



## Legislative Assembly of Alberta

**Title: Monday, May 14, 2007**

**7:00 p.m.**

Date: 07/05/14

head: **Committee of Supply**

[Mr. Shariff in the chair]

**The Deputy Chair:** We'll call the committee to order.

head: **Main Estimates 2007-08**

### Energy

[Mr. Knight introduced the following departmental support staff: Mr. McFadyen, deputy minister; Mr. Borland, director, financial services; Ms Denman, associate executive director, electricity division; and Mr. Rodgers, business unit leader, gas development]

**Mr. Knight:** They're accompanying me, and we will, certainly, I think, Mr. Chairman, have an opportunity to have some very good debate tonight. We had, of course, one opportunity earlier with respect to our main supplements, and we're looking forward to, again, you know, a good debate and to bring forward some of the issues with respect to Energy's budget.

So with that, I think, Mr. Chairman, we would proceed.

**The Deputy Chair:** The hon. Member for Edmonton-Calder.

**Mr. Eggen:** Well, good evening and thank you, Mr. Chair. I rise with great interest in regard to the Energy budget because, of course, the ministry really is a significant driver of our budget here in this province. It is generating a very large single portion of our expenditures, so it's absolutely incumbent for all of us to ensure that that budget is functioning in the most efficient way possible. Rather than on an expenditure side we're looking at more of a revenue side in regard to Energy. The New Democrat opposition is very concerned and watches with a close eye what developments do take place in the Energy budget because this is the money that provides us with the ability to supply public health care and education and infrastructure and just a whole range of important public institutions.

I would like to focus this evening just, first of all, on the royalty rates because we are discussing royalty rates at this juncture now, and of course there is a review of the royalty rate system. I think it's important because the public has an interest in where our royalty rates go, but for the average Albertan it seems a bit complicated. But, you know, with a little bit of understanding and clarification here this evening I think that we'll actually be able to shed some light on the royalty structure and, hopefully, have a more informed public, with this very important debate, as I said, providing a good portion of our expenditures.

My understanding is that back in 1996 a new generic royalty system was brought about that affects the production agreements in common terms. This did not affect previous agreements that were grandfathered into the current structure. Oil companies do not have to pay more than the 1 per cent royalty on recovered oil until they have recovered all of their capital costs, usually in six or seven years. This, of course, is in regard to the tar sands. After full cost recovery the royalty rate jumps to 25 per cent. The provincial government instituted the 1 per cent royalty rate in the 1990s, when oil prices were below \$20 a barrel. It is viewed as an incentive for companies to invest and to develop the oil sands. Previous to this reform the royalties were at the 30 per cent mark.

So, you know, my first question that I would like to ask the

ministry, please, is: where do we want to see these royalty rates going? It's the view of the Alberta New Democrats that the royalty structure has lagged behind, first of all, the windfall profits that energy companies have been enjoying over these past few years. Also, the royalty rate has in fact been out of step with the production of energy because, of course, we're shifting our focus from conventional crude sources to the tar sands.

In doing so, it seems anyway that there's some loss of expenditures in our royalties. In fact, it seems like our share of the royalty rates has actually gone down in these past couple of years. So I would like to ask for some clarification as to why specifically that has taken place and why we have not taken measures, you know, in the last three or four years to correct that. Of course, even if you made a modest adjustment to royalty rates to reflect the windfall profits that energy companies are enjoying now, I think we would see a significant increase in our revenues from royalties.

A calculation that the New Democrat caucus developed based on a very modest increase that increased along with the price of crude oil and decreased if the price went down: we estimate that with a modest adjustment we would be realizing an increase of at least \$3 million per day for royalty revenue coming into the province. So, you know, if people got wind of this or started to think about it in terms of daily expenditures, \$3 million per day, Mr. Chair, is quite a significant loss. In fact, I think we developed those numbers almost three years ago now, so that would be probably significantly higher.

So that's my first focus of questions, in regard to royalties and building a structure that would ensure that, in fact, we are going to realize an appropriate level of monies from our royalty structure.

The second question that I would like to ask and invite comment on is in regard to bitumen. You know, the bitumen, of course, is a product that is partially refined from the tar sands process yet not entirely refined. It's certainly refined to the point where it can travel. The Alberta New Democrats, again, have a very serious problem with the export of bitumen out of the province of Alberta because we believe – and I think that our understanding is becoming more widely shared by Albertans – that this is a nonrenewable resource that is mined here in the province at considerable cost. We believe – and others believe as well – that it should be refined here in the province as well so that we take advantage of all of the secondary jobs that come downstream from the processing of bitumen into a more finished product, even up to the point of different lubricants or gasoline in the petrochemical industry.

You know, we had some great foresight, I believe, in regard to the natural gas industry here in this province more than 40 or 50 years ago, when the natural gas was here and plentiful and affordable, and the government encouraged industrial development of that natural gas to break it down into the fertilizer and plastics industries that we see in Fort Saskatchewan. So here we are probably 50 years later with a similar opportunity, but if we start to set up the mechanism by which bitumen is exported out of the province, then, in fact, that is a lost opportunity. It's a loss of high-paying jobs, and it's a loss of revenue because, of course, when you make a value-added product, you can charge more money for it and increase your revenues once again.

You know, in concert with this, then, I would like to just emphasize and seek comment from the minister again on just how we are going to control the rate of development in this province if we are moving at such a breakneck speed to mine and process and export as much bitumen as we possibly can here in the province of Alberta right now. In fact, wouldn't it be more logical and perhaps reasonable to put a self-limiting factor into place, where we only mine as much bitumen as we can process with upgraders into a higher grade

finished product? This would be a natural limiting process that certainly wouldn't limit the economy because, of course, you're building a diversified secondary industry base based on upgrading and refining of bitumen and all the jobs that are associated with that, but then also you are perhaps putting a small limiting factor on how much of the raw bitumen is extracted at any given time. You mine it here, you refine it here, and you do that within the confines of the labour realities in the province, the infrastructure realities in the province, the environmental realities within the province, especially concerning water. Of course, there is a tremendous demand in both the extraction of bitumen and the refining and upgrading of bitumen into different oil products for using fresh water that's involved in those processes.

This is perhaps a nice sense of symmetry about the whole system. We're not just distorting the economy, digging these vast holes, and processing the bitumen to a very minimum amount to just be able to ship it down the line to refineries in the United States; rather, it's sort of more of a unified unit, we could say, where Alberta is enjoying all of the benefits that can be had from this wonderful natural resource that we have.

So I invite comment from the minister. Thanks.

7:10

**The Deputy Chair:** The hon. minister.

**Mr. Knight:** Thank you very much, Mr. Chairman. I certainly want to thank the member opposite for very constructive questions with respect to issues that our department faces and deals with on a daily basis. You know, the issue of the day, without a doubt – and I think the member brought it forward on a very constructive basis – is the idea around the royalties and the relative importance of this business, the energy industry, with respect to the province of Alberta.

I would support his comments by saying that the province of Alberta has a GDP somewhere in the neighbourhood now of \$200 billion a year. Mr. Chairman, about 50 per cent of that, somewhere between \$95 billion and \$100 billion, is relative to the energy industry. So the member opposite is absolutely right that this is a very critical piece of business with respect to how Alberta develops in the future, and the decisions that we make today relative to that industry are extremely important.

Mr. Chairman, the royalty system: again, the member is correct. He goes back and talks about the generic system that was put in place in '96/97. The question that he had is: where are royalties going? I think that in order for me to answer that question directly, I'll have to qualify that the present royalty review is being conducted. The Ministry of Finance is the lead with respect to the royalty review, so where royalties are going will depend upon how Albertans respond to the review. We will take into consideration the outcome of the review. Most certainly, this government is going to be very responsive to Albertans with respect to that issue. That will be addressed at a point in time when some indication comes to us with respect to the completion of the review.

Certainly, there are issues around the whole royalty system. Again, the member indicated the 1 per cent and 25 per cent after payout and a certain number of years, you know, that it takes these people to reach payout. The average now is about five years. The system responds quite well to most economic circumstances. We have a situation now where there are rising costs and considerations like that that need to be taken into consideration. Part and parcel of this revenue stream is the land sales that we have in the province that are rather unique to our industry and, again, our tax structure with respect to this industry.

So the royalty review: you know, I've been asked this a number of times, and really, Mr. Chairman, what I would suggest is that it's

not going to be my opinion. It's not going to be the opinion of the government that determines where royalties will go. As the member said: where are royalties going to go? We will be very consistent, I think, in respect to this review. We've been consistent all along and said that it will be open, it will be transparent, and at the end of the day we will listen to what Albertans and particularly what the panel have to say with respect to their report.

There was a question, Mr. Chairman, with respect to the business of bitumen, the mining of bitumen. Again, I think that it's fair to make some comments relative to bitumen because the resource base in bitumen in the province of Alberta is a world-class resource. A large portion of the bitumen production that takes place today is most certainly mining.

But, Mr. Chairman, as we move ahead with these projects, of course the member opposite knows very well that mining is actually the smaller end of that piece of business that will be conducted in the province over the next long number of years, I would suggest decades. Certainly, the in situ recovery of this resource is at least as important a piece of business and probably in the outgoing years would be a more important piece of this business than the mining is although, again, it's understandable that the mining today is relatively upmarket with respect to its visual context and that sort of thing. People have more of an opportunity, I think, to relate to the mining activity than they would do with in situ, which is, really, closer to what we would do with, you know, recovery of other resources.

There are kind of two questions here, I think, and I'll give a couple of answers. One was with respect to the natural gas, and I believe that was actually a question inside of this question. But on the idea that bitumen upgrading should be in some way directly connected to whatever bitumen production there is so that we would not produce more bitumen than we were able to either upgrade or refine in the province of Alberta, I would have to suggest, Mr. Chairman, that although it may have some attraction to certain individuals in Alberta, the idea really can't hold water, quite simply.

I think, again, the member would probably know that we produce about 1.1 million barrels, something in that neighbourhood, today: 700,000 barrels of it are upgraded; 400,000 barrels a day of this bitumen leave the province of Alberta as a bitumen product that's either diluted or it could be synbit, which is a mixture of synthetic oil and bitumen or bitumen and some kind of a diluent. That is a major piece of our business in the province of Alberta. If we were to go out today and say, "Well, you can't ship it; if we can't refine it, you can't produce it," we would shut down 400,000 barrels of production from the province of Alberta. I'm afraid that I would not be able to support us doing that.

I think also that it might be worth while to point out here – and perhaps we can discuss this a little bit more. Mr. Chairman, I think that if we're going to get value maximization in the province for these resources, we have to provide a basket of products that we can supply to clients in Alberta, in Canada, in North America, and certainly beyond our borders and internationally. So the whole concept around the proper balance with respect to developing these resources is also value maximization, and that means developing a whole basket of products that would take us into the integrated energy strategy, from bitumen to synthetic oil to synbit to bitumen that's got diluent, to the idea that bitumen upgrading refinery off-gases would end up in the petrochemical industry, and these again would produce value maximization and additional products for the province of Alberta to ship to Albertans and North Americans.

7:20

Certainly, some of our products, of course, as you know, Mr.

Chairman, already reach international markets. The idea that natural gas is being expended at a rate that is not sustainable with respect to what's happening in the oil sands industry: again, I would suggest that when you look at the conventional natural gas, conventional methane resources in the province of Alberta, these resources, like any hydrocarbon resource, I think, globally are finite. But there isn't really anybody that I know – I mean, there are all kinds of people that have theories about how long and at what rate you can produce for how long and that type of thing. The comments are well received, and we're aware . . .

**The Deputy Chair:** Hon. minister, the time allocated has elapsed.  
The hon. Member for Edmonton-Calder.

**Mr. Eggen:** Well, thanks very much, Mr. Chair. I appreciate the minister's comments. You know, this is a very critical issue that I just want to touch on very briefly, this bitumen export, because people understand that it's a nonrenewable resource, and so many people have a job that's associated with the oil and gas industry.

It's not a question of an either/or. I mean, certainly the scale to which we have exports already is clear, and I'm not advocating that you just shut off the tap. That's certainly not realistic, nor would it be practical. But you set in motion a mechanism by which you increase the percentage that does stay here, and you look twice at whether you need to approve five or six or seven new big projects up in the tar sands to continue that process because what we've set in place is the mechanism by which export is becoming the norm.

