



House of Commons
CANADA

Standing Committee on Natural Resources

RNNR • NUMBER 048 • 1st SESSION • 39th PARLIAMENT

EVIDENCE

Wednesday, May 9, 2007

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Chair

Mr. Lee Richardson

Also available on the Parliament of Canada Web Site at the following address:

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• (1530)

[English]

The Chair (Mr. Lee Richardson (Calgary Centre, CPC)): Ladies and gentlemen, we will begin the 48th meeting of the Standing Committee on Natural Resources. I welcome committee members and the crew here up front on our continuing study on the greening of electricity consumption in Canada—natural gas and cogeneration.

Our witnesses today are from the National Energy Board. We're welcoming John McCarthy, business leader in commodities, and also Bob Modray, technical specialist, economics and energy analysis, in the commodities business unit. In addition to that, we will also hear from the Forest Products Association of Canada, Avrim Lazar, the president and chief executive officer. Welcome.

We are, as you'll note, televised today, so just to those millions in the viewing audience across Canada and around the world, I'll explain that many of us are wearing a carnation today for multiple sclerosis. So that explains that to those television viewers on CPAC, the Internet, and around the world.

We will begin today with opening statements from our witnesses. We're asking you to try to keep it to about ten minutes each, at which time we will proceed with questions.

We decided we were going to start with the National Energy Board, I think. For the National Energy Board, then, John McCarthy. John.

[Translation]

Mr. John McCarthy (Business Leader, Commodities, National Energy Board): Mr. Chairman, thank you for inviting me to speak to the committee.

You have invited us here to speak about cogeneration, or the simultaneous production of thermal heat and electrical energy. While cogeneration is not the main focus of our work, it is nonetheless one of the many factors to be considered in our market and energy analyses. We are planning to publish one of these analyses, the Report on Energy Futures, in October 2007.

[English]

Like many of the reports of this nature, it is a long-term balance of supply and demand in Canada, going out to the year 2030.

We have a number of other studies that we have conducted over the years, and I've distributed to the members of the committee a list of those studies. The ones I'd like to draw attention to, which will be the basis of our remarks today, are a study on emerging technologies

that was conducted in June 2006 and a report that we completed on the challenges related to oil sands, which we produced in October. We were here with the committee in October to discuss that report.

We undertake all this work in the context of our mandate under the National Energy Board Act. Today I'd just like to very briefly touch on our mandate. I'm sure most of the committee is very familiar with it, and I won't go into great detail. I'll talk briefly about cogeneration, and my colleague Mr. Bob Modray will focus more on some sectoral and regional aspects of cogeneration, some benefits and challenges that come from the work. Then we will talk a little bit about our ongoing work on energy futures, which I referred to earlier.

Firstly, with respect to the National Energy Board, we are an independent federal tribunal. We are located in Calgary. We have been there since 1991.

Our responsibilities are twofold: regulatory as well as advisory. It's in the construct of the advisory role that we're here today, primarily talking about how we monitor energy markets and how they're functioning, and we produce a number of reports.

Just moving on to cogeneration, the focus of our comments today, it really has to do with the simultaneous production of thermal heat as well as electric energy, and it's often referred to as combined heat and power. Generally speaking, conventional power plants will emit a fair amount of heat that's created as a byproduct in the production of electricity, and cogeneration systems are a means to capture that lower-grade heat and turn it into a useful purpose, such as paper drying from the chemical processing, or space heating. The important thing is that you do need a use for that heat in order for cogeneration to work.

The next two slides are really just a very simplified process of how that heat is captured and reused. Essentially, you can take a standard thermal generation station from an efficiency of about 35% of the usage of the heat, and through cogeneration you can bring it up to 75% efficiency. So it's a significant gain as far as the reduction of waste heat and the use of that energy.

With that, I'll turn it over to my colleague, who's one of our senior economists who has been focusing mostly on electricity markets.

Bob.

• (1535)

Mr. Bob Modray (Technical Specialist, Economics & Energy Analysis, Commodities Business Unit, National Energy Board): Thanks, John.

What I would like to do over these next few slides is give a bit of the sectoral and provincial perspective, and, as John mentioned a little earlier, some of the benefits and challenges associated with cogeneration. Then I would like to bring it back to some of the long-term outlook work that we're doing.

I'm on slide 8 now. With respect to the sectoral applications, cogeneration currently occurs mostly in the industrial sector, in the industries indicated here. Somewhat less than commercial, this is more in the institutional setting. There are very limited, if any, commercial applications right now in the residential sector. As mentioned, electricity is often a by-product of the primary uses for process and heat in a lot of these sectors.

Regionally, cogeneration occurs on a volume basis. It's obviously predominant in some of the gas producing and consuming regions, Ontario and Alberta. With respect to B.C. and some of the eastern areas, there are fairly big applications in the forest industry.

The main fuels tend to be biomass or wood waste in the forest products area. Natural gas is increasing. Of course one of the big emerging uses—and I'll talk a bit about that later—is in the oil sands.

Going down the road, with respect to emerging technologies, we have tremendous waste heat being produced from fuel cells and coal gasification, which could also go into a combined cycle mode.

In terms of the benefits of cogeneration, there's a clear efficiency benefit that translates eventually into lower energy costs and lower emissions. From the standpoint of a producer, it can provide him with energy system reliability, and from the social standpoint, system security.

To the extent that we get into going down the road of more uses for distributed generation, say in an urban setting or in some of these bigger institutional settings, we can see cogeneration being an enabler to allow those distributed generation systems to occur.

With respect to the challenges, one of the big things with respect to cogeneration is that you've made an investment in these facilities, and if you're using something like natural gas or another fuel that has volatile prices, then you could be in a situation of not making the return on your investment.

Some of the other challenges we've listed here are ones we noticed in a study John referred to, which we released about this time last year. It was entitled "Emerging Technologies in Electricity Generation". There are such factors as sometimes cogenerators cannot always access their markets. At other times, there are difficulties in obtaining access to the transmission grid.

It's sometimes stated that some of these technologies have social and environmental benefits and perhaps they are not able to capture the value of that. Perhaps there should be some sort of environmental premium attached to them.

When it comes back to large-scale application, say in the commercial sector, perhaps even in the residential sector too, so far in Canada and North America overall, there has not really been a lot of the coordinated planning that needs to be happen in an urban setting. Perhaps that's something that will be there in the future.

With respect to the oil sands, this is one area that has really been growing. I'm sure members on this committee know that we currently produce close to a million barrels a day. The study we did last year indicated a future range of something like two million to four million barrels over the next ten years.

Coming along with that will be tremendous process heat and opportunities to produce electricity in that cogeneration mode.

● (1540)

One interesting thing about the oil sands use is that a few years ago the producers wanted to size their facilities more for their own heat and power requirements. There was the real prospect of making a lot of power available—oversizing the cogeneration units and shipping that power south. Although that idea is still there and still a prospect, it seems to be less of one than it was a few years ago.

Another issue with the oil sands as a fuel source is the higher gas consumption coming very soon. I think there will certainly be other options pursued there. One of the most recent has been talk about nuclear in that area. It's quite speculative at this point.

On program incentives, I have a page here on some of the federal programs that are available through taxation, and some direct assistance as well. The provinces have some programs geared for cogeneration as well, through direct purchases that some of them are arranging.

On our energy futures work, a report will be coming out in October. We've consulted quite broadly across the country. We've had two rounds of consultations on this document.

We're basing it on three scenarios. We've represented the scenarios in terms of price tracks on slide 14. We have a reference or continuing trends case, with prices receding to the \$50 range in the future. We have what we call a fortified islands scenario that results in a higher price track—over \$80. Then we have what we call our triple E scenario, where we have a balance between energy, economy, and the environment. It shows higher prices initially but then receding, with a number of options available relative to the current conventional fields.

On the next slide we show those prices and the implications they have through the pricing system for the other main energy products—coal, natural gas, and the renewable fuels. Based on that we've done a preliminary projection. We still have some work to finish it up, but this is what we were talking to people about in our last round.

I guess what's evident on this chart is that all scenarios show significant growth in electricity demand. The other thing that stands out is that hydro will continue to dominate over the next 25 years or so. Particularly in the triple E case, we see more of the emerging technologies. One of the big ones there is wind, growing rapidly from less than 1% now to perhaps 11% in the triple E case.

In the other scenarios we have variants on that, obviously less in the case of the fortified islands, which has more traditional fuels; and continuing trends where we are today, moving ahead more gradually with respect to those fuels.

Overall we would look to something like a triple E scenario that has more emphasis on efficiency, and this balance being more amenable to a cogeneration situation.

• (1545)

Mr. John McCarthy: I just want to summarize our thoughts here. First, we feel that cogeneration offers significantly improved efficiency in energy use. It can reduce the demand for primary fuels, reduce emissions per unit of energy consumed, and make lower-cost power available.

There are also the benefits of more diverse sources of energy, with diversification in the locations of energy generation. But there are associated risks with respect to capital costs and price volatility when you're working in two markets—a heat market and an electricity market.

The opportunities vary significantly from coast to coast and are dependent upon a need for the waste heat that's located where you're going to be generating the electricity. The oil sands is a good example of where that waste heat will be needed. Finally, it complements strategies toward distributed generation.

Mr. Chairman, I hope that gives you an overview of cogeneration.

In speaking with the researcher in advance, he mentioned that there may be some interest among committee members in natural gas. The last slide shows the same scenarios but with Canadian gas production taken out, so you can see what our view is there.

This again is preliminary work. We're finalizing it and incorporating the consultations that are just concluding. We will be publishing in October. I would be more than happy to come back to meet with the committee at that time to present our final results.

The Chair: Thank you very much. I appreciate the work that goes into these graphs and charts. It's very helpful for us to have empirical data to work with here in the committee.

We'll get to questions, but first I think the committee would like to hear from the Forest Products Association of Canada and Mr. Lazar.

Mr. Avrim Lazar (President and Chief Executive Officer, Forest Products Association of Canada): Thank you.

