and it ended in 1999 with the new act, the Canadian Environmental Protection Act, 1999. The 1999 act also included a five-year parliamentary review. That review was to start in the spring of this year.

In anticipation of that review, and to their great credit, both Environment Canada and Health Canada have involved stakeholders—industry, environmental groups, public health groups, and labour—in consultations in fashioning advice to government on what should be changed with respect to the law. Our organization has been involved in that for over a year now, or since April of 2004. It was a legitimate process. It was a participatory process, and all stakeholders, I think, had fair access to the debate and the consultation.

• (1610)

That process resulted in what's called a Health Canada-Environment Canada scoping paper. That paper was presented in five workshops across Canada to the public. I say this because, one, I think it was a good process, but, two, because that is the forum in which we thought these kinds of substantive changes to the Canadian Environmental Protection Act would be debated and discussed as a prelude to it coming to this or another parliamentary committee. In other words, we thought that's where public input and public discourse on CEPA were occurring.

That is why we were somewhat dismayed that the changes went through a budget bill, rather than through the legislated parliamentary review, which we thought would be a better and fairer forum to debate the pros and cons of it. So there is a process issue that underlies this.

The amendments to the Canadian Environmental Protection Act, in our view, do constitute important changes. If you were to ask me how important and what the implications are, I could honestly say I'm not sure, and I'm not sure because we'd have to think them through some more. For instance, clearly, part 15 of Bill C-43 removes the word "toxic" from many places in the act, but not all. It does not remove the words "toxic substances" from section 44, which has to do with information gathering, or "toxic substance" from section 65, which deals with virtual elimination.

What are the implications of that? I'm not sure, but certainly as one of the most important cornerstones of environmental legislation in Canada, we should have those questions reviewed, debated, and thought through before we carry on with legislative change.

One of the rationales for moving ahead with this is the suggestion that the act in some way does not deal with what they call low-risk, high-volume substances. These are substances such as salt or ammonia. In our view, this is a legitimate issue. These substances, in certain contexts, in certain environments, in certain volumes, are toxic. We recognize, though, that they may not be perceived by the public in the same way. We have suggested in the past that there are many options to deal with this problem. The solution offered in Bill C-43, which is to remove the word "toxic", is one option. We believe there are many other options, and we don't think this is necessarily the best one.

We understand that the government proposed to remove the word "toxic" because it provided a stigma to the term within the legislation. Again, it should be noted that a number of options have been identified with this issue. We understand that the term "toxic" may be perceived as a barrier to go ahead and regulate greenhouse gas emissions. Again, in our view, there are many options to deal with this stigma. For instance, you could create a new part in the context of the CEPA review to regulate greenhouse gas emissions in the longer term. In the short term, use the existing act as it is. I've not heard anyone suggest that the existing act does not provide the legislative authority to go ahead.

There are other mechanisms in the act that can be used. Our view is that there's no rationale at this time to change the act from a legal point of view. In my view, there are issues that must be dealt with, and I think there is a way to deal with those. But, most importantly, it seems to me that the options to arrive at a solution to the problems perceived by government can be done in a number of ways, and as an environmental group, we'd like to debate more fully those ways of doing it.

I'd like to end my comments by stating that the proposed amendments to the Canadian Environmental Protection Act are creating an unnecessary and divisive debate regarding the legislative mechanisms for the regulation of greenhouse gas emissions. Attention should be focused instead, in my view, on the adequacy of the emission reduction targets themselves and ensuring the establishment of an effective regulatory regime for industrial sources of these pollutants.

• (1615)

In other words, we're happy to talk about the vehicle to regulate greenhouse gas emissions. I think one of the key preliminary arguments or debates should be, though, whether there are targets and whether they are sufficient.

I think my colleague, Matthew Bramley, will speak more particularly to that issue. Thank you.

**The Chair:** Thank you, Mr. Muldoon.

We'll go to Matthew Bramley of the Pembina Institute.

**Mr. Matthew Bramley (Director, Climate Change, Pembina Institute):** Again, thanks very much for the invitation.

Adequately controlling greenhouse gas emissions from large industry and from what the government refers to as large final emitters requires two things: appropriate legislation and appropriate emission targets.

I'd like to take a few minutes to focus on the second of these, as many of us believe that the most fundamental question raised by Bill C-43 is not the choice of legislative instrument but rather whether the government plans to use whatever legislative instrument is chosen to require a sufficient amount of greenhouse gas emission reductions by large final emitters.

The amount of emission reductions is the most important question here because large final emitters are responsible for close to one-half of Canada's greenhouse gas emissions. Industrial emissions are rising more rapidly than Canada's total emissions. Emissions from the oil and gas sector, which is the industrial sector responsible for most greenhouse gas emissions, rose by 47% between 1990 and 2002.

Clearly, therefore, a regime of mandatory greenhouse gas emission targets for large final emitters must be the single most important element of Canada's Kyoto plan.

Now, as members of the committee will be aware, there have been many media reports on the anticipated contents of the Kyoto plan to be announced next week. In the federal climate change plan for Canada released in 2002, large final emitters were to be required to secure 55 megatonnes of reductions. But according to the most recent media reports, the government is envisaging a large final emitter regime that would require industry to secure only 30 megatonnes of reductions in annual greenhouse gas emissions. That would represent just one-ninth of the 270 megatonnes of reductions that Canada needs to secure for Kyoto.

What has happened is that industry groups have had considerable success persuading the government that the mandatory targets need to be weakened on the purported grounds that Kyoto represents a major economic burden. This is a myth.

The reality is, there is abundant evidence to show that large final emitters overall could be required to secure much more than 30 megatonnes of reductions without significant economic disruption. Some key elements of that evidence are as follows. Federal government and industry sources have both confirmed that the currently proposed targets for the oil industry represent, at most, 25¢ per barrel of oil produced. That would be the cost if industry met targets simply by purchasing credits rather than by reducing its own emissions. Clearly, when oil is selling for upwards of \$50 U.S. a barrel, the industry could afford to make a bigger contribution without significant economic impact.

According to the president of the Petroleum Technology Alliance Canada, whose members include most of the large oil companies, there are 29 megatonnes of profitable emission reduction opportunities in Canada's oil sector. According to the alliance, rather than representing a cost, these emission reductions would produce dollar savings of around \$1 billion per year.

After oil and gas, electricity generation is the industrial sector responsible for the second largest amount of greenhouse gas emissions. Over 90% of Canadian electricity is sold in Canada, much of it in regulated markets. This sector can therefore relatively easily pass on cost increases caused by the large final emitter regime to consumers.

It may be true that currently proposed large final emitter targets represent a significant economic challenge for certain industry subsectors, but that is clearly not true for large final emitters overall. If targets were set in a way that took account of each sector's circumstances and opportunities, far more than 30 megatonnes of reductions could be required in the large final emitter regime without significant economic disruption.

Now the Kyoto plan is a zero-sum game. In other words, every weakening of the targets for large industry makes taxpayers become responsible for a greater proportion of the total 270 megatonnes of reductions that Canada needs for Kyoto.

The Pembina Institute recently calculated that the weakenings of the large final emitter regime the government is reportedly contemplating represent a cost to taxpayers in the vicinity of \$2.65 billion. The details of that calculation can be found in a backgrounder we released on March 8.

● (1620)

In our judgment, within the context of the overall Kyoto plan, a large final emitter regime that delivered only 30 megatonnes of reductions would place such a large burden on other sectors and on taxpayers that the credibility of the plan, and its ability to meet Canada's Kyoto target, would likely be stretched beyond the breaking point.

Before concluding, I'd like to draw your attention to the proposed Technology Investment Fund, which is another of the three Kyoto-related elements in Bill C-43. Large final emitters would be allowed to make payments into this fund and count those payments at some rate of dollars per tonne towards meeting their targets for the Kyoto period, 2008-2012, during which Canada must meet its national Kyoto target.