You know, this will only be exacerbated by the continuous approval of new projects once again, a tripling or a quadrupling of tar sands production in the near future. So we're suggesting that we just change the course, the trend, not shut off the tap of bitumen exports but change the way in which we approach this. I think the basic idea of mining it here, refining it here, be that in situ or the actual mining, resonates with the public, not just for insignificant reasons. They know that that is their product. They own that product. We want to make sure we get the maximum value for it.

My second set of questions and focus will move to electricity then, please, if possible. I've been watching the unfolding of the development of our electricity grids and production very closely over these past few years because, of course, we are in the midst of rebuilding or redefining how our electricity system is going to function here in this province. Indeed, the choices we make now are what we're going to be stuck with for the next 20, 30, or 40 years in regard to electricity production. I think it really is an important point to take a step back and decide on a course of action that is sustainable and that is going to be in keeping with the changing conditions of our province: increased population and the like. Certainly, again, the New Democrats are not advocating somehow reducing people's electricity consumption overall in the population but, rather, looking for a different way by which we produce electricity and deliver electricity too.

My first question, then, is one that we've discussed before, and I'm hoping that the public are going to hear something good here very quickly. When are we going to take off the wind cap on electricity, and how are we going to help facilitate the wind industry to produce sustainable electricity? This is something that we recognize. I'm not sure exactly why the decision was made to put a cap on the wind production. Certainly, most of the arguments were quite spurious, I would suggest. We know that there is a tremendous amount of investment interest in wind production in the province of Alberta and investors waiting to make that move. But, you know, we all know that investment capital doesn't stick around forever, and the wind is pretty much around in different parts of the

world. It doesn't just blow in Alberta. It's so important to seize this opportunity while there is interest and not scare them away with the cap. I know that we are going to in fact change or remove that cap for wind production, and I think everyone is waiting with bated breath to know exactly when.

My next question is in regard to other sustainable energy production, and remember that we're talking about a basket of electricity production here. Certainly, we're not suggesting that we can just supplant coal production in one fell swoop and move on to sustainable solar panels or what have you all at once but, rather, that we set in motion the process to let those sustainable resource developments produce a better percentage of the electricity.

I've been following with great interest what's happened in Ontario recently and what they've been doing in Germany for quite a long time, and that is having a variable price on different forms of electricity according to how it's produced and how clean it is. This is the logical next step for the concept that we've been batting around, which is net metering, right? Certainly, we're all waiting, again, with expectancy to see when the net metering regulations will be in place. What you really want is the ability for people to produce that electricity on a local level and get the price that makes it profitable.

I wondered why, when I visited Germany several years ago, in the whole village that we were staying in with my wife's family, almost everybody had solar panels. I thought: oh, isn't that great? But then I only realized recently why that is so. Solar electricity has a different price than electricity produced from hydro or nuclear, and it's a higher price. So it becomes more valuable to produce that solar energy, and people can make money off it.

That's the way, so often, the world turns. It's not such a bad thing, really, to have that self-interest built into the production of microelectricity and make it worth people's while so that you're not just saying: oh, well, I can't put in solar panels or geothermal or wind because the electricity is only worth, whatever, 6 cents or so. If you make a variable pricing, where the wind is that much more and the solar is that much more, then suddenly people will look twice at these things.

Wouldn't it be a wonderful legacy for us to look across our great cities here in Alberta and see solar panels on people's roofs not because they're just feeling morally conscious about this but are actually making money from producing this electricity and because we've set up a way to strengthen our electricity grid in the widest possible way, not just saying, "Well, we need to build more coal plants" but because we have literally thousands of electricity producers here and there and everywhere helping to strengthen the grid.

So this is, I think, a fascinating thing that we have to look at here in Alberta: opening the door through net metering, which I was so happy to see the minister making some positive overtures about. This is the logical step to make net metering actually work. The Alberta New Democrats fought very hard, of course, for net metering, and we're happy for that, and we're welcome to take it to that next level, where people will actually be able to take advantage of it.

My next question – sorry to have so many here in such close succession – is talking about building and strengthening the grid. You know, one of the most important things about electricity production is that you want to produce the electricity as close to where it's consumed as possible because, of course, you have line loss of electricity. The further away the production is happening, I think people are removed from where the electricity comes from as well. Even just here in Edmonton – 40 or 50 kilometres away is where we produce so much of the electricity – ask the average

person, and they have no idea where the electricity comes from. Having better education, a closer connection to your power, I think, increases people's education and consciousness about it.

So I'm asking: do we really need to build so many big long-distance lines like the 500 kV line between Wabamun and Calgary when we could potentially have the capacity to produce electricity more locally in southern Alberta? Certainly, the city of Calgary and southern Alberta are growing tremendously. I was just overwhelmed, as I always am, when I was in Calgary this past weekend to see the growth in the economy. It's all quite wonderful. You know, why would we have to burn coal all the way up here in Wabamun to ship that electricity all the way down to Calgary? It doesn't seem like the most efficient way to serve the needs of southern Albertans.

7:30

Of course, we've been working with the residents and people who have been raising concerns about the 500 kV line. You know, I just really wonder if we actually needed that 500 kV line or if it was really excessive. So the next logical question is that if we did increase that line so much, to a 500 kV line, what percentage of that kV line is designed to in fact export electricity as a merchant line? Considering that the tie-line to Montana is being put in place, then are we looking at electricity production here in Alberta to export electricity to the United States? Certainly, that doesn't seem like an efficient use of our natural resources. Of course, burning coal here in Alberta to produce electricity to ship to the United States just doesn't seem to be a logical use of our resources.

You know, the whole issue about building these lines as well: people have a big concern in my constituency and across the province about who's going to pay for them.

**The Deputy Chair:** The hon. minister.

**Mr. Knight:** Well, thank you, Mr. Chairman. Again, good comments and good questions. The member kind of started his second round of questioning with respect to bitumen exports. I suggest that perhaps I should open that comment with a little history here. The province of Alberta has exported oil since 1947, 60 years that the province has exported oil, and all kinds of other products followed along after that. Certainly, it is not a new business. We are producing in the neighbourhood of 2 million barrels a day currently, and we export about 1.1 million barrels internationally. About half a million barrels a day, I believe, is consumed in other areas of Canada, and of course the remainder is domestic with respect to Alberta.

So, Mr. Chairman, as we move ahead with the development of this resource, certainly I think it's only fair to say that the oil sands are one more piece of Alberta's continuing success story with respect to the hydrocarbon industry. When we start to look at things like carbonate plays and deep, tight gas, the possibility of coal-bed methane playing a role – and again there were some suggestions about natural gas. I sort of ran off the end there, didn't quite make the end of my statement. We've got about 40 tcf of conventionals in the province of Alberta that has been delineated at this point, but certainly the geological survey would suggest that there could be as much as 500 tcf of methane in coal in the province of Alberta. So as we move ahead and develop some of these resources in a very environmentally sustainable manner, these pieces, again, as I suggested earlier, will begin to fit together pretty well.

[Mr. Prins in the chair]

Mr. Chairman – and a new Mr. Chairman, I might add – getting

into the questions with respect to electricity, the grid, the generation, the restructuring, and so on, the member indicated that we would not want to make decisions that we are stuck with in the future. Again, you know, I would have to agree with that. We don't, and we won't. Most certainly, the restructuring and the new Electric Utilities Act, that came in in 2003, offer many advantages with respect to not being stuck because areas in that legislation, like any legislation most certainly, can be brought forward and altered to meet the requirements as we move ahead.

The restructuring. I would suggest that when we go back and take a look at where we were prerestructuring and where we are today, the province of Alberta itself has changed very dramatically. Certainly, I would suggest that although people see increases in the cost of their energy, I wouldn't argue with that. It's true. You know, I would again say that in any of these discussions leading up to where we are today and leading up to my responsibility now with respect to this issue, there was no point at which I would have suggested that we could somehow make the price of energy go down. It's a reality.

What we have done with the restructuring is indicate to Albertans that this system is pay-as-you-go. We will not leave energy debts for future generations to pay. So the cost of your energy is open; it's shown to you. If you consume it, you pay for it. Again, you know, there can be all kinds of discussions around whether that is or isn't proper social policy, but I'm suggesting to you that this government believes that we should not leave these kinds of bills behind for future generations to pay.

The question came up: when does the wind cap come off? Again, a very good question. In fact, what this government has done – through the Alberta Energy Research Institute the wind industry has put together a committee to study the wind resource in the province of Alberta. So we're going to study this for a year. When we're finished, we'll know where the wind blows and when, 24/7, 365 days, and we'll figure out what the proper balance is and how much of this wind energy can sustainably and reliably be added to the grid.

The only reason that the cap is there now is quite simply that we have to be responsible to all consumers and to all users of electricity in the province. It would not be, in our estimation, responsible at this point in time to lift the cap when we don't know what effect that would have on the grid. You know, give or take 10 per cent, at the moment we use just under 9,000 megs a day. The cap is at 900 megawatts, and by the way, we're not close to that. We're somewhere around half of that capability actually being generated now. But this government is looking forward to in a year's time and a bit, when we have an opportunity to get the information from this study, moving that cap.

Would we remove the cap and throw it wide open? I would suggest to the member again that that may not be the most responsible way for us to deal with this situation. However, we do see that wind energy has a very important role to play, and we will maximize wind energy with respect to electrical generation in the province over a very short space of time.

Mr. Chairman, there was a question on sustainable electricity. Again, a good question, a positive question. What I can tell you is that on the biofuel and biogenerating side these things are right now in one of the programs that we have. They're connected together. We have a \$239 million program that's come forward this year. We've actually given out the first amounts of money with respect to that initiative for biofuel and biogeneration. So on the biogeneration side there's 6 cents a kilowatt hour available for people that get into the production of bioelectricity.

I might also say that we're working with the regulations. We'll have regulations with respect to microgeneration and the business of

– you know, we’re considering net metering, but net metering is really only applicable when you get to a certain scale. Net metering for people with two or three solar panels or one of the small homeowner’s wind generators is not really a very viable solution. So what we’re looking at there is net billing so that you would build or run your meter one way or the other, and at the end of a month you would be billed for the net that you took off the grid, if that’s the case.

7:40

I might also say that a number of years ago the province was very proactive with respect to the generation of bioelectricity and renewable wind energy. The province contracted for renewables in wind and, certainly, biomass generation in Grande Prairie. As a matter of fact, the biogenerator that’s operating now in the city of Grande Prairie – it’s about a 20-megawatt facility – would not be there today if it weren’t for the fact that the Alberta government through Alberta Infrastructure made a long-term commitment and purchased electricity from that biogenerator.

It gave them the opportunity then to go to their financiers and say: “Gentlemen, this is what we have. We have the government of Alberta; the province is behind us. They’ve contracted this power.” We’re continuing to work with that industry in that way and in others. We have programs in place and, certainly, solid contracts in place to support that industry.

There was a question on distributed generation and whether or not the 500 kVa line that is in front of the EUB, proposed to be constructed between basically Edmonton and Calgary . . . [Mr. Knight’s speaking time expired]

**The Acting Chair:** The hon. leader of the third party.

**Mr. Mason:** Mr. Chairman, thank you very much. It’s a pleasure to rise and address the Minister of Energy with respect to his estimates. I want to pick up a little bit where my colleague from Edmonton-Calder – well, not where he left off but where he went with respect to the whole question of tar sands development and the issue of bitumen. I know that the minister would prefer oil sands. That’s a nice, sanitized-sounding word that’s been carefully chosen by the industry to replace the original term that was more commonly used: the tar sands. So you say tomato and we say tomato. They mean the same thing, but it does have a little different connotation.

Now, with respect to that, I wanted to follow up with the minister on a comment that he made in the first round of questions, and I wrote this down. He said: it is not the government that will determine where royalties will go. I would appreciate it if the minister would elaborate a little bit on that statement. If not the government, who? Perhaps he was referring to the committee that’s looking at royalty structures right now in the province, but I certainly assumed that they’re going to be giving a report to the government, much like the housing task force did, and that the government will make some choices and some decisions with respect to that report. But if not the government, then who?

Now, the minister also indicated that we have about 700,000 barrels per day of oil sands production – did I get that number correct? – and 400,000 a day which is not upgraded. Are those approximately the numbers? I just want to make sure. The plans to increase the amount of unprocessed bitumen that’s exported out of the province: I was looking at some information about the Alberta Clipper project, which initially would increase the export by 450,000 barrels a day and, eventually, up to 800,000 barrels a day of bitumen exported to the United States, as well as the Keystone project, which will increase the amount by 430,000 so that’s about 1,000,230

barrels a day increase on top of the current 400,000, so basically four times as much by my calculation.

So the question is: is there an upside limit that the government is prepared to enforce with respect to the amount of unprocessed bitumen that can be exported from the province? Are they prepared to take steps with respect to either of those two projects or future projects to limit the export of unprocessed bitumen from our province?

The minister also indicated that we need to provide a basket of products to maximize our value from the resources of the province. My question with respect to this is: how does including a steadily increasing proportion of unprocessed bitumen within that basket increase or maximize the value on our resources? I think that statement needs some explanation. It certainly seems to me just as a layperson intuitive that if you maximize the value-added in your natural resource, you will increase or maximize the value to Albertans of the resource. So those are some of the questions I had with respect to that.

The minister also indicated that he didn’t want to leave any bills unpaid. I think he was making that reference in connection with the energy prices paid by consumers in the province if I’m not mistaken. There is another issue of bills unpaid, and that has to do with the environmental liability left by these projects and whether or not the government monitors those things, calculates them, tracks them, and what the formula is for allocating the costs for environmental liabilities as a result of oil and gas exploration and tar sands development as well as coal-bed methane. So I would be very interested in knowing just how the government keeps track of environmental liabilities, clean-up costs and so on, and how great those are.

I believe it was in last year’s Auditor General’s annual report, Mr. Chairman, that indicated that the environmental liability for cleaning up conventional oil and gas exploration environmental liabilities was about \$2 billion, and that, in fact, there were no plans in place to fund that. I would like to know how that’s handled.

Now, I want to talk a little bit about natural gas. This is, perhaps, one of the most valuable resources that we have as a province. It certainly produces the greatest proportion of royalty revenues for the provincial government. One of the things I was surprised to learn when I first was elected to the Chamber and started looking into some of these things is that we get the lion’s share of our nonrenewable royalty revenue from natural gas, not from oil. So it’s very significant.

I also remember seeing a few years ago some lists of the proven reserves with respect to natural gas. I’d be interested in knowing how the government policy with respect to allowing export of gas or development of gas relative to proven reserves is calculated and whether or not that’s changed in the last decade or so. The recollection that I have is that we are running down our proven reserves of natural gas very, very severely. I would like to know what the minister’s view is of that and how that relates to the export of natural gas from the province and how much of our natural gas and at what rate it’s being shipped south and how long we will as a province have supplies of natural gas available to the people of this province.

I would also like to know the minister’s view with respect to the continuing use of natural gas in production of crude from the tar sands projects. I know that a recent document I’ve seen relating to a conference in Houston about the future of Alberta talked about getting off natural gas. Kicking the habit of natural gas I think was the title of a section of the report. I’d like to know what the government plans with respect to that and what some of the issues that they’re struggling with might be.

7:50

I'd also like to know from the minister what his view is of the viability of the Mackenzie Valley pipeline, where that is, and when and if that pipeline or the other pipeline is built, the impact that that's going to have on natural gas and supply of natural gas in this province.

Another point that I'd like to ask about is the extraction of the volatiles from natural gas. I know that under the Lougheed and Getty governments there was a requirement that the various chemicals that were useful for a petrochemical industry had to be stripped out and that only the methane gas would be shipped for export south. That's been changed. I wonder what's behind that and why the government made that change and if they would be prepared to consider changing it back again so we could promote a petrochemical industry in this province.

**The Acting Chair:** The hon. Minister of Energy.

**Mr. Knight:** Well, thank you, Mr. Chairman. First of all, I guess I'll go a little bit quicker because I want to make sure that I catch up to the questions that I didn't quite finish with the previous speaker. Most certainly, the thing that I want to get to is the idea around whether or not the transmission system in the province of Alberta needs to be fortified and whether or not the fortification of that is or isn't good for Albertans, generally speaking. I would suggest that we, in fact, do a lot of distributed generation in the province of Alberta. However, some of our major generating facilities are not, not dissimilar to many other places globally, as handy to the load as we might like them to be. So, most certainly, a transmission system is, in fact, not only desirable but critical for us.

The city of Calgary's Enmax Corporation have indicated recently that they're talking about distributed generation in southern Alberta, about 1,200 megawatts of capacity. They came out with a statement, a news release, one day last week – I can't remember; I think it might've been Tuesday last week – that indicated their full support for the grid strengthening, the 500 kV line, and the fact that whether or not there was distributed generation in Calgary, that strengthening was absolutely necessary.

Mr. Chairman, Montana Alberta Tie, the MATL, is not part of any discussion around providing electricity for Calgary or southern Alberta or, for that matter, really, the situation with respect to internal power in the province of Alberta other than that we know that we are very, very weak with respect to tie-lines into and out of the province of Alberta. We believe that MATL, which is, by the way, a merchant line, would be very advantageous to Albertans because of the fact that it can provide us with a higher degree of reliability in our system.

The questions that came. I'll try to get through all of these. Hopefully, the member opposite will bring some of them back if I don't get them all. One sentence had about four questions in it. I didn't catch all of them.

How does bitumen export maximize value? He keyed on to that, and I'm glad that he repeated: maximize value. In fact, other than the statements that have been made around value-added, which are good statements, it's a bit of a catchphrase that we in the Department of Energy feel now doesn't really cover what it is that we want to say. What we want to say is that these resources for Albertans will have a maximum value for the people of the province of Alberta.

How does exporting bitumen fit into that picture? Well, indeed, it fits in very well, Mr. Chairman, because one thing that is difficult to do with bitumen the way the system has evolved is to actually get good valuation for bitumen. So if can get merchant purchase in bitumen exports, that gives us a much better ability to set a base as to what valuation we can place on bitumen and, of course, as the

member very well knows, this is crucial to us with respect to our royalty system and collecting the revenues that the owners of this resource deserve. So, most certainly, that's one of the areas.

[Mr. Shariff in the chair]

The other thing is if you have an ability to supply a range of products to customers rather than saying: the only thing that we would give you is something like syncrude or something like transportation fuel. It's not too hard for us today in Alberta to imagine what would happen with respect to the bitumen production if you have a situation where you're going to say: any bitumen that's mine in Alberta will be upgraded and refined in Alberta. We've heard these statements, and they're good statements. The only thing is that bitumen or any upgraded product that might come from that, like kerosene, jet B fuel, transportation diesel fuel, are all marketable. They're all good products. They're all good commodities.

But like every other commodity – for instance, I can just use barley or wheat as an example. If the province of Alberta is knee deep in wheat and you can't move it, what's wheat worth? To us, nothing. If we were standing knee deep in bitumen – and good Lord help us because we'd need some fairly tall rubber boots. Bitumen valuation and the fact that this product can find markets and those markets help us maximize the value of this particular resource for Albertans, the ability to supply markets with a variety of products: those are the reasons that bitumen export helps maximize the value.

Mr. Chairman, there were suggestions that the environmental liability in the province of Alberta is large and growing. Again, I think that to the greatest degree possible environmental liability is part of the consideration with respect to approvals, and no approvals are given for any projects to move ahead in the province of Alberta without proper environmental assessment and environmental approvals.

Lease remediation. I believe that that was perhaps where the member was headed. I don't know if it's a question with respect to oil sands per se, but lease remediation in the province of Alberta has been, you know, successful to date. We have of course got leases in the province that become homeless for one reason or another, and there is an orphan well program that we have in the province to address the situation with respect to leases that need remediation and there isn't a responsible party at the other end. So, in fact, the province isn't on the hook for this. We collect from industry and put this money aside in an orphan well program to do those types of remediation.

Certainly, with respect to natural gas: why do we export natural gas, and we're definitely running out of natural gas, and all of that. Again, those discussions take place daily. Daily you hear people on both sides of the issue: "We're running out of gas. There'll be no more gas. Pretty soon methane's done." Well, I think I can let the member opposite know that methane, which is the basis of the natural gas we're dealing with, Mr. Chairman, is arguably one of the most common compounds on this planet. There's no shortage of methane. The unfortunate part for us, I suppose, in certain places where consumption of methane is high: the methane isn't where we want it, and it's not necessarily in the form we'd like to have it in. There's no shortage of methane. As I indicated, just from our coal-bed methane alone, there is – not our numbers – geological survey indicating probably 500 tcf of methane in coal in the province of Alberta. So, certainly, not a shortage.

8:00

Gasifying coal. We've got literally hundreds and hundreds of years of coal available, and gasification of coal is another way that

we can bolster the methane production in the province of Alberta if that's required.

The member very correctly brought me up short with respect to a comment that I made, that the government won't determine where royalties go. My statement should have been – and I will stand corrected. This department is what I was expressing, that our department doesn't determine where royalties will go. My colleague is absolutely right. With this situation with respect to royalties this government has a responsibility with respect to the royalty structure in the province. What I intended to indicate was that the Department of Energy and this minister would not direct where royalties will go.

I think that we've covered most of the issues.

Mr. Chairman, the amount of upgrading certainly that takes place in the province of Alberta or generally speaking, I would suggest, in North America is dependent to a degree on refining capacity. Of course, refineries are constructed specific to their supply, to their feedstock, and to a degree there is some requirement for us to attempt to match those refinery feedstock variabilities.

The Hydrocarbon Upgrading Task Force, Mr. Chairman, provides a forum for government and industry stakeholders . . .

**The Deputy Chair:** Hon. minister, your time allocation has now elapsed. Thank you.

The hon. Member for Edmonton-Highlands-Norwood.

**Mr. Mason:** Thanks very much, Mr. Chairman. I appreciate that we're covering a lot of ground in fairly short time frames. If the minister doesn't get to anything and wishes to, you know, provide us an answer later in writing, that's perfectly all right as well.

I want to just go back and deal with a couple of things. The question of the export of bitumen and the dramatic increases in the export that are in the works, that are planned: is the government going to develop a very clear policy with respect to this issue and how decisions will be made in the future and instructing the AEUB or its successor bodies with respect to the amount or the percentage or the value of unprocessed bitumen that can be exported? The question that I would have – and I know that the minister in a previous response talked about it not being advisable to just, you know, cut off the 400,000 barrels per day that are being exported now, but could we not set a cap? Could we not say that this is the maximum that we're going to allow and deal with it in that way?

Certainly, the argument that we need to find a way to determine the price of unprocessed bitumen is an interesting one, but I really question why we would be making decisions to permit a quadrupling of the export of raw bitumen to the United States from our province simply in search of a price. That doesn't make sense to me, Mr. Chairman, but what does make sense to me is that we're having limits on the ability to process it here and we're in a rush or the Americans particularly are in a rush to maximize the amount of oil that they receive from Alberta and they don't mind building some industrial infrastructure and creating some jobs in the process. The question I have is whether or not that's in Alberta's interests or just in the interests of the United States market. I think that's enough on bitumen.

I do want to come back to natural gas a little bit because I didn't feel I got a very precise answer on the whole question of proven reserves. I assume that the department has a method of calculating reserves and pays quite close attention to that, so I would be interested in knowing what the department's approach is to that and what their numbers show in terms of the proven reserves of natural gas. The minister didn't have time, obviously, to deal with the stripping of the volatiles from the natural gas and that policy and whether or not that policy is under consideration again or the use of

natural gas in the production of synthetic crude oil in the tar sands. Also, I had asked about the viability of the Mackenzie Valley pipeline and how that would affect our industry.

I just want to touch very briefly on nuclear power. My colleague from Edmonton-Calder may wish to raise this some more, but the question of nuclear power has come up, and I would like to know if the government has any programs or plans in place to support nuclear power in the tar sands or elsewhere, whether or not it's received any specific proposals from any proponents of nuclear power and just generally what the minister's view is with respect to the problems and the benefits of nuclear power.

I want to talk a little bit about district energy, which is an issue that I had something to do with in my previous life as a city councillor with the city of Edmonton. District energy, of course, is the use of waste heat in order to supply heat energy to urban developments, primarily urban, and it's most commonly used in northern European cities. Entire major cities in northern Europe are heated through the use of district energy. There's also an alternate form, which is district cooling, where sources of cold water, generally, are available. They provide air conditioning to major downtown centres in many cities in the world. This approach is environmentally very beneficial. It makes maximum use of our available energy sources, and in certain cases it's very cost-effective. The technology in Europe is quite advanced with respect to this. I would just ask if there are any district energy programs under consideration or if the department has really looked at this.