I can't help but remark that it's quite charming to see so many carnations. Not since my high school prom have I seen so many people dressed like this. When I came in, I thought no one told me about the dance and you guys had all rushed in from some prom to do this.

Thank you for inviting us. The Forest Products Association of Canada represents the industry from coast to coast: lumber, wood,

pulp and paper. I've come here to give you some good news, in fact some great news: that it is possible to generate green energy. It's possible to be environmentally responsible and it's possible to make a buck while doing it. Cogeneration in Canada's forest industry is the example of that good news.

We have switched our fuel usage to renewable biomass, sawdust, bark, chips, stuff that would otherwise have gone to landfill. When we did this, we reduced what goes to landfill by 40%, stuff that would have rotted in the ground.

We have reduced our greenhouse gases by 44%, not in intensity but an absolute reduction, and 54% in intensity. We've reduced our air pollution by 70% and we've improved our cost-effectiveness, because we are no longer dependent upon fossil fuels. Our fossil fuel use is down by 45%, and we're now at about 54% cogeneration.

So instead of bemoaning the price of fossil fuels, instead of polluting through the use of fossil fuels, we've switched to renewable biomass. We use what's at hand and we are now generating enough clean, green energy just in our mills to replace three nuclear reactors. We generate enough electricity just in our mills to power all of Ottawa-Gatineau, and we're not stopping there.

Our intention is to become energy self-sufficient. Our intention is to export green energy to the communities where we work. So instead of sending expensive energy through long grid lines from some coal or nuclear plant in southern Ontario or southern Quebec, our plan is to work to the point where our mills generate not only enough energy to run the mill, but also to run to the nearby town and thereby have a more sustainable, affordable, and environmentally responsible approach to energy generation.

All of this will be done through industry innovation, through business innovation. It's not through regulation, not through government intervention, but by business, by local communities finding solutions that work using materials at hand.

We can go further, of course, and faster if the policy climate favours us: if there's a robust trading regime for greenhouse gas credits so that we can use that to help finance new boilers; if all renewable energy, not just wind and solar, is recognized in government programs; and if the accelerated capital cost depreciation is extended from two to five years. All of these things would make it possible for us to speed up this good news revolution by retooling our mills still faster.

But even if government does nothing, we will continue down this road, because it makes sense and because we didn't wait for regulation to start and we're just going to do the right thing regardless.

Thank you so much for inviting us, and we're ready for questions.

• (1550)

The Chair: Thank you very much for the great sustainability report. I think you were just busting to find a place to tell people, and we're glad to be the audience, because it's very impressive. Thank you also for getting us back on schedule in terms of time.

I think we will move to questions. I will just ask the committee again, because we have a shortness of time today, that we're going to pretty carefully try to keep it to about a five-minute question. That way, we can get through everybody once.

I'll begin with Mr. Tonks.

Mr. Alan Tonks (York South—Weston, Lib.): Thank you, Mr. Chairman.

Thank you to the energy board representatives and to Mr. Lazar for being here.

This is good news that comes from the forestry industry with respect to cogeneration and the reduction from natural gas, because where we have travelled, and particularly in Fort McMurray, at the oil sands, that's been a major challenge.

Mr. McCarthy, you mentioned nuclear. We think there are some inherent problems with respect to the interface between nuclear and the energy requirements. But having said that, my first question is to you, Mr. McCarthy. This report that's coming out in a matter of months, will this be your strategic plan based on different scenarios for a projected long-term implementation of alternate and renewable energies?

• (1555)

Mr. John McCarthy: Yes, but I'd probably phrase it a little differently. We use scenarios because we can't predict the future. We can't predict the policy or environment that we're going to be working in, particularly up to the 2030 timeline, so we create a scenario.

We have created three scenarios to kind of give us a balance, a spread, if you will, of what's possible. Through that analysis, we hope that we can identify pinch points, identify things that are common across the scenarios, identify things that influence one scenario over another, and then try to understand the system a little better.

Mr. Alan Tonks: Do you have some concern with respect to decisions that may be made now that will pre-empt the findings or

the strategic positioning from that report's perspective? I'm thinking of, for example, decisions being made—apparently as we speak—with respect to the nuclear alternative in the province of Ontario.

Mr. John McCarthy: We don't necessarily choose one option over the other. It is difficult for us to model. One scenario we have is what we call “continuing trends”, which takes into account all existing policy decisions. Those are changing rapidly. We're trying to model that.

So that does make it difficult for us, but I think our work will help to give people a sense of what might be the long-term implications of some of these decisions, or what might be the pinch points that perhaps wouldn't be considered.

One thing that I think is unique about our work is that we do integrate all energies. We look at it with a completely holistic approach with respect to energy. That's unique in the Canadian economy or in the Canadian resource review.

Mr. Alan Tonks: We have been informed, through one of our briefing documents, that the consumption of energy has risen 22% in Canada from 1990 to 2004. We have been listening to municipal applications with respect to innovative renewable technologies in subdivisions, in geothermal applications for heating water for residential and industrial use, and a number of other things.

My question is twofold. One, what scenario do you think is most reasonable, against conservation and so on, with respect to the percentage increase in terms of electrical energy requirements? Second, do you see a major impact made through local applications—for example, energy conservation, the EnerGuide programs, both residential and industrial applications? Do you think we're on the path to a reasonable match in terms of the projections of electrical requirement and the actual implementation of new technologies?

Mr. John McCarthy: One thing we do with our scenarios is that we do make a balance. We do make demand and supply meet. That's one of the outcomes that happens in all of our scenarios.

You asked me a couple of questions there. One was with respect to whether the increase is reasonable. I'm not familiar with the data you referred to, and I couldn't say exactly what the numbers are that we're using. But one thing we do note is that there seems to be a very strong link between energy usage and GDP growth. As we all get a little more wealthy as a country and as an economy, we tend to use energy a little bit more. So we tend to see there is an overall linkage towards those.

At the same time, we're seeing a significant improvement in efficiencies. Energy use is still growing. It's not growing as fast as GDP, but it is growing, and it's growing faster than population. If you look at it, it's sort of between the two.

With regard to the percentage, if we're talking about the energy needs increasing over time, I think that's true; they will increase over time, and that's what we indicated. We just looked at the electricity demand aspect in our slide. You can see there's quite a significant growth. From now until 2030, I think in one case there was a 25% increase up to about a 50% increase in energy demand over that period of time. And that's only electricity; there are other forms of energy as well, of course.

The other thing to note is that where you source that energy changes. It doesn't change significantly, but there are shifts. For example, in one of the scenarios, we had a significant growth in wind contributing to the larger consumption needs in that period of time up to 2030.

So to answer your questions, it's a bit of both; it's both.

•(1600)

Mr. Alan Tonks: Thank you.

I had a question, Mr. Lazar, but we'll get it in next time, perhaps.

The Chair: Right. We'll hopefully get to another round.

Now I'm going to go to Madame DeBellefeuille, for *cinq minutes, s'il vous plaît*.

[Translation]

Mrs. Claude DeBellefeuille (Beauharnois—Salaberry, BQ): Any time I have remaining I plan to split with Mr. Ouellet.

Mr. Lazar, it is refreshing and reassuring to hear an association of forest producers tell committee members that it has succeeded in achieving an absolute reduction in greenhouse gas emission and pollution levels. This has translated into lower energy costs for you. People had been predicting a catastrophe if the government opted to go with absolute reduction targets. It's interesting to see that it's possible for an industry to achieve these targets and to come out ahead of the game.

You wrapped up your presentation by making some fairly specific requests of the federal government. What are you asking for exactly, in dollar terms, to move ahead even more quickly with cogeneration development? What type of incentives are you looking for from the federal government to further develop your cogeneration network on an industry wide basis?

[English]

Mr. Avrim Lazar: The first thing that would help the law would be to take.... I'll explain what it costs. To replace a boiler costs between \$30 million and \$80 million. In an industry that is suffering the economic hardship our industry is suffering, getting that kind of cash is very difficult. So even though it's

[Translation]

profitable in the short, medium and long term, initial start up capital must be found. The government has introduced a measure that helps us a great deal, namely an accelerated capital cost allowance provision. However, the measure is only good for two years. That's not enough time to implement these changes. We're asking that this measure be extended for a period of up to five years.

The government has also introduced another very useful measure.

[English]

That is a recognition of renewable energy from solar, wind, or cogeneration, I think of about 1¢ a kilowatt-hour. But the total money available for it is quite constrained. An increasing of that pool would make it easier to increase the number of projects we could undertake.

In addition to that, the new technology necessary to do this

[Translation]

does exist, but more effective and cost-efficient technology is being developed and should be available shortly. Ramping up investment in renewable energy technologies would also be very useful. On that score, we have no complaints about the government's efforts. I think that it's doing a good job and that Mr. Lunn will do his share as well. However, it's only a first step and much more needs to be done.

Mr. Christian Ouellet (Brome—Missisquoi, BQ): Mr. McCarthy, I have here in my hands a chart that shows the prevailing trends. Could you explain to me the significance of the line in the middle of the chart?

•(1605)

[English]

Mr. John McCarthy: The line you're referring to is the production of gas from Canada. As a bit of background, the majority of Canadian gas currently comes from the western Canada sedimentary basin, and the basin is mature, in that the ability for the basin to increase its production is very much dependent upon the economic incentives, if you will, or the environment, including price, that's provided to the folks who produce that natural gas.

In the scenario here, we have reflected a steady state as far as level of price and level of activity are concerned. We can see that if that assumption continues, we will continue to see a slow decline in western Canada sedimentary basin gas.

[Translation]

Mr. Christian Ouellet: The green line at the bottom is the cogeneration line.

[English]

Mr. John McCarthy: No, the green below is.... One thing I should say is that this is "all of Canada" natural gas. I've been focusing on the western Canada sedimentary basin, but it is all of Canada.

Concerning the green line, you may remember from the scenario that we used a much lower price for energy. At the lower price there was less activity. With less activity you have a steady decline in the amount of production of natural gas from Canada. One of the assumptions that's part of this scenario is that the decline in natural gas from Canada is made up with natural gas sourced from elsewhere in the world through liquefied natural gas. That is part of this scenario.