The problem here is that the money in the fund is to be used to pay for research and development undertaken by industry. While this will hopefully generate emission reductions, the vast majority of those reductions will only occur after 2012. Reductions occurring after 2012 cannot be used by Canada to meet its Kyoto target. The Technology Investment Fund therefore creates a loophole in the large final emitter regime. The more payments made into the fund, the less large final emitters will contribute to help meet Canada's Kyoto target. The fund actually makes meeting Canada's Kyoto target more difficult.

According to media reports, the government intends to cap the Technology Investment Fund at nine megatonnes. Removing the fund from the Kyoto plan would strengthen the large final emitter regime and take us nine megatonnes closer to Canada's Kyoto target. Clearly, research and development into long-term emission reductions is an important activity, but it should be pursued through other means. It does not have to be linked in this way to industry's compliance with the large final emitter regime.

Thank you.

**The Chair:** Thank you very much, Mr. Bramley.

Mr. Elgie.

**Mr. Stewart Elgie (Professor, Faculty of Law, University of Ottawa):** Thank you very much.

I'm sorry for doing some scribbling, but the events of the last 24 hours—which you all know about—have somewhat changed what I may have said to you today. Let me adapt with the changing times and speak to the issues as they stand today.

[*Translation*]

As I do not speak French very well, I would rather speak English. However, if you speak slowly I think that I will be able to answer your questions in French.

[*English*]

First, if I may, I have a general comment on climate change from someone who was an avowed abstainer for many years—and I mean abstaining in a climate change sense. I had always vowed I would never work on climate change. It always struck me as the black hole of issues, massively complex, with slow progress, and requiring high levels of global cooperation.

I succeeded for a decade in staying out of working on it, but have subsequently failed miserably. In fact, last year I voluntarily left my former work as an environmental lawyer and went down to the States and began a doctorate at Yale, looking at economic regulatory approaches to climate change. I took a crash course, really, in the economics of regulation focusing on climate change and also looking at the constitutional aspects of regulating Kyoto, particularly looking at forests and the role forests can play as a reservoir of carbon.

I did that not because I was a glutton for punishment and wanted to learn economics at an age when people shouldn't try to learn economics, but because I came to believe that climate change is probably the most serious environmental problem facing humanity at the moment. If we don't solve this one, it will dwarf almost all of the other environmental problems we're working on. And I came to that conclusion reluctantly.

I'm sure many members of the committee will have thought this through in their own ways too, but just stepping back and looking at it in a big picture sense, it seems to me that human civilization has flourished for the past century, and perhaps millennium, really because we've enjoyed a period of unusual climatic stability. We take that for granted, and it's something that we have to be very careful, reluctant, and cautious about potentially interfering with. Anyway, I suspect I'm saying things you already know, but that's the context for my thinking.

Kyoto obviously is not perfect. If I drafted it or if any of you drafted it, we probably could come up with a better way of getting to that target, but it's only a first step. It's a first step in a very long journey toward limiting our carbon footprint on the planet and building a more sustainable society. The fact that we've achieved an international agreement is remarkable, and international agreements are never perfect. That's all by way of saying that despite some of its imperfections, it's very important that we meet our Kyoto targets, in my view, and meet them as a first step toward a better and hopefully stronger plan that will come out after 2012.

In my view again, this issue of dealing with climate change is an issue that really transcends partisan politics. It's an issue that goes to the heart of a prosperous Canadian society and of our quality of life, particularly for future generations. I would hope that members will

really be able to put aside their political differences and work together to try to come up with a plan for effectively meeting our Kyoto targets. That's not to say there isn't room for legitimate debate about how we meet those targets. Clearly there is. There are many ways to get there. But I would hope that the question of whether we meet them is something there would be broad agreement on.

Anyway, thank you for indulging me. That's really the context for my remarks today.

If I can, I'd like to say four things about CEPA particularly as a vehicle for Kyoto. I'll talk a little bit about its legislative tool kit, speak briefly about its constitutionality—although given the events of the last 24 hours, that may be less relevant—and then close by saying a few words about a Kyoto plan, which is really the most important issue.

I won't repeat what's been said by Mr. Muldoon and Mr. Bramley, but I would agree and reinforce that CEPA is a good vehicle for regulating climate change. It is a strong and comprehensive statute with a very broad tool kit for controlling pollution. Just to give a few examples, it has a very strong science and assessment foundation. It has a very strong and comprehensive regulatory tool kit. It includes economic instruments, like emission trading, guidelines, and potential for voluntary measures. It has some of the best federal–provincial cooperative provisions you'll find in any federal environmental statute, including equivalency agreements that let provinces take the lead in specific areas. It has very strong public accountability provisions built into it. So, yes, CEPA is an effective vehicle for regulating climate change.

• (1625)

In my view, what this means is that there really wouldn't necessarily be a need for bringing in new or separate legislation to accomplish this job. In fact, typically, Canadian environmental legislation, as this committee will know, tends to be enabling legislation. It tends to provide the regulatory framework, and the actual specifics are set out in regulations. Even if we did have stand-alone new legislation, it's likely we would be at the same place we will be under CEPA anyway. It would provide a lot of the same tools that exist in CEPA, and then the real action, the real decisions about where we're going to get to, would happen at the regulatory stage.

My view is that we should get to those debates, we should get to the specifics of what we're going to do, and that's likely to happen in the regulatory debate in any event. I would hope this committee would be part of that debate, regardless of what the forum or vehicle is for getting to that point.

That isn't to say there aren't ways in which CEPA could be tweaked or improved slightly to make it an even better tool kit for dealing with climate change, and there are some ways in which it could. I won't go into them in detail, because no doubt if that issue arises, we'll have a chance for more fulsome hearings. But to give one example, the penalty or enforcement provisions of CEPA are not necessarily well suited to dealing with small administrative-like penalties, such as minor fines for exceeding an emissions-trading rule. They tend to be more suited to punishing large polluters. There are ways of dealing with that through other legislation, but that's one way in which CEPA could be tweaked. In any event, that's just an example.

My third point has to do with the constitutional issue. I don't propose to spend a great deal of time on that today in light of recent events. But let me just say, first of all, this arises from the issue of whether or not to remove the word "toxic" from the CEPA legislation. As we've heard in the last 24 hours, that is not legally necessary, although there may be policy reasons for doing it, policy reasons that go beyond Kyoto.

I had the fortune, or I guess misfortune, of being one of the council arguing the Hydro-Québec case, which resolved the constitutionality of this part of CEPA. Paul Muldoon and I co-argued, and the court was foolish enough to adopt a lot of our argument in the majority judgment in what ended up being a very close 5 to 4 decision to uphold the constitutionality of that part of CEPA. The fact that it was such a close decision obviously means that one should navigate with caution in terms of changing that particular piece of legislation.

I won't go into the specifics of how taking "toxic" out might actually raise questions, but let me just say this. I think anyone who looked at the issue would say that there would at least be some degree of constitutional risk associated with taking the word "toxic" out of CEPA. I think there is room for legitimate debate about whether that risk is a very small risk or a moderate risk. My view is that it's more in the small category, but not trivial.

The word "toxic" was not the main basis for upholding the constitutionality of CEPA. The main basis for upholding it was the fact that there is a very rigorous, science-based assessment process under CEPA that results in winnowing out only the most harmful and dangerous substances in society. That stems from the three criteria that will be maintained in the act right now. Nonetheless, it was referenced in the decision, so there is always the possibility that taking it out would raise issues.

The real issue, if indeed Parliament goes down that road, is whether or not the benefits of doing so outweigh that risk. That's not an issue I propose to get into today, given the time limits, but clearly that's a question for parliamentarians and this committee to think about. Having said that, again, if Parliament and this committee do choose to go down that road, I should also add that there are ways of reducing any constitutional risks that do exist. There are ways of modifying, or otherwise tweaking, the proposed amendments that would actually result in an even lower degree of constitutional risk. If any committee members are interested, I would be happy to speak to some of those.

The final point, and really the main issue, I think, and the issue the debate is moving towards, is not the issue of what vehicle we should use for regulating climate change, but how we deal with controlling climate change. Obviously, that's an issue that flows from the Kyoto plan. Getting a strong and effective plan is something that all of us are looking forward to seeing and seeing very soon.

• (1630)

I think it's probably imprudent to get into a long, theoretical discussion about what might be in the plan and what we might think of it, but if I might, I'll make two or three quick points about things that have been reported in the media that would certainly be critical components of the plan.

One—and I won't repeat what Mr. Bramley said—is the issue of targets for industry. In general, I share his views that industry is responsible for close to half of our greenhouse gas emissions and out of fairness it should bear its fair share of the burden in terms of meeting our Kyoto targets. The history of environmental and pollution regulation is that typically industry is able to achieve pollution-reducing technology in a much less expensive way than was anticipated up front. If one looks at the issue of catalytic converters and vehicle emissions and if one looks at acid rain emissions, it's clear that up front the anticipated costs of complying with those types of new requirements ended up being much, much higher than the actual costs, because you create an innovation incentive.

It's called technology-forcing regulation. Industry ends up finding much more cost-effective ways of getting to that target than even they would have anticipated up front. One thing industry is good at is being creative and being innovative. If you set a target and give them enough time to meet it, they will find ways, ones we couldn't even have imagined, of meeting that in a cost-effective way. That's one.

The second thing is this issue of purchasing credits. Obviously, purchasing credits both domestically and internationally will be part of the Kyoto plan. Purchasing credits internationally is not inherently a bad thing. Obviously, relying on that as the main vehicle for meeting our targets would be problematic, but relying on it as part of our way of meeting our targets is built into the plan.

We should be cautious about what kinds of credits we purchase. Those we would call hot air, reflecting historical reductions in coal emissions from some eastern countries, should not be a focus and perhaps should not even be counted. But there are ways of targeting international emission credit purchasing so it achieves real environmental gains and also can contribute to sustainable development in developing countries.

The final thing I'll talk about just very briefly is the potential role of forests, which is the issue I'm really focusing a lot of my research on for my doctorate and my university research. I just say this: the role of forests and potentially agriculture as carbon sinks offers a very interesting and potentially exciting opportunity as part of a Kyoto strategy. Just to give you a statistic, I'll point out that Canada's forests alone store an amount of carbon that is more than twice the total global fossil fuel emissions annually. In other words, we have a lot of carbon in our forests. The way in which we manage those forests could play a vital role in our meeting our Kyoto targets and improving the climate change situation.

Two things are interesting. One is that as it turns out, many types of forest management projects will also be highly cost-effective. In other words, they will offer some of the lowest-cost emission reduction opportunities in a carbon trading regime. The second thing is that there are many ways of storing more carbon in forests that end up being very beneficial for biodiversity and conservation. For example, in one of the pre-Kyoto pilot projects that happened as a way of doing test runs, the Government of Saskatchewan reached an agreement with SaskPower whereby they would withdraw 200,000 hectares from managed forest land base—it was relatively marginal timber to begin with—they would create a forest plantation project on marginal lands, and they would sell those as carbon credits to SaskPower.

That did three things. The first is that it maintained a timber supply by having offsetting plantations to at least counterbalance protected areas. The second is that it advanced protected areas and biological diversity. The third is that it did it in a highly cost-effective way. That's just an example, but it suggests to this committee that this will be, and hopefully should be, an important way not only of meeting our Kyoto targets but also of achieving other important environmental benefits along the way and getting more bang for our buck.

In closing, let me just say that this committee will obviously have a very important and exciting role to play in reviewing the Kyoto plan and potentially the role of CEPA in that plan. I look forward to watching your deliberations and being part of them, if I can be of any help.

Thank you.

• (1635)

**The Chair:** Thank you, Mr. Elgie.

What we'll do is go to questions now, and I'll just indicate to you how we do this. We have ten minutes from each party and then we have five-minute interchanges.

So we'll go to Mr. Jean.

**Mr. Brian Jean (Fort McMurray—Athabasca, CPC):** Thank you, Mr. Chairman, and thank you, guests, for coming today.

My question is, quite frankly, fairly simple. In your comments you touched briefly on the economic and pollution results of the clean air credits both in Canada and the world. I'm wondering, first of all, what do you think the impact is going to be on the Canadian economy of sending money overseas? And what do you think is going to happen, in essence, with the world pollution situation, specifically with regard to China and India not being signatories to

Kyoto, given the immense growth we have going on in China right now especially?

I'd like to hear comments from all three of you, if you don't mind.

**Mr. Matthew Bramley:** First of all, it's worth pointing out that during the international negotiations that resulted in the Kyoto regime, industry groups and a number of countries, including the U. S. and Canada, were very enthusiastic supporters of the international emissions trading mechanisms because they were seen as ways to reduce the costs of meeting targets. The rationale for emissions trading is that if you can pay someone more cheaply to reduce emissions elsewhere than it would cost you to reduce your own emissions, then that makes sense. And it has a logic for greenhouse gases because greenhouse gases have a global environmental impact rather than a local impact. In theory, at least, reducing greenhouse gas emissions has the same environmental benefit wherever it takes place.

Having said that, of course, when we reduce greenhouse gas emissions in Canada, we have major co-benefits. We have economic co-benefits. We stimulate new economic sectors. We reduce other kinds of pollution. So we want to maximize the domestic portion of the Kyoto plan.

Clearly, given the delays that there have been in taking effective action to reduce Canada's emissions, to meet our Kyoto target we're going to have to make significant use of international emission credits. It will be important, therefore, to ensure that the credits that are purchased do correspond to real environmental projects that really reduce greenhouse gas emissions beyond what would have been the case otherwise and that represent economic opportunities for exporters of Canadian technology, for example.

Finally, China and India have ratified the Kyoto Protocol. The key point is they don't currently face targets. For China and India to take on targets in the future, countries like Canada and other developed countries are going to have to demonstrate a willingness to take meaningful action; otherwise, I don't think it's reasonable to ever expect China or India to volunteer to take on targets themselves. We have to remember that these international agreements are essentially made by consensus. Countries have to agree to take on targets. If those countries that have most contributed to the problem, including Canada, are not willing to take meaningful action initially, it's perhaps not realistic to expect that the Chinas and Indias will agree to join in later.

• (1640)

**The Chair:** Mr. Elgie or Mr. Muldoon, would you like to respond? Whoever would like to go first....



**Mr. Stewart Elgie:** In terms of the China and India part, I would agree with that. It was always contemplated in Kyoto that the developed world would go first, since it has been the main beneficiary of fossil fuel emissions for the past many decades, and once it has shown a willingness to act, the developing countries would be brought in, in the next round. That's the plan, and hopefully that will be the reality.

In terms of the economic issue, it's a really complex question to answer. I know enough to be dangerous on it but probably not enough to be wise. Let me just say this. I think you would have both positive and potentially negative effects on the economy. I'm not sure which would prevail.

In some ways, it would certainly save Canadian industry money in terms of compliance costs. No industry would purchase a credit from abroad unless it could do so more cheaply than it would cost it to reduce domestically. Initially it will be a money-saving device for industry. In terms of the Canadian government buying credits, the same is true. It will buy them only if it can buy them more cheaply than it can buy them domestically.

I would agree with Matthew Bramley that we should make domestic credit purchase the priority and in fact meet the large bulk of our commitments through domestic actions and credits.

Having said that, international credit purchase will be part of the plan. That will move money out of the Canadian economy obviously. Those dollars will flow elsewhere. What will the economic repercussions of that be? That gets into global development issues. Obviously, there are many who would argue that investing in development of underdeveloped parts of the world ultimately will have economic benefits for the developed world, in that it creates markets. It creates people who, in theory at least, will be purchasing our goods and products and services. Ultimately, that's why many North American industries support the idea of international development.