I know that NRCan has a program to promote district energy. They actually organized tours of municipal officials and some provincial officials to northern European countries to tour their facilities. There's a wide range, from small biomass-type situations right up to major developments that heat and cool major cities like Stockholm or Copenhagen or Helsinki. I just would encourage the minister to take a look at this because I think it would help us meet some of our obligations with respect to greenhouse gases as well as make effective use of our existing sources of energy.

I think, Mr. Chairman, that covers the points that I want to make, and I would be happy to turn my remaining minutes, however few they may be, over to the minister, if that's allowed under the rules, so that he can answer all the questions in full. Thank you.

**8:10**

**Mr. Knight:** The member opposite is so accommodating – it just makes me feel warm all over – with respect to the energy business.

I'm going to get to every one of the questions, I think, this time, Mr. Chairman, but I'm going to start a bit at the back and kind of move to the front of the questions. The situation around district energy and district heat, most certainly we're very aware. This government has been working with the city of Grande Prairie for about three years. They have, as I had indicated, a biomass-generating facility in Grande Prairie that produces about 20 megawatts of power. Along with that, they produce enough residual heat to provide heat for probably eight or 10 of the major buildings in the city of Grande Prairie. This government being proactive and working with the city of Grande Prairie and with other people in the district heat industry has changed the Natural Gas Price Protection Act so that it will allow for district heat offsets, for that heat to be offset the same amount that rebates would be under a situation where they would have burned natural gas for the same amount of heat produced. So, indeed, we're working with proponents with respect to that. The city of Calgary also is working on a district heating system, and again we will be interested in working with them with respect to that issue.

The nuclear power question is a big question. Most certainly, I've



said this many times and will repeat it here again tonight: we as a government are not a proponent for nor a detractor from any energy proposal that may come forward. There have been proponents with respect to the nuclear issue, looking a number of years now, I believe, but most certainly it came to my attention about a month ago. I've met, not dissimilar to meetings that I might have had with any of the other industry players, all the way from service companies to the majors, Mr. Chairman. If they ask for a meeting, if they want us to listen to their proposals, I'm open to doing that. I have listened to one particular proponent of a nuclear proposal, and I would presume there are more. This government will not get involved in any nuclear facilities in the province of Alberta until there have been open discussions with the constituents and the residents of the province of Alberta. So we're not in the business of doing anything at the moment. We watch and listen, and if people want to come and speak to me about the issue, I am open to those discussions.

Natural gas reserves came up again. Most certainly, one of the things that I'd like to point out to the member is that – and he'll remember this. Prior to the Alliance line being constructed in Alberta – and we got an awful lot of flak over some parts of that particular situation because we were exporting gas and exporting jobs from the province, and again, you know, it's a commodity – and having us connected to the areas in the Midwest, where that commodity was useful, we were standing knee deep in natural gas in the province of Alberta. I can tell the member quite honestly – I was in that business in the middle of that, and it wasn't pretty. It was very, very difficult. If you want to check the records – well, I'd suggest even six months prior to the Alliance line coming on stream and six months to a year later – and then calculate the difference in the price of that commodity and the royalty that Albertans received in the meantime, that piece of business, quite honestly, Mr. Chairman, was a huge win for Albertans. It provided, probably, as the member has stated, the largest portion of revenue from royalties for Albertans certainly in the ensuing years from the time the Alliance was put on because it made the whole commodity from Alberta sensitive to a commodity price internationally. It restructured our whole pricing arrangement and, by doing that, restructured the amount of royalties that Albertans receive.

Alberta's basin still has a lot of life. We've got reserve additions that come on continuously. They're price sensitive, and when you get prices in that \$4, \$5, \$6 range, we don't see a lot of additions. When the price of natural gas rises to the \$7 or \$8 range, people get more interested. Most certainly, drilling increases, and we get an increased amount of reserve additions. The last couple of years we've sustained our reserve base. New additions and depletions are pretty much balanced, and that includes our conventional reserves and CBM.

We're back to where we started from, hon. member, with a little bit of a discussion again at the end here with respect to bitumen and bitumen exports and a suggestion that there's nothing planned here and that, you know, we should at the very least perhaps cap the amount of bitumen exports. Again, I think that for this government that is probably not an option that we would entertain.

We certainly understand that there are many plans by industry players with respect to the movement of product. A pipeline, you know, can move more than a single product. So on the connection with respect to pipelines and somebody coming along and saying: "We'd like to build a pipeline to move 180,000 barrels a day. We'd like to build one that can move 320,000. These people would like to build one that can move 400,000 barrels a day," those are projects that people are bringing forward. I would suggest that, to my knowledge, they're not approved. Those projects aren't approved today; they're in process. Most certainly, we will be very diligent

and vigilant with respect to the owners of the resource that would move in any form in those pipelines.

To suggest, I think, that this piece of business, again, may not be good for Albertans, I've got to just go back to the situation that I discussed with respect to the gas pipelines, dissimilar in many ways but similar in some ways. We have just come forward with an incremental ethane extraction program so that with the value of the natural gas liquids that are in the system, generally speaking, in the province of Alberta, not in any one particular piece of pipe or another but in the system, we can find a way to work with the petrochemical industry, with suppliers, with producers, and arrive at a situation where we can maximize the value of those natural gas liquids for Albertans. I find it very exciting. I think that we'll be able to move ahead.

Of course, as the member knows, the petrochemical industry in the province of Alberta is the largest in Canada. Certainly, in our integrated energy strategy, in the way we see these pieces fit together as we move ahead, we're certainly keen on maintaining that, and we're confident that not only will we maintain, but we will continue to build on that.

On the idea of a cap on exports I think that with all due respect to the member, it would be my opinion that it is not well founded because you have a situation where there may be times when certain customers that we would have for our product would be able to receive more and sometimes less of a particular mix or blend of a product. When you start trying to put artificial caps in the way and you begin to tinker with the natural market that develops around these types of products, I think that in most cases what you see happening is restriction and restrictive practices, and you end up creating situations where our players are disadvantaged in the marketplace. Therefore, at the end of the day Albertans are disadvantaged with respect to the maximum value that we can garner for them with respect to any of these resources.

I think, Mr. Chairman, I got to the questions that we had. I want to just add that the hydrocarbon upgrading demonstration program that we're doing . . . [Mr. Knight's speaking time expired]

8:20

**The Deputy Chair:** Are we done with Energy? Would you like to move on?

**Mr. Eggen:** Okay. Maybe what I'll do is just ask five minutes of questions, and then we'll bring it around.

Well, you know, it's interesting what the minister is suggesting here, Mr. Chair, because we have a situation now with natural gas and potentially with bitumen where, yes, you let full-steam rolling of that product across the border for export – and certainly we're not opposed to exporting per se – but this full steam ahead approach creates a number of problems: (a) you're not getting that value-added back here, (b) you are creating an expectation in the market, especially south of the border, and (c) there are provisions in NAFTA which will actually compel you to continue to produce and export at that level.

So once you lock yourself into that model, aren't you creating a situation where we are going to lose that value-added component? Aren't you in fact not getting the maximum value for that raw material because you're letting it go without having that value-added processing stamped onto it? That makes it more valuable. I think that's a question we need to answer and answer very quickly because, of course, once we set in motion that level of bitumen export, aren't we going to be compelled to continue to do so under the provisions of NAFTA and under the provisions of creating that market direction? So that's, I think, a big question we need to ask ourselves here this evening and otherwise.

You know, like I said before as well, this is the revenue that drives so much of our budget here, so we can't play games with it. This whole notion that we'll take some time and we'll dilly-dally about with this royalty review: maybe we need to in fact not increase the royalties because of the provisions that the federal government are putting in in terms of tougher environmental standards. I'm sincerely hoping – and I think all Albertans are – that we will keep that extra value through royalties here in the province instead. By not doing anything, taking action or delaying, is the federal government not in fact moving in on that same revenue with great speed and disadvantaging Albertans potentially?

There seems to be a lack of co-ordination here. People can see where the golden goose is. We're not going to let them kill the golden goose by any means, but are we going to sell off portions thereof through the federal government's initiatives and not keep the money here at home through moving quickly on the royalties? You're always going to get complaints about royalty rates being changed. Certainly, the industry is not going to greet it with open arms, but they also know that this change is imminent. So isn't it better to move quickly and prudently on the royalty rates so that we get their maximum value?

There are two questions there. Number one, by setting in motion this massive increase in export of bitumen and natural gas to the United States, aren't we endangering our revenue stream and locking ourselves into an untenable situation in regard to NAFTA?

Thanks.

**The Deputy Chair:** The hon. minister.

**Mr. Knight:** Well, thank you, Mr. Chairman. You know, we've got about five minutes here to kind of conclude. What I'd like to do first of all is get something on the record here that I had intended to do to answer this member's question and, certainly, the leader's question as well, and that is that we have a hydrocarbon upgrading demonstration program going forward in the province of Alberta. We're going to invest a hundred million dollars in demonstrating new technologies that help our energy system to more efficiently convert energy resources to value-added products while minimizing environmental impact. So I think that what I'm suggesting here is pretty much what the members opposite have indicated they would like to see, and that is that we will find ways to continue to increase the amount of value maximization and the refining and upgrading of these products in the province.

With respect to the royalty system, again, to just go back to that, the member opposite has indicated that we're kind of doing this little review and that it's nice and comfortable and that we're dilly-dallying. I'm going to try to address that situation by indicating, Mr. Chairman, that this thing was engaged in January this year, and we're looking for a report to come forward in the August/September time frame.

Mr. Chairman, you know that this is not a slow process. We're not dilly-dallying. These folks have gone out, and they're taking a very concerted effort to come up with the answers. They've already gone through three, I believe, of the public consultations with respect to this issue, receiving very good input, and certainly we look forward to those results.

The situation around us kind of sitting on our hands and moaning and groaning while the feds move in: most certainly, again, the only way that, I would suggest, there's anything anywhere close to the feds moving in would have to do with the most recent situation around carbon taxes and that kind of thing. I'd like to just point out to the member that we were first in this business, and there's no doubt about that. The federal structure mirrors a lot of what Alberta

has already done. We do have some concerns and are addressing concerns with them on a continuing basis with respect to how they're implementing their program, and we will continue to fight for Albertans with respect to that.

I'd like to say that there's co-operation there as well. We have a carbon capture and storage panel, a blue-ribbon panel, that NRCan and the Department of Energy in Alberta are jointly sponsoring. Our deputy minister sits on that panel, and we're certainly, again, moving forward with respect to the issue. We really believe that this is a way forward for absolute reductions in greenhouse gas emissions in the province of Alberta. Mr. Chairman, we believe in this, and we are having good co-operation with the federal government with respect to that issue, and we hope to continue to do that.

Although I wouldn't argue that the feds are interested, I'd suggest to you that every province and certainly the countries in North America and globally are very interested in what's happening in the province of Alberta. We have leading-edge technology, we have the expertise, and we have the people power and the knowledge in the province of Alberta. That, coupled with our resources, makes this an absolute powerhouse in the energy industry globally. Mr. Chairman, this department is going to continue to support our government with respect to the development of these resources in an environmentally sustainable manner that's in the best interests of all Albertans.

**Mr. Mason:** One final question, Mr. Chairman, before we leave the Department of Energy. There's been some talk about restructuring the administration of the electrical system in our province, and I would like the minister to maybe outline those changes and the reasons behind them and whether or not the government is considering changing its position with respect to electricity deregulation in this province.

**The Deputy Chair:** The hon. minister.

**Mr. Knight:** Mr. Chairman, thank you very much. There are a number of questions in the question, but the answer to the first one, on the restructuring of the Alberta Energy and Utilities Board, is quite short: yes, we are. We're going to restructure it.

The reasons for it. Certainly, when you look at the numbers of applications that have come forward with respect to the energy side, not the electricity side but the energy side, it has, I would suggest, gotten to the point where although the EUB is managing on a timely basis to deal with all of these issues, I believe there's a requirement now for the old ERCB to come back, the Energy Resources Conservation Board, and there will be more of a focus from that group of people on those energy projects that we are faced with. As the member knows, there are many of them. It's certainly very, very important to the province of Alberta.

8:30

But on the other side of the issue, Mr. Chairman, we intend to put in an Alberta utilities commission. As you know, in 2003 we brought in a new Electric Utilities Act, and it continued the restructuring of the electrical industry in the province of Alberta. I believe that we now need an Alberta utilities commission that looks at those utilities, and it's external or not directly connected to what was the EUB. Folding those two regulatory entities together at one point in time may have seemed like the best fit for Albertans. It's my opinion that now is the time for a new fit, and the new fit would give the proper consideration to the utilities in Alberta. So this is not only the utilities with respect to electricity, but of course the natural gas utilities in the province of Alberta would also be housed there.

As the member knows, under the new structure in the Electric Utilities Act we've got the AESO, Alberta Electric System Operator; we have the MSA, the market surveillance administrator; we have the Utilities Consumer Advocate; and we have the Balancing Pool. What we want to do, Mr. Chairman, is have a focus on the electrical industry in the province of Alberta from the point of view of a regulator that's focused on that piece of business for Albertans. All of the things that we've talked about tonight, all of the development, all of the fact that we'd like to upgrade, we'd like to do more petrochemical: all of those issues cannot move an inch without electricity. It's extremely important for all of us, and I believe that it's important enough that it should have its own stand-alone regulator.

**The Deputy Chair:** Hon. members, are you finished with Energy?

Hon. Minister of Energy, thank you and your staff for your presence here today.

### Environment

**Mr. Renner:** I was going to introduce my staff, so as soon as they get here, we'll introduce them. They're on their way in.

**The Deputy Chair:** Well, Mr. Minister, we don't stop the clock for that purpose, so if your staff are not here, you can proceed unless somebody is directing them, or we can proceed with one . . .

**Mr. Renner:** Well, they're here. Is 30 seconds a big deal to you? It's not a big deal to me.

**Mr. Eggen:** No. We're all friends in the morning. We're here to help you.

**Mr. Renner:** Well, Mr. Chairman, I'm pleased to be here tonight to speak about Alberta Environment's business plan and budget. I will be accompanied by a number of members of my staff. I would like to take some time to introduce the executive team that works with me. Joining me very shortly will be deputy minister Peter Watson. Peter provides leadership and support to a team of about 800 that we have in Alberta Environment and oversees the department's daily operations.

I'm also joined by Alberta Environment's four assistant deputy ministers and the director of finance and administration. Bev Yee is the assistant deputy minister of environmental stewardship. Bev has the responsibility for environmental strategies, environmental relations, conservation and education and outreach programs. For example, Bev is leading the update of Alberta's climate change plan and is partnering with her colleagues to develop and pilot Alberta's cumulative effects regulatory framework.

John Knapp provides leadership for our environmental assurance division. He joined Alberta Environment in 2005 through an executive mobility program. Interestingly enough, he came to us from Agriculture, and many members, I'm sure, will remember John for the work that he did in Alberta Agriculture. In Environment, however, he has the responsibility for drinking water, environmental policy, environmental monitoring and evaluation, as well as information management branches.

Jay Nagendran is the assistant deputy minister for our newly formed oil sands environmental management, and he has responsibility for oil sands strategic policy and innovation and oil sands operations.

Jim Ellis is the assistant deputy minister for the environmental

management division. Jim is responsible for the Alberta Environment support and emergency response team, our water management operations, and regional integration in Environment's three regions.

Finally, Mike Dalrymple is the director of finance and administration. Mike provides leadership to Alberta Environment's finance, Freedom of Information and Protection of Privacy Act, administrative services branches.

I want to just say that since I've had the pleasure of being in this ministry, I've come to appreciate the expertise that each of these individuals brings to Environment, and I can assure all members that each and every one of them is very professional. But, more importantly, they're very much devoted to their responsibilities as stewards of the environment, and the passion that they bring to the job, I'm sure all members have noticed, is passed on to the minister. I'm pleased to say that much of the passion and knowledge that I have is as a result of the excellent relationship and briefings I have from the various folks that are now seated around me.

Alberta Environment received an increase of \$9.8 million in this fiscal year, bringing the total for the year to \$164 million. This budget will help to ensure that Alberta is an environmental leader, able to respond to increasingly complex environmental challenges and risks.

Alberta Environment staff work every day to safeguard public and environmental health, promote environmental stewardship, and enhance our regulatory systems and infrastructure. I'm confident that Alberta Environment's budget is well resourced and will meet our environmental priorities. This year we will add approximately 38 new FTEs to our staffing, of which 30 are committed to the oil sands environmental unit. This brings us to a total of about 842.

We will use the increased budget dollars to support the development and implementation of the Premier's priorities for Alberta's environment. For example, the lion's share of the increase, some \$7 million, will help us to manage growth pressures related to cumulative environmental effects and the development of the oil sands.

I've already introduced assistant deputy minister of oil sands environmental management Jay Nagendran. Jay is overseeing the development and operations of a new division within the department. Alberta Environment created the oil sands environmental management division in February to help us effectively manage the unprecedented growth in this area. One of the division's priorities is to respond to the recommendations of the Oil Sands Ministerial Strategy Committee on environmental impacts and development in oil sands communities.

Another priority of this division will be to effectively manage the cumulative environmental impacts of oil sands development and upgrading in our province. Alberta Environment recognizes that we need to look at the whole region to develop an environmental management approach that protects the air, land, water, and biodiversity of our province. In fact, developing a new environment and resource management regulatory framework to enable sustainable development is one of the initiatives outlined in my mandate letter from the Premier. This initiative is under way, and Alberta Environment will pilot some elements of this new approach with the development in the industrial heartland area.

In addition, \$1 million this year will support another of the Premier's priority initiatives, renewal of Alberta's Water for Life strategy. Alberta will use the funding for groundwater mapping, a key part of the renewal. We've committed \$12 million in new funding for groundwater inventory work over the next three years. This includes initiatives to assess coal-bed methane groundwater impacts, conduct a provincial groundwater risk assessment, complete basin groundwater mapping, evaluate and upgrade groundwater monitoring and data. Later this year the Alberta Water Council will

consult with Albertans on updating the Water for Life strategy. All Albertans have a stake in the Water for Life strategy, and its review will include opportunities that involve all stakeholders. This review will include an evaluation of current activities identified by the strategy as well as discussions of what additional activities may be required in the future. In the meantime Alberta Environment is committed to moving forward with the actions identified in the strategy in order to ensure that Albertans continue to enjoy a sustainable quality and supply of water.

8:40

My department is also moving forward with updating Alberta's climate change plan. We've recently completed climate change public consultations in 10 Alberta communities, and we received input from more than 2,000 Albertans. We are beginning stakeholder consultations and intend to have a draft plan developed by the fall of 2007. We have budgeted \$3.6 million for climate change in the coming year. We believe this is enough to implement our current policy commitments.

Not all environment-related spending comes from Alberta Environment. Some examples that are located within other budgets: Infrastructure and Transportation is spending \$422 million in capital grants to support municipal water supply and treatment and wastewater treatment and disposal; Advanced Education and Technology has dedicated \$25 million to research to enhance water management; Health and Wellness and Tourism, Parks, Recreation and Culture are allotting \$13 million to expand water testing monitoring and emergency response support.

In addition to those that I've already mentioned, Alberta Environment has many other initiatives under way, including three partnership actions and an internal action plan to support staff. Alberta Environment recognizes the benefits of working closely with our partners, and this year we're partnering with the Clean Air Strategic Alliance to develop comprehensive air quality strategy. Clean Air Strategic Alliance is a well-recognized multistakeholder partnership which recommends strategies to assess and improve air quality in Alberta.

We'll continue to work with Sustainable Resource Development and Energy on our vision of being the best natural resource and environment managers in the world. To do this, we're taking a new approach to our work. We're working together to achieve agreed upon natural resource and environmental outcomes.

We're also working with Sustainable Resource Development and other government ministries and Albertans to develop a long-term land-use framework. The land-use framework will help to address a wide range of land management issues identified in consultation with Albertans. It's also one of the Premier's priorities under managing growth pressures.

One of our department's top internal priorities is to provide the support needed to enhance staff capability. Part of this initiative includes implementing the ministry's workplace culture, learning and development, and succession management frameworks.

For the first time in history the environment is topping Canadian lists of priorities. It's also one of Alberta's top priorities, and, Mr. Chairman, it's my priority. Alberta Environment is committed to working with all Albertans to protect our land, our air, our water, and our biodiversity now and into the future.

Members, I ask for your support for Alberta Environment's 2007-2008 budget and business plan so that we can continue to enhance environmental protection, environmental stewardship, and the quality of life in Alberta.

Mr. Chairman, on a personal note I want to say that I'm here tonight at considerable personal hardship. I won't say that I'm here

under duress, but I am experiencing some latent anxieties because as we speak, my Medicine Hat Tigers are on the TV playing the Vancouver Giants, and I hope everyone will keep in mind that . . .

**The Deputy Chair:** Hon. minister, the time allocated has now lapsed. We wish the team well, though.

The hon. Member for Edmonton-Calder.

**Mr. Eggen:** Thanks, Mr. Chair. Certainly, I will keep in mind that the hon. minister has some latent anxiety already. I won't necessarily do anything to alleviate that, but I wish the Medicine Hat team all the best as well.

I'm very happy to work with the Environment budget here for this year. It's with considerable interest that I take a look at the budget because, of course, I've been watching this. This is the third one that I've seen come through, and each time my biggest concern is that this ministry is underfunded in relative and absolute terms. Once again with this budget I'm asking why, in fact, the ministry only received a \$9.8 million increase, which is, I believe, only about a 5 per cent increase from last year, when the scope and the responsibility that the ministry has has increased many more times than that. Certainly, 5 per cent doesn't even meet the rate of inflation. You know, you consider all of the responsibilities this ministry has in regard to managing our water systems and overseeing all of these new projects that are taking place. I know that the workers in the ministry are very dedicated and work very hard, but there are simply not enough of them. The workers in the various areas of this Ministry of Environment simply can't reach the places to which they need to go to look, to be responsible, and to execute the policy that the ministry has.

I'm seeing this as a significant problem because, you know, we can come up with the best-laid plans in the world here and in the ministry. Indeed, we do have some very good policy in regard to the Water for Life strategy, say, and some aspects of Climate Change Central. But all of those things are so seriously undermined by a lack of funding to put in place monitoring capacity that I fear that the ministry has once again been hamstrung by an insignificant budget increase and an overall budget that doesn't allow it to do its job.

I think that at this juncture the environment in general needs stronger stewardship and more of a policing element to the ministry where we're directly watching and making sure that we're providing a third-party monitoring of what's going on in the environment, but it's just not there. We're not able to do it. You can have the best intentions in the world, and if you don't have the capacity to be there, then it's just not going to happen. So I'm very concerned about that, and we're seeing the ramifications of this all over the ministry and its responsibilities.

An interesting place that I would like to ask about specifically in regard to this is this oil sands management initiative that the ministry is initiating. What I'm seeing and hearing from the environment industry is that, you know, there's a shortage of people that you can get to focus on this oil sands initiative. So, in fact, some of the corporations are offering to pick up some of the pieces, to do the research for them and to do the monitoring and the job that the ministry was to be responsible for.

Again, this is a trend that I'm very concerned about, and I'd like the minister to tell us about what the policy is here in regard to self-regulation. If you allow it to self-regulate to such a great degree, eventually we lose track of the whole thing in the first place. If we're putting in a new oil sands/tar sands management section here to focus on the tar sands area, but then we say, "Well, we can't really do it ourselves," and we just get the companies to do it, then you

lose a degree of credibility. I suppose people will take a second look at that and say: well, how reliable is that information and that data if we're only allowing the industry to regulate itself?

A good example of that, I think, is in regard to the downstream flow issue on the Athabasca river below the big tar sand projects. You know, what we're getting is a lot of confusion about that information. What is the minimum flow that should and could ensure to retain the ecosystem of the Athabasca river? Are we meeting those expectations? What are the implications of leakage and seepage from the massive tailings ponds that have been there for 30 years and the whole bit? What's been there at present has been a self-regulating system that obviously has not satisfied the requirements of that ecosystem, and it's not just the natural areas that you are endangering but, of course, all of the populations that live downstream from these massive tar sand projects.

So my basic first round of questioning is this: the integrity of the ministry is certainly there and a lot of the policies that we have, but would not the minister agree that again, for at least the third year in a row, we've been chronically underfunding this ministry? That has to undermine the capacity of the ministry to actually do its job, that it's mandated to do. I guess that I would like to help the minister in regard to lobbying to increase that budget and to supplement the staffing. If we have a special tar sand initiative, perhaps we can look for special funding for that to ensure that we do in fact put in ministry officials that are not working for the oil sands companies but are working for the ministry to actually execute that initiative. I think that Albertans would expect no less in regard to that and in regard to executing other initiatives that the ministry is responsible for.

8:50

You know, another area, just briefly, that is in the same situation is water – right? – being able to do the water testing and monitoring throughout the province. We've put in some very stringent initiatives, putting the moratorium on the southern rivers and whatnot, but we just simply don't have a way to measure and to regulate to see that it's being executed. All right? So if we have a moratorium on new water licensing and we're trying to set up a system to conserve the water, I mean, isn't that the very best time to put extra monies into the ministry to have people on the field to actually execute that plan? If it's all just on paper, then it's all fine and dandy, but we have to ensure that there is compliance, and the compliance has to be protected through the work of the ministry and the workers in the ministry.

So those are my first sets of questions. Hopefully, in the spirit of having more of a dialogue, I'll sit down and allow the minister to reply. Thanks.

**The Deputy Chair:** The hon. minister.

**Mr. Renner:** Thank you very much, Mr. Chairman. I guess that I'm dismayed but not surprised at the tone of the member's remarks. I think the Member for Edmonton-Caldor knows very well that this jurisdiction is a leader among provincial jurisdictions when it comes to ensuring that the environment is adequately monitored and regulated. It is dismaying to have someone stand up – and he's not the first one that's done it. It happens repeatedly, not only here but outside this House, by people who simply don't take the time to understand exactly what it is that we do, to make statements that are based upon fallacious assumptions.

You know, the fact of the matter is that it doesn't take hundreds of millions of dollars to do a good job of developing policy. It takes a significant amount of intelligent people who have the necessary

expertise, who have the support of their minister, and who have the support of this executive team that you see in front of you, who develop the tools that we use to ensure that we are in fact doing our job as stewards of the environment, ensuring that the issues that the member makes reference to don't in fact exist.

I want to point out that, for example, the member talks about the chronic underfunding that this department has and then talked about water. Well, this year alone we have an additional \$4 million that is allocated to groundwater: groundwater mapping and research related to groundwater. In my books, in anyone's books, \$4 million is a lot of money. It buys a lot of expertise. It buys a lot of people, and it buys a lot of work. So I take great exception for anyone to say that we don't have sufficient dollars in our budget to do the job that we need to do.

The oil sands management unit, as I mentioned in my opening remarks, will eventually consist of about 38 people. Bringing those people into this unit will accomplish a number of things. Obviously, one of the most obvious is that those people will be fully immersed on a day-to-day basis in issues related to the oil sands, so they will develop the expertise that's specific to that particular case to a much greater extent than we've been able to do in the past. Because the development of oil sands policy, the ongoing compliance mechanisms, the necessary quality assurance programs that we have in place for the oil sands tended to be housed within other divisions in the department, people would be working on oil sands for two or three months, and then they would be moved and work on something else for the balance of the time. By bringing everyone together, by consolidating this unit in one, the people that are working in that area will concentrate almost exclusively on development of issues for the oil sands.

I want to talk about this statement that industry is picking up where the department leaves off. You know, nothing could be further from the truth. I was up in Fort McMurray myself not more than about two months ago. I met with a number of our staff, and I also met with a number of people that are involved with the Wood Buffalo Environmental Association, WBEA. That's one thing that I am learning in this department: acronyms are everywhere, and until you learn them, it seems like they're speaking Latin all around you.

The other thing that I've learned is that if you want to do a good job of protecting the environment, you can't have a policeman on every corner. So when we talk about safe neighbourhoods, what do we talk about? We talked about safe communities, community-based policing, Neighbourhood Watch, all of those kinds of programs. If we're talking about public safety, everyone says: "Government should be promoting this kind of a program. It's an excellent program. You can't have a policeman on every corner."

Well, hon. member, I'm here to tell you that the same thing applies to the environment. The best way to ensure that you have compliance with environmental legislation is not by going out and hiring more policemen, because you'll never have enough policemen on every corner. It's by involving the community and ensuring that we have community buy-in so that everyone in the community knows what the environmental standards are, knows what their responsibilities are as an individual, and knows how they can participate.

That's where we get – whether it be an airshed organization like WBEA or we get WPACs for watershed, or in this case we're actually going to be combining the two, air and water, into one organization – a community-based organization. Yes, industry is involved in it. Industry should be involved in it. They're part of the community, but so are the NGOs; so are the First Nations; so is the man on the street that has to live in this environment and is interested enough to participate in these kinds of organizations.

Yes, they're volunteers, but they're not acting in isolation. They're supported, I think, very well by support staff from Alberta Environment. They have funding that comes through to them internally through our department and through the industry, who by the very nature of the fact that they're there, there is expectation that we place on them to say: "You should be contributing to this. You should be part of this monitoring, an ongoing process."

So it comes down to this: Alberta Environment's job is to set the standards, to develop policy, to give us the tools so that we can ensure that we're protecting the environment. We do have a compliance component as any organization should have. We do from time to time some spot checks, some audits, to make sure that the systems that we've put in place are working. But we feel that it is a much better use of our resources to be developing policy, to be developing forward-looking policy so that we can continue to have leading-edge policy when it comes to managing the environment. Put our emphasis there, and then have a process in place where we've got the community watch; we've got people that are in place knowing what the expectations are, having our people from a compliance perspective deal with (a) complaints – and we follow up on virtually every complaint – and (b) spot checks. If we see things through either complaints or through spot checks that are not consistent with the policy, not consistent with the standards that we've set, then we are prepared to and we have not hesitated to come down very heavily and very severely on those that choose to blatantly ignore the standards, pollute and contribute to the environmental degradation that we absolutely do not put up with.

9:00

So, hon. member, I guess the bottom line is that I am not going to accept the fact that because in some people's opinion we should have had a larger increase, then therefore we're incapable of doing a job of protecting the environment. I think it's quite the contrary. We have \$160 million-plus to devote to protecting the environment, and \$160 million is plenty of money in anyone's books. It's not how much money we have; it's how we use those resources in the most effective way so that we know and are confident at the end of the day that we have fulfilled our obligations, our commitments to society and to the environment to ensure that the standards that we set are, in fact, the standards that are kept.

**The Deputy Chair:** The hon. Member for Edmonton-Beverly-Clareview.

**Mr. Martin:** Thank you, Mr. Chairman. I'll save the debates about CO<sub>2</sub> intensities and absolute reductions for my colleagues, but I want to go into a couple of areas, one that potentially impacts my constituency. I want to talk just generally about reclamation and the problems that are out there from the past, i.e. service stations or other areas. I haven't had time to look tonight, but the Auditor General has talked about this, that there's a severe cost out there, and I think we might agree on this, that the polluters should pay. But how you go back and do that is another situation, of course. I would be interested in the cost and the scope of the problem that the minister sees out there with some of these places that have been left. You know, the ones that are most common are service stations.

The one that I want to talk about is the banned Domtar plant in northeast Edmonton, which impacts my constituency of Edmonton-Beverly-Clareview, and certainly one of my community leagues, Homesteader, has some concerns about this. I know that there's been some contact with the ministry, and I know that they sort of said, "Well, it's up to what the city wants to do," and the city is looking perhaps at some zoning that would allow I think play-

grounds or some sort of situation in there, obviously not housing. But many people have said that they're not even sure about that, that this could have leaked into all sorts of places. Now, I don't know if this is the case or not, Mr. Chairman, but I know that there's a lot of concern in the community, and this could be a bigger issue.

I guess I'd want to know – and if the minister doesn't know about it, I would say that if he can't answer it here today, because he may not be aware of the situation, certainly a written reply would be okay in the future. But I do want to get some feedback about what the Environment ministry says about this particular site. Is there any possible danger? What could be put there without some sort of danger? How are we working with the city? My residents say: "Well, this is all well and dandy. We've heard about safe sites before." Then all of a sudden they find out something down the way, you know, that just wasn't appropriate and shouldn't have been there. I mean, I guess I question why Domtar isn't picking this up and cleaning it up themselves. I know that they've been sold, but it seems to me that they did a lot of business there over a lot of years, and the polluters should have paid. I wonder why they haven't been asked to go back in there and do a more thorough cleaning up so that it's not left with the government here or the city to deal with that. So if the minister is not updated on this – I don't expect that with every little problem he is – that's fine. I wouldn't mind a written reply about it after.

The third – and I'll give the minister an opportunity to comment; it's something that I think he would like to comment about because he was mentioning it in debate today – is the recycling industry. I believe, if I'm not wrong, that we've seen sort of a dropping off in the number of people that are recycling, and that's created some concern about why that's happening. I believe the minister talked today – and I'll allow him to expand on it a little bit here – about the possibility of this going to a policy field committee or something to look at what is happening in the whole recycling industry. So I certainly would be interested to hear his thoughts on that and see what he says and if that is possibly going to a policy field committee.

So, Mr. Chairman, those are just a couple of very specific issues that I wanted to bring up today, broadly talking about reclamation but specifically about Domtar. Then maybe the minister can talk about some of the concerns he has about what's happening with the recycling industry. Thank you.

**The Deputy Chair:** The hon. Minister of Environment.

**Mr. Renner:** Thank you, Mr. Chairman. Let me talk a little bit on the reclamation of the downstream sites: retail sites, service stations, that kind of thing. The role of Environment is twofold. First of all, our expectation, as the hon. member mentioned, is to ensure that the polluter pays. So where there is a clearly identifiable polluter, then we're doing two things. We're monitoring the situation to ensure that the contamination that is within the site is not moving, is not spreading onto adjoining pieces of property and also that the owner of the site has got an ongoing management plan so that over time they are in fact remediating and cleaning up the site.

There is work to be done on this whole issue of reclamation and remediation. Let me be honest; the way we have the existing legislation does not have a whole lot of incentive in place to encourage the owner of a former service station site that's got contamination due to leaking petroleum tanks or something – while I think it's valid and it's good and it's proper that we have the philosophy that the polluter pays, our legislation now says that not only does the polluter pay now but the polluter continues to pay in perpetuity. So when someone cleans up a site today and we issue a

reclamation certificate, if 20 years down the road technology changes, the state of the art changes, and we find that there still is contamination on that site, the original polluter could still be held liable. So people are looking at it and saying: look, if we're going to be perpetually held liable for this, if we can never sell this piece of property and we can never actually take this potential liability of our books, why should we bother?

So I think that is an area where we have a lot of work to do. There is and we in fact are working on a process whereby we can issue a reclamation certificate and, barring huge exceptional circumstances, reasonably be able to say to the owner of that land: yes, you have cleaned that up to the satisfaction of government, and that obligation of polluter pay has been fulfilled. It's not as easy as it might sound, and we don't necessarily want to have a massive transfer of liability from the private sector to the public sector, but it's an area that I think, until we resolve that problem, we're constantly going to be dealing with these kinds of issues.

#### 9:10

When I was minister of municipal affairs, we often ran into situations where we would have a small town in rural Alberta where all four corners on main street, right in the middle of downtown, are now vacant, and the reason that they're vacant is because they're owned by giant oil companies that used to retail gasoline on those sites, and it's cheaper for them to continue to pay the property taxes every year, to do minimum maintenance on that property than it is for them to do the reclamation. Even if they did the reclamation, there's no guarantee that they would be held blameless should something else turn up at a later point in time. So it's an area that we have work to do on.

That being said, we're making some really good progress. The areas that we're making some really good progress on are some of the sites that were held by independents, that were held in the hands of municipalities. As the hon. member knows, also in my former ministry of municipal affairs, there is the petroleum tank program that has recently been funded to allow for some further work to be done to deal with the small-property owners that have potential to have significant problems. They're not able to sell their property because they can't get financing. Banks won't issue a mortgage on property until they've got a reclamation certificate in their hands. So we are making some very good progress in that manner.

I want to talk just slightly about the Domtar site. I do have some information about this site. Again, it's similar to what I've been talking about with respect to a service station. Only this is on a much larger scale. Our priority with a site like this is to ensure that the highest risk areas are dealt with so that if there is obvious contamination that is posing a significant risk to neighbours, that area is dealt with first. I'm advised that all of those high-risk areas on that site have now been dealt with. The rest of the site is being risk managed, which means that the owner of the site has to supply Alberta Environment with their risk management plan so that it shows over time that they are continuing an ongoing program that is going to reduce the amount of contamination on the land. Most importantly, we are satisfied that none of the contamination that's on-site is migrating off the land.

What has to happen now is that combined with the city and the owner, there need to be some decisions made on: what is the future use of that land going to be? Depending upon what the future use of that land is, Environment will then have to become involved and set various levels of decontamination for the land. If, for example, the land is going to be converted into a parking lot, paved over in a parking lot, and a caveat put on the title that it can never be developed, then basically what we would be concerned with is that any

contamination is stabilized, that it's not moving and it's not going to migrate and it's not going to cause any problem to groundwater or adjoining land and it's not going to be posing a risk to anyone. If, on the other hand, someone decides that they should build a school there and children are going to be on-site every day and playing and rolling around in the dirt on the playground, then obviously the level of decontamination is going to be significantly higher. So we'll work in conjunction with the municipality to ensure that the designated use of that land is compatible with the degree to which the decontamination is taking place.

A good example of that is a project – and I don't know how familiar the member is; it happened a few years ago – in Lynnwood Ridge in Calgary. That was an ongoing process where what happened was that there was inappropriate use of an industrial site that we are now still in the process of cleaning up after the fact. We don't want to allow ourselves to get into a situation like that again, so we're not going to approve any development on that site until we know what it is and what the degree is to which the decontamination plan has been put into effect.

It works with, really, a three-way communication: the owner of the land, the municipality and their long-range plans, and Alberta Environment. I think it's probably a pretty good system when we allow it to work and everybody uses a little bit of common sense. It would be pointless to say that this has to be in pristine condition if it is in fact going to be paved over for a parking lot. On the other hand, there may be cases where it makes a whole lot of sense that for various reasons it does need to be returned substantially.

Finally, let's spend just a little bit of time talking about recycling. The member is absolutely right – oh, Vancouver 2, Medicine Hat 2, seven minutes left in the game. Thank you very much. It could be into overtime.

The recycling is troublesome.

Does somebody else want to talk? Then I'll get back to you.

**The Deputy Chair:** Hon. minister, the time allocated has now run out.

The hon. Member for Edmonton-Highlands-Norwood.

**Mr. Mason:** Thank you very much, Mr. Chairman, and I appreciate the comments so far of the hon. minister, still Minister of Environment.

I'm just wondering how the team is doing. I don't know if your officials are keeping you apprised of the score.

Anyway, I wanted to talk a little bit about the government's climate change act, which was previously known as Bill 3. As the minister knows, we fundamentally disagree with the intensity approach which is contained in that bill. I would like to sort of deal with it in terms of the recent federal initiatives that were announced with respect to climate change and to greenhouse gas emissions nationally.

Now, the federal plan also begins initially with an intensity approach, but within a few years the plan shifts towards absolute caps. This has not been part of the approach that has been expressed in what we've seen from the provincial government. So it seems to me that there is a period of harmony for a number of years while the federal government deals with intensity targets but then a shift to hard caps, not part of the policy that we at least have heard this government express. Yet there was a certain amount of comment which we observed in the media and otherwise about the two approaches being somewhat in harmony. I guess my question for the minister is: what impact does this federal plan have on Alberta's long-term approach to greenhouse gas emissions, and what does it do to the climate change act, or Bill 3?

It seems to me that there's at least an argument that could be made that the federal plan renders Alberta's act almost a dead letter and, in fact, renders it almost irrelevant. I'd like to know the minister's view on how the federal plan and the provincial legislation interact with each other and what validity into the future the climate change act actually has, given the federal move in this area. If you could focus on the jurisdictions of the two orders of government with respect to this issue and which one takes precedence, I would be most interested in hearing that in a little detail.

9:20

Then it gives rise to the question of whether or not the provincial government envisages moving toward some hard cap at some point into the future. If not, then how much absolute emission does the government think Alberta will be producing, you know, in 10 years or 20 years?

The other questions that I have have to do with the federal government's carbon tax and how that fits in with the government's plan to have emissions-based intensity trading within the province and whether or not that also has been rendered essentially null as a result of the federal action. I just wanted to deal with that at this point in terms of emissions.

I want to talk a little bit about water and the supply of fresh water. I wonder if the department has looked at the state of the glaciers that feed the major rivers in Alberta, including the North Saskatchewan and the South Saskatchewan river systems, and when the melting or degradation of those glaciers is going to significantly impact the supply of fresh water in our rivers and what impact that's going to have: whether or not, in fact, there's some long-term planning. Has the department looked at those glaciers and what the supply of water is going to be when those glaciers become essentially degraded? Are they following the melting back of glaciers and the impact on the rivers and the supply of fresh water in Alberta?

I'd also like to know in terms of the rapid growth that the province is experiencing – and particularly the city of Calgary, I think, in this case is one that I'd like to focus on – how sustainable the current population or projected populations of that city and I guess southern Alberta as well as a whole are, given a reduced supply of fresh water in the future and what steps the government is going to take to limit growth or to manage the insufficiency of fresh water into the future. So the whole question, Mr. Chairman, of the rapid growth in Calgary and southern Alberta versus the potential decline in the amount of fresh water that's available.

Also, of course, there is the agreement with Saskatchewan that we provide them with 50 per cent of the fresh water that we receive, whether or not that particular agreement with Saskatchewan is being adhered to and whether or not the department believes that we will be able to meet that obligation to the province of Saskatchewan given the rates of growth that are taking place in the province. If not, well, then there's the broader question of the government's policy relative to growth in general, which is not this minister's specific responsibility but which we would, you know, certainly be raising with the Premier and with other ministers, perhaps at one of the cross-ministry sessions.

There's also the question of the availability of fresh water to support development in the Athabasca tar sands. There has been a lot of discussion in the last couple of years about the supply of water in the Athabasca River and how that river is going to be impacted by continued growth of industrial development in the tar sands around Fort McMurray, whether or not some severe damage to that river is going to take place, whether or not the government is prepared to accept that, what analysis they have done, what studies they have done to estimate the impact on the Athabasca River and other water

bodies in that area of the ongoing development of the tar sands, and whether or not the plans for the economic development and the Department of Energy for continued rapid growth and not touching the brake, as the Premier puts it, letting the market decide, whether or not those approaches and the projections arising from that have been married to projections of freshwater supply and the wildlife habitat that exists there.

I want to ask also, Mr. Chairman, if I can about the quality of water in the lakes, particularly in central Alberta. There has been a certain amount of discussion around that, a certain amount of concern that has been expressed in some studies and in the media and so on about the quality of the water in those lakes: Pigeon Lake, Gull Lake, Sylvan Lake, and a number of other lakes in central Alberta. I'd like the minister perhaps to give us some indication of where we stand there.

**The Deputy Chair:** The hon. Minister of Environment.

**Mr. Renner:** Well, thank you, Mr. Chairman. Just an update: the game is in overtime, in intermission as we speak. So maybe we'll answer a whole lot of questions really fast, and then we can watch the overtime. I don't think we'll make it.

The leader of the third party talked on climate change and water, so let me have my comments around the same two issues. The federal plan is really in many ways a reflection of the provincial plan, and when the member asks what impact the federal plan has on the provincial policy with respect to CO<sub>2</sub>, we see it to some extent as being complementary. There's a significant difference between the federal plan and the provincial policy, and that is that at this point the federal plan is just that: it's a plan. It's not due to take effect until three years from now.

The provincial plan comes into effect three months from now, the 1st of July. We will have had a significant amount of practical, hands-on experience in dealing with what are substantially the same mechanisms that the federal government is dealing with. In fact, the federal government has been quite straightforward in saying that they plan to harmonize and work with provincial jurisdictions wherever possible. So we believe that what we accomplish over the next three years can very much feed into and complement the federal plan.

There's a great deal of detail. These kinds of situations are never black and white. It's never as simple as it might seem. A lot of the disagreements over interpretation that we anticipate over the next couple of years will have been resolved, and I think that by that time the federal government will realize that rather than having to fight the same old battles over and over, they may learn from the experiences of those same battles fought in Alberta.

9:30

The issue to keep in mind with the federal plan – and the member points it out, and I've heard it pointed out before – is that the federal plan contemplates caps, absolute caps. Well, in fact, it doesn't. It talks about targets that are caps, but it doesn't talk about absolute caps. It very deftly, however you want to put it, goes from intensity-based targets that are industrial in nature, and then flows through very nicely, almost without having taken a breath, into absolute targets that are economy-wide in nature. All of a sudden now we're including vehicle exhaust and building heating and everything else. While it's relatively simple to deal with the technicalities around intensity-based targets for industrial emitters, it's not nearly so simple to start to make promises around fulfilling commitments to absolute targets for vehicle emissions and everything else. The best that we can do is to set some targets.



Alberta has never said that we were not going to achieve some absolute targets. We've just said that it'll be done on the basis of investment in the necessary science and technology so that at some point in time we will have the ability to do a better job of managing our CO<sub>2</sub> emissions than what we're doing right now. That's why we believe that by bringing our mechanism into play in July of this year, we're going to get a significant head start on the rest of the country when it comes to having the necessary expertise to deal with the science.

Where we differ, quite frankly, with the federal government is that I think the federal government is being a little overly optimistic when they expect some pretty massive organizations to turn things around as rapidly as they seem to think they're going to be turned around. Yes, there are wonderful opportunities, and we believe that there are huge opportunities for carbon capture and sequestration, but it doesn't happen overnight, and it doesn't happen in a one- or a two-year window. It happens in probably a 10-year window, where you begin the process, you have the opportunity for the capture to be incorporated into the design plans, and at the same time you're dealing with the transportation of CO<sub>2</sub> and how you are going to be moving CO<sub>2</sub>. All of these things have to happen in the proper sequence.

I'm concerned that the federal government may be abandoning investment in the technology far sooner than would be prudent and far sooner than will allow industry to make the necessary changes. What the federal government is proposing that the province is not proposing is to move into emissions trading and those of kinds of instruments to a much greater degree than the province is. The province believes that we should be dealing with our problems here in Alberta, not simply paying, as the member calls it, a carbon tax so that we can merrily go on polluting and not deal with the situation that we have here.

Let's make it very clear: the intensity-based targets that we have in Alberta are designed to create the opportunity for absolute reductions. In fact, if you're one of the operators anywhere in Alberta right now that's subject to the legislation, it is, in reality, an absolute target. It's not intensity based. You cannot avoid the compliance mechanisms by simply turning down the tap. We've already established what your base is, and we expect you to be more efficient in producing whatever it is that you produce with respect to CO<sub>2</sub>. What makes it intensity based as opposed to absolute is that we're not putting up a sign at the border and saying: anyone who wishes to work in Alberta need not apply because we've closed the door to all future development. We're not prepared to do that. We never will do that because we don't believe that that's the role of government.

That is a good segue and leads me into the discussion around water because the member was making similar kinds of statements around water. A typical NDP way of looking at the world is: "We won't manage our resources. We'll simply manage the business. We'll just determine how many businesses we can have in this province, and then when there's enough, we'll just send the rest of them away." We, on the other hand, feel that it is our job and our responsibility to manage the resources wisely and to set the outcomes.

So when we look at water basins, for example, like we did in the Athabasca – we've determined what are the in-stream flow needs of the Athabasca River, and we've determined what is the maximum that we are going to allow industrial development to impact on those in-stream flow needs. At this point the amount of water that is actually being used is minuscule. Less than 2 per cent is allocated. The difficulty is that the water doesn't necessarily flow at a uniform rate 12 months of the year, so we have periods of the year when

there are massive amounts of water such that you wouldn't even notice that there's been any withdrawal, and then in other parts of the year, particularly in the winter, the flow is significantly diminished. So we have to set the maximums at different levels depending upon the flow rates, and that's what we've done through the IFN.

The same thing applies in southern Alberta. We've now closed off the South Saskatchewan River basin to further allocations on the Oldman and the Bow, but that doesn't mean that there can be no more development on the Oldman and the Bow. It means that we have to do a lot better job of using the water that's already there. There's plenty of water there. It's just a matter of ensuring that we use it wisely, ensuring that we conserve water wherever we can, that we recycle water wherever we can, and that's how we're going to continue.

**The Deputy Chair:** The hon. Member for Edmonton-Highlands-Norwood.

**Mr. Mason:** Thanks very much, Mr. Chairman. Well, I'm happy to raise some more questions with the minister. I think that, you know, in a rather partisan way he misrepresented the intent of the questions around water. The questions were: what impact will a shortage of water in the South Saskatchewan basin in particular have on urban growth, and what impact will industrial development in the Fort McMurray area around the Athabasca tar sands have on the Athabasca River? It's not, as the minister tried to suggest, an attempt on our part to say that you need to control the businesses. I said nothing of that sort whatsoever, so I didn't appreciate that very much.

I don't think that the minister actually answered the question: what kind of limitations on growth? Let's take Calgary. Let's take the South Saskatchewan River basin and the Bow River in particular. What impacts on the growth that's projected for that city is the shortage of fresh water going to have? Not trying to control any businesses or anything. That's a serious question. It's a very important question because Calgary is growing very, very rapidly, and at some point a shortage of fresh water is going to act as a brake on that development. I'd like to know what this minister and what this department has planned for that situation. The same with the impact of continuing development in the tar sands and the Athabasca River. I'd like to know about that as well as the impacts of the melting of glaciers at the headwaters of a number of Alberta rivers and whether or not the government is planning for that and what they're planning for that.

I want to talk a little bit about carbon sequestration, Mr. Chairman. I would like to know what studies the government has with respect to the viability of this approach, where in Alberta this approach is being considered, what developments in technology need to be achieved before this technology is viable, what capital costs the government has in mind for developing this system, including spending a considerable amount of federal money, potentially, on a pipeline for the transportation of CO<sub>2</sub>, where that project is at, and how the government plans to spend that money.

9:40

Mr. Chairman, I just want to indicate that there are many depleted or partially depleted oil fields in this province. The use of CO<sub>2</sub> in order to replace fresh water as a means of getting the final 10 per cent or so of the oil from these fields is probably a very good idea, mostly because we'd no longer have to consume fresh water, which is then permanently lost. I believe the province of Alberta has about 100,000 holes drilled in it. I could be way out, but that number seems to stick in my head as a ballpark figure. The question then is:

if you're going to push CO<sub>2</sub> under the ground into these fields, and there are thousands of holes in a given field that have been drilled, and all of the subsurface strata has all been punctured, how are you going to keep the CO<sub>2</sub> down?

Now, just in case I get reprimanded here by the minister, I understand that CO<sub>2</sub> is heavier than air and won't float up into the atmosphere like it was helium. But I also think that if you want to store substantial quantities of CO<sub>2</sub> underground, you're going to have to put it under some pressure. If that's the case, it will come back up through a strata that, in this province, I think is more akin to a pincushion than anything else. So it strikes me, Mr. Chairman, that if they're going to use this approach, which is, in my opinion, quite untried, they're going to have to do a lot of work to make sure that specific sites are valid or are going to work. You just can't start pumping this stuff into some of these major underground formations and expect it to stay permanently down.

So the real questions are whether or not this is a valid approach, whether it really is workable, whether it's economic, what the costs are. I'd like to know the state of the government's research on some of this. Are there some specific areas where this can be done today? What percentage of the subsurface fields are suitable for this? Have they looked at that?

Those are real questions, Mr. Chairman, that I think need to be answered before we put all our eggs into the basket of what is essentially landfilling CO<sub>2</sub>. This is the approach that the government thinks is going to save them and allow ongoing increases in development in the Athabasca tar sands and other industrial development in this province. These is the magic bean that is going to save the government's industrial strategy, so they're putting an awful lot into it. They're postponing any significant action on reducing CO<sub>2</sub> production in the hope that one day this particular approach is going to become viable.

So I'm very interested in just how real it is and what steps the government is taking to make sure that it is going to be a viable strategy for dealing with CO<sub>2</sub> emissions and how much that's going to cost and whether they know if it's going to be reliable and when it's going to be significantly available.

Mr. Chairman, those are my questions. There are some, as I mentioned, that the minister didn't get to last time, about glaciers melting and so on, so I would be happy to give him the remaining few minutes that I have of my time added to his 10 minutes so that he can do that.

Thank you.

**The Deputy Chair:** The hon. minister.

**Mr. Renner:** Thank you, Mr. Chairman. I think that given the fact that we're following the rules to a T tonight, it would be best if you stood up and said "30 seconds" and then sat down again, and then it'll be my turn again.

The issue regarding water and glacial status is one that is certainly under consideration. You don't have to be a scientist to be able to see that there are receding glaciers. How long the water will continue to flow from those glaciers: we're going to have to learn that over time. I don't know that anyone at this point in time can give any more than an educated guess on what is the actual issue with respect to the actual numbers involved with glacial melt. It's dependent upon the temperature, the climate over the next few years, and it's also dependent upon the degree to which global warming and climate change progress. Both of those are variables that are very hard to predict.

What can be predicted with relative certainty far enough into the future is that the amount of water that comes from glacial melt is

going to be diminished, and that's why it's absolutely imperative that we begin now to plan for how we're going to have water storage mechanisms in place. The net amount of water may not change that much over time. It's just that it's going to come in different forms. It's going to come in the form of rain, and it's going to come in the form of snow. So when we get the tremendous amount of flush in the spring, if we don't manage to keep some of it behind, then we're going to be just simply sending it off either to the Arctic or to Hudson Bay, which then leads me to the questions that you brought up earlier with respect to our commitments to our neighbours to the east.

We have a very firm commitment that 50 per cent of the water flow from Alberta goes through to Saskatchewan. We've never even come close to that 50 per cent except for one year, 2001, which was the driest year that we've had, and in that year it was 59 per cent. Most years it's well over 75 per cent and, in fact, even more; it's over 80 per cent. So it's simply not an issue.

What is an issue, though, is how we manage that water so that it continues to flow all season long. Much of that flow goes through in the spring. So if we can capture some of that water in the spring, have off-stream storage facilities of one kind or another, it will allow us to release it over time and keep that water flow constant for the downstream users.

I talked briefly about the in-stream flow need and the Athabasca River. How we're dealing with that river is by setting the maximum that can be withdrawn by industry. That same philosophy will apply again in the south. So, again, to answer the question that the member had – how is the shortage of water going to affect the growth of Calgary? – it's not my question to answer. I'm not the one that's going to be making the decisions on whether there's going to be economic growth. I'm the one that's responsible for managing the water. I'm going to be saying: "This is how much water is available. You're going to have to learn to live with this much water."

As an example, the average water consumption in Calgary, I'm told, is about 400 litres per person per day, which is probably double what many other North American and European cities have. So if you want to talk about economic development, we could double the economic development if we only conserved water to the same extent that everyone is already doing everywhere else.

**9:50**

There are ample opportunities for us to do a better job of managing the resource. To suggest that we're going to restrict economic development because of a shortage of water is simply not true. What we are going to do is manage the water better. We're going to put the priority on managing the health of the stream, and we're going to do everything that we can to facilitate the water users sharing that water, using it two and three times over so that the municipal wastewater from one becomes the feedstock for another. An industry that needs water for cooling, for example, can use municipal wastewater. They don't need to have a separate licence to take water out of the river. There are opportunities for irrigation to use municipal wastewater. There are all kinds of opportunities for us to recycle and reuse the water, and we don't have to even reinvent the wheel. They're being used the world over in other places. So that's the role and the leadership position that Alberta Environment needs to take.

On carbon sequestration the question was: where are we going to have carbon sequestration? Alberta is unique geologically in much of North America in that we do have the geologic formations that are conducive to storage of CO<sub>2</sub>. Those do not exist in other places, nor do they exist in all places in Alberta. The formations that are

conducive to carbon sequestration are dotted all around Alberta, but there is some work being done right now in central Alberta, some pilot projects and some smaller projects that Glencoe Resources in the Red Deer area is currently working on. We're also participating in a pilot project in Weyburn, Saskatchewan, that's perfecting the issue of carbon sequestration.

AERI is working, as is Alberta Environment, on devising – one of the things we have to do in policy development is understand the regulatory regime around carbon storage. The member asked: "We've got a whole bunch of holes in all of these various wells from former wells. How are we going to ensure that we've sealed it?" Well, we do have a regime in place that says that when a well is abandoned, it has to be sealed off. Again, we're going to have to be sure that we follow up, that those kinds of things continue to take place, that wells that are currently in use are sealed, and we will have to have a plan in place to ensure that all of the abandoned wells in a particular formation have been appropriately sealed so that we don't have risk of contamination.

The costs that are associated with it are some of the questions that will be answered by the committee that is currently looking at this whole issue. They're looking at economic viability; they're looking at costs. Those kinds of answers we will have shortly.

What development needs to take place? We need to perfect at this point a couple of things. We need to perfect the capture. There is technology in place now to capture CO<sub>2</sub>. That technology only applies for capturing CO<sub>2</sub> that is a consequence of a chemical reaction. So it happens inside a steel container. When you talk about gasification of coal, for example, one of the results of that is that you get pure CO<sub>2</sub> that's already captured in a vessel, and we don't have to worry about capturing it. We then just have to go: now that we've got it, what do we do with it?

There's another aspect of CO<sub>2</sub> sequestration that we have a lot of work to do on, and that's: how do we capture the stuff that's coming out of a stack? How do we capture CO<sub>2</sub> that's a result of combustion, that's being created by heat? That's the area where most of the research will have to be committed to the sequestration side.

On the storage side the member has pointed out one of the issues. The other issue is: what is the most economical way and the best way to move it? As the member points out, it's heavy stuff. It's a lot heavier than natural gas, for example, and to put it into a pipeline requires a significant amount of horsepower to keep it moving down that pipeline. There's probably going to have to be some additional work done on that.

All that being said, the technology exists today. It's not science fiction. It exists in pilot plants in North America, in Africa, and in Canada. What we have to do is learn how to scale it up to commercial size, and we have to learn how to do it in an economically viable way because there's no point in storing CO<sub>2</sub> if the cost of storing the CO<sub>2</sub> is higher than what the returns are that you can get from creating it in the first place.

**The Deputy Chair:** Hon. Member for Edmonton-Calder, we have about two minutes.

**Mr. Eggen:** Yeah. I'm just jumping in quickly. Perhaps I can get an answer in writing for a couple of questions here, and then away we go.

I had a question in regard to air monitoring. There are new federal standards that are coming on in regard to nitrous oxide, sulphur dioxide, and particulates. I wanted to ask how the ministry was going to deal with these and try to get ahead of those as they come online. It's certainly going to be an ambitious target though something well worth pursuing.

The second thing that I wanted to just ask about quickly is if the ministry is looking at: what's the threshold for the North Saskatchewan River vis-à-vis water extraction? We have a lot of upgraders being planned for the North Saskatchewan, so has the ministry done some projections as to how many upgraders and plants they can approve so that the North Saskatchewan still can be maintained as an ecosystem and to meet our obligations to the downstream flow to Saskatchewan?

Then the third one. I just wanted to get back to the budget itself. I wasn't trying to be fallacious, as the minister tried to describe me as being. Rather, I would say that perhaps a more appropriate word would be "felicitous" because in fact I'm making a well-reasoned argument. The numbers don't lie, right? I mean, we go from year to year. We've only had an increase in the budget of 5.2 per cent, which maybe meets the rate of inflation but probably not. Regardless of what the intention of the ministry is, if you're not funding it from year to year to expand or to even meet the rate of inflation, then does that not constitute really maybe a lack of commitment to the environment from the government in general? I know that the minister must be, at least secretly, disappointed that he didn't get more money from his budget.

Thanks.

**The Deputy Chair:** Hon. member, you still have about 30 seconds if you want to.

**Mr. Eggen:** Oh, I'm sorry. I was just getting down to get my pen.

**An Hon. Member:** You were not.

**Mr. Eggen:** Yes, I was. Here, I've found it.

I guess, you know, that it's a question of priority in relation to other ministries too. Let's say, for example, that the grant budget went up by 66 per cent this year, and this one only went up by 5.2 per cent. That is indicative of priority, I think . . .

10:00

**The Deputy Chair:** I hesitate to interrupt the hon. Member for Edmonton-Calder, but pursuant to Standing Order 59.02(9)(b) the Committee of Supply shall now rise and report progress.

[Mr. Shariff in the chair]

**Mr. Mitzel:** Mr. Speaker, the Committee of Supply has had under consideration certain resolutions for the departments of Energy and Environment relating to the 2007-2008 government estimates for the general revenue fund and lottery fund for the fiscal year ending March 31, 2008, reports progress, and requests leave to sit again.

**The Acting Speaker:** Does the Assembly concur in the report?

**Hon. Members:** Concur.

**The Acting Speaker:** Opposed? So ordered.

The hon. Deputy Government House Leader.

**Mr. Renner:** Thank you, Mr. Speaker. I move that the House now stand adjourned until 1 tomorrow afternoon.

[Motion carried; at 10:03 p.m. the Assembly adjourned to Tuesday at 1 p.m.]