The big story from this is that there isn't a huge amount of new natural gas within Canada. There is an ability to increase it, but it's limited. Even maintaining it will be difficult.

[Translation]

Mr. Christian Ouellet: Thank you.

[English]

The Chair: Monsieur Ouellet, perhaps you can continue this in the next round.

Mr. Bevington will speak on behalf of the NDP in the first round. Mr. Bevington.

Mr. Dennis Bevington (Western Arctic, NDP): Thank you, Mr. Chair.

Thank you, presenters.

I'm looking at the electrical generation graphs you've created here, and I'm thinking of the work that's gone on in Parliament around the development of the greenhouse gas target reductions for, say, 2030. All parties have basically accepted a very significant decrease in greenhouse gas emissions from all sectors by 2030.

Where does this show up on your graph and in your thinking about where energy is going in Canada? If it doesn't show up there, does that suggest you're not able, without some kind of instruction about the nature of our energy system going into the future, to come up with projections that would actually show us where we have to go?

Mr. John McCarthy: That's a very good question.

Time is very important when we are doing this work. This document comes from our consultation document, which we consulted with over the period probably from March to.... It's ongoing. Since then, the policy environment has changed significantly, and what we thought was a rather aggressive policy environment when we were setting it out turns out to be in fact a little soft compared with what people are actually moving towards. When we are re-doing our numbers, first of all in the triple-E scenario, for example, which is our most aggressive policy scenario, you will see some shift.

Mr. Dennis Bevington: You have the total energy produced by electricity going up by almost 70%, and you've maintained about the same proportion of it being produced with carbon dioxide emissions. Unless you accept that carbon sequestration is going to be the order of the day in all of that sector... Have you priced it into the projections you're putting into that sector?

• (1610)

Mr. John McCarthy: Yes, but first of all this is just the generation; it doesn't detail the emissions. There is an aspect in here that talks about carbon sequestration and what the effects would be if it were to be included in this.

In the triple E scenario, as I said, we put together what we thought was an aggressive policy package of different things that have been tried and used around the world, to help us do our modelling. In there is a carbon tax that's progressive over time and is included in this scenario.

All that is to say that when we do it again we'll probably have a little different configuration of the pie, and it may also be a little smaller.

One thing to note, though, is that we have a very strong momentum in this country and in the economy with respect to a hydrocarbon-based energy system. We have a lot of hydrocarbons, we use them, there's a significant investment made already in plants that are operating, and it would be difficult to change it.

Mr. Dennis Bevington: Wouldn't that suggest, if we are serious about making significant reductions in climate change, we need right now some form of national energy strategy that sets out targets for renewable energy to be produced in this country over the next number of years that will actually guide industry in a new direction?

Mr. Avrim Lazar: If I can just jump in this for one second, what we have to do is go from stale hydrocarbons, which are fossil fuels, to fresh hydrocarbons, which is biomass. Any sort of national energy policy that would integrate the role of biomass and other renewables with the sustained role of other carbon sources would be a useful guidance, not just to industry, but to all of Canada.

Mr. Dennis Bevington: The question I'd have for you, sir, is this. You're talking about forest products and the use of biomass. I've seen the European plants, the coal-fired plants that are running pellet streams from Canada. They're shipping pellets to Europe to maintain a clean energy balance in their plants. They don't have to retool the whole industry. They don't have to spend a lot of money on it. They just need the product in order to move ahead with it. Wouldn't you say that in your industry you need to look outside just providing the energy for your own particular internal uses and look at the larger market that exists in Canada for converting other forms of energy to biomass?

Mr. Avrim Lazar: And we are looking at a broader market for the biofuels. That being said, we wouldn't like to reach the point they have in Europe in which the subsidies make it more profitable to burn the wood than to turn it into paper and wood products. It's not good for jobs because there's a lot more value added, and it's not good for the environment.

Mr. Dennis Bevington: Well, there is one other question that might lead from this. We're looking at renewable fuels for putting in automobiles. At great expense we're converting a biomass or a renewable fuel into a form for motor fuel, whereas we could simply, if we wanted to reduce greenhouse gas emissions, use it in a thermal situation in other places. Don't you agree?

Mr. Avrim Lazar: I won't comment on that, because it's outside the range of what we lumberjacks are expert in, but probably a better thing would be to have cars that run on wood. You could stop by the side of the road, pick up some logs, and just pop them in.

Some hon. members: Oh, oh!

Mr. Dennis Bevington: Well, we can be facetious about this, but, I mean it's—

Mr. Avrim Lazar: No, I'm serious.

The Chair: Thank you, Mr. Bevington and Mr. Lazar.

We're going to have to move along. I'm going to go to Monsieur Gourde.

[Translation]

You have five minutes.

Mr. Jacques Gourde (Lotbinière—Chutes-de-la-Chaudière, CPC): Thank you very much, Mr. Chairman.

Based on your experience, can you predict when renewable energy sources will be sufficiently developed to the point where demand for traditional energy sources will decline?

[*English*]

Mr. John McCarthy: Our work has indicated that it will always be—and again, “always” is a very strong word—a mix going forward. Certainly the policy environment as well as the price environment that we're in now provides incentives in many areas, as the forestry folks were talking about, to move into more renewable sources of energy. So there isn't exactly a point in time when we start to decrease as far as our reliance on fossil fuels.

• (1615)

[*Translation*]

Mr. Jacques Gourde: How does the price of electricity in Canada compare to the price charged in other countries? Right now, the hydroelectric industry is more competitive than the wind energy industry. In view of competitive energy prices, if electricity costs increase over time, what kind of prices would we need to see in order for the wind energy industry to take off?

[*English*]

Mr. John McCarthy: I'll ask my colleague Mr. Modray, who has spent a fair amount of time looking at the emergence of alternative technologies.

Mr. Bob Modray: With respect to the first question, our electricity prices in Canada are among the very lowest in the world. We have very rich hydro resources that contribute to that.

With respect to the emerging technologies wind, biomass, what we call small hydro, and those sorts of things—and some of them are what I would call a little further out, such as photovoltaics, and on the technology side, fuel cells—the cost of these has fallen quite dramatically over the last 15 or 20 years or so. Wind is a terrific example of that. You can actually see the technology. The turbines are getting bigger, with a bigger sweep, and there's more technology being introduced for how the blades adjust to wind speed and that sort of thing. There have been advances in wind forecasting. It really depends quite a bit on the specific circumstances, but if you take the amount of energy that's produced from it, wind is quite often competitive. One of the big difficulties with wind—it's an intermittent source, as some of the other emerging technologies are—is integrating it into a grid so that it's reliable.

Even in that respect, advances are being made. That is one of the reasons we see this tremendous growth. Canada reflects what's really going on in the world. It seems we are getting fairly close to that point where it's competitive.

I was saying a little earlier that it also depends on the other sources available to you. Hydro and wind have great synergy. If you have a capability to store hydro, then when the wind is not blowing you can use hydro. It's a fairly simple example, but I think it also helps to improve those economics.

The Chair: Thank you, Monsieur Gourde.

If we're quick and stick to three minutes a round, we can get another round in.

We'll have Mr. Russell, Monsieur Ouellet, and Mr. Allen, for three minutes each, please. Mr. Russell.

Mr. Todd Russell (Labrador, Lib.): Thank you, Mr. Chair.

Thanks to the witnesses for being here this afternoon.

For the NEB, in looking at your pie graph charts, there doesn't seem to have been much change in 25 years, except in the area of wind and natural gas. Does this tell us anything about what type of electricity generation we're going to have when it comes to coal, for instance? Is there any anticipation that there is going to be cleaner coal? There are arguments around hydro and whether hydro is totally green, or just a greater form of green than some other types of electricity production. What assumptions are built in here? Is it large hydro, small hydro that you're talking about?

• (1620)

Mr. John McCarthy: Each of the scenarios has a different answer to that. For example, the “fortified island” scenario is a scenario where you look at trying to match the needs of North America in totality. It tends to promote the idea of large infrastructure. Large hydro would be part of it. Any large indigenous sources would again be favoured in that kind of scenario.

The triple-E scenario tends to provide a little more incentive for local generation and for more energy efficiency, trying to move towards reducing the demand for energy, and looking for greener sources of energy. As you can see, for example, wind is taking over, as far as 11% in that pie chart. In all cases, you see it growing, and I think that should be noted.

In our assumptions, we assumed there would be a number of projects on the books now that would be completed and implemented. For example, in the “fortified island” scenario, we have Churchill Falls power coming on, and I believe it's the 2014–2016 timeframe for that scenario. We have a number of known projects that we know are on the books, and they're included in the scenarios as they go forward.

We give a little preference further out to some of the favoured technology. There's perhaps a little more nuclear in some technology versus another. But with respect to nuclear, there are limits.

We looked at refurbishing existing sites, and we identified a few ideas that might be used for additional sites, but these take very long in the planning and in the implementation process. We're looking at a decade or so before they can actually be brought to fruition. They come in at the very tail end of the scenario.

I hope it gives you a sense that there's growth in all areas and in all scenarios. It's where the emphasis is. It changes from one scenario to another.

The Chair: Thank you.

Monsieur Ouellet.

[Translation]

Mr. Christian Ouellet: Thank you, Mr. Chairman.

I'd like your help in making efficient use of my remaining three minutes.

My first question is directed to Mr. Lazar. Can you provide us with a document showing the amount of electricity generated through biomass and your future projections? How many facilities do you have? You mentioned that it was comparable to a nuclear generating station. In terms of generating electricity, how does this compare to a nuclear generating station?

Mr. Avrim Lazar: I'm not certain that I understood your question fully, but we can certainly provide you with a document. Sixty per cent of our energy is derived from biomass, which is completely renewable. We have achieved a conversion rate of 60%.

Mr. Christian Ouellet: How many facilities do you have across Canada?

Mr. Avrim Lazar: We have hundreds across the country. We are planning conversions for other facilities.

[English]

The thing that slows it down right now is we're in economic trouble and we can't get the capital. Otherwise, we'd go all the way with all of them.

[Translation]

Mr. Christian Ouellet: Exactly what kind of assistance could the government provide to spur the development of this technology?

Mr. Avrim Lazar: Certainly I can answer that.

[English]

When talking about these graphs, to a large extent they're choices. They're predictions based on choices.

If we choose biomass, we'll get there faster. Frankly, right now biomass is six times wind, solar, thermal, and all of that combined. I know wind is sexy, but biomass actually gets done.

[Translation]

Mr. Christian Ouellet: Mr. McCarthy, are you aware of the state of repair of the gas pipeline that winds its way across the country?

• (1625)

[English]

Mr. John McCarthy: *Bon.*

The gas pipeline is regulated by the NEB. We have a complete pipeline integrity system that we require for all pipelines regulated by the NEB, and we have been successful.

[Translation]

Mr. Christian Ouellet: Can you provide us with a document detailing the quantity of CO₂ emitted each year in Canada as a result of gas cogeneration?

[English]

Mr. John McCarthy: We don't produce such a document, and I'm not certain that I could retrieve one, but I will try to see what we can do. Talking to our researchers, we may be able to source a document.

[Translation]

Mr. Christian Ouellet: Could we have your business plan and your growth projections?

[English]

Mr. John McCarthy: The growth projections for—

Mr. Christian Ouellet: What's your growth?

Mr. John McCarthy: For our organization?

Mr. Christian Ouellet: For the future.

Mr. John McCarthy: Sorry, growth for the energy?

Mr. Christian Ouellet: Yes.

Mr. John McCarthy: We can provide you the preliminary numbers. What we found in our consultations is that we may have been a little high, and we are going to change those growth numbers a little bit, based upon the consultations. But I will provide to you what we provided others; it will probably still be preliminary, but I can give you that.

[Translation]

Mr. Christian Ouellet: Mr. Chairman, gas cogeneration is a very interesting subject, because we're talking about the first plants to be converted down the road to geothermal energy.

[English]

The Chair: I was wondering how you were going to get that in. Thank you, Monsieur Ouellet.

Mr. Allen.

Mr. Mike Allen (Tobique—Mactaquac, CPC): Thank you, Mr. Chair.

Thank you for your presentations. I have two really quick questions. I hope we can get them in.

Slide 11 of the cogeneration challenges talks about two of the challenges: industrial cogenerators not always being able to sell the excess power in the grid; and obtaining access to the transition grid may be costly and time-consuming.

This does impact the forestry companies that are actually using cogeneration as well. What do you see as those constraints? Is it transmission constraints, from an infrastructure standpoint? Is it the deregulation of the market that is causing independent system operators to get into this argument about who pays? Or is it plain utility inertia to let people on the grid?

Mr. Bob Modray: I think it does vary a bit from province to province. Sometimes there are constraints when it comes to access to transmission, I guess the rules of the market. In some provinces you can't sell directly to end-use customers. You can sell it to a utility, but perhaps not to the highest-value customer.

With respect to obtaining the actual connection, one thing we saw in talking to smaller producers in their emerging technologies was that the cost of doing the studies was quite often formidable in itself. There are two types. There are some that are required exactly to obtain transmissions, so they'd be looking at the impacts on reliability. At other times it might be sometimes environmental studies that they either would not be able to do or didn't know how to do. There are those two types, I think.

Mr. Mike Allen: Okay.

My second question is for Mr. Lazar. I am very sympathetic to your early adopter case for the forest industry in terms of lowering your greenhouse gases, in the nineties especially, because there are a few who have done that in New Brunswick.

New Brunswick, of course, is exporting a lot of chips and stuff to sell, and they're burning it in Maine right now. What do you see as the risk for biomass in the market in terms of expense and availability to your companies?

Mr. Avrim Lazar: Well, it's interesting: the success of our environmental consciousness means that what used to be garbage is now competed for. So sawdust, bark, and stuff that used to go to landfill—now the people who want to make plywood, the people who want to burn it, and the people who want to turn it into pulp are all competing to get a piece of it.

Certainly the use of biomass for cogeneration, for production in the plant, makes a lot of sense economically. To make it economical to actually harvest wood and then burn it for energy would probably require, at the moment, subsidy levels that would distort the marketplace. In Europe it has proven to be counterproductive.

There are exceptions. The beetle-affected wood in the west, which may not have any other economic uses, is an exception. You have to ask yourself something about our policy structure when it makes sense to change Canadian wood into pellets, ship it across the ocean and have them burn it, then call it an environmental plus.

● (1630)

Mr. Mike Allen: Thank you, Mr. Chair.

The Chair: Thank you, Mr. Allen, and thank you to our witnesses.

That does bring us to close this first section of today's meeting. I want to thank you again for great presentations and for your succinct responses to the questions we were asking.

May I just add, before you get away, that those documents that were requested by Monsieur Ouellet and any other member, if you would be kind enough to submit them to the clerk, we would then distribute them to the full committee in both official languages.

Thank you again for your presentations.

To the committee, thank you for your cooperation in getting through a great round on time.

I'm going to suspend for a few minutes while the witnesses leave, and we anticipate the arrival of the Honourable Gary Lunn, the Minister of Natural Resources, for our consideration of the estimates.

Thank you.

● (1630)

(Pause)

● (1635)

The Chair: Ladies and gentlemen, we're going to return to consideration of meeting number 48 and our consideration of the estimates of the Department of Natural Resources.

Appearing today we have the Honourable Gary Lunn, the minister, Cassie Doyle, the deputy minister, and Richard Tobin, assistant deputy minister. Thank you very much for appearing.

It's our standard practice to ask the minister to lead off with a brief statement, if you would, and that's followed by questions in the traditional manner.

With that, Mr. Lunn, thank you very much for appearing.

I'm just going to turn around and have a quick look at the clock, and I see it's about 4:35. We have promised the committee one hour of your time, and I appreciate your coming. I know how busy your schedule is. If I could beg your indulgence to give us the full hour, we'll go a little past 5:30, if that's all right with you.

Hon. Gary Lunn (Minister of Natural Resources): Yes, I'm happy with that.

The Chair: Thank you very much.

I'll ask you to proceed.

Hon. Gary Lunn: Thank you very much, Mr. Chair.

First, it's my pleasure to be back before the committee. I always enjoy coming to committee, and we know of some of the great work that happens here. I actually had an opportunity to review some of the work you've done, and I've been quite impressed with it.

I do have some prepared notes. I don't know how short they are, but we'll see how far we get along. I'll try to keep them brief so we can get right into questions.

First, as I said, I do appreciate the work the committee has been doing. We have been looking at that.

Natural resources, as you are fully aware, have shaped our country. They've helped us become a world-ranking commodity producer and an emerging energy superpower. We've developed strengths in manufacturing, engineering, financial services, environmental consultancy, and specialized technology services, just to name a few. What really matters is how we build and use these great gifts.

Our government believes Canada can use its natural resources to an even greater advantage. My goal at Natural Resources Canada, with the energy, forest, and mining sectors, with the earth sciences expertise we have, and with our cutting-edge science and technology and policy-making, is to develop practical strategies for building a strong and distinctive Canadian advantage in today's global economy. The goal is consistent with our government's objectives outlined in Advantage Canada, budget 2007, and our ecoACTION plan. Our priorities are real. They are practical actions that combine economic opportunity with environmental and social sustainability.

In the energy sector, in our emerging role as an energy superpower, two realities are driving our actions for the year ahead. First, our traditional sources of energy must be balanced with cleaner sources. The second reality is that our current energy production and consumption account for some 85% of smog and 80% of greenhouse gases. If we don't succeed in dealing with these realities, our air and the environment and our health will suffer; but that's not all—so will our economy and our way of life.

In short, our challenge is to become a clean energy superpower. Mandatory targets on industry are the backbone of our government's action plan to reduce greenhouse gases and their pollution. This is the first time ever that the federal government has introduced regulations to force industry to reduce greenhouse gases and air pollution.

Initiatives to promote clean energy are focused in three critical areas:

Renewable energy—and you're all aware of this, and I believe we've talked about this before: \$1.5 billion to increase renewable energy.

Budget 2007 also takes us further by providing access to accelerated capital cost allowance for industries generating cleaner energy, and it also is providing \$2 billion in the budget over the next seven years to provide incentives to producers in the biofuel sector.

We're looking at ways to generate electricity from wood fibre sources, such as timber destroyed by the mountain pine beetle, sawmill residue, and logging debris. With NRCan's support, Tolko/Nexterra is demonstrating the production of bioenergy from wood waste to replace traditional fuels used in lumber kilns. I should add that we're getting increased interest right across the country from people in the forestry sector in the biomass energy. We are quite pleased with that.

Energy efficiency: as you know, we've launched this initiative. It's up and running, supporting greater energy efficiency among Canadian homeowners. We're providing grants of up to \$5,000 to save energy and reduce pollution by improving efficiency in their homes. As a result, some 140,000 Canadian homeowners will be able to enjoy an average energy savings of 30% each and every year. On a typical \$2,000 annual bill, that's about \$600 that can be spent on other family priorities.

We also recognize the importance of regulations and standards. Our regulatory agenda includes introducing new energy-efficient standards and strengthening others. Just last week I announced that the Government Canada is introducing a ban on inefficient light bulbs. This is the second country in the world to do so. Implementing a national ban on inefficient light bulbs will help Canadians reduce their energy bills by more than \$600 million a year, saving the equivalent of six to seven coal-fired electricity generation units.

• (1640)

I may add, Mr. Chair, I emphasize banning inefficient light bulbs. This is not banning incandescents. What's really exciting about this, when you speak to people in the industry, is it's actually driving them to produce more energy-efficient lighting options more quickly. In fact, they're advising me that they'll get to the point where they'll

actually have incandescent bulbs that will meet these standards. So that's very positive when we're looking at these standards. I know we've seen a lot of it reported in the media that we're in fact banning incandescents and forcing compact fluorescents, but that's absolutely inaccurate. So it's just another example of where we're moving.

