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Chair

Mr. Leon Benoit

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● (1530)

[*English*]

The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)): Good afternoon everyone. Thank you all for being here on time. It's very much appreciated.

We have two items on our agenda today. First is the main business of the meeting, which is a continuation of our study. From 5 o'clock to 5:30 we will deal with the future business of the committee, so we will break right at 5 o'clock to start that. For the first hour an a half we will, pursuant to Standing Order 108(2), continue our study on the contribution of integrated approaches for providing energy services in Canadian communities.

As for our witnesses today, from B.C. Hydro we have Joanne McKenna, project manager, distributed generation strategy, customer care and conservation; and Victoria Smith, manager, aboriginal and sustainable communities sector, key account management. From Terasen Gas we have Douglas Stout, vice-president, marketing and business development. From Union Gas Limited we have Mel Ydreos, vice-president, operations.

Welcome, everyone.

We will start with each group giving a presentation of up to 10 minutes. If the clerk said less, then it's less. We have three presentation, so if you can keep them short that would be great.

We will start with Joanne McKenna from B.C. Hydro.

Mrs. Joanne McKenna (Project Manager, Distributed Generation Strategy, Customer Care and Conservation, B.C. Hydro): Thank you.

First, I'd like to thank you all for inviting us here. We're very happy to come and talk to you about some of the great innovative programs and initiatives Hydro is working on that we believe support the sustainable municipalities program and initiative.

Three of the key take-aways I'd like you to take from this is that we have found that communities are starting to take a leadership role in matters relating to energy. They've become more interested, and I think what we're seeing is a rise in that. Customers want to be involved in energy decisions; they want to look at how energy is going to impact their land use planning, their economic development, and future growth opportunities.

One of the ways Hydro sees an opportunity to assist them is by adding technical support and some small-scale funding at the study level. Second, integration and coordination of policy programs and funding is extremely important. If we can leverage the funds together, we can create more win-win opportunities and we can create more projects. Third, we need to get more practical solutions built and done. I know there's probably going to be some discussion of Dockside Green. I'm going to let that ensue as we move forward, but that's an example of a real, practical project that could work.

The first slide is who we are. I'm going to go through that quite quickly.

I think what is useful for you to know is that we are a crown corporation. We are the third largest utility. We are primarily hydroelectric power. We have met and have slightly exceeded a 90% clean renewable target. We have a very aggressive Power Smart program that I think is the envy of some of our fellow utilities. Finally, we have some of the lowest electricity rates in Canada, which is both a blessing and a curse sometimes when you're trying to get other projects built.

The next slide is looking at the sustainable communities. This is Quest's model, but B.C. Hydro shares this vision of what a future community could look like, and that is looking at a community that has an integrated energy system and local supply options.

As I've said before, customers are not just becoming more interested in the land use planning and the infrastructure side of their business, but they're looking at energy as a way to create additional revenue streams, plan around their communities, and drive and understand future needs and demands.

The next slide lets you know what the backdrop is in B.C. We have a very progressive energy plan that came in in 2007. It's relevant to B.C. Hydro because for the first time it gave us a 50% conservation target and a goal to be self-sufficient by 2016. It also gave us the 90% clean target. All of those have led us to develop and advance some of the programs we're currently involved with. It's important context.

I think what's also interesting is that the province has come forward with an innovative clean energy fund, or the ICE fund as we call it, which is geared to renewable energy projects and sustainable municipal opportunities as well.

We also have an aggressive climate change charter. B.C. Hydro is looking to become carbon neutral by 2020 and we are to be net zero emissions by 2020. Again, although we're largely hydroelectric, a proportion of our system is made up of natural gas, but it's aging natural gas so it's not state of the art.

When we look at our future needs, Hydro has sectioned this off into three components.

First, we will seek cost-effective and practical conservation.

Second, we have been instructed by our provincial government and through the energy plan to buy more through the private sector. That means independent power producers, first nations, or municipalities and communities.

Finally, we will build more. We will look at our existing facilities, existing hydroelectric dams, and we will look to add to those. One example of that is our Revelstoke facility in northern B.C., where we've added two more turbine units. That gives additional capacity on an existing footprint.

● (1535)

[*Translation*]

Ms. Paule Brunelle (Trois-Rivières, BQ): Mr. Chair, could you ask the witnesses to speak more slowly? It must be very difficult for the interpreter.

[*English*]

The Chair: It takes a little longer with the interpretation, so just a bit slower, if you could.

Mrs. Joanne McKenna: I'm wanting to get those ten minutes. Less is more.

The next slide has a lot of information on it. I'm only going to cover a little bit of it, and I will do so more slowly.

Historically, Hydro has been involved largely at a provincial level, when we look at how we plan for the province. We do it through our long-term acquisition plan and our energy planning process. We do forecasts of what our future energy needs will be in 20 years, in 50 years, etc.

On the conservation side, we see that Hydro has been more involved in what we would call the lamps and ballasts level, which has been influencing technology through light bulbs in refrigerators and at the site and building level—high-performance buildings and that kind of thing.

What we've come to realize, and part of this is because of the way communities have become more engaged in energy issues—there's certainly been some assembly of thinking around sustainable communities—is that now we should look at getting involved earlier in the process.

What the diagram here is meant to illustrate is that we've been involved at a very narrow, focused level and need to step back, look more broadly, and get back to the neighbourhood or regional level, where we can start to influence development before it happens. If we can do that, we've found that we can have a larger impact on energy savings, and it would be more cost-effective at the front end than on the retrofit side of the equation.

The next slide has some examples of where municipalities have stepped up and taken some leadership. I'm not going to read all of these. What I wanted to point out is that B.C. has been taking a leadership role with local and municipal governments. They understand the value of sustainable communities—

Hon. Geoff Regan (Halifax West, Lib.): Mr. Chairman, just to help everyone, I wonder whether the witness.... