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—
Chair

Mr. James Bezan

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•(0900)

[*Translation*]

The Vice-Chair (Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.)): Good morning, everyone. Welcome to this eighth meeting of the Standing Committee on Environment and Sustainable Development and our first meeting devoted to our resumed study of the oil sands and Canada's water basins.

Our Chairman, Mr. Bezan, apologizes for his absence; he had to travel to Manitoba this morning. In order for the Liberal opposition to be able to put its usual number of questions, at second round, I will give my speaking time to a member of my party.

The theme of today's meeting is the role of the federal government in oil sands development. We have with us representatives from the Department of Natural Resources, the Canadian Environmental Assessment Agency and the Department of Fisheries and Oceans. Each group will be making a 10-minute presentation, and that will be followed by questions from committee members.

Mr. Stringer, you have the floor.

Mr. Kevin Stringer (Director General, Petroleum Resources Branch, Department of Natural Resources): Thank you, Mr. Chairman.

We will begin, and then you will hear from the Canadian Environmental Agency and the Department of Fisheries and Oceans.

Thank you for giving us the opportunity to meet with you and make this presentation before you. I will be giving you a brief overview of the situation with regard to the oil sands. I will start on the second page of the deck and talk about the economic opportunities, federal and provincial regulatory oversight, the environmental challenges, technological improvements and the role of the federal government.

[*English*]

My presentation will be a little broader than the other two. It will speak to the oil sands generally and then get to the issue of water specifically. The other two presentations will be about water issues specifically.

I have with me, and should introduce, Dr. Kim Kasperski, the manager of water quality research with CanmetENERGY in Devon, a government lab just outside of Edmonton that deals with oil sands issues.

The third slide gives you a map of where the oil sands are.

•(0905)

[*Translation*]

As you can see, the oil sands are primarily located in North-Eastern Alberta but there are also some in Saskatchewan.

[*English*]

And the three different areas that you can see, the Athabasca area, the Cold Lake area, and the Peace River area, are where the oil sands exist.

The fourth slide provides a very, very high-level scientific sense of what this is. It's really bitumen. Bitumen is a molasses-like viscous oil that will not flow unless it's heated and diluted with lighter carbons. It can be blended with diluents and shipped to refineries, or it can be upgraded into a synthetic crude oil. But it's basically in the ground, and has the consistency of a hockey puck, and when it's heated up, it starts to look like the picture you have on slide four.

Slide five is quite significant. It speaks to how this is done. There are two ways that the oil sands are delivered to market. The most well-known way, and the one that's being done the most at the moment, is mining—open pit mining—as you've seen in the pictures of big dump trucks and large shovels, etc. However, it's very important that about 82% of the resource is available only through what we call in situ extraction, which is similar to what is done at oil wells elsewhere, where you inject steam into the ground and then pull it out via wells. In other words, the mining, which is a large percentage of what's happening now, is only 20% of what's going to be happening into the future. So we need to be concerned about both issues.

As slide six shows, about two-thirds of the bitumen is currently upgraded to synthetic crude oil before being shipped to refineries, and the remaining one-third is blended with diluents before being shipped to refineries.

I want to spend a little bit of time on slide seven as a set-up to the rest. In other words, where are we going with the oil sands? What are the projections for how big they are going to get over the next number of years? What you have on this slide is the previous 2007 forecast.

I'll just walk you quickly through the different areas. The bottom three layers are the traditional sources of oil in Canada, mostly from the western sedimentary basin in Alberta, Saskatchewan, and part of B.C. Apart from the east coast, the ones that are growing are the oil sands. One piece of that is the mining, and one piece is the in situ, the stuff that is farther than 80 metres below ground.

You can see that as of last year, the sense was that it was going to grow substantially. We've tried to show here the effect of the economic slowdown—and this is the big question—on the growth of the oil sands. And I'll speak to that in a moment, but it's a very important issue relating to the other issues of water use, and everything else around the oil sands. This slide is based on the numbers from last year, but with a sense of what is also happening with the economic slowdown.

Slide eight indicates how important it is to note that this is a major economic driver for Canada, and the committee members, I'm sure, are aware of this. But here some numbers. Again, these are last year's numbers, and we need to look at what the economic slowdown is doing. But the numbers show that the oil sands have generated about 120,000 direct and indirect jobs. It's also notable that 60% of those jobs are in Alberta and 40% aren't. There's a good number in Ontario and in Quebec, and some outside the country as well.

Investment has been very substantial in the oil sands, with industry spending \$47 billion on new capital from 1996 to 2006. The forecast, as of last year, was for another \$110 billion to \$125 billion over the next 10 years. The economic slowdown has had an effect: the estimate last year was that we would have \$20 billion of investment in new capital into the oil sands in 2009, and we now think it's going to be in the range or \$10 billion. So it's \$10 billion instead of \$20 billion.

Many of the projects that were under construction are still being constructed, and we will see what happens with respect to ongoing projects after those projects are done, which will largely be in 2009.

● (0910)

Oil sands are an enormous long-term resource. If you look at the International Energy Agency's world energy report, which was released last fall, between now and 2030 Canada is the only country that's going to show any growth in oil production because of the oil sands. There will be growth elsewhere in the world in OPEC countries and other countries, but the only growth in the OECD countries will be in Canada, and it's because of the oil sands. They make up 97% of Canada's proven reserves.

Slide 10 gives you a sense of the opportunity in the oil sands. The red at the bottom indicates how much is being produced. The oil sands are quite new, and it's only in the last couple of decades that they've been going.

The proven reserves are shown in green. Proven reserves mean that with current technologies and current prices, 173 billion barrels are available. That puts Canada at number two in the world in proven reserves, behind Saudi Arabia and ahead of the rest.

Recoverable reserves are shown in light blue. With the technological improvements we see coming down the road, the best scientific inspired guess is that the total recoverable amount will be in the range of 173 billion barrels. But the total amount that we

believe is in place, as shown by the full scale here, is 1.7 trillion barrels, which exceeds the total amount of oil produced in the world to date by 50%. So in other words, 1.78 billion barrels of oil have been produced to date in history, and there's a significant amount more in the oil sands. It's thought that may result in 315 billion barrels with technological improvements that might be reasonably thought of.

I want to spend a bit of time on the environmental issues and federal responsibilities. My colleagues are going to speak specifically to water, but there are issues around air, land, and water. We've provided a deck with some overview information on that.

I want to speak a little about the jurisdiction issue. At the end of the day this is a national resource, but the Constitution suggests it's largely provincial jurisdiction. The provinces have ownership over natural resources. The provinces set the pace and extent of resource development within their jurisdiction. But the federal government has important levers with respect to the oil sands. They include the Canadian Environmental Assessment Act, the Fisheries Act, the Navigable Waters Protection Act, the Migratory Birds Convention Act, the Canadian Environmental Protection Act, the Species at Risk Act, and many other pieces of legislation as well.

I won't go through the rest of the presentation, except to highlight water use on slide 16. We are concerned about water use. In the question and answer period I'll be happy to walk through some of the things water is used for in the oil sands. But suffice it to say that one to four barrels of water are used for every barrel of bitumen that is produced. There have been improvements, and 75% to 90% of the water is recycled now. In one case it is 95%. DFO will be walking through the water management framework we have developed jointly with Alberta.

Another big water issue is tailings ponds, shown on slide 18. Alberta has put out a new regulatory regime that requires environment improvements in tailings ponds.

The final point, on slide 19, is technology. Dr. Kasperski is with me, and we believe that technology is hugely important in making improvements. We in the government are supporting research elsewhere, and industry is also working on technological breakthroughs to reduce tailings ponds and water use, and improve efficiency. We can speak to some of the work that's been going on there during questions and answers.

Thank you very much.

● (0915)

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you very much, Mr. Stringer, for going through those slides so efficiently.

We'll now move to the Canadian Environmental Assessment Agency and Mr. Burgess.

[Translation]

Mr. Steve Burgess (Executive Director, Project Reviews, Canadian Environmental Assessment Agency): Thank you very much, Mr. Chairman.

Before I begin, I would like to mention that I am accompanied by Mr. Steve Chapman, who is associate director of our western operations within our project review group.

[English]

What I'd like to do in the time available today, Mr. Chairman, is talk a little bit about our federal environmental assessment process and specifically how it relates to the oil sands.

I'd like to talk a little bit about federal-provincial cooperation. You heard from Mr. Stringer a minute ago that the resource is essentially a provincial resource, so there needs to be federal-provincial cooperation on the EA front.

Then I'd like to talk very briefly about oil sands and water issues from the environmental assessment perspective.

[Translation]

Page 3 describes the purpose of environmental assessments. In most cases, the assessment is applied early in the planning phase of a project. This process helps predict and evaluate the possible environmental effects and cumulative effects of a project and propose measures to mitigate or eliminate adverse effects on the environment. A very important aspect of the process is that it provides an opportunity for the public to participate and influence the government's decisions regarding the project.

One of the aims of the Canadian Environmental Assessment Act is that it be a tool for the promotion of sustainable development.

[English]

It's important to understand a little bit about how the Environmental Assessment Act works. It applies to decisions made by the federal government that could allow a project to proceed. Those include regulatory decisions, such as those under the Fisheries Act; decisions where the federal government funds a project, for example, and is actually the proponent of a project; and decisions where the federal government provides land in order for a project to proceed.

In the case of oil sands, these triggers, as we call them, generally are regulatory decisions made under the Fisheries Act or, on some occasions, under the Navigable Waters Protection Act, which is administered by Transport Canada. It's a self-assessment process in the sense that departments that have regulatory or other decisions to make related to the project are the ones responsible for conducting the assessments.

There are several types of assessments undertaken pursuant to CEAA. There are screening level assessments, which apply generally to relatively small projects with non-significant environmental effects, all the way to review panels. I'll focus a little bit later in my presentation on the review panel process.

I think it is important to mention, though, that because our act is triggered in situations only where the federal government makes decisions, it's not necessarily the case that a project in the oil sands or anywhere else will undergo an assessment under CEAA; it's only in situations where the government makes a specific decision in regard to that project. There are many examples in the oil sands, particularly for in situ projects, where our act is not triggered and an environmental assessment is not required federally.

In terms of the roles and responsibilities of the various federal players in an environmental assessment, our agency essentially administers the process. Typically we don't undertake environmental assessments ourselves. That's the responsibility of individual departments that have decisions to make related to a project. We do have an important role in the management and support of public review panels that occur in respect of some projects.

Under the legislation, we call decision-making departments "responsible authorities". As I mentioned before, they're the ones that actually undertake the assessments, for the most part. Those assessments must be undertaken before decisions are made to allow a project to proceed.

There are also expert departments. Although they don't have decisions to make, they must or may provide information to the environmental assessment. I'm thinking in particular here of Environment Canada, which has expertise and a mandate with respect to migratory birds, for example.

There is also the Major Project Management Office, which was created probably about a year ago now and is housed within Natural Resources Canada. It has the responsibility for assisting in the coordination of the EA and regulatory processes related to major resource projects. Obviously, oil sands projects are included in that group.

•(0920)

[Translation]

I will now say a few words about federal-provincial cooperation in the area of environmental assessments. I am at slide 6.

Environmental assessments are a joint responsibility. We have negotiated bilateral agreements in view of harmonizing the environmental assessment process with several provinces, notably Alberta. When a project requires a provincial and federal assessment, both levels of government carry out a joint assessment. The goal is to avoid duplication and promote efficiency within the process.

[English]

Slide seven basically gives a schematic of the environmental assessment process, particularly in the context of environmental assessment review panels.

I won't go into too much detail here, in the interest of saving time. It's worth noting, though, that there are several steps in the process wherein the public has an opportunity to participate. That would be in the review of the environmental impact statement guidelines, which set out the information requirements for the environmental assessment; during the course of finalizing the environmental impact statement itself; and then, of course, during public hearings.

[Translation]

I will now move on to a map showing the location of past and current oil sands projects that have undergone an environmental assessment. My map is perhaps somewhat difficult to read but it indicates those projects for which a review panel has carried out an in-depth study in accordance with the provisions of the act.

[English]

Next I thought I'd focus on some of the issues related to water that have been recognized through the environmental assessment process. These relate both to effects related to water withdrawals, and thus to water quantity, and to water quality.

You'll hear later from Fisheries and Oceans Canada about a framework for water management that they have developed recently in conjunction with Alberta. This is something that I think will assist us in the environmental assessment process in the future to better understand how these projects can affect water quantities in watercourses that might be affected by projects.

There have been concerns raised through the environmental assessment process regarding water quality and concerning the accuracy of predictions related to water quality. So for example, in some reviews—notably in the case of the Kearn, Muskeg River, and Jackpine projects—there have been requirements for water quality monitoring to ensure that adverse effects are detected and adaptive management measures put in place, if necessary.

We also have a bit of a regulatory backstop in the form of the Fisheries Act. As was recognized in the panel review for the Horizon project back in 2004, we see that as a mechanism to address potential concerns related to water seepage or other releases of deleterious substances.

I'll leave it at that, Mr. Chairman, and turn it over to Fisheries and Oceans. Thank you very much.

• (0925)

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you, Mr. Burgess.

Next we have the Department of Fisheries and Oceans. Is it Mr. Matheson or Ms. Flood?

Mr. Ian Matheson (Director General, Habitat Management Directorate, Department of Fisheries and Oceans): It will be me, Mr. Chair.

[Translation]

Good morning, Mr. Chairman, Members of the Committee. It is a pleasure for me to be here with you.

I would like to introduce to you Ginny Flood, National Director, Environmental assessments and major projects.

[English]

I'll go through the presentation. I'll be following it loosely probably, because what I'm really interested in doing is explaining what the law says and how it applies to the types of projects that we see in the oil sands. I'll be covering as well some of the jurisdictional issues that we have with the province as to how we work together with the province and with other stakeholders.

We'll look at slide three. The Fisheries Act has two main provisions for regulating fish habitat. One says that you're not allowed to kill fish by means other than fishing unless you have the authorization of the minister. The other says that you're not allowed to harm, alter, disrupt or destroy fish habitat unless you have the authorization of the minister. That's important to understand, because if you do require an authorization, then there's a trigger in the Environmental Assessment Act that says you do require an environmental assessment. So if you're going to either kill fish or destroy or alter habitat, you'll need an authorization and you'll also trigger an environmental assessment.

Of course this is all done on a project-by-project basis, so if the proponent has a development that it wants to undertake, we review that development as a stand-alone project and the authorization is issued with respect to a particular project.

The Environmental Assessment Act, however, does require us to consider cumulative environmental effects, and that's a concept that's important to bear in mind as well. I'll talk about that later when I get into the water management framework.

I would like to make note of the last point on this page. It relates to the cumulative effects. Looking at a project in isolation is useful, but because water is connected, projects do have a cumulative effect. When we think there will be a significant environmental impact, in some cases due to the cumulative effect of multiple projects, then we'll recommend or suggest that the minister recommend to the Minister of the Environment that a panel environmental assessment be held. In the last four developments, that's been our recommendation.

Slide four talks a little bit about Fisheries Act authorizations. An important concept to understand is that our preference would be that people not kill fish and that they not destroy or alter habitat. So the process we go through when working with proponents is actually to help them look for ways to avoid doing that damage. We're proposing, on the basis of science, different ways that they can mitigate the effects of their development. But in some cases it can't be avoided, and then we get into the discussion of authorization. To be able to authorize destruction, we'll seek some sort of compensation.

Typically oil sands projects, as you're aware, have two effects on the water system: one, they'll either divert streams or tributaries, because there's a big open pit and there may be streams running through the area. Compensation in those cases is typically a diversion of the stream around the area so that water can still flow, or in some cases creating a new water body to replace one that would be eliminated.

The second impact that these types of projects have is that they draw water from the watershed. That's something we need to be aware of as well, because the fish need that water to live in. So we'll evaluate the amount of water that's required for the fish to actually survive.

Slide five, to pick up on my last point, talks about how this is an area of shared jurisdiction, because the province regulates the volume of water that's being used by proponents and we're interested in the amount of water that's needed for the fish and their habitat to be viable.

● (0930)

We have to work quite closely together, and we've found a way to combine these two interests by developing a water management framework. This has been a product of discussions that began in a multi-stakeholder organization called the Cumulative Effects Management Association. The two key decision-makers in that organization are the province and the federal government.

I'll move on to slide six and talk about the framework in a bit more detail.

The water management framework is the tool we've developed to address the cumulative effects of all these projects in the watershed. The easiest way to explain this is to think about the watershed as being a series of tributary streams flowing into the lower Athabasca River. Every time you eliminate a stream or divert it, you're going to be affecting the flow of the water, not only in terms of the volume but in terms of the rate the water flows through the water system. Both those factors are important to us from a fish and fish habitat perspective. Fish need a certain amount of water to live in, but the rate and flow of the water is also important.

We know over the course of a year that the rate of flow varies naturally. The framework uses a scientific model to say what an acceptable variation in water flow is over the course of a year. It actually sets a range. If the water flow is above this level, usually a unit of volume of water per second in a unit of time, then we're okay, but if we go a little below that we're starting to get into a cautionary zone. There's also a red zone. We're of the view that if you get into that low level of water flow you're actually going to cause destruction to fish habitat.

This is a useful framework for industry to know how we will be evaluating their project. They can use it as a planning tool. And as a decision-maker, we can ask proponents what the rate of water withdrawal will be from the watershed and predict what effect that might have on fish habitat. Again, the goal is to avoid harm or destruction to fish habitat. We prefer that proponents find ways to avoid getting into that yellow or red zone.

It's the province that actually sets the conditions on how much water can be withdrawn. It's their legislative power that sets the conditions on water removal. We're interested, because if a proponent were to exceed that or put in a plan where there would be a risk of water actually being withdrawn at a rate that reduces the flow in the streams to a low level, that would cause the trigger for our authorization.

Right now, with oil sands being in the very early stage of development, there are not so many projects that in-stream flow

requirements are a problem. But we can foresee that if there's further development we'll have to use this tool much more carefully. It will become much more important to the decision-makers, to guide our decision-making with respect to how much development we allow in the area.

It's quite a useful tool. It does allow people to monitor. It's the province that monitors the amount of water that's being used, and it can be used in real time to say what is happening today. The information can be shared with the proponents and decisions can be made to actively manage this process.

● (0935)

The final slide is just to say we're obviously not working alone. We're a full participant working closely with the Province of Alberta. We're consulting actively with all the stakeholders, including first nations, and in our decision-making process, although the legislation is primarily focused on environmental needs, there are mechanisms—and if you want, we can talk about these—that allow us to balance the socio-economic needs as well.

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you, Mr. Matheson.

We'll now proceed to the first round of questioning, with Mr. McGuinty.

Mr. David McGuinty (Ottawa South, Lib.): Thank you very much, everyone. I apologize for being late this morning.

I want to go back, Mr. Matheson, to your last points, if I might.

Is DFO participating in the CEMA process? What does CEMA stand for, again?

Mr. Ian Matheson: Cumulative Effects Management Association.

Mr. David McGuinty: Right, and it was struck as a public-private, governmental-non-governmental, aboriginal steering committee, or a committee to help guide the overall development of the oil sands?

Mr. Ian Matheson: That's right.

Mr. David McGuinty: Has that group examined the water question in detail?

Mr. Ian Matheson: Yes, to answer your question, we are a participant. There are, I think, 44 members of the association at this point, and they have working groups. There is one working group in particular that is focused on the water work, and it is that group that has given us the water management framework. It took it to a certain point, then the federal and provincial governments finalized it.

Mr. David McGuinty: What did they conclude about this issue? Didn't they just issue a report in the last year about the overall state of the oil sands, and was there not a subsection or a chapter dealing with water?

Mr. Ian Matheson: Sorry, did the Cumulative Effects Management Association issue a report on water usage?

Mr. David McGuinty: Yes.

Mr. Ian Matheson: I have to consult on that question.

We're not sure. I can look into that and get back to you.

Mr. David McGuinty: Okay. I'm just trying to get a sense here of how much we really know about the hydrogeology of that area. How much do we know?

Mr. Ian Matheson: I guess we know more than we used to and not as much as we want to. The water management framework actually focuses on the part of the lower Athabasca River where most of the development is right now, but we know that in the future we'll have to expand that knowledge into the greater reaches of the river.

There's a lot to be learned yet, and we're beginning this work. It's a model that we've developed. The model needs to be refined, and that is best done with data that's collected over time. DFO has a lot of scientists working on this particular issue, and our focus is on the instream flow needs as compared to the volume questions.

Mr. David McGuinty: Can you describe the area as a watershed?

Mr. Ian Matheson: Yes.

Mr. David McGuinty: And is there not a trend or an increasing demand in Canada and worldwide to look to the concept of watershed management? I think, for example, of the Fraser Basin Council; I think of the Ottawa River, right here in this community, and the Ottawa riverkeeper is calling now for joint federal-provincial-municipal-aboriginal participation in reflecting the fact that there is just the one watershed.

• (0940)

Mr. Ian Matheson: That's right.

Mr. David McGuinty: Is that something that's being contemplated or been discussed, either through Mr. Stringer's department or yours, going forward?

Mr. Ian Matheson: Yes, that's exactly what CEMA has been set up to do. You may not have been here for my presentation, but our legislative system is set up to look at project-by-project decisions. Although CEAA—the act—does say that we should consider cumulative effects, we didn't really have a good mechanism for doing that, which is why the Cumulative Effects Management Association established itself and said okay, let's find a way that we can actually think about these things on a watershed basis—so going beyond the bounds of particular projects and looking at it as a watershed.

The model is a watershed model.

Mr. David McGuinty: The CEMA was struck to examine the watershed, first and foremost?

Mr. Ian Matheson: Cumulative effects writ large, one of those being water.

Mr. David McGuinty: Maybe the CEAA folks are best placed to answer the question, but do we actually have nomenclature design systems where we can meaningfully pursue something called cumulative effects measurement management? Do we actually know what that means?

Mr. Ian Matheson: I think that the water management framework is a good illustration of how you can grapple with the question of cumulative effects. Essentially, the question is how much develop-

ment can an ecosystem sustain? What a model looks at is, if you introduce certain disturbances into an ecosystem, what effect does that have on the ecosystem overall.

In this example of the lower Athabasca River, the impact is withdrawing water, let's say. So what we're really studying here is what happens if we take out water at different rates, how does that change in the volume affect the flow, and what effect does that have on the organisms that rely on the water? It gives us a tool to then use in our decision-making process on a project-by-project basis.

Mr. David McGuinty: But that's restricted to water.

Mr. Ian Matheson: Right.

Mr. David McGuinty: I always understood cumulative effects to be emissions, tailings ponds, the dislocation of wildlife, the disappearance of boreal forest, and that these things in combination constituted cumulative effects. You're saying that cumulative effects is water-based management—

Mr. Ian Matheson: It's an addition of each project.

Mr. David McGuinty: Does CEMA actually have a cumulative effects system in place that transcends just water?

Mr. Ian Matheson: Yes.

Mr. David McGuinty: It does?

Mr. Ian Matheson: Yes.

The Vice-Chair (Mr. Francis Scarpaleggia): You have about 20 seconds left.

• (0945)

Mr. Ian Matheson: Sure. I don't know if CEAA knows more about this than I do, but—

Steve.

Mr. Steve Burgess: I'm not sure I can describe it in 20 seconds or less.

The Vice-Chair (Mr. Francis Scarpaleggia): Take a bit more time than that.

Mr. Steve Burgess: Okay.

Certainly CEMA looks at more than just water. The CEMA springs out of what is called the regional sustainable development strategy that Alberta developed back in the late 1990s. Essentially, there were three main areas of investigation that CEMA was to follow up on; for example, sustainable ecosystems was one, cumulative effects on wildlife, and so forth. So it is much broader than just water, certainly.

It has taken more time than I think most of us originally anticipated for CEMA to produce tangible results and information. Essentially, I wouldn't characterize CEMA as the vehicle for addressing completely the issue of cumulative effects related to oil sands. It's really meant to provide information in order for regulators, if you will, Alberta, perhaps the federal government, to make those assessments.

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you. Is there much to add to that? like to go to Mr. Bigras. Maybe you can work that into another answer.

Monsieur Bigras.

[Translation]

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

I also thank the witnesses for their presentations this morning before the Standing Committee on Environment and Sustainable Development.

Before moving to my questions, I would like to obtain some clarifications, in particular with regard to the document supplied by Natural Resources Canada. When I read page 14 of the deck, dealing with greenhouse gas emissions, I nearly fell off my chair. It is quite something to be told, especially in the context of a presentation on oil sands, that as far as greenhouse gas emissions are concerned we have made progress in Canada. You are telling us that GHG intensity reduced on average by 32 percent between 1990 and 2006. You are not wrong; you are absolutely right. However, might I be given the numbers in absolute terms? Could you tell us by how much GHG emissions in the oil sands sector increased between 1990 and 2006?

Mr. Kevin Stringer: Yes, I believe I have those numbers with me. I will find them before the end of today's session.

[English]

I would say the issue of intensity has decreased by 32%, but your point, as I understand it, is that with the increase in the growth of the oil sands overall, it has outstripped significantly the improvements we've been able to make in terms of—

[Translation]

Mr. Bernard Bigras: When you take the volume, you are comparing emission volumes.

[English]

Mr. Kevin Stringer: That's correct.

With the growth of the oils sands, it's outstripped the improvements we've made in terms of intensity. The overall GHG emissions have gone up, and I'll get you those specific figures. It is, at this point, in the range of 5% of Canada's overall GHG emissions, and that's up from around 1% or 2% a number of years ago when this all started. So indeed, the overall amount has increased.

That said, on the intensity, they are making improvements on a case-by-case basis; it is accurate. Your point about an increase is accurate, and we'll get you the specific numbers.

[Translation]

Mr. Bernard Bigras: Very well, thank you.

Could you tell me in what year the very first environmental assessments were carried out under Canadian law? Perhaps Mr. Burgess could provide the answer.

M. Steve Burgess: It was...

Mr. Bernard Bigras: I am talking about environmental assessments generally, and not just those pertaining to the oil sands.

Mr. Steve Burgess: The act came into force in 1995.

Mr. Bernard Bigras: Very well, but when were the very first assessments of all projects, including hydro development projects, carried out?

M. Steve Burgess: Nationally, yes.

Mr. Bernard Bigras: In what year were the first environmental assessments of projects carried out in accordance with the law?

Mr. Steve Burgess: In 1995.

Mr. Bernard Bigras: What were the first oil sands projects to be assessed?

Mr. Steve Burgess: I do not have that information with me.

Mr. Bernard Bigras: Is it possible that they began in 2003?

Mr. Steve Burgess: Yes, those assessments probably began around that time.

Mr. Bernard Bigras: How do you explain that hydro development projects were assessed under the Canadian Environmental Assessment Act and that all of a sudden in 2003 the first oil sands environmental assessments began?

Mr. Steve Burgess: As I explained in my presentation, the Canadian Environmental Assessment Act is triggered when the government makes decisions regarding a given project. These are the triggers leading to our decision of whether or not there should be an assessment. I would not say that there was a delay in the assessment of oil sands extraction projects, but the only reason for any delay is that the assessment process relies entirely on these triggers.

As I explained, it is not all oil sands projects that require an assessment, given that there is not necessarily a federal decision to be made regarding these projects. In the case of hydro development projects, there will clearly be an impact on fish habitat, for example, and this is why we consistently have triggers.

● (0950)

Mr. Bernard Bigras: Hydro development projects must therefore obviously undergo an environmental assessment given that they impact upon fish. However, oil sands projects do not necessarily require an environmental assessment because, in your view, there is no federal or international responsibility with regard to greenhouse gas emissions.

However, Imperial Oil's Kearl project is a \$7 billion project aimed at producing 300,000 barrels of oil per day during the next 50 years. That is the equivalent of approximately 800,000 cars on the road. This project was challenged before the Federal Court, that was of the view that the review panel, in its report, did not provide much substantiation of its conclusions with regard to the greenhouse gas emissions related to that undertaking.

Therefore, how can you state today that hydro development projects have an environmental impact and must undergo environmental assessments, but that it should not be the case for certain other projects. Even your current assessments do not take into account the impact of climate change.

How can you state before the Federal Court that you have done an assessment of the project, but that the conclusions and reports relating to greenhouse gases are not quite complete.

It is at the end of 1990 that you understood that the assessment of the cumulative effects of oil sands projects on a case by case basis was relatively inefficient and had serious limitations. That is what you told us, here, in committee, as recently as in June 2008. This is why, as Mr. McGuinty stated, CEMA was established in 2000.

Do you therefore recognize that even in areas that come under your jurisdiction, the information pertaining to oil sands projects and the reports tabled by the review panels are incomplete? I am not the one who is saying this; it is the Federal Court.

Le vice-président (M. Francis Scarpaleggia): Mr. Burgess, would you provide a quick answer, please.

Mr. Steve Burgess: First of all, even if the federal government does not conduct assessments of oil sands projects, that does not mean that no assessment is being done. In fact, these projects fall under provincial jurisdiction. These projects should be assessed.

As I stated earlier, our process is dependent upon a federal decision being made pertaining to these projects. In the absence of a federal decision, federal authorities are not entitled to carry out an assessment.

In the case of the Kearl project, the court did indeed state that the panel had not sufficiently justified its conclusions with regard to the effects of the project as far as greenhouse gas emissions are concerned. And the review panel redid its work in response to the demands of the Federal Court.

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you, Mr. Burgess.

We will now move on to Ms. Duncan.

[English]

Ms. Linda Duncan (Edmonton—Strathcona, NDP): Thank you, Mr. Chair.

I'll go back to Mr. Burgess.

Mr. Burgess, there have been successive court cases brought against the federal government for failure to apply and enforce the Canadian Environmental Assessment Act, the Kearl case being one of the most recent, one in which the federal Department of Fisheries had to withdraw its permit. What kinds of actions is the CEAA office taking to respond to this continued filing of court actions and in many cases of serious findings showing flaws in the application of federal laws on the tar sands projects?

Mr. Steve Burgess: Some of the challenges in the application of the act that have arisen over the years have revolved around project scoping, for example. Many of the court cases that have arisen in the past have had to do with questions around whether the projects considered in environmental assessments have been scoped appropriately. Over the course of time, the courts have clarified what the responsible authorities' responsibilities are with respect to that issue.

In order to provide some clarity and consistency with respect to how projects are scoped, we've developed a cabinet directive on scoping for purposes of environmental assessment. That's one example of how we're addressing that kind of issue.

● (0955)

Ms. Linda Duncan: Can I ask you, Mr. Burgess—or maybe Mr. Stringer can answer this—is the coordination of the environmental assessment and the regulation between the Alberta and federal governments being coordinated by the CEAA office or the new MPMO in NRCan?

Mr. Steve Burgess: The actual coordination of environmental assessments, in the case of a joint review panel, for example, or in the case of a screening where both the federal and provincial processes apply is still being conducted by the Canadian Environmental Assessment Agency. The role of Major Project Management Office is to provide oversight, if you will, with regard to both the environmental assessment and the regulatory processes that apply to these projects. So the MPMO would be one window into the process, should there be issues that arise during the course of the review—mainly for proponents, but for others as well.

Ms. Linda Duncan: Can you tell me, Mr. Burgess, what is the regulatory trigger for NRCan to be involved in an environmental review of tar sands projects?

Mr. Steve Burgess: They are not a responsible authority for environmental assessments. They have been given by cabinet the role of providing some oversight of the environmental review and regulatory review of major resource projects broadly.

Ms. Linda Duncan: So we are actually moving toward some duplication, where we now have the CEAA office and MPMO. I'm very confused about how this is actually making things more efficient.

Mr. Kevin Stringer: To answer your first question, CEAA does a coordination with the province. MPMO is responsible when there is a large project—and there is a definition for a major project. It is to try to have a one-window approach for the federal government, involving all of the responsible agencies, as I think they're called, but also all the other players who would be involved in that. So it's to set up a specific group for coordinating that.

Ms. Linda Duncan: Who, for example, would the other players be?

Mr. Kevin Stringer: You would see Indian and Northern Affairs at the table, and there are other departments that don't necessarily have an environmental review responsibility for a major project. It's to understand all of the issues around the major project. This was set up largely for efficiency and to try to ensure that we're more comprehensive than we have been.

Ms. Linda Duncan: Mr. Stringer, are first nation consultations obligations now being delivered through the MPMO?

Mr. Kevin Stringer: No, in fact the MPMO is similar in some ways to what Steve has outlined for CEAA. Its responsibility is to coordinate responsibilities across the federal system. There are a large number of federal players, and on the major projects you do want to make sure you have the players in the same room to talk about these issues. So it is mechanism to get together on these issues the people who have an interest in the file.

Ms. Linda Duncan: Okay, that's fine. I'm suitably confused.

Mr. Matheson, I'm curious to know if you've been engaged in the process with the Government of Alberta, which I am advised is pursuing the possibility of resolving the mounting tar ponds by processing the water and draining it into the Athabasca River.

Have you raised concerns with the Government of Alberta about this proposed process?

Mr. Ian Matheson: That's not an issue with respect to fish and fish habitat.

• (1000)

Ms. Linda Duncan: It certainly is to the health of the fishery.

Mr. Ian Matheson: It is. You're correct.

Ms. Linda Duncan: It would be Environment Canada's responsibility, I understand that. But you are here speaking for Fisheries. It could potentially impact the health of the fishery.

Mr. Ian Matheson: You're correct. There is a section in the Fisheries Act that regulates the deposition of deleterious substances, which is what we're talking about. But DFO has delegated that responsibility to Environment Canada, because it's the department that deals with pollution.

Ms. Linda Duncan: I'm sorry to interrupt you there, but I am just trying to fully understand your water management framework. So is the water management framework completely separate from any consideration of the concentration of pollutants in the river as well?

Mr. Ian Matheson: Yes.

Ms. Linda Duncan: So you are looking only at how much water is there, not the quality of the water?

Mr. Ian Matheson: That's correct. This is a model that looks at volume and flow.

Ms. Linda Duncan: Is it not true that if the water levels go down, pollutants might become more concentrated?

Mr. Ian Matheson: It's not my area of expertise, but—

Mrs. Ginny Flood (National Director, Environmental Assessments and Major Projects, Oceans and Habitat Sector, Department of Fisheries and Oceans): I think what's.... On phase two of the water management framework, there are other elements being considered. That science will probably help inform some of where we're going on phase two to better define some of those indicators.

Ms. Linda Duncan: Do you think it would wise to perhaps not approve any more—

The Vice-Chair (Mr. Francis Scarpaleggia): Quickly, Ms. Duncan.

Ms. Linda Duncan: My time is up?

The Vice-Chair (Mr. Francis Scarpaleggia): Well, pretty much, yes. In a couple of seconds, I would say so.

Ms. Linda Duncan: Well, either it is or it isn't.

The Acting Chair (Mr. Francis Scarpaleggia): It is. I was trying to be polite.

Mr. Warawa.

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

Mr. Stringer, I read your testimony when you were at the committee here less than a year ago, in June of last year. Welcome back.

When I read this, I thought of how the world has changed since then. You started to touch on the forecasts. I'm going to be asking you to elaborate a little bit on the forecasts, because.... What is the production? You've said the investment is going to be cut in half, from \$20 billion down to \$10 billion. Do we have now a new forecast graph that would show what would be happening?

I have another question, and it might be for Ms. Kasperski, regarding having carbon capture and storage. We're using water as a very important part of the process. Most of it, using the in situ technology, is recycled. I think we're up to 90% recycled now. But as we're using carbon capture and storage, that technology of using carbon reinjected, it will help old reserves that are no longer producing start to produce again. If we're using the carbon capture and storage, will that also lower the need to use water?

Those are the two questions. How is that going to play into the impacts on water? And starting off with Mr. Stringer, what's going to be happening with the forecasts and the ultimate total greenhouse gas emissions, maybe the importance of...? We will likely, with the slowdown, have the total greenhouse gas emissions drop, but we are also providing more efficient use per unit of production.

Could you elaborate on both of those? Thank you.

Mr. Kevin Stringer: Certainly. I'll start off by taking the opportunity to say that in 2007, 38 megatonnes of GHG came from the oil sands, and that was between 4% and 5% of the Canadian total. That was in response to a previous question.

On the economics and the current forecast, we have provided, in the slides—I think it was slide seven—a sense of where we think it's going.

There are two or three things to keep in mind when we're thinking about forecasts. First of all, to be candid, when you're talking to people in Calgary who are making these decisions, their views seem to change from week to week. It really is a moving target at the moment.

What we are confident about are two or three things. One is that there is a slowdown. There's no question that we think there's going to be less spending in the future than there has been in the past. How long that is, we don't know. If you look at the announcements that have been made by the major companies that have investments and that had announced major expansions, they're not saying they're not doing it; they're saying they're delaying it, and they're saying they're delaying it for up to 18 months, or for a certain period of time. You should know that with the environmental assessment for the construction phase, it takes six years, or in that range, to go from planning to application to approvals to construction. So it may be some time before we see some of these things come back and see significant growth in the oil sands. That's one point.

A second point I would make is that what we are seeing is a significant decrease now—and this is just recently—in input costs. I might have said, and probably should have said back when I was here in May or June, that the input costs for steel or engineering work, for labour, were.... “Overheated” is a word that was often used; that word is no longer being used. We are still seeing significant employment in the oil sands. We're not seeing production cuts, but we are seeing the input costs come down and come down significantly. Whether they will come down to where the price of oil is at is a challenge, and that will determine how much new investment there's going to be.

The final thing I would say is that whether it's a delay of two years or whether it's a delay of six years, if we look at the requirement for oil in the world and where it's going to come from, this will be a very important resource, whether it's, again, a decade from now or two decades from now. There is a view, even within the patch, that it's much more sustainable now in terms of the pace of growth and that there's an opportunity to work on some of the issues we're talking about today.

Those are some of the comments I would make. What we have provided to the committee is an early sense of what that growth pattern might look like. We're watching it very closely, and I think those three points are what I would say in terms of the growth forecast.

• (1005)

Dr. Kim Kasperski (Manager, Water Management, Department of Natural Resources): With regard to the impact of carbon capture and storage on the potential reduction of water intensity in oil sands development, there are three different types of oil in the ground: there are the oil sands, there's heavy oil, and there are conventional reserves.

This is just stuff I've read, so I'd have to confirm what I'm going to say now, but carbon dioxide has been piloted as a way to improve the recovery of heavy oil and the tertiary recovery of conventional reserves, but it has not been targeted at in situ recovery of the oil sands. So I don't think it will have a role in reducing water intensity in oil sands recovery.

Mr. Kevin Stringer: Can I just add to that? I think the sense is, again, that the slowdown in the growth of the oil sands we're experiencing right now—and we'll see how it goes—will no doubt have an effect on cumulative water use and on cumulative air emissions.

As the members of the committee will know, the federal government and the Alberta government and Saskatchewan and others are working to move the technology on carbon capture and storage quickly with demonstration projects over the next number of years, which we think will be important in the oil sands as well as in other areas, such as in coal-fired generating plants, and so on.

Mr. Mark Warawa: What technologies are we looking at to reduce the need for water in situ? Because that's where we're going.

The Vice-Chair (Mr. Francis Scarpaleggia): This is a big question, and there's very little time left, but if you want to, you can take a stab at it.

Dr. Kim Kasperski: The technologies mostly focus on surface mining and on improving water issues there. As far as in situ goes,

the improvements with respect to water use are, for example, solvent-assisted steam injection, where you lower the temperature of the steam you need and hence the amount of water. Others are looking at different in situ methods that do not use water, such as toe-to-heel air injection. So they're looking at different methods.

Now, as for the ones that actually do use water, the improvements there would be in improving the water treatment they use to recover more water so they're not disposing of as much water in their deep-well injections, the waste water from the water treatment processes.

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you very much, Dr. Kasperski. That was very efficient and very profound, really. You covered a great deal of terrain there.

[*Translation*]

We now move to the second round of five minute questions.

Mr. Trudeau.

[*English*]

Mr. Justin Trudeau (Papineau, Lib.): I have questions for DFO, but I would like to first go back to something you just said, Mr. Stringer: that the tar sands are becoming increasingly sustainable. How do you, quickly, see that happening?

• (1010)

Mr. Kevin Stringer: What I meant to say, if I didn't say it, is that the challenge was that input costs were very high and growing very quickly. The sense is that there is some order coming back into it, that the growth is likely to be more sustainable over the next number of years and that we won't see that type of growth in input costs.

If I had been here last year at this time, I would have been talking about then-current estimates of the go-ahead production costs in oil sands in the range of \$65 per barrel. They would have needed \$65 per barrel for new capital investment. As of last summer, with the growth we had seen less than one year later, it was in the range of \$85 to \$100. The sense was that this was not sustainable. We are now seeing input costs come down to a more decreased level.

Mr. Justin Trudeau: Okay. This is one of the problems with the very word. Your definition of sustainable is in economic terms—in input costs and output costs—and includes no perception of whether this is good for future generations of humans and animals living on the planet.

Could you perhaps address the view of Natural Resources on whether there is a sustainable side, in ecosystem terms, to the oil sands development? Has it been studied?

Mr. Kevin Stringer: Yes. I would say that we are all speaking to that, generally. I thought the question I received was about the economics of it, and so I was speaking to the economics.

There is no question that sustainable development is a crucial issue and one we are all addressing today. We have spoken to the legislative framework we have and the legislative framework the province has to address those issues. NRCan, like the other departments, takes the view that this must be a sustainable development and is committed to making sure that it is brought on as a sustainable resource for Canada, North America, and the world.

Mr. Justin Trudeau: Okay. Let's get away from the mushy stuff of wildlife and little children. Let's talk about energy inputs. How much energy does it take, in percentage, to create right now a barrel of, say, open-mine oil?

Mr. Kevin Stringer: I can get you, hopefully before the end of the session, exactly what the numbers are, but it is substantial. It is higher than for conventional oil, higher than for natural gas—and significantly higher. In mining it's not as much as it is for the in situ production.

Mr. Justin Trudeau: I'm going there next. I just want to establish a mining view. Do you have it in general?

Mr. Kevin Stringer: On mining, I may not even have the numbers, because I don't think the numbers are that high. We do have it for in situ.

Mr. Justin Trudeau: Okay. For in situ, it's what?

Mr. Kevin Stringer: In situ operations—and I am going to ask my guys to correct me if I'm wrong here—use in the range of 6% of Canada's natural gas right now. One of the things we are working on —

Mr. Justin Trudeau: The percentage of a barrel of—?

Mr. Kevin Stringer: No, it's 6% of—

Mr. Justin Trudeau: No, I'm asking how much of the barrel of oil that we're producing to burn as energy.... How much energy did it take to create that barrel of oil?

Mr. Kevin Stringer: I'll get you a specific number, but it is significant.

Mr. Justin Trudeau: Okay. And the follow-up to that is how much water it takes. I know you mentioned four barrels. I've heard figures as high as 11 barrels from various people.

Mr. Kevin Stringer: I'll start, and my colleague will keep going.

The answer, we believe, on the numbers we have—and we are confident with the numbers—is one to four, and it is three to four for the in situ.

Oh, the three to four is for mining? Okay.

But we know that Imperial Oil, for example, is moving to brackish water and saline water and is decreasing their use. We know that others are working on other mechanisms to decrease the use of water.

I have pointed out—and it's in the deck, and Dr. Kasperski can speak to some of this—that we are working in our government labs to try to find ways to decrease the use of that water. It's a hugely important issue.

The Vice-Chair (Mr. Francis Scarpaleggia): Quickly, Mr. Trudeau.

Mr. Justin Trudeau: Do we know what effect injecting solvents and brackish water into groundwater is going to have in the long

term? Are there any long-term studies on how aquifers are affected by that?

• (1015)

Dr. Kim Kasperski: That's a critical question. It depends on the hydro-geochemists mapping those aquifers. That's not something that I know. Alberta Geological Survey and Geological Survey of Canada would be better able to speak to that.

Mr. Justin Trudeau: Is that information—

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you, Mr. Trudeau. Your time is up.

Mr. Calkins, please.

Mr. Blaine Calkins (Wetaskiwin, CPC): Thank you, Chair.

I certainly appreciate the witnesses appearing here today.

I want to set the table a little bit. My questions will have a lot to do with reclamation and what happens afterwards, because I think focusing on the cleanup is very important. This is in relation to water.

When applications are received—I'm talking about an application for a pit mine or whatever the case might be, even if it's in situ—all of those applications must come with plans about how the company doing the exploration or the mining plans to reclaim and basically restore the landscape to its natural state. Is that correct?

A witness: Yes.

Mr. Blaine Calkins: Would that also be correct if there were any alteration of streams and any alteration of fish habitat? We've talked about HADD, which obviously triggers DFO's involvement. All of those things are taken care of in the application process should a HADD be triggered for a stream or creek diversion. Is that correct?

Mrs. Ginny Flood: We try to do the compensation plans to offset any impacts. Then we monitor to make sure there is an effectiveness so that our compensation plans are actually doing what we thought they would do. We work very closely with the companies to make sure that's happening.

Mr. Blaine Calkins: Okay.

I think one of the challenges the companies face up there when it comes to tailings ponds.... The whole strategy has been that the water, the sand, and everything that comes out of the extraction process once the oil is removed goes to the tailings ponds. The whole idea there is that the solids settle out over time and the water evaporates off, and that will allow some form of reclamation.

My understanding is that there are some projects, according to some plans, that were slated for reclamation in the very near future. I'm just wondering what the status of those reclamation projects is, where they're moving along, and what any of the technologies are that are helping with the reclamation of these tailings ponds.

Dr. Kim Kasperski: I can speak to that. First, with the tailings ponds, the water does not evaporate. The water that is recovered as the solids settle is recycled back to the process. That provides a huge fraction of the water used in the process.

As for reclamation that is ongoing, Suncor is currently reclaiming pond 1, their very first pond, the one you see in all the photos. It's right next to the Athabasca River. They're using many methods to solidify that material. In some methods, they're actually pumping out the clay slurry, which is the intractable part of the oil sands tailings. They're using a bunch of other methods to solidify that surface. Once it's solidified, they will put the overburden back on and plant it. They are projecting to have that done by next year. Whether that happens.... That will be the first tailings pond that will be reclaimed. I don't know where they are in their process, but that is the target, I was told.

With respect to other reclamation, there was a tailings treatment process that was introduced, called the consolidated treatment process, and that's a way of getting a rapid solid surface. It's faster than just leaving the tailings as they are. Again, Suncor has filled two ponds with this consolidated treatment process. The water is pumped off to be recycled, and that leaves behind a solid surface.

They did have difficulties with the process, so not all areas of the pond are as solid as they need to be in order to drive a Cat on them, for example, without it sinking, but other areas are. Those are the ponds they're aiming at. They're almost full now. The soft areas will be ameliorated somehow, and I'm not sure how, but the other areas will be reclaimed.

Mr. Kevin Stringer: Just to answer that, again, the mines are only about 20% of the area, but the challenge with the mines is that they produce for a long, long period of time, in the range of 40 years. This is a challenge, so reclamation is an issue.

That said, of the 530 square kilometres that have been disturbed so far, about 65 square kilometres are under active reclamation. The fact that they haven't been certified as reclaimed means that the company is still hanging on to them. Some of that stuff is now forested land again.

So there is important work under way to do that, but the land issue does remain a significant one for us. I think Dr. Kasperski's lab is actually involved in dry stackable tailings.

You may have spoken to that.

Dr. Kim Kasperski: Yes.

Mr. Kevin Stringer: These are a hugely important piece going forward. We believe that the technological improvements that we, the companies, Alberta, and others are working on are what will make the difference in terms of improving the environmental performance over the longer term.

• (1020)

[Translation]

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you, Mr. Stringer.

We now must go to Mr. Ouellet.

Mr. Christian Ouellet (Brome—Missisquoi, BQ): Mr. Burgess, I am still unclear as to what circumstances will trigger an environmental impact assessment. I know you undertake such reviews on hydro power generating stations. It is all very foggy in my mind.

I am going to give you a concrete example and I would like to know if you are going to undertake an environmental impact study. Sweet crude from oil sands is carried to the United States in a pipeline under exclusive federal jurisdiction that crosses the province of Quebec. Construction of a huge pumping station is to start in 2010.

Are there sufficient issues there to trigger an impact review?

Mr. Steve Burgess: Mr. Chairman, I am not familiar with this specific project but if this pipeline is under federal jurisdiction and if it crosses streams, thus risking to impact fish habitat or navigation, this would be enough to trigger an environmental assessment by the National Energy Board, for example.

Mr. Christian Ouellet: Thank you very much.

Mr. Stringer, you are aware of the investments that will soon be made. As you said, they might be delayed by 18 months, but certainly not by 18 years, obviously. How many nuclear power stations would it take to replace the natural gas that is presently being used in the oil sands? I heard the figure of 14. Is this correct?

[English]

Mr. Kevin Stringer: I don't know the answer to the question, if there would be such a thing. What I can say, and I'll take the opportunity to answer the previous question, is that outside energy sources, external energy sources, account for between 10% and 20% of the energy produced, the energy content in the final product. So it is significant, and that's on the question the other member of the committee was asking, but it does speak to this as well.

There are experiments now on a number of different approaches, and I'll ask Dr. Kasperski, who may know these better than I, to discuss these in terms of alternatives to natural gas use in the in situ. There is—

[Translation]

Mr. Christian Ouellet: Excuse me, Mr. Stringer, but I am only allowed five minutes. You said you did not know. I will therefore put my question to Mr. Burgess.

Everybody knows there will be nuclear generating stations. The figure of 14 is being mentioned, but even if there were only two, is it your intention to launch impact assessments of those projects?

We know that we are still unable to control tritium in those nuclear power plants and that it will affect fish. This would obviously affect First Nations and other people, but it seems this is not viewed as important. Is it your intention to undertake an environmental assessment of nuclear power plants?

Mr. Steve Burgess: Yes. Nuclear power plants are regulated by the Canadian Nuclear Safety Commission. The federal government will make a decision about those nuclear plants and assessments will take place. In Ontario, several nuclear plant projects are undergoing assessments, including at Bruce, Darlington and elsewhere.

• (1025)

Mr. Christian Ouellet: When I visited the oil sands in Alberta, all the companies told us that six barrels of water were required to extract one barrel of oil and that this amount could not be reduced. They can't seem to find new ways of doing things.

You said there were other ways of reducing the amount of water required. But the companies told us that it was impossible to reduce this amount.

Where is the technology going?

The Vice-Chair (Mr. Francis Scarpaleggia): Please reply briefly because this question has already been answered.

[English]

Dr. Kim Kasperski: There is water lost due to the settled solids and tailings, speaking specifically about mining issues. The way to reduce that water use is by developing what they call dry stackable tailings. So by treating the tailings immediately to produce a dry solid, we recover twice the amount of water, so the actual loss of water is reduced from four barrels to two barrels per barrel of bitumen produced. That's the main technology that's been developed to address surface mining water use.

As for in situ, they're already down around one, in response to my previous question looking at improved water efficiency, solvent-assisted in situ methods, and so on.

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you.

We'll go now to Mr. Braid.

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

Let me begin by thanking the witnesses for their participation today and their very thorough presentations.

Mr. Stringer, I would like to start with your presentation. I noted with interest that over 40% of the jobs created from the oil sands occur outside of Alberta. I'm particularly interested in those that are based in Ontario and Quebec. I want to ask if you can elaborate a little on the nature of those jobs.

I presume those are 2007 numbers, and I wonder if you can provide some analysis on what impact, if any, the economic downturn has had on the jobs outside of Alberta.

Mr. Kevin Stringer: I believe those are 2007 numbers. Whether it stays at the 41% level with the economic downturn is a very good question. I think it may not stay at that percentage with the downturn. In Ontario and Quebec, we're talking about manufacturing jobs and jobs in steel. There are enormous capital costs for the oil sands for those types of things. We would also speak to pipelines and projects that go from Alberta, across Saskatchewan, Manitoba, etc., and even into the U.S. So those are the types of jobs we're talking about.

Whether they will continue to be in the range of 40% with the economic downturn is a good question. My sense is no, but I'd like to take a look at that. It's something we will be looking at.

Mr. Peter Braid: Thank you very much.

On the water recycling use, according to your presentation it has improved by 75% to 90%. You cited one example where the percentage of water recycled was actually 95%. Could you elaborate a little on that specific example and tell us what makes it unique in terms of its improved water recycling?

Mr. Kevin Stringer: I believe this one involves Imperial Oil at their Cold Lake operation. They're using saline and brackish water. They say they've found a way to get down to 0.5 barrels of water per barrel of oil. That's an in situ operation. So improvements have been made in the total amount. It's largely in situ, as my colleague pointed out, where the water numbers are low.

Mr. Peter Braid: Thank you very much.

There are only certain cases where there are joint federal and provincial environmental assessments. I wonder if you can provide an example or two of joint assessments.

• (1030)

Mr. Steve Burgess: Certainly.

Ordinarily, as we mentioned previously, the oil sands is a provincially regulated resource, and the primary regulator there is the Alberta Energy and Utilities Board, which conducts assessments of oil sands projects from a regulatory perspective, whether they be mines or otherwise.

The federal process is triggered when there's a federal decision to be made with respect to the project—typically, regulatory triggers for oil sands projects. So whenever our process is triggered at the federal level and the provincial process is triggered, then we conduct a joint review. I would say, in the case of the oil sands, virtually all of the projects that are assessed federally are also assessed provincially, and therefore we routinely conduct joint reviews for those projects. Those include, for example, Muskeg River Mine back in 2000, the Jackpine oil sands project in 2004, the Kearl project, which we talked about previously, Muskeg River Mine expansion, and a range of others.

Certainly if you're interested we could provide you a list of projects, but there are many of them. There are probably, I would say, in the order of at least 25 or so projects going back to 1999.

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you. We are out of time, Mr. Braid.

Typically the next question would come to me, but I will be giving my time to Mr. Trudeau, who I believe wants to split with Mr. McGuinty.

Mr. Justin Trudeau: I have a quick question on DFO.

Fisheries and Oceans has a mandate to prevent killing of fish outside of fishing...and it can't harm, destroy, or alter a habitat. Any time a project proposes to do either one, it automatically triggers an environmental assessment. When the environmental assessment comes back and says it's going to do this, at what point is DFO able to enforce and prevent projects from happening? At what point does the minister have to step in and waive DFO's right to block projects like that? And has it happened?

Mr. Ian Matheson: I think what your question gets at is this: when are the cases in which there's a significant environmental impact? That's the term we use to distinguish between what we can live with and what we can't.

Mr. Justin Trudeau: Who decides what you can live with?

Mr. Ian Matheson: It's a scientific analysis, looking at the impact of the project. As I mentioned, in the last four projects that we've looked at, we decided, on the basis of cumulative effects, that the environmental impact could be significant. It's a question of the likelihood of there being a significant environmental impact, and that triggers a process that is in the environmental assessment—a panel process, typically, but it's not always. It's a complex piece of legislation.

Let's take the case of a panel. It's that process that allows a panel to look at it independently and to provide recommendations to the federal government. DFO, as the decision-maker, provides our advice to cabinet. It's a cabinet decision that is taken as to whether to accept the panel recommendations or not. And really that's the mechanism for weighing economic, environmental, and social needs.

Mr. Justin Trudeau: That's fine. Thank you.

Mr. David McGuinty: Can I follow up? I want to go back, if I could, to CEMA. I know you don't work with CEMA.

CEMA is an NGO with 44 members. It was set up in 2000 precisely to deal with the complexity of the challenges inherent in pursuing further development in the oil sands. I understand there have been well over 100 reports issued, and eight management frameworks have been developed for each of your respective agencies or departments to work within.

On October 23, 2008, CEMA wrote to the Alberta government asking for major clarification of whether CEMA actually was in charge. The Alberta government had been bringing in its own land use management plans. It had been bringing in all kinds of new approaches to the region, which were running afoul of, so to speak, or in contrary directions from what CEMA was actually putting forward.

I thought that when CEMA was created in 2000, it was created precisely to address the question, who's in charge here? I thought CEMA was the place where people basically surrendered a certain amount of their sovereignty as agencies, departments, and orders of government to say, if we're going to do this, we have to do this together; we have to do it from a watershed management perspective; we have to do it from an ecosystem management perspective. I'd just like to get some sense, some insight, into whether CEMA is in charge of this development process, or is this a number of federal agencies and departments, provincial agencies and departments, and territorial agencies and departments, who are simply not working together and are working at cross-purposes with each other? I thought we were vesting in CEMA, through a sophisticated 21st century multi-stakeholder process, the jurisdiction to tell us what is working and what's not working.

Can anyone answer that or give me some insight?

• (1035)

Mr. Ian Matheson: I'll take a stab at it.

CEMA is, as you said, a multi-stakeholder organization set up to advise, as I've been told, the Alberta government in its decision-making process. It's a discussion forum to see whether they can reach consensus on how to manage the issues related to the oil sands. In cases where consensus cannot be reached, and I'll give the example of the water management framework, it was the two

decision-making authorities—the provincial government and the federal government—that actually decided what the water management framework should be.

On the basis of that example, I don't think we could say that any authority has been devolved to CEMA. The governments still retain the decision-making authority and are exercising that authority where CEMA cannot help.

Mr. David McGuinty: So it's about taking it all under advisement, then.

Mr. Ian Matheson: CEMA is an advisory body.

The Vice-Chair (Mr. Francis Scarpaleggia): We have to go now to Mr. Woodworth.

Mr. Stephen Woodworth (Kitchener Centre, CPC): Thank you very much. I'm interested in matters similar to what Mr. McGuinty was asking about.

As I understand it, CEMA was set up as a kind of advisory group on watershed management, and I understood that it was to consider all aspects of watershed management. Now, I may be wrong about that, so if I say anything that's not correct, let me know, but I understand that includes both water quantity and water quality, and that one working group of CEMA came up with the water management framework, which in phase one, at least, deals with water quantity only. But there's a phase two, and I thought at some point somebody said that phase two might also address water quality.

So I would like to have a thorough understanding of both the process and the content of the water management framework. I would like to believe that the process was open and consultative and brought in all the stakeholders, and that the content will ultimately address both water quality and quantity. I'd like you to describe that to me, please.

Mr. Ian Matheson: To begin with, the watershed issues related to oil sands are one element of what CEMA looks at. It's the one that I talked about, because that's my world. On the water management framework, that discussion began in one of the working groups of CEMA, but it was concluded by the provincial and federal governments working together.

The considerations as to what to look at in a water management framework include hydrology, biology, geomorphology, water quality, and connectivity.

To answer an earlier question of whether water quality was considered in developing phase one of the water management framework, I see now it was considered, but what they decided to do was focus on more of the hydrology aspects—that is, the volume and flow rate—as being the most significant areas of concern at this point.

In future, for phase two of the water management framework, other elements will be taken into consideration, and I can see now from what has been put in front of me that water quality will receive greater attention in that part of the framework.

•(1040)

Mr. Stephen Woodworth: To follow up on that, I understand that phase one is in effect until the end of 2001 and then there will be a phase two recommendation. I'm assuming that the phase two is therefore in preparation as we speak. But that may or may not be a correct assumption, so I'd like to know a little bit about where we are at with phase two and whether it will address some of the concerns around water quality issues relating to the oil sands.

Mr. Ian Matheson: To be clear, it's in effect until 2010.

Mr. Stephen Woodworth: Sorry, that's what I meant to say. I lost track of what year it is.

Some hon. members: Oh, oh!

Mr. Ian Matheson: There are discussions beginning on how we want to get started on phase two, but I'd say they're preliminary at this stage. Our understanding is that we should be looking at water quality in that second phase, but again it's still early days.

Mr. Stephen Woodworth: I have no sense, when we say "we".... We have a committee here of 10 or 11 people and we get to have five-minute conversations with people. I'm assuming that the development of phase two will involve a raft of experts and scientists who will be able to have more than five-minute conversations with each other. Can you give me some sense of how many people are involved in the preparation of phase two?

Mr. Ian Matheson: Again, we'll look to CEMA, an organization with currently 44 members, to debate and work through these questions with their task groups. Part of what we've committed to with the province—I'm saying DFO and the federal government—on the issue of water management framework is that if CEMA cannot reach consensus on what it should look like, then we will be the backstop to that process. We want this to succeed, and if a decision has to be made, then the two governments will make that decision.

Mr. Stephen Woodworth: All right. Thank you.

The Vice-Chair (Mr. Francis Scarpaleggia): Thank you, Mr. Woodworth.

We now proceed to Mr. Jean, followed by Mr. Watson.

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

I thank the witnesses and Mr. Warawa for inviting me today.

This is not my normal committee, but I do represent the area of eastern Alberta, Fort McMurray in particular, and 30% of Alberta and most of the oil sands. I have some opportunity to know about some of it. I've lived there since before the first oil sands plant started producing in 1967.

My question, first of all, is on the 4:1 ratio that you talked about in water to oil. Are you including recycled in that or is that fresh water?

Dr. Kim Kasperski: That refers to the surface mining water used, and that is all fresh water.

Mr. Brian Jean: In essence, the 4:1 means that the four is fresh water that's being utilized for every barrel of oil produced.

Dr. Kim Kasperski: Yes, it's a water loss through the pores of the settled solids in the tailings ponds.

Mr. Brian Jean: Now, do they recycle that water?

Dr. Kim Kasperski: The water that is released as those solids settle is all recycled. It goes through the process again and again. The problem with that is that the chemistry of it deteriorates over time, but that's the price you pay for the recycling.

Mr. Brian Jean: They do use that water for other things, cooling towers and things like that. Is that correct?

Dr. Kim Kasperski: For cooling towers, heat exchangers, that sort of thing, they use river water and treat it because of the specifications for the purity of water required.

There are pilots looking at using the tailings pond recycled water for heat exchangers and cooling towers. But for that, you need water treatment plants to bring it to the specifications needed for those processes.

•(1045)

Mr. Brian Jean: Now, what percentage of water actually touches oil and then goes back into the river?

Dr. Kim Kasperski: None.

Mr. Brian Jean: It's zero per cent.

Dr. Kim Kasperski: That's what their permissions say. So there's zero discharge of process-affected water.

There's also no discharge of runoff that has touched—what's the proper term?—any land that has been disturbed. So all runoff has to be collected too.

Mr. Brian Jean: And in fact, currently the oil sands plants in northern Alberta have a licence for up to 2% of the flow of the Athabasca River but, in essence, don't even use 50% of that; so they're using less than 1% of the flow of the Athabasca River at this stage?

Dr. Kim Kasperski: It all depends when they're developing. The initial year, they use probably the total of their licence, because they need to build up their inventory. Once they're in production, as are Syncrude and Suncor, they use less than half.

Mr. Brian Jean: Now, currently the weekly flow of the Athabasca, for instance, is somewhere between 200 and 2,600 cubic metres per second. Is that correct?

Dr. Kim Kasperski: I don't have those numbers in my head.

Mr. Brian Jean: I'm referring to a report called *Environmental Challenges and Progress in Canada's Oil Sands*. But it's fair to say it goes down to a 10% flow from 100% capacity during the season, depending on when it is.

Dr. Kim Kasperski: It varies tremendously from season to season. But regarding exactly what the percentages are, I would have to consult.

Mr. Brian Jean: But it does vary tremendously?

Dr. Kim Kasperski: Yes, it does from winter to summer to spring.

Mr. Brian Jean: And in fact 2001-02 was a peak year, almost double the other years. Is that fair to say?

Dr. Kim Kasperski: I don't know.

Mr. Brian Jean: I would provide this report to anybody who is interested, Mr. Chair. It indicates the water flow and some of the peak years that we have had.

Now, is it also true that there are approximately 46 sites that constantly monitor air and 16 sites that constantly monitor water, or that they do seasonal monitoring on the water in the area?

Dr. Kim Kasperski: I think that would be Alberta Environment and probably Environment Canada that do that, so I'm not aware of the number of sites. I do know that there is air monitoring and there is water monitoring, but I can't tell you how many—

Mr. Brian Jean: It's done on a constant basis, though, as far as you know. Is that fair?

Dr. Kim Kasperski: Some are monitored constantly.

Mr. Brian Jean: Now, I fish and hunt a lot in northern Alberta, and I have for about 40 years. My family does it as well.

I wonder how you balance the fish deaths with the project. That's what was mentioned by DFO. I'd like to see a lot more northern pike gone, to be honest, because I can't throw my line out without catching a couple every time. But how do you balance that situation? For instance, in Fort McMurray and that area, the oil sands produce about 6% of the GDP. And we had 500 ducks that died recently in the pond, but we have, for instance, 6,000 birds that are killed every year by hitting the skyscrapers in Toronto, and 200,000 are killed by hitting windmills across North America.

So how do you balance that, compared to what's happening, for instance, in Toronto with the birds that are hitting skyscrapers?

The Vice-Chair (Mr. Francis Scarpaleggia): To ask the question is to almost answer it. But if you wish to—

Mr. Brian Jean: It's a fair question. He talked about balance and—

The Vice-Chair (Mr. Francis Scarpaleggia): It is a fair question, but I think it's pretty self-evident. But if anyone wants to take a stab at it, please go ahead.