Science and technology: As you're aware, we're investing \$230 million in our budget on a very focused approach on things like carbon capture and storage and unclean coal. In other measures, we've added \$85 million through federal granting councils for research on key priorities on energy and the environment.

NRCan is helping develop gas hydrates as a new clean energy source. Gas hydrates, like ice substances that exist in large areas of the world's Arctic and in deep sea locations, are still, admittedly, some distance off in the future. The problem is when they bring them to the surface they literally vaporize, and the technology has to be developed on how they can capture that. But I'm also told the reserves are enormous, and again, it's another potentially clean form of energy. They represent an enormous potential, and again, an opportunity for us to reduce greenhouse gases.

I would also add, Mr. Chairman, that through Canada's trust fund for clean air and climate change, we're also providing support to the provinces and territories for major projects resulting in real reductions in greenhouse gas emissions.

I also note, quite apart from the initiatives I've mentioned, that our investments in energy, science, and technology include nuclear energy, which is an important energy option for Canada. It's a secure and emission-free source of electricity. Canada is currently participating in an international effort to develop the next generation of nuclear reactors, commonly referred to as generation 4.

In all of these areas, we are advancing our commitment to cleaner air, water, land, and energy while strengthening our economy at the same time.

Mr. Chairman, it will be my priority to assist two industries facing serious challenges that are important to Canada's economy, forestry and mining.

Canada's forest sector is undergoing a major transition. It faces many challenges: increased global competition; higher energy prices; a higher Canadian dollar; a slowdown in U.S. housing starts; and the continuing problem of forest pests, in particular, the mountain pine beetle in British Columbia. In fact, no forest industry in the world faces the same mix of challenges as the British Columbia forest industry.

In March, we joined forces with British Columbia to take action on the mountain pine beetle. We announced \$24.8 million to help control its spread and to protect communities. We're working on a number of initiatives with the Province of British Columbia. We're in this for the long haul, as you know. In budget 2006 we committed a billion dollars. This is part of that funding. We committed \$200 million, part of our initial one billion dollar commitment over 10 years.

Mr. Chairman, the government has also provided \$125 million to the forest sector to strengthen long-term competitiveness. Through this funding we are providing critical support to promote innovation and investment in the industry, expand market opportunities, and help lead in the development of a forest pest strategy.

A few weeks ago I was at meetings with community leaders and scientific experts in Kamloops, and it was clear that we need to take action right away to deal with this problem. But we also need to take action to ensure the long-term viability of affected communities.

Just briefly, Mr. Chair, let me touch on the other sector that is facing serious challenges, the mining sector. It too is being challenged by intense global competition as well as declining reserves, shortages of skilled labour, and regulatory obstacles. With our partners in the industry, universities, provinces, and territories, and others across Canada and around the world, we are developing new environmental technologies and processes, improving geoscience, and strengthening Canada's value-added industries.

I would add that with support by our government, this industry is aggressively pursuing environmental sustainability and corporate social responsibility, both in Canada and abroad. It is providing leadership and increasing aboriginal participation in industry, and it's a leader in investing in new technologies to improve productivity and environmental performance.

•(1645)

My department's CANMET laboratories are looking at growing clean energy crops on mine site wastes to produce biofuels that are helping develop new lightweight parts for cars that reduce energy use and therefore reduce greenhouse gases.

Mr. Chair, in this regard, I'm pleased to note that we are working to strengthening our S and T and innovation partnerships with the relocation of our materials technology laboratory to a new world-class facility at McMaster University. This is a commitment by the government of \$46 million, and it will help create the synergies between industry, government, and academia.

Mr. Chair, I see the clock is ticking away, and I don't want to continue on. I would also add that we have put in \$150 million in budget 2006 to create a major projects management office for regulatory reform to help ensure the high standard of our regulatory approval processes as well as efficiencies. It will help the people bringing projects forward ensure that they're done in a very efficient manner. I think this is something that will be well received by the industry, and again we can ensure the integrity of our environmental approval process.

With that, Mr. Chair, let me conclude by saying Canada is indeed a fortunate country. We have a strong energy mix that includes conventional sources of energy such as oil, coal, natural gas, a

growing supply of non-conventional and renewable energy. We have a natural resource sector that is facing its challenges head on and excelling on the global stage while it is embracing its responsibility to the environment and social development.

Mr. Chairman and members of the committee, this abundant diversity of resources is a unique source of strength. Our government is committed to building on this unique advantage to ensure economic prosperity and social development and environmental sustainability.

With that, Mr. Chair, I look forward to the members' questions.

The Chair: Thank you, Mr. Minister.

We do have a number of members wishing to ask questions, so I'm going to ask the members again if we could keep the questions tight. There are five minutes for each question, including the answer. If the answers could be as brief as the questions, that would get us through.

I am reminded that members will be summoned to the House at 5:30 for a vote at 5:45, so we may just have some bells in the background for a few minutes after 5:30. I'd like to get everybody in, so we'll commence and will strictly adhere to the five-minute rule, beginning with Mr. Holland.

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

Minister, thank you, and welcome.

I would like to start by talking about the programs you recalled when your party came to power a little over a year ago. The EnerGuide programs for homes were cancelled. There were four separate programs that were involved with that, not just EnerGuide for homes, but also the commercial building incentive, the industrial building incentive, and of course the EnerGuide for low-income households program. Each had its own separate budget. Now we lost the year—it's over—but we do have the new program the government has introduced, repackaging these programs. But in repackaging the programs that were cut, we're left with a budget that's for all of these things in total. Instead of four separate budgets, we now have one budget.

Of the \$220 million that has been set aside for this new program, can you provide clarity on how much specifically is available for homes?

•(1650)

Hon. Gary Lunn: Thank you very much.

First of all, we did have a look at these, and I just want to stress that in fact we didn't lose a year. That is not accurately being portrayed. We reviewed the programs, absolutely. We looked at the ones we thought were not working.

I'll give you some examples. There were commercial buildings—the CBIP program. When we had a hard look at that, we actually found out that we were cutting cheques to large corporations like Zellers and Sears and some of the large banks. They were receiving money from these programs to retrofit their businesses to make them more energy efficient, when they have a very healthy bottom line. Although we still encourage these businesses to do that type of work, we didn't believe, number one, that taxpayers should be funding this.

Just let me finish and I'll get on to your question.

So the programs, with respect to losing the year, in fact wound down, and in fact there was even some overlap when we brought in our new programs. One of the things we discovered, actually, when we announced that we were winding down the previous EnerGuide program—in fact it didn't end until end of March this year—was that there was greater take-up of it. There was a bit of a race for the finish line, if I may use that, because they knew that this program was ending, and of course we didn't announce right away what its replacement would be. There was an increased uptake in the program, and we saw that. In fact, the program continued on, and it even had much greater use.

As far as what we announced, the \$299 million for the ecoENERGY efficiency initiative is targeted at reducing greenhouse gases. In fact, the people in our department, the scientists, will tell us that in fact we will actually, with our program, obtain far greater efficiencies in actually saving energy, and hence actually reduce a greater amount of greenhouse gas.

So at the end of the day, we recognize how important energy efficiency is, and we wanted to design efficient—

Mr. Mark Holland: Sorry to jump in, but I only have five minutes.

I'm very sorry, Minister. I'm just wondering if you could answer the question about how much of that money is directed at homes, specifically.

Hon. Gary Lunn: The \$299 million is primarily directed at homes, but it also includes small businesses. So it does include the large.... Small businesses, small buildings, are also included in that. We think this will be enough to make the program—

Mr. Mark Holland: But you don't have a specific figure for housing.

Hon. Gary Lunn: Absolutely. It's \$299 million. Let me just add this.

Mr. Mark Holland: What portion of that is for housing?

Hon. Gary Lunn: I'm not sure—

Mr. Mark Holland: Maybe you can get back to me on that.

Hon. Gary Lunn: It's about \$37 million per year for housing. And we'll look at that, and if it's not enough, we'll revisit it. We appreciate how important this is. We believe that this will be enough funding to carry this program for four years.

Mr. Mark Holland: If I can, because we're short on time, the only thing I would say is that under the Liberal government there was \$180 million over four years for the housing program before it was wound down or killed for a year, whatever you want to call it. That figure would take you to roughly \$130 million. So we've lost,

already, compared to what was there before, just on housing, a lot of money.

And that leads me to the EnerGuide program for low-income homes. You said that one of your concerns was that the program was helping larger companies. But one of the programs that was cut, which was \$500 million over five years, was the low-income program. And what experts are telling us is that we get the most bang for our buck when we go after Canadians who are in low-income situations and provide them with money. Can you tell me why that program was cut, in light of the comments you just made? And is your government planning to reintroduce that program?

Hon. Gary Lunn: First of all, actually, it did the opposite. It recreated it. It did not get the best investment for the taxpayers' dollars when it came to energy efficiency. What we've really done is design an energy efficiency program that everyone qualifies for. The amount of money you receive is based on how much energy you're going to save. So that's where this is focused.

Now, we do have other programs with income thresholds that are not in my department but in fact are through Minister Solberg's department, and they can retrofit their homes based on income thresholds.

But this goal, and I want to emphasize this, is to obtain the greatest energy efficiencies to reduce the greatest amount of greenhouse gas. So that is the focus of this program.

● (1655)

Mr. Mark Holland: I understand. My only concern, though, is that we've lost roughly \$50 million from what we had before, whether it was wound down or was a lost year, and then on top of losing that \$50 million from homes, we're losing the \$500 million that was directed at low-income homes in a specific program, separate and apart from the other. So I'm asking why that program, specifically, was cut, as an adjunct, and why we don't have that money.

I don't care if it's included in one program. But if everything is going in one program, then you have to have an equivalent amount of funding. So if you add \$50 million from the loss from the one and \$500 million from the other, I mean, we're talking about being out a lot of money.

Hon. Gary Lunn: Actually, we're not out a lot of money. And you know what? We invested \$2 billion in this budget to reduce greenhouse gases, on everything from energy efficiency to renewable energy and a number of other initiatives, as you're fully aware.

We don't make any apologies for looking at programs that were under the previous Liberal government that weren't working. The facts speak for themselves. I know they're there.

We all know what happened to greenhouse gases under the previous government. So people shouldn't be under any illusions that the previous programs were actually working. We looked at them and we said no, this is not working. It's not reducing greenhouse gases. We're not going to continue to spend Canadian taxpayers' dollars in this manner.

So we did make some changes. We did kill some programs. Some of them were not working—

Mr. Mark Holland: One of them being \$50 million less than the previous programs, other than eliminating the EnerGuide program for low-income homes, which is another \$500 million that's gone, other than making those cuts in the amount of money that's available....How are they markedly different from what there was before? I mean, they're essentially the same programs.

Hon. Gary Lunn: Oh no, not at all. In fact, Mr. Chair—

Mr. Mark Holland: You're pretty much the only one who thinks that they're separate programs from what was there before.

Hon. Gary Lunn: I can tell you how they're markedly different. First of all, by getting greater participation from the people who are applying for this program, whether they're homeowners or small-business people—

Mr. Mark Holland: With less money.

Hon. Gary Lunn: No. In fact, the amount of grant they receive will actually increase by 25%. So the amount of grant that goes to the homeowner is actually increasing by about 25%, up to \$5,000. So we think that's significant.

In fact, under our program, and you've heard me say this before, I know, around 50 cents of every dollar either went to administration or audits, and now the homeowner is required to buy in. So when they come in and pay for their own audits and they carry through and get the retrofits done, in fact at the end of the day they'll be better off. They'll get a much larger grant back from the federal government. But of taxpayers' money, over 90 cents of every dollar will go to energy efficiency or in effect reducing greenhouse gases, as opposed to 50 cents from the previous government's program.

That is where it was inefficient. That's where we wanted to make some changes. The Prime Minister is demanding accountability. In all of these initiatives that we're putting forward, we're following up. We'll make sure that they're working and they're delivering results.

We think we have some good programs happening here. I admit they're very different from the previous Liberal government, but they simply weren't doing the job, and we're going to be held to account in our records. So we're quite proud of our programs that we've put forward.

The Chair: Thank you, Mr. Minister.

Thank you, Mr. Holland. We can continue that if you wish in the next round, but I'm going to have to go to Madame DeBellefeuille.

[*Translation*]

Mrs. Claude DeBellefeuille: Thank you, minister.

Your visit was eagerly anticipated. We've been after you since February to honour us with your presence. I don't like being pressed for time when we're dealing with a budget in excess of \$2 billion and

the equivalent of 4,000 employees. It's truly a shame that you can't devote two hours of your time to us. Part of our job entails asking you questions about your budget. However, we're being rushed.

I noted in the budget that your department's expenditures have increased considerably, in particular your operating expenditures which have increased by \$158 million. I was once an administrator in the public service in Quebec and my boss had to justify just about every penny he spent on operations. I have some questions about the \$71 million increase under the item "Professional and special services". What explanation can you give us for this increase?

I did my homework and I found that these increases are largely offset by a range of budget cuts, including the series of measures aimed at reducing greenhouse gas emissions, or Action Plan 2000 on Climate Change, and assistance to the Canadian softwood lumber industry. The government is increasing its operating expenditures, particularly in the professional services sector, but taxpayers would also appreciate some explanations as to why any increase of this magnitude is justified. All of the people here are, I must say, very mindful of how taxpayer dollars are spent.

Before you answer, I'd like to ask you a second question. I've compared past energy savings programs with the ones that you are proposing. It's all rather confusing. That's why the Library's research staff has prepared a good comparison for me. I'd like to share with you the findings of the researchers on this matter:

Most programs included in these initiatives are a continuation or a resurrection of existing or former programs that have been renamed and, in some cases, have undergone a few specific changes. Some of the changes have either expanded or restricted the scope of the program to some degree.

Here is my second question. I'm my party's natural resources critic and as part of my job, I handle complaints from citizens who feel victimized in some way by the cuts that have been made and by the new program in place. They had signed an agreement with the department which stipulated that they had 18 months to do the work associated with the EnerGuide Program.

During the transition phase, these citizens were asked—and I have with me a letter from your department bearing your signature—given the funding shortfall, to shorten the deadlines for completing their work. These individuals made a commitment to your department, with your approval, but during the transition phase, in an attempt to speed up the process, you asked Canadian citizens committed to reducing greenhouse gas emissions and using energy more efficiently, to complete work within deadlines that had not been agreed to.

Can your department offer any permanent solutions to these citizens in an effort to resolve this situation to their satisfaction?

•(1700)

[English]

Hon. Gary Lunn: Thank you very much. I welcome your questions.

I think you've basically raised four areas.

Number one, with respect to the operating budgets of the department, they have increased. That's something I watch carefully and I am equally concerned about it. In fact they've risen 28.7%. I can tell you where these increases are. There is \$111 million that has gone specifically to address our nuclear waste liability. This is something that has been ignored for decades. It has not been dealt with and was long overdue. We had no option but to address this issue. There was an additional \$57.9 million for developing the initiatives and the management for our clean air agenda. That was done. There was also an additional \$22.4 million for the low-level radioactive waste cleanup in the Port Hope area.

And you're right, there were some offsets. We eliminated some programs and we brought in programs that didn't exist before. So there are some changes. But there are those increases, and that's a result of the....

If you look at the global budget of NRCan, you'll see it has actually increased by almost half a billion dollars. That raised concerns for me; I like to go in the other direction. But what in fact is happening is that particularly Newfoundland and Labrador receive 100% of the royalties from the offshore. That flows through my department, the federal government, and then they flow back. So even though it looks like our department has received another budget of half a billion dollars, it flows right through to the province. And that's—

[Translation]

Mrs. Claude DeBellefeuille: I'm sorry, Mr. Lunn...

[English]

Hon. Gary Lunn: Let me finish.

[Translation]

Mrs. Claude DeBellefeuille: I simply want...

[English]

Hon. Gary Lunn: You've asked three other questions. I'll try to get through them really quickly.

You talked about the limited scope of the projects in some of these. In fact, that's the opposite. I'll give you some hard examples, and I know they look similar to some of the previous government's programs.

The previous government brought in, in their last year of office, a program called the WPPI, a wind incentive production program. The WPPI program actually was exclusively only for wind. It didn't provide any incentives for renewable energy. We brought in our ecoENERGY renewable initiative incentive to provide a production incentive, very similar to the previous one except we have included renewable energy such as biomass, tidal, small hydro things, and obviously wind and solar. These were not included in there. And we have other separate programs for solar heating and so on and so

forth. So we've actually expanded the scope of some of these projects to invite more renewable energy.

You've talked about files in your office about damage to victims. I can only say that people have signed contracts, signed contribution agreements. We are honouring all of those. I've expressed that in the House. I've expressed that, and I would be more than happy to look at specific files, if you provide them to me. The department will look at them. If they're signed contribution agreements or contracts, we are honouring each and every one of those. I made that very clear on the day we announced that we would not be proceeding because we didn't feel this program was efficient. And we have even stronger and better programs in place now.

That information's been very, very clear. There have been a few members from all parties who have brought files forward to me, and I take them to my officials and we look at them. If someone's fallen through the cracks, we're fixing them. So the government has no intention of not honouring signed contributions or contracts. In fact, we've been receiving quite positive feedback on our new energy efficiency initiative.

I appreciate your comments and the work of the Library of Parliament. I acknowledge there are some similarities, stuff that's working. I have no problem saying yes, we need to do this. I've said many times, the largest untapped source of energy in this country is the energy we waste. Energy efficiency is so important, but it's equally important how we spend the taxpayers' hard-earned dollars—that we spend those efficiently as well.

Admittedly, we're making some changes, but we think we've got the right ones.

•(1705)

[Translation]

Mrs. Claude DeBellefeuille: Minister, could you ask your staff to table the details of the \$71.2 million increase in the professional and special services budget? Could you possibly provide the committee with that information?

[English]

Hon. Gary Lunn: I think we're thinking it's related to the nuclear waste liabilities, but I will commit that we'll look into this and we'll get back to the committee. If it's something we can disclose, I'm more than happy to do so. I'm all for full transparency, so we will follow that up. If there's something that I can possibly send back to the chair of your committee, we'd be more than happy to share that with you. We'll look into what we can and cannot provide and we'll try to get you a very direct answer as soon as possible.

The Chair: Thank you, Mr. Minister, and thank you, Madame DeBellefeuille.

We're heading a little closer to eight or nine minutes for the first two, so Madam Bell, you may go a little bit longer, just this once.

Ms. Catherine Bell (Vancouver Island North, NDP): So I get ten minutes?

Thank you, Minister, for attending and for your opening remarks. I was taking notes on some of the things you said. You mentioned \$2 billion for biofuels—and underneath that you talked about logging debris as one of the sources that you would see using—and also \$125 million for the forest sector. I think you mentioned that money was in part to be used for making sure that logging communities and resource communities are viable.

I just want to talk a little bit about something I brought up with you at your last visit to this committee, which was log exports. I've asked you those questions in the past, and you said to me that this is a serious issue and that your government would be looking into it and that I had your commitment that you would do everything you could to mitigate the job losses that are a direct result of log exports. Since then I've seen an increase in my community and others on that front, and it's becoming an issue for the sustainability of some of the smaller resource-based communities.

I've spoken with managers of forest companies who say that it's not profitable for them to bring logging debris out of the forest and that it's cheaper to leave it there, which is unfortunate. They also talk about the environmental aspect of leaving some of that debris on the floor. It may look bad, but I understand that it's compost at some point.

Log exports are causing the shutdown of more and more of our mills in British Columbia, and probably everywhere else. In fact, in my riding a mill was shut down for two weeks because they couldn't get logs, and yet there's a log dump just up the road, and they go by on ships on a daily basis, and they go by on trucks, but our mills can't get them. I'm just wondering if you would commit to supporting the industry in getting those logs, instead of them all being shipped out. They say that it's too expensive. I'm afraid that we're going to lose the only remaining mills that we have.

• (1710)

Hon. Gary Lunn: Thank you for your questions.

You've touched on a number of issues. Let me talk about the log exports, because obviously that's something very dear to your heart. You and I are both from Vancouver Island. It's not an issue in the rest of British Columbia; predominantly it's a Vancouver Island issue.

With respect to using the forestry debris, there are really opportunities in the heartland of British Columbia, where we have the pine beetle kill. There are things like the pellet industry, in which they use all that kind of forestry debris, as well as some of the beetle wood. There are some pretty keen opportunities there.

With regard to log exports specifically, first of all, what happens now is that no logs are exported unless no company in that area is interested in them. In fact, if somebody wants to export logs, they have to go to an agency, and they would actually advertise that these logs are going to be available. They would go out to all of the local industry. If nobody's interested in these logs, then they're deemed to be excess, and they would receive a permit to export a certain amount of logs.

I understand your concern. We've seen some of the more inefficient mills close right across parts of Canada, and they're struggling.

One of the proposals that has been put on the table is a suggestion for a lumber equivalent export tax, and we're looking at that proposal. One of the disadvantages on log export is logs can be exported, and they're not paying any of the export taxes that softwood lumber would actually have to pay. So if we actually put on an export tax, that would put it at a level playing field. It would at least level the playing field where they're processed on either side of the border.

That's something Minister Emerson is looking at. It's being looked at with the province. We actually work together. The federal government is responsible for logs coming off private lands for export, and the provincial government is responsible for logs coming off crown lands, so it really has to be looked at together. That's one of the areas they are looking at to help these communities protect those jobs.

I hear your concerns loud and clear, but I want to stress that there is absolutely not one log that goes across the border that is not first offered to all the local industry people; they all have access to it first. They have first right of refusal, if I can use that, and only then would an export permit be issued, and it's only for a certain amount. That process is actually done jointly, with both crown and private lands; they use a similar process.

You touched on \$125 million. What did we do with that money? We made a commitment, as you know, of \$200 million to help the forest industry become more competitive. We went to organizations like FPAC, the Forest Products Association of Canada, and asked them how we could best help the industry. We asked them to tell us what their industry was telling them.

They gave us some very clear suggestions. One of the things we did was bring together Paprican, FERIC, and Forintek, three individual research institutes, under one umbrella, called FPInnovations. This is now the largest public-private forestry research institution in the world.

Its board of directors is made up of forest company CEOs, and they set the priorities. They're deciding how to move this forward. They're deciding the priorities for this funding.

We're listening to the industry. We're going to the industry. As a government we're asking how we can best help, and that's been the result of our actions.

• (1715)

Ms. Catherine Bell: I thank you for that.

I want to change topics and ask you about the security of our supply of natural gas. We have approximately seven years of reserves left in this country. I'm wondering what this government is doing about securing a supply of natural gas for Canadians.

Hon. Gary Lunn: Well, as you know, we're an integrated energy market. We export \$80 billion to \$90 billion a year of energy, predominantly to United States. It is actually one of the strongest parts of our Canadian economy.

We're constantly working with the energy sector on efficiency initiatives. We're looking at alternative fuel sources. We're investing in renewable fuels.

I understand your concern. I actually think the natural gas reserves are larger than seven years' worth. We're looking at the Mackenzie Valley pipeline, which opens up another entire area.

The short answer, and I don't mind saying this, is we have to decrease our dependency on fossil fuels. It's so important. If you think about it globally, right now we burn a thousand barrels of oil per second in the world, every single second. We burn 85 million barrels of oil.

It ties into natural gas becoming more efficient. We can't continue to sustain this consumption. It's why we're investing in alternative energies, renewable energy, and energy efficiency to try to decrease our dependency on fossil fuels.

Ms. Catherine Bell: Thanks.

I have one more quick question.

The Chair: I'm sorry, but I think you're going to have to wait. Nine minutes is the running average this afternoon.

We may not get to everybody on the second round, because everybody's gone over their time.

I'll now go to Mr. Trost.

Mr. Bradley Trost (Saskatoon—Humboldt, CPC): Yes, I'll be splitting my time with Mr. Harris. If the minister can keep the answers short, both Mr. Harris and I can get our questions in.

I have a few questions on the nuclear issue. I'm very much supportive of the whole nuclear industry, and so forth, but I like things to not be subsidized by the government.

One of the complaints we've had from outside is that AECL is always subsidized and has been subsidized for many years. In looking through some of the estimates here, the commercial business activity is self-sustaining, but government provides spending for some of the R and D facilities and operations. Could you explain it a little and put it on the record?

Essentially, what I'm looking for is this. What would be the subsidy to AECL? What is it really, when they are fulfilling non-commercial aspects for the government, for basic R and D safety issues that would need to be done even if AECL was privatized, closed, or commercial? I'm trying to get at the bottom line number we would still be spending if AECL's commercial units were privatized or something else was done by the government.

After that, do you have any more comments about things the government is doing on the nuclear file that's promoting it? I know there are large provincial areas of jurisdiction, but more general comments on the nuclear industry would be appreciated, as far as your vision for that industry.

Hon. Gary Lunn: Why am I not surprised by that? Perhaps you can give me a warning when my time is up. I could spend a lot of time on this file.

First of all, we have committed \$75 million in this budget for research on the advanced CANDU reactor. A lot of money has gone into this research up to now, and this is sort of the last installment to complete this research. It would be irresponsible for our government

not to complete the research on this next-generation reactor. I appreciate the involvement of AECL and the commercialization.

So we are making investments like that. In fact, we're in a nuclear renaissance. We're seeing interest around the globe and in Canada as well. I don't think it's any secret we're seeing activity here in Ontario. We're hearing about activity in New Brunswick on refurbishments. We're hearing of new reactors. The industry sector in Alberta is talking about it as a potential source of energy to reduce natural gas consumption in the oil sands. They're looking at it as a clean source of energy. From purely an environmental perspective, nuclear is absolutely emission-free, pollutant-free, and greenhouse-gas-free.

Ultimately it's a decision that will be made by each individual province on whether this is an energy mix that they want to pursue. We'll be there to support them.

I can't speculate on what kind of research dollars will go into it in the future. I think it's very important—and I've said this publicly before—that AECL is commercially viable and competitive on its own without government assistance. It's essential as we move forward.

I think the opportunities are very good for AECL, from the interest we're seeing. We want to promote all sources of energy, renewable energy. We want to promote clean coal technology, but you can't discount the potential enormous interest that's coming forward in nuclear, for no other reason than it's a clean form of energy.

We'll continue to make the investments we need as we move forward. One of my first investments as minister was \$500 million for the nuclear waste legacy issues at Chalk River.

So these are things we are doing, but I wouldn't want to try to speculate where we will spend our research dollars in the future.

Let me add one last point. I think it's important to note that about 50% of the world's medical isotopes are produced at Chalk River—50% of what is used for nuclear medicine. That's quite remarkable when you think about it. There has been a lot of research, so it's not just energy generation.

• (1720)

The Chair: Mr. Harris.

Mr. Richard Harris (Cariboo—Prince George, CPC): Thank you.

Minister, probably a lot of people from British Columbia and Alberta are watching this program. I understand it's being broadcast.

Hon. Gary Lunn: I know my mother will see it.

Mr. Richard Harris: Or they will see it over the next several weeks as it's repeated.

A considerable amount of money has been committed to fighting the mountain pine beetle and mitigating the damage. For clarity, could you give us perhaps some examples of how that funding will be spent in support of mitigating the damage that the mountain pine beetle has done?

Hon. Gary Lunn: I'd be happy to, Mr. Harris. I can tell you about some of the broad-theme areas in which we're looking at spending this money.

First of all, wherever they're telling us that we need to be spending on mitigation, wherever they think there's an opportunity for...and I don't want to use the word "containment", because you and I both know how much they've chewed in British Columbia. But if there are opportunities to stop the advancement—and obviously the biggest area is in trying to prevent it from moving into Alberta and the boreal forests—we are making those investments.

Those investments, those cheques, have been written. The money has flowed through to the province. In this area we're working jointly with the province. I believe we spent about \$24 million in this area in the last fiscal year. We'll probably spend a similar amount in this fiscal year.

We're also looking at initiatives with the province on fire suppression work around communities that are surrounded by the infestation. Obviously it changes the fuel dynamics of the forestry floor and the forests. Again, we're working in partnership with the province on fire suppression work.

Obviously the other area that's very important is economic development. We can't spend all this money just on research. We don't think that's the right thing to do. There are some good things being done, but at the end of the day, we have to look at where the greatest investments are. Again, we're looking at initiatives in conjunction with the province, matching dollars with the province for large public economic infrastructure, for what we know are the great drivers—things like airports, bridges, opportunities in the railroads. We're looking at infrastructure like that and at smaller-based community economic development projects going out into the heartland of the pine beetle area and talking to these local communities.

These will be coming forward. They're not there yet. Again, we're in discussions with the province to ensure that there are matching dollars, so that the communities can tell us, "Here are some priorities where we think we can make investments in our communities that will really help move the economy forward."

I want to add one thing, because I think it's very important that we send this message as well. The forest industry is very important to our economy nationally, right across the country, and obviously in British Columbia. British Columbia produces about 50% of the softwood lumber in Canada. We believe the softwood lumber industry will be strong for decades and decades to come in British Columbia. We're there to work with the forest industry as well. It's very important that we work there, doing the research on how to use this fibre, on how long will it last, on how to accelerate the recovery of this fibre.

So those are areas in which we're also making an investment, Mr. Harris. We're in this for the long haul, as you know. We've committed \$1 billion over ten years. You can be sure that we will be investing that in all of these ways to deal with the mountain pine beetle in this area.

• (1725)

Mr. Richard Harris: Thank you.

I have one final question, if I may. There are centres of forest excellence at universities and colleges throughout the interior of B.C. Can we expect that the expertise that's available there would be part

of the pine beetle mitigation, funding programs to look at new and innovative ways to use wood that has been damaged by the beetle, and indeed to learn more about the pine beetle itself?

Hon. Gary Lunn: Without question we would welcome that from the local colleges. I know in your city, you have the University of Northern British Columbia. Some great work is being done there.

So we would not only welcome it but encourage it. I know that Dr. Allan Carroll, a leading scientist in our department at the Pacific Forestry Centre, works on a regular basis with the funding. We actually have staff from Natural Resources Canada located right in the University of Northern British Columbia, working on these types of projects. We look forward to a continuing engagement.

Some of these people, those who are living right in the heartland of the pine beetle, know it best. They're witnessing it, they're experiencing it, they're seeing it, and they're listening to the experts and the people in the industry as well. We're really proud to have them as partners. You can count on our continuing to engage them and helping to provide the resources to do the work.

The Chair: Thank you, Minister, and thank you, Mr. Harris.

We're going to have to go quickly here.

Mr. St. Amand, we have about five minutes. You're going to end up sharing that with Mr. Ouellet just so that we can get everybody in.

Mr. Lloyd St. Amand (Brant, Lib.): Minister Lunn, thank you for coming this afternoon.

Let me be as candid and direct as I can be. The nub of the concerns that have been expressed by David Suzuki and Al Gore, among others, and shared by millions of Canadians, I dare say, is that your government continues to defer to the oil and gas sector, particularly regarding the oil sands.

They're concerned, for instance, about the announcement of intensity-based targets, not overall targets. They're concerned about our targets, or your government's targets, such as they exist, well short of what has been announced in the United Kingdom and France.

I understand that there's a report indicating that the oil sands are now going to be exempt from any regulations or controls on emissions that result in smog. I'd like to ask you directly, is that the case? Are we going to hear about that? Or can you unequivocally say no, they will not be exempt from such controls or regulations?

Hon. Gary Lunn: Thank you very much.

First, I can unequivocally say as directly as possible that they will absolutely not be exempt. In fact, every sector is going to be required to reduce greenhouse gases, and every sector is also going to be required to reduce smog.

You talk about intensity-based, and yes, there is intensity-based. But we believe that through aggressive targets, we can get to real reductions. We can turn the graph and start to go down.

All of our targets far exceed anything the previous Liberal government brought in. Even in terms of the plans brought in by them in 2005, just before they were thrown out of office, the numbers are absolutely and unequivocally far more severe.

The numbers speak for themselves: greenhouse gases are plus 35%. Let me put this in perspective. When they had 15 years, they could have gone from zero to minus 6%. Now we're at plus 35%, and they're saying, well, in five years, can't you go from plus 35% to minus 6%? It's not possible without having a devastating impact on the economy. So it's not possible, but—

• (1730)

Mr. Lloyd St. Amand: If I may, because I'll probably be allowed only one more question, what will we be hearing and saying about the cap, specific to the oil sands, on volatile organic compounds? What will be the firm cap?

Hon. Gary Lunn: Again, my colleague, Minister Baird, can give you that number. I can only tell you that they'll be in discussion.

As you know, we had a smog day this year already. I think we heard that today is a smog day in certain parts of the country. But we're committed to cutting the smog in this country by 50% in a real hard cap reduction. These are the most ambitious aggressive targets.

Independent people who audit these will tell you that our actions toward reducing greenhouse gases and smog over the next five years will be far more aggressive than those of any other industrialized country, including France and the U.K. What we're going to impose on the industry here will be far more aggressive than what's imposed anywhere else in the world. We admit that we're starting late, so we have to become more aggressive. But we feel it's important to do that.

Do you want to go for five more minutes? Is somebody watching the clock?

The Chair: House procedure suggests that we suspend when the bells start ringing.

Hon. Gary Lunn: I'm okay for five minutes.

The Chair: I need the unanimous consent of the committee to continue. Could we get that to give Monsieur Ouellet five minutes?

Some hon. members: Agreed.

The Chair: All right, we have unanimous consent.

Monsieur Ouellet, for five minutes, go.

[*Translation*]

Mr. Christian Ouellet: Minister, AECL's current budget stands at \$103 million. The budget for nuclear facilities and activities is \$66 million, while the budget for R&D is \$37 million. The budget for the Canadian Nuclear Safety Commission has been increased by 20% this year and now stands at \$94.4 million. A total of is \$94 million has been earmarked for operating expenditures, while \$420 million have been allocated for grants and contributions. Therefore, the total budget for nuclear energy is \$814.4 million.

Earlier, in response to a question from Mr. Trost, you said that nuclear energy was clean energy. A mere \$57 million per year is being earmarked for other forms of energy, including passive solar and active solar energy, photovoltaic energy, tidal energy, wind energy, biomass, mini hydro-electric power stations and, of course, geothermal energy. Can you explain to me the reason for the large discrepancy between the two budgets?

It's no secret that the different forms of energy that I just listed could meet 20% of Canada's energy requirements by the year 2020. Geothermal energy harnessed from deep within the earth is a newly discovered form of energy that could meet all of our energy requirements by the year 2025.

I will put my second question to you right away, as I imagine your response will be quite brief, based on what I've just told you. When you were here last time, you stated that LED bulbs were a new discovery and so forth. We thought that you would be investing in this technology, but you changed your mind and opted to go with fluorescent light bulbs.

I did some calculations to compare the figures that you gave us. There are between four and seven light bulbs in every home, in addition to 20 to 25 halogen lights, and additional outdoors lights. If you calculate the amount of heat that houses emit, bearing in mind that lights are on mostly in the winter, you will not manage cut CO2 emissions by 6 million tonnes per year, but only by a mere one million tonnes.

On which studies did you base your conclusions? Can you share them with us? To our way of thinking, it's absolutely impossible to achieve these reductions solely through the use of these small light bulbs.

Why do oil tax expenditures total in excess of \$300 million per year, when a mere \$57.8 million is being spent on renewable energy? Again, it's a matter of comparison. I'd also like to know how the \$57 million budgeted will be spent.

Finally, if you think nuclear energy is so clean, as you stated earlier, are you prepared to tell us today that all nuclear waste could be stored in your riding?

• (1735)

[*English*]

Hon. Gary Lunn: Thank you very much.

Let me go very quickly. You've touched a number of issues.

First of all, with respect to nuclear, we increased their budget by 9%. We had to actually add \$94 million. A large portion of it went to the Canadian Nuclear Safety Commission.

I want to stress that our government is promoting renewable energy with \$1.5 billion for things such as wind, solar, tidal, biomass. The \$1.5 billion is a production incentive for that renewable energy. But we are seeing increased activity in both the refurbishment of and in new nuclear builds. Here in Ontario we're seeing it, and we're hearing about other parts of the country where there's an interest.

Our job as the federal government, as the regulator, is to ensure that all aspects of the environmental approval process, the safety aspects when they go through the Canadian environmental assessments—all of that—would be done by the Canadian Nuclear Safety Commission. They will absolutely need these resources to complete that work.

Just to put it in perspective, we haven't seen an application in this country to build a nuclear reactor in three or four decades, and we're seeing a lot of activity now. We have a responsibility to ensure the safety and ensure, when they go through the regulatory approval process, that the resources are there to have a comprehensive, thorough review, so that no stones are left unturned.

Nuclear is only one form of energy. We're blessed with many forms of energy in this country, and it's really up to the provinces to decide on their energy mix. Places such as Quebec, your province, or my province of British Columbia, are blessed with a lot of hydro electricity, which is a very clean form of energy. Not all other provinces have that opportunity, and thus are looking at other sources. So we had to put those resources in.

With respect to the light bulb, the story I told about the company Group IV Semiconductor actually wasn't about LED but about solid-state lighting. We've invested \$1.2 million in the development of a very efficient way of lighting. We're quite enthusiastic about it. We'll continue to support these types of initiatives.

With respect to banning inefficient light bulbs, 5% of the energy used in North America—you can translate that back into Canada—is used in lighting. We can revolutionize the way we light up our country. The amount of energy savings is enormous.

I would encourage you to go out and buy energy-efficient lighting. It may not necessarily be compact fluorescents. As I say, there will be incandescent light bulbs coming on the market in the coming years that are as efficient as compact fluorescents. They're coming; I think we should be open to that fact.

The numbers speak for themselves. There is lighting available today that uses 20% of the power of an inefficient light bulb. If we add that up across the country, we're literally talking about five or six or seven coal-fired electricity generation units.

We'd be happy to share those numbers with you. I don't come up with these numbers; these are from scientists, independents. And this is really easy math to do; this number has been calculated.

So this is a really simply fix, and the most exciting part is that by putting these regulations in place, we're really pushing the industry, people like Philips and GE, to accelerate their investments and develop the most energy-efficient lighting.

We all need to look at the energy we consume. We can't just continue to blame it on everybody else and say it's the refineries or it's the oil companies. Every drop they produce, you and I use.

● (1740)

Mr. Christian Ouellet: What about the waste? Will you take it?

Hon. Gary Lunn: What I can tell you about the nuclear waste is that this is being done by the Nuclear Waste Management Organization. They're looking at everything from deep geological storage.... Actually, they do quite an effective job of dealing with the nuclear waste. I would defer to them.

I will say this: the work that's being done, the way they deal with this, is quite impressive. The nuclear industry has an excellent safety record, and they've done a very impressive job. We should keep an open mind and base not only all of our answers but our questions on sound science in considering waste as we move forward. We need to look at all clean forms of energy, if we're going to make a difference in the environment. That's exactly what our government is doing.

The Chair: Thank you, Mr. Minister.

Thank you, Mr. Ouellet.

I appreciate the extra time you gave us. We're now going to have to run to the vote in the House. I appreciate your coming, and the questions of the committee.

Thank you very much for today.

We are now adjourned.

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

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

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