How the costs and benefits play out, which side of the ledger comes out ahead, is a very complex question. But there's no doubt the dollars initially will flow out of our economy. Some of them will then flow back into the economy.

**The Chair:** Thank you, Mr. Elgie. Mr. Jean, thank you.

Mr. Mills.

**Mr. Bob Mills (Red Deer, CPC):** Welcome back, Stewart. We've had other battles, and it's good to see you again. We go back quite a ways.

I have three questions. Let me place all of them, and then you can pick and choose. The first one is with the LFEs. Obviously, I think we would agree about 50% of emissions come from them. Obviously, if we're aiming at 270 megatonnes, their share would be 135 megatonnes. You suggest they're only going to be responsible for 30 megatonnes, and of course we have the auto industry already at 5 megatonnes, and we have Rick Mercer at 20 megatonnes. There's a great deficit here. How can you possibly not believe that if we were to bump up the large final heavy emitters, the price of power, heat, and transportation would not have to go up dramatically? That's what a lot of economists are saying. Obviously we need to tell Canadians that, and then Canadians have to decide

whether in fact the government's approach is right in dealing with this whole issue. That's one question.

The second one is on the fertilizer industry. I met with them yesterday, and they said we're using 2005 technology to produce nitrogen fertilizer. China is building new plants that use the technology of 1940 for producing very low-grade nitrogen. Obviously, the solution to our global climate is dealing with those countries, helping them to get to 2005 technology. That makes sense, and that achieves the targets—not our targets but the world's targets—much more quickly and much more simply. It would seem to me that would be a better focus.

Third—I wonder, Stewart, how are we going to...? Basically, at the COP meeting in Bonn it was decided we'll just sort of write off those sinks. We'll give it to you, Canada; stay in the agreement. The U.S. has just dropped out, but we'll give you that to stay on side. We'll give you 37 megatonnes, but don't talk to us about it; don't tell us how you're going to monitor it. It's a giveaway, and that's the giveaway. How, now, can the federal government determine the price? Obviously, agriculture wants a share of sinks, too; they claim they can produce 90 megatonnes of savings. I don't know what the forestry industry claims they can do. How are we going to work that into the equation, and who's going to pay that money to the farmers and the foresters, other than the taxpayer?

What I'm trying to say is we have a huge economic impact. I don't think anybody addresses that. We don't do that side of the equation, ever.

● (1645)

**The Chair:** Mr. Elgie, since you and Mr. Mills have been kicking around for so long, maybe you'd like to start off.

**Mr. Stewart Elgie:** I'd be honoured.

Let me start, I guess, with the final question. I certainly wouldn't characterize the forest sink or the agricultural sink provisions as a giveaway. Forests, as I said, store a massive amount of the world's carbon. As a biology teacher, you know this as well as anyone, that terrestrial vegetation is a huge part of the global climate cycle. How we manage our forests and our agriculture will be critical parts of resolving the climate change problem. Something like 25% to 30% of our increased greenhouse gas emissions in recent decades have been due to forest management—deforestation and changes in forest management. So if it's roughly 25% of the problem, we have to deal with it as part of the solution.

I think it is fair to say there are many who would argue that there is a potential to abuse sink provisions if they aren't carefully monitored. Obviously, monitoring the total biomass in our forests, which are in very remote parts of the country, is a difficult thing, so there's the potential for the system to be abused if it's not carefully structured and carefully monitored. I think that's a concern many have expressed, and I would share it.

But if those concerns are met, it has to be a part of resolving the climate change problem.

There's a 44-megatonne cap for forestry sinks. I think it's highly unlikely we will get even close to that, at least in this commitment period. I would think if we get anywhere toward maybe 20 megatonnes, 25 at the outside, that would probably be doing pretty well. So it's not going to be the bulk of the solution, but it could be part of it.

As to how to do it, there will be probably two mechanisms. One is through carbon trading. In that case, an industry that has to meet an emissions target would reach an offset agreement with a forester or a farmer to have them store more carbon through their management, and the industry would purchase a credit for that. There would have to be verification they would have to meet. There are five tests for showing it's real.

Who would pay? In that case, it would be industry that pays, and they would pay only if it were less expensive for them than meeting their targets through their own changes.

The second mechanism will be through a direct purchase program—the clean fund. One of the prongs of that will be to purchase credits, and those could be credits through forest management or agriculture. Again, I would presume they would be purchased only when doing so would be more cost-effective than other options. I can tell you there's voluminous research showing that there are a number of types of forest management projects that can produce very cost-effective carbon credits in the range of \$3 a tonne, for example, for creating a sink, which is pretty low.

So those are two options. I would add that it can create co-benefits. So if in the course of storing more carbon, you're also creating habitat for endangered species, producing protected areas that people use for recreation, or helping to secure riparian areas for water supply, obviously that generates other benefits for society that don't have a price tag directly but would be beneficial.

That's the main one. Let me defer to others to take on some of the others, or I can chip in if you want me to.

•(1650)

**Mr. Matthew Bramley:** The quick answer to why we don't expect dramatic energy price increases is because of supply side efficiencies and demand side efficiencies. In my presentation I already cited evidence that there are some 29 megatonnes of profitable emission reduction opportunities in oil and gas production in Canada, which is almost the same number as the proposed mandatory reductions from large final emitters. In other words, in many cases, mandatory emission reductions simply do not represent costs.

On the demand side, a critical component of a credible Kyoto plan is having measures to increase consumer efficiency. In other words, reduce consumer consumption of energy. Both of those tools can ensure that price increases are kept to a minimum. But even supposing—let's take coal-fired electricity—you required generators of coal-fired electricity to offset 100% of their greenhouse gas emissions, at \$10 a tonne, that would be just 1¢ per kilowatt hour. That's an extreme scenario. One cent per kilowatt hour is not a particularly large amount of money. So at the currently anticipated carbon prices, even if a zero target were set for that particular example, the price increase would be within a fairly modest range.

Finally, on the question of helping countries like China to clean up its technology, the Kyoto Protocol explicitly provides for a mechanism called the clean development mechanism, whereby Canada can invest in cleaning up sectors in countries like China, developing countries where there are good emission reduction opportunities, and get credits in return that we can then use toward meeting our targets. Kyoto explicitly builds in such a mechanism.

**The Chair:** Thank you.

Mr. Mills, I have given you a little bit of Mr. Bigras' time.

**Mr. Bob Mills:** Thank you, Mr. Bigras.

**The Chair:** Mr. Bagnell, if you'd like to come in, then I'll go to Mr. Cullen.

**Hon. Larry Bagnell (Yukon, Lib.):** Thank you, and thank you all for coming.

I'm sorry things got changed beyond anyone's control in this room; we changed the topic from what you were prepared for.

I understand we can use CEPA for this regulation, so that's not an issue. There just may be some ways that would be useful for those changes.

I was curious, Paul, about your comment about salt, because I come from a... Before I say this, I'll just put my bias on the table. My riding is in the north, where climate change is already there and having big effects. Whereas people in the south are just trying to cut emissions, we have a second agenda of adaptation because we're already having serious effects.

But I'm curious on salt because I come from a municipal background and you suggested there may be other ways of handling that problem. I was just curious if you could outline any of those at this time.

**Mr. Paul Muldoon:** My comment on this was that one of the rationales for changing or removing the word “toxic” was because of the stigma. It's been said many times that it's difficult for the public or for the regulated industry to suggest that salt is toxic, so that was the rationale.

We've heard many times that it's hard, I suspect politically and publicly, to develop a regulation or a regulatory framework for road salt when people ask themselves, does that mean all salt is toxic? We recognize this is a legitimate issue, but we don't think you have to in effect surgically change the act to get to that problem. The risk assessment and the scientific evidence is clear that road salt in certain situations is a problem. There's no doubt about that.

The question is how do we communicate what the real problem is versus what it is so that the public has a very clear understanding. I think this is the issue, and I think there are many options to do that. The option proposed in Bill C-43 is only one option. There are other ways of doing it. So that's what we would welcome, that discussion on how do you—

•(1655)

**Hon. Larry Bagnell:** But my question is, what were those other options?

**Mr. Paul Muldoon:** One was to more clearly communicate what is meant by “toxic” in the context of road salt. I think it was not particularly clear to the public what is meant when you say that salt is toxic. Does that mean table salt is toxic? Of course not. And the same goes for ammonia. Ammonia itself—people could get scared off and say that means ammonia is toxic. But municipal effluent in certain concentrations entering a river body is toxic. The scientific basis upon which this was all dealt with clearly identified the context for that. So one solution itself is to better risk-communicate what the issue is. I don't think you need necessarily to legislate changes to it.

I don't have any magical solution. We recognize it's a problem, these kinds of dilemmas. But there's the other way to do it. If you remove the word “toxic” from CEPA, it goes the other way too. Right now there are over 60 substances in schedule 1 that are, both scientifically and in terms of the public, toxic. So it cuts both ways. It may remove the stigma for low-risk, high-volume substances, but then what do you do with the substances for which there is in fact a scientific consensus that they are toxic, ought to be regulated, and ought not to be either used or restricted severely? So that's the dilemma.

I don't have a magical solution. Certainly a debate on that issue is long overdue, but I don't think the Bill C-43 answer is the only option on the table.

**Hon. Larry Bagnell:** Thank you.

**The Chair:** Before Mr. Mills leaves, I was going to suggest, on behalf of the committee that, Mr. Elgie, since you are looking at the sequestering of carbon and you know Mr. Mills is a biologist or a biology teacher, you might take him on as your TA.

I'm sorry to interrupt there.

Mr. Bagnell.

**Hon. Larry Bagnell:** Matthew, I was just wondering, you were saying that if different industries were treated differently, there were savings there. Are you assuming that in our plan to be announced next Wednesday, every single final emitter is being treated identically?

**Mr. Matthew Bramley:** The approach that Natural Resources Canada was pursuing, beginning in early 2003, was to try to get industry buy-in for the notion of a 15% reduction target for every single industry sector. If every sector had a 15% reduction target, that would add up to 55 megatonnes, which was the number in the climate change plan for Canada. I should say that's 55% below projected 2010 emissions. So it has a superficial appearance of being fair, because it's the same number for everyone, but in reality, different sectors have different rates of projected increase between now and 2010. There are many different views of what is fair. It doesn't take into account different opportunities to reduce emissions.

The general sense we have from what has been reported is that if the federal government does weaken the system to some number below 55 megatonnes, overall the same approach would be taken. Generally speaking, sectors would have the same or a similar target in terms of a reduction below projected 2010 emissions, and presumably it would be less than 15%, because 15% is what gives you 55 megatonnes; for 30%, it might be somewhere between 10 megatonnes and 12 megatonnes, something like that.

**Hon. Larry Bagnell:** So you would be pleased with a more rational approach, where different industries were treated more logically because they are different sectors.

**Mr. Matthew Bramley:** There was a letter sent by former Minister Dhaliwal to the Canadian Association of Petroleum Producers at the end of 2002 saying, we'll give you a 15% target. I think that should be revisited. More could be asked of the oil sector, without significant impact. That would allow perhaps less to be asked of other sectors that may have a genuine challenge they're facing.

**Hon. Larry Bagnell:** Using the oil sector as an example, has the institute done an analysis of what further could be cut than what's going to be asked for? What are we asking the oil industry to cut now under the present plan that's going to be announced, and then what further could they cut that they're not going to have to cut under this plan? You suggested they could cut more.

• (1700)

**Mr. Matthew Bramley:** Under the climate change plan for Canada and the commitments that were made subsequently, the oil sector would be given a 15% reduction target. It sounds as though that is now going to be a smaller number, if the reports are correct that the overall system is being weakened.

But let's suppose for the sake of argument it's 15%. In terms of megatonnes, I don't have the numbers in front of me. If we know that a 15% target represents a maximum cost of 25¢ a barrel and that in reality the real cost would be a lot lower because of all those profitable emission reduction opportunities, I don't think we've put forward a number that the 15% should be increased to, but I think it's pretty clear it could be increased very substantially without dramatic impacts.

**Hon. Larry Bagnell:** I was looking more for what those extra opportunities were, but I don't want to use all my questions on it. Maybe I'll ask that in another round. Just think about that—what the other opportunities for cutting in that sector are.

How much time do I have left?

**The Chair:** Mr. McGuinty was hoping to shoehorn in there, but we'll get back to him. You have about three minutes.

**Hon. Larry Bagnell:** I'm not going to let him speak. He spoke yesterday.

I'd just like to say, whether it's the government or the taxpayer, it's ultimately the taxpayer, because they pay in their products in most cases.

Stewart, I was very interested in your forestry. Did you attend the biosolutions conference a couple of months ago that we funded here? There were a lot of scientists from across Canada. I spoke at the luncheon.

**Mr. Stewart Elgie:** Yes. I spoke in the morning at it. I heard your talk.

**Hon. Larry Bagnell:** That's good. I think we're not very good at—

**The Chair:** It's a matter of opinion.

**Hon. Larry Bagnell:** You're supposed to be on my side.

I don't think we're very good at outlining all the things that we are doing actually in the various initiatives, in the various things like that, which are occurring across the country, because a lot of people obviously are not aware of that. But that area—I assume you agree—has to be studied very carefully, because in some forests there's potential; in other forests there is not. There are a lot of complex situations involved in the dimension of those forests, but it is a big area of opportunity too.

**Mr. Stewart Elgie:** It's a very big area of opportunity, and in some ways, once you create a market, the proponents will do the studying themselves. Once carbon becomes a market good, the way that timber is a market good now, those with access to forest management rights will look themselves to see whether or not changing their forest management could actually result in selling valuable carbon credit opportunities.

Forest companies right now are looking at ways in which changing harvesting practices makes more economic sense because of the carbon values: lengthening rotation periods by five years, for example, leaving growing carbon credit on the stump for four or five more years; reducing the size and number of roads, which reduces deforestation; setting aside economically marginal timber stands as wildlife habitat or protected areas. Once we create a market incentive, then forest managers themselves will actually figure out where it makes sense to manage for carbon and how to do it.

And, yes, there could be a number of opportunities, and it could be a real win-win opportunity in terms of promoting sustainable forest management and helping address climate change.

**The Chair:** Mr. Bagnell, we're out of time now, and we'll go to Mr. Cullen.

Thank you.

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

And thanks to the witnesses for coming forward.

I have a question, Mr. Muldoon. You mentioned this consultative process you've been going through and that it lasted about a year or so. You gave it credit; the government's prior engagement of stakeholders seemed like a good and positive process.

I'm wondering if throughout that process there was any hint given as to what we've seen in the last week with respect to this proposed—and now potentially “unproposed” or pulled away—change to CEPA.

**Mr. Paul Muldoon:** There's no doubt that the issue of how to deal with those substances, such as salt or ammonia, did come up at various consultations. No doubt it was an issue, but certainly the proposal to remove “toxic” from CEPA was not in the public discourse, as it were.

The context for this has been that in the last year there was an inventory of issues, and that inventory of issues ultimately grew. I gave the clerk today a document that the environmental groups handed out during the consultations, which gave our agenda or list of issues. This issue was not on that.

There's no doubt that, as I've mentioned earlier, it is an interesting issue, and an issue that I think has to be in some way debated and

reflected upon, but certainly there was not a clear, unequivocal sign from government that this was going to happen. It didn't percolate to become a controversial issue during the consultations.

• (1705)

**Mr. Nathan Cullen:** So the particular reason we called this special meeting was that the proposal caught many of us off guard. Would that statement be similar to how ENGOs approached the announcement of the proposal? Were they surprised?

**Mr. Paul Muldoon:** I think that's why I gave the clerk that document, to show that this was not on the radar screen to the extent we would have expected. If the government had been going to do this a year ago, I would have expected it to be front and centre during the advisory committee on CEPA review and front and centre at each of the five workshops across Canada.

**Mr. Nathan Cullen:** That's interesting. Thank you.

Mr. Bramley, I have a question for you. There's a confusion I have—and there have been some numbers quoted by Pembina—in terms of what subsidies go into the fossil fuel extraction sector and whether they're accurate; there are two sides to the issue. But there's something I'd like you to comment on beneath that, which confuses me.

We had the Minister of Natural Resources in front of us yesterday to look specifically at climate change. He commented at one point that he only wished we had a few more oil sands projects, which I can understand in terms of economic benefit—and as I said in my comments yesterday, I don't begrudge northern Alberta, and Alberta in general, the great boom this has been or the benefit it's been to the federal coffers.

But I'm confused as to this apparent tension that is not really resolving itself, to my mind, within the federal government, and perhaps within cabinet, between the promotion of fossil fuel extraction—and that burning—either through a positive taxation regime or investments in research or what have you, and the notion that we will end up paying, either through a credit system or through many different ways as a government and as Canadian taxpayers, to reduce those very same emissions that we're promoting.

I'll leave it at that. Could you comment on this?

**Mr. Matthew Bramley:** I would absolutely agree with you that there are currently very substantial federal expenditures that contribute to increasing greenhouse gas emissions; the oil sands project is a particular example of that.

In the report that you were referring to, we attempted to quantify those federal expenditures, which are largely in the form of tax breaks of one kind or another, relative to a neutral tax system.

**Mr. Nathan Cullen:** You mentioned this quote, and I've heard it a number of times, about the 25¢ per barrel to reach an estimated 29 megatonnes. Is that specific to the oil sands? Where does this number float around from, and how realistic is it?

**Mr. Matthew Bramley:** The 25¢ per barrel was a number produced by the deputy minister of Natural Resources Canada before the House of Commons' industry, natural resources, science and technology committee on November 4 last year. It's a number that has been confirmed by industry sources as well. Sometimes it's 22¢, sometimes it's 25¢. What that represents is this. For an oil sands producer having a 15% reduction target, which corresponds to the 55-megatonne large final emitter regime—it would be the oil sector's share of that, according to the government's approach recently—it would be the cost of meeting that target through the purchase of credits at \$15 a tonne. That's how you calculate the 25¢.

I think the point you were making in your initial question was that the federal government, rather than industry, is spending money that contributes to increasing greenhouse gas emissions, while readying itself to announce a Kyoto plan that will be spending money to reduce greenhouse gas emissions. So you have the government pursuing, in a spending sense, really quite contrary objectives. And obviously that simply ends up increasing the total cost to taxpayers. It's because in Canada we have a climate policy, which is to comply with the Kyoto Protocol, but we have a de facto energy policy, which is heading in a quite different direction. And until such time as Canada manages to integrate its energy and climate policies, we're going to face this problem of spending money on contrary objectives.

• (1710)

**Mr. Nathan Cullen:** A quick question to this. This has come up with a number of witnesses, and it came up yesterday with the minister and his deputies, about this notion of a level playing field. When put to the minister yesterday, he and his deputy confirmed...I believe the answer was that we have a tipped playing field in favour of renewables. In the regime that's set up, they both confirmed that it is to the advantage of renewables. Would you agree with that?

**Mr. Matthew Bramley:** No, because I don't believe their analysis includes environmental costs. I think the logic that should be applied here is that conventional energy has environmental costs that should be factored into policy making. And there are various models of doing that, where you actually attach dollar numbers to the environmental costs and the human health costs of conventional energy, and then you should ask the question, is the playing field tipped or level? I think if you integrate those costs you would have a different answer.

**Mr. Nathan Cullen:** Thank you.

A question for Mr. Elgie with respect to forestry. I don't know what the proper environmental term is, but there seems to be a positive reinforcing loop. When you talk about the forest sinks being able to capture a great deal of carbon.... Like Mr. Bagnell, I come from the north, a heavily forested region that is quickly becoming deforested, both through an increase in the annual allowable cuts, 30% per year for a number of years, as well as through the pine beetle that's been going through and now crossing over, it seems, into the Rockies and the boreal forest.

Are the numbers you folks deal with, or the considerations you make...I don't think the connection has yet been confirmed in science and it would be good to know if any of the panellists know this. Between any aspects of climate change that we're seeing and the increased dryness of our forests and the potential spread of the pine

beetle, (a), has there been any science to back that up or any connection made, and is it considered within your realm? And (b), when you consider the benefit of forest sinks, are we considering the fact that the forests at present—I can speak just within the northwest region and I think a bit into the Yukon—are being devastated, for a number of reasons, at an unprecedented rate?

**Mr. Stewart Elgie:** Again, I'll try to give a short answer to a big question.

In terms of the pine beetle, I'm not a scientist, but I can tell you what I've heard from scientists, which is that climate change is likely a factor—probably a significant factor—in the northward spread of the pine beetle, largely because of warmer winter temperatures. There's a threshold; I couldn't tell you whether it's -25 degrees or -28 degrees, but when in an average you get a week-long or two-week-long period below a certain temperature in winter, that's a limiting factor for the range of the pine beetle. Once temperatures creep up and you no longer have that long spell of that cold temperature, it's allowed to expand its range. That's believed to be a significant contributing factor to the spread of the range.

In terms of forest sinks, it's hard to generalize in Canada and say we're hammering our forests. I mean, in some areas of the country we're obviously harvesting unsustainably, in some areas we're harvesting in a way that's causing unnecessary ecological damages, and in some places we're actually doing better forestry. It depends on which region. Overall, though, creating a market for carbon creates an incentive to leave more wood volume in the forest. In other words, the more growing forest you have on the land, the more carbon you're storing.

That creates an incentive, just to give you an example, to do, let's say, three different things. One, it might create an incentive to reforest areas you've deforested, which can create new habitat where it was gone, particularly around urban areas. That could be part of a green cities agenda, for example. It creates an incentive to let trees grow longer before you harvest them, and that can be good for wildlife. Many wildlife species need those older forests for habitat; letting trees grow longer before harvesting creates good habitat conditions. The third thing it can do is in economically marginal forests, and the boreal forest has a bunch of those—it's just barely profitable to cut those trees. Once you have the opportunity of actually getting carbon revenue, there may actually be an incentive not to cut them, and to use them as a carbon reservoir instead.

So it will create a number of opportunities that will generally promote more ecologically sustainable forest management, although part of that will depend on how we set the rules.

• (1715)

**The Chair:** Thank you, Mr. Cullen.

Mr. Jean, would you like to take over?

**Mr. Brian Jean:** Yes. Thank you, Mr. Chair.

My first question is actually to Mr. Bramley. I'm curious about the 29 megatonnes you've suggested oil and gas could immediately cut out without any real economic impact. I'd like to hear a little bit more about that, and then I have one other question.

**Mr. Matthew Bramley:** There are a couple of sources for that. The Petroleum Technology Alliance Canada has made available some materials on its website that document the 29 megatonnes. There was also an article on page 3 of the business section of *The Globe and Mail* on February 15, in which the president of the alliance, Eric Lloyd, was quoted in regard to the 29 megatonnes of profitable opportunities and the \$1 billion of annual savings. That would be a very interesting source of information to pursue further and potentially invite to the committee.

**Mr. Brian Jean:** I'm crystal-balling, and I know Mr. Muldoon did not want to comment on the economic impact, but I'm interested in the role of the International Court of Justice. I studied law—environmental law and international law—in Australia. At that time, which was many years ago, it seemed there was an expansion of the ICJ's role in international law, and in cross-border pollutants in particular. Do any of you gentlemen see that as a future, especially in regard to signatories and non-signatories of Kyoto?

**Mr. Paul Muldoon:** I don't see that happening quickly. International law is a means whereby states agree to do things, or not to agree to things; in effect, they just contract with each other to do or not to do anything, and they're very jealous of surrendering any more than they have to.

Ultimately I think the buck stops with domestic legislation. A country will do what, in its own power and its own discretion and its own judgment within its own consensus, it will do. Although there's an enormous role for international law in setting targets and in trying to foster a global consensus in terms of regional alliances, in terms of synergies of science, ultimately it's up to domestic legislatures to set in play the legislative framework for the corrective action. I think that's ultimately where the buck will stop.

**Mr. Brian Jean:** Don't you see a difference between the United States, for instance, where international law is really not enforceable—it is compensative—and Canada, with our parliamentary system, where it is enforceable?

**Mr. Paul Muldoon:** That's probably why the United States is so hesitant to sign on to agreements and conventions. In my experience looking at the United States—and I can cite a few instances—rather than going to international negotiation, agreeing to a target, coming back, and then domestically trying to find legislation to meet the target, they get their act together through Congress or other legislative forums, find the domestic target, and then sell that internationally. So they do it in a different way.

But the role of the United States in international law is a bigger topic. It's a topic whereby they're very hesitant.... As you know, in the Law of the Sea, the Stockholm Convention, and many other instances, they just have not played the role we expected them to play.

But it is different; they have a different sort of perspective on it.

**Mr. Stewart Elgie:** I agree with Paul that international law is inherently relatively toothless at the moment, but there's no reason why you couldn't include in any international treaty a more meaningful enforcement or compliance regime. We see that in trade agreements all the time; that there are actually real consequences for non-compliance. It so happens that Kyoto has relatively mild consequences, shall we say, for non-compliance, but there's no

reason why the next round of climate change targets couldn't include meaningful teeth for countries that didn't comply.

**The Chair:** Thank you.

I have just a follow-up, if I may. CEPA does have provisions with respect to international law, and so on. What is the enticement or the entrée through CEPA?

• (1720)

**Mr. Paul Muldoon:** I think what you're referring to is the international air pollution regime.

**The Chair:** Yes.

**Mr. Paul Muldoon:** Basically, the focus of it is to allow the federal government to act when there is international pollution. So I think it is worth investigating to see how it fits with greenhouse gas, but I think it was really designed for more specific instances of transboundary pollution. It would be interesting to look at to see if it can be moulded into something useful, but it's more geared to more specific pollution than climate change.

**The Chair:** Thank you for that.

Mr. McGuinty, would you like to ask a question?

**Mr. David McGuinty (Ottawa South, Lib.):** Thanks. Good to see you all again.

Matthew, I have not so much a question as just a reaction. You made comments about a zero-sum game. We haven't seen the numbers, but I find it difficult to take that at face value. Let's wait for the plan next week and see where we are. We may have a major breakthrough in clean coal in two and a half years. We may find all kinds of new ways—hydrogen and otherwise—so I'm not sure it's quite accurate to talk about a zero-sum game.

On the second thing I want to take exception to, you were asked point blank again about the levelling, non-levelling, or tilting of the playing field in terms of renewables and non-renewables. I don't think that's a question that can be answered. Your answer was, "We can't answer it because we're not doing the right kind of accounting". I think I would accept that; in fact, I support and spent nine years trying to design a new accounting for the country. But right now I don't think we even know as a country whether or not it's tilted, level, or in favour of one or the other. So I just wanted to react to that.

Stewart, I liked your opening comments about Kyoto being a good start—a weak draft. I think it was Galbraith or Robert Penn Warren who once said that anybody who says that writing is easy is either a terrible writer or a terrible liar. I think legislative drafting is no different. But the question I want to put to you really falls hard on the heels of the discussion on the enforceability of the agreement. The principal stumbling block for me is just the whole notion of a nation state, and the fact it seems that no nation state can come to the table with clean hands to enforce.

I have a really practical question in the lead-up to the release of the plan. I find it hard for the committee to work with fictitious baselines, but which three countries have operational climate change plans that we can look to for meaningful comparison to the plan we're about to get here in five or six days?

**Mr. Matthew Bramley:** I hesitate in responding to that because obviously you have to go and look at the plans in detail, and it isn't something I've personally done, to go and look at the plans of countries X, Y, and Z.

We're actually in the process of conducting a study that compares Canadian federal-level climate policies with EU-level climate policies. But we didn't, as part of that study, go and look at national-level policies; we're looking at the EU level, so I'm afraid I can't give you a complete answer.

**Mr. David McGuinty:** Commentary comes forward to the committee or is made elsewhere about Canada's performance with respect to its ultimate climate change plan, Mr. Chairman. Could I take from this that we don't have meaningful comparison at a nation-state level?

**Mr. Matthew Bramley:** It depends on what you're comparing. You referred to comparing plans; what we can do is compare policies. We know that for large final emitters, for instance, the EU has implemented a large final emitter regime. It began functioning at the beginning of this year. We have a sense of what it's going to deliver in terms of emission reductions, and we have a sense of the carbon price it's generating. In other areas we have examples of specific policies countries have put in place to address renewable energy and so on and so forth, so there's fairly abundant information available on that basis.

But your initial question was specifically about comparing plans, and that's not something I personally have done.

**Mr. Stewart Elgie:** Nor have I, by the way. My reading knowledge of Norwegian and Dutch is relatively poor.

I think it is fair to say that there's at least some ability to compare performance to date. Some of the instruments or measures that are in place don't give a complete answer and they don't give a forward-looking answer either, or they don't say. It's a case of looking in the rear-view mirror rather than looking forward. For example, there are some things like the commitments we've seen from Tony Blair in England towards not just meeting a Kyoto target but actually meeting a more rigorous, long-term target they've put out there. That's very useful. It sends a good signal to industry and makes a commitment that Kyoto is only a first step. That would be a great thing to see coming out of Canada as well.

There's a greater use of fiscal and economic instruments in Europe, not just trading systems but other fiscal instruments. Again, that's a very efficient, effective way to implement carbon measures.

So you're right. Plans, no; measures and performance, to some extent.

• (1725)

**The Chair:** Anybody else?

**Mr. David McGuinty:** Can I just put a question to Mr. Muldoon? Hopefully, he can answer this.

Paul, is it true the Japanese have, through their parliament or Diet, told the international community they would take their targets and make their best efforts to make the reductions, but basically said, leave us alone?

**Mr. Paul Muldoon:** I don't know. It's an interesting approach, but I don't know the answer.

I'm just reflecting upon your earlier question. I think it is useful to find those comparators and to see where Canada fits in. I can also—and this is coming from another area I work in, the regulation of toxic substances—cite a number of instances where Canada did not have any comparators and just went out and did the right thing. Looking back upon that, I can say not only did other countries follow, but in fact the economic impacts were not as severe, the environmental benefits were clear and unequivocal, and Canada retained an enormous positive reputation for in fact moving ahead of the curve.

I realize it's risky on one hand and courageous on the other. It's an important question, but I think Canadians are actually ahead of the curve in terms of their attitude and the need to act.

In lieu of a good response to the question, even though your question is absolutely legitimate and fair, I'll say I think and hope we can still do something ahead of the curve on it.

**The Chair:** Thank you.

Mr. Bagnell, if you'd like, you can just finish off. Mr. Jean is satisfied.

I'm not sure if he's satisfied, but he doesn't have any questions.

**Hon. Larry Bagnell:** I have three quick questions, and I'll ask the last one first. It's to everyone, but I'll ask the last question first to give you time to think. You may have to be a little creative.

The topic today was on the word "toxic". Obviously, the government sees some benefit to helping our plan progress by removing it or changing it, but could any of you outline any suggested ways that could help to advance the climate change agenda?

The second question is this. Are you aware of any voluntary initiatives either related to climate change or anything else? Those are pretty standard operations in the ways of the world. Some voluntary initiatives are very successful, but what about voluntary types of agreements in the area of climate change in any country?

The first question is an easy one because I know that Stewart will have the answer. You were talking about letting trees grow for a longer period, which is great and very interesting. Has any computer modelling been done to the extent that when trees grow for a longer period, it then often leads to more devastating and extensive forest fires, which would, of course, lead to more greenhouse gases? Has there been any modelling on the balance of that? How much would you let them grow when it would turn out to actually be a detriment or a reduction to the amount of greenhouse gases saved?

That was the first question.

**The Chair:** All right. Who would like to answer?

**Mr. Stewart Elgie:** Okay. You're starting with the short-answer questions. That's a good professorial strategy.

The answer is yes, the Canadian Forest Service, actually to its credit, has developed what I think is the most sophisticated carbon budget model anywhere in the world. It is trying to actually forecast 32 different scenarios for different disturbance regimes or management regimes and different definitions of what a forest might be over the next 40 years.

You're exactly right that in an ecosystem with a high risk of fire, the longer you leave trees out there, the greater the risk of burning. There is a point at which the risk exceeds the benefits of doing it. It really has a lot to do with the average length of the fire regime in any one place. But as you know all too well, being from the Yukon, fire doesn't behave the way we hope it will most of the time. The average fire regime might be 80 years in a place, but that doesn't mean a fire won't happen for 150 years as opposed to 20 years. At best, it's a rough guess.

Certainly, to some degree, managing fire is going to have to be part of a forest carbon management plan

• (1730)

**Hon. Larry Bagnell:** Next is the voluntary question, for all three of you.

**Mr. Matthew Bramley:** Quickly, regarding industrial greenhouse gas emissions, the centrepiece of Canada's federal climate plan in the nineties, beginning in 1995, was something called the voluntary challenge and registry program, which focused particularly on industrial greenhouse gas emissions, but also included other sectors on a voluntary basis, of course.

The fact is that industrial emissions rose more rapidly than Canada's total. Canada's total grows rapidly itself. That particular example did not get us anywhere near where we need to be for Kyoto types of reductions.

**Mr. Paul Muldoon:** Professor Robert Gibson of the University of Waterloo edited a book a few years ago on voluntary initiatives. I'd be happy to forward relative chapters to you that really review it in great detail.

There are two points. One is that like anything else, a voluntary agreement is only as good as its content. It's a vehicle. The question is this. What drives the vehicle? The second issue, though, is when they did the studies looking at the success of voluntary agreements, it was still the threat of regulation that motivated industry to act.

Our organization focuses on the regulatory regime, because when the rubber hits the road, it's usually because there is or there is about to be a regulatory environment. That's why we focused on it.

**Mr. Stewart Elgie:** To reinforce that, for many years, KPMG has been doing an annual survey of business leaders, asking them about the factors that were the most important for motivating them to improve their environmental performance. Every year the number one motivator is regulations. The number two for many years is director and officer liability. Voluntary opportunities tend to be much further down the list. That doesn't mean it's not important, but as

Paul says, what's driving voluntary change is the threat of regulation or sometimes the threat of consumer pressure as well.

You see a lot of voluntary agreements that have happened lately, particularly in the forest sector, that are way ahead of the regulatory curve but are being driven by the marketplace. The threat of some kind of consequence often leads to effective voluntary agreements.

**Hon. Larry Bagnell:** Could you answer the last question?

**Mr. Matthew Bramley:** In chronological order, your first question, if I heard it correctly, was what needs to happen to move forward, particularly with regard to CEPA.

**Hon. Larry Bagnell:** No, it was, if we change the word "toxic", as was being proposed, can any of you see any benefits to that, or ways that would help us move forward? Obviously the government does.

**Mr. Matthew Bramley:** We've said clearly that we don't think it's necessary. The government has acknowledged that it's not legally necessary to put in place a regulated large final emitter regime. I don't think the arguments that have been advanced by the government are sufficient to motivate the amendment.

Another point is that when the word "toxic" is present in the act, it creates some expectation on the part of the public that the government is going to do something serious to deal with these substances. That's a point that hasn't been raised in the preceding discussion, and I think it's an important point as well. There is a perception issue here, and the perception issue cuts both ways. We've heard about the perception from industry, that "toxic" is a word they don't like, but there's also a perception that it's a word that is helpful in reminding Canadians that these are substances that are causing serious damage to the environment and need to be dealt with in a serious manner.

**Mr. Paul Muldoon:** I agree. Obviously, the government feels there's some benefit. We don't understand the benefit.

But what I want to reiterate in closing is I hope this debate does not confuse our position. The position is that large final emitters should be regulated, and we do not want this debate to delay that approach. We see there's great urgency to moving ahead. We hope this debate and our position are clear, that those amendments are unnecessary but that this should not forestall action now.



•(1735)

**Mr. Stewart Elgie:** Just to build on that, let's bring it back to the larger context. We're dealing with, as I said, probably the most significant environmental problem that's faced humanity in our memory. We should put the importance of this change in that context: that moving forward in addressing climate change, and doing so swiftly and effectively, is a public policy goal of overriding and paramount importance. Whatever someone's position is on having the word "toxic" in or out of CEPA, and the risks and benefits of doing so, if it results in our moving swiftly to take effective action on climate change, that will have been a tremendously important accomplishment, and probably about the most important thing we could do. Let's not lose sight of the end goal here.

**The Chair:** Just before we close, you had made available—I think this is coming from Mr. Muldoon.... Out of this, is it my understanding, through the committee, that the scoping document came as a result of the process, and this delineates some of the issues that were—

**Mr. Paul Muldoon:** No, I'll put that in context. The scoping document is, in effect, government advice. This is the departmental advice on what should be done with CEPA. As a stakeholder, we, with other stakeholders, participated in giving input into that advice. We are helping the department fashion what they should say about changing CEPA. That document is advice to them on what they should say.

The reason I submitted the document was simply to show that there are many issues on the agenda, and this one was not on top of the list.

**The Chair:** Okay. Is it your opinion that the scoping document would be of benefit to the committee with respect to their preamble to looking at CEPA?

**Mr. Paul Muldoon:** My understanding is that the document in effect was prepared for you and will be presented by the department formally. So yes, I think you're going to see it—

**The Chair:** I see some heads nodding. I suspect, then, that the committee is going to have access to it and be briefed fully on it. We can talk further about that. Good.

Thank you very much. Let me say on behalf of the committee that we appreciate your being here. We apologize for the delay that resulted from votes we had, but I think committee members will agree that this has been very helpful. We are working now towards the Kyoto plan that we'll have before us. We'll have used some of the witness testimony you've given to look at that plan, and also to look at some of the legislative issues that are coming out of CEPA. You have given us a great deal of insight into that next part of the process.

Thank you very much

Thank you to the members for being here.

Good night.

---





**Published under the authority of the Speaker of the House of Commons**

**Publié en conformité de l'autorité du Président de la Chambre des communes**

**Also available on the Parliamentary Internet Parlementaire at the following address:  
Aussi disponible sur le réseau électronique « Parliamentary Internet Parlementaire » à l'adresse suivante :  
<http://www.parl.gc.ca>**

---

**The Speaker of the House hereby grants permission to reproduce this document, in whole or in part, for use in schools and for other purposes such as private study, research, criticism, review or newspaper summary. Any commercial or other use or reproduction of this publication requires the express prior written authorization of the Speaker of the House of Commons.**

**Le Président de la Chambre des communes accorde, par la présente, l'autorisation de reproduire la totalité ou une partie de ce document à des fins éducatives et à des fins d'étude privée, de recherche, de critique, de compte rendu ou en vue d'en préparer un résumé de journal. Toute reproduction de ce document à des fins commerciales ou autres nécessite l'obtention au préalable d'une autorisation écrite du Président.**