Mr. Ian Matheson: I do so at my peril, I guess.

Mr. Brian Jean: I am interested. I'm fishing for some information.

Mr. Ian Matheson: The comparisons between what happens with birds in Toronto and what happens with fish in oil sands are not what we get into. But there are many factors considered when we're trying to figure out how much is enough. And one of them I mentioned earlier was how much an ecosystem could sustain. We're interested in that question.

We're also interested in the uses of the fish. And this is where aboriginal subsistence uses or cultural uses of fish are important for us to be aware of, and that's kind of why we undertake the aboriginal consultations. I know in the oil sands area there is also an aboriginal fishery. There are people who catch fish and sell it for a living.

Mr. Brian Jean: You're talking about in Fort Chipewyan?

The Vice-Chair (Mr. Francis Scarpaleggia): We've run out of time, but you've navigated that question, I think, very well.

Mr. Brian Jean: Mr. Chair, I'm just wondering about something as well. Mr. Trudeau had a question about energy used to produce oil. Now, I'm just wondering if the witnesses are going to provide that information. If we could have, from start to finish, before it's consumed—

The Vice-Chair (Mr. Francis Scarpaleggia): Absolutely. I think you're right.

Mr. Brian Jean: I think a lot of the reports seem to ignore the pipeline issue compared with trucking. Obviously it's a very similar thing for conventional oil once you take into consideration the transportation of it by truck compared to pipeline, because it's much more efficient for the oil sands oil to be transported. So I'd like that information.

The Vice-Chair (Mr. Francis Scarpaleggia): Sure, could we get an accounting of the energy used to produce oil sands oil, looking at comparative scenarios?

• (1050)

Mr. Kevin Stringer: I started to say that between 10% and 20% in the end use is input in terms of energy, but we could get the specifics on start and finish, a sort of life cycle.

The Vice-Chair (Mr. Francis Scarpaleggia): You could send that to all members through the clerk.

Mr. Justin Trudeau: And sources as well; for example, natural gas.

The Vice-Chair (Mr. Francis Scarpaleggia): Okay, that brings us to Mr. Watson.

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

I think many of my issues have largely been settled here. I'd like to give my time to Mr. Warawa, if I could. I understand he has a few more questions.

The Vice-Chair (Mr. Francis Scarpaleggia): Go ahead, Mr. Warawa.

Mr. Mark Warawa: Thank you so much.

This is a question to Madam Kasperski.

Back in June I asked a similar question of Mr. Stringer regarding using carbon capture and storage and injecting carbon dioxide back into the ground. I asked if it would enhance oil recovery using in situ. Mr. Stringer said, "Good question. I can't answer that", and he then deferred to Dr. Hamza. Dr. Hamza then said it does.

What has happened in Weyburn, actually, although we're getting the carbon dioxide from North Dakota, is that there's an experiment to see how it works. The advantage with Weyburn is that we know the base information, and when we put the carbon dioxide in, we can see the effect of the carbon dioxide. Your objective is to store it for a long time. But you should understand that when you put carbon dioxide into the oil, some of it stays behind and some of it comes back with the oil. So it is extracted and recycled again, and like the water, you make up the difference with this. It reduces the viscosity of the oil.

So is that the same science, that we're talking oil and bitumen? Dr. Hamza is saying that carbon capture and storage enhances the recovery with in situ. I think you said the opposite, so I want a clarification.

Dr. Kim Kasperski: When we're talking in situ, when that term is thrown around, that's in situ development of the oil sands. The Weyburn project in Saskatchewan is conventional oil and heavy oil. I'd have to clarify whether it's actually heavy oil or oil. It's not oil sands in which the CO₂ is being used—to the best of my knowledge.

Mr. Mark Warawa: So the question was specific to in situ, and Mr. Stringer deferred to Dr. Hamza, and he then said....

Maybe you could provide some further clarification on that.

Dr. Kim Kasperski: Definitely.

Mr. Mark Warawa: The other question is again on using carbon capture and storage. If we use in situ, right now it produces more greenhouse gas emissions than open pit. Is that correct? As we are expanding in situ, you still have the trees and the forest. It's putting pipes into the ground—anything below 75 metres, I think, was what you testified before. So as we are using more in situ, you don't have the disturbance of ecology above the ground, but you then put the pipes underground.

But you do at present create more greenhouse gas emissions, is that correct?

Mr. Kevin Stringer: Yes. The in situ is lighter on the water and heavier on the GHG emissions.

Mr. Mark Warawa: Okay. Now, as we bring in carbon capture and storage, it reverses that and it becomes a much cleaner way of retrieving the—

Mr. Kevin Stringer: The Government of Canada believes that carbon capture and storage is a hugely important technology moving forward. It is a new technology. It is a technology that needs to be proved up. It's a technology that's further advanced for coal-fire-generated plants, but it's a technology that we believe will be essential for the oil sands, particularly around upgraders but also around in situ—hence the investment in terms of demonstration projects to move in this direction. We think it will be essential.

Mr. Mark Warawa: Mr. Stringer, with the clean energy dialogue with President Obama, again, they need to deal with their coal, and we are looking at carbon capture and storage for dealing with the oil sands. They're focusing on the coal, and together both the United States and Canada are providing billions of dollars for that technology. Do you see that moving forward much more quickly in a positive way?

Mr. Kevin Stringer: It is moving forward. The \$1 billion that we have, the funds that Alberta has announced, means that Canada is at the leading edge at the carbon capture and storage demonstration stage. It does take time for this stuff to be demonstrated. The costs are very high for this, but the sense is that the cost will come down with demonstration. We'll be able to see which technologies work best. We'll be able to test how best to bring down the costs, and we do think it is a way forward.

It is not just for oil sands and coal-fire-generated plants, but those are two obvious areas where there's an important requirement for that. It's for industrial uses generally.

• (1055)

Mr. Mark Warawa: Okay. And I have just one quick comment, Chair. I've asked this to be passed on—

The Vice-Chair (Mr. Francis Scarpaleggia): We'll get to that in a second.

Mr. Mark Warawa: Later? Okay.

The Vice-Chair (Mr. Francis Scarpaleggia): I would like to thank our witnesses for their excellent presentations. I think we learned a lot from this session. I think it's the second time some of you have appeared, and we appreciate your time.

Before we adjourn, I have a couple of items that, with your permission, I will raise. I believe we only have two groups of witnesses next week, so I was thinking, given that we've discussed CEMA quite a bit, that with your concurrence we could invite them to appear next Thursday, along with Health Canada and Environment Canada. Is there any objection to that?

Ms. Linda Duncan: With all due respect, Mr. Chairman, CEMA has come under considerable criticism as a process. All but one NGO have pulled out, all the first nations have pulled out. Even the senior advisers to the Government of Alberta have recommended that there not be reliance on CEMA any longer. I'm frankly amazed to discover that DFO is relying on CEMA. If we're going to look at those, I want to have some assurance that we're going to hear from the NGOs and the scientists who have raised the concerns about the processes we're relying on.

The other one would be RAMP. Mr. Woodworth had a very good question. It's my understanding that RAMP is doing the water quality and water quantity studies. That's a 100% industry-funded program, whereas CEMA does biodiversity, air pollution, everything. So we might want to be looking at—

The Vice-Chair (Mr. Francis Scarpaleggia): Yes. I'll go to Monsieur Bigras, but maybe this isn't as simple as I thought it was.

Monsieur Bigras.

[*Translation*]

Mr. Bernard Bigras: I agree with Ms. Duncan. CEMA is funded in large part by the industry. Furthermore, it is greatly supported by the government of Alberta. I would prefer to hear the views of scientists and NGOs, rather than of representatives of CEMA. If we bring in CEMA, we will hear the position of the industry.

The Vice-Chair (Mr. Francis Scarpaleggia): For next week, we will stick to Environment Canada and Health Canada.

Mr. Warawa has an announcement to make.

Mr. Warawa, you have the floor.

[*English*]

Mr. Mark Warawa: Yes, and regarding CEMA, I would agree they should be here at some time, but maybe not—

The Vice-Chair (Mr. Francis Scarpaleggia): Maybe when we go to Calgary.

Ms. Linda Duncan: What is CEMA? Do you want the executive director? Do you want all the members?

The Vice-Chair (Mr. Francis Scarpaleggia): We can discuss that I think at steering committee, but for now I don't think we should invite them, as you say, for next week.

Ms. Linda Duncan: Unless CEMA is now with Industry.

Mr. Mark Warawa: Thank you, Chair.

I've asked that this be passed out to all members of the committee. The House leaders have all agreed to pass the National Cemetery Act of Canada by unanimous consent, but it requires each of us to review this document. So perhaps you would at your earliest convenience.

The Vice-Chair (Mr. Francis Scarpaleggia): Is there a motion to adjourn?

Ms. Linda Duncan: I don't understand what he means, that it requires us to review it.

The Vice-Chair (Mr. Francis Scarpaleggia): I guess they've asked all members of Parliament to look at this kit as one of the conditions for unanimous consent. Is that correct?

Mr. Mark Warawa: Not at this committee, but—

The Vice-Chair (Mr. Francis Scarpaleggia): On our own?

Mr. Mark Warawa: On your own, and we are seeking unanimous consent.

The Vice-Chair (Mr. Francis Scarpaleggia): Okay, thank you.

The meeting is adjourned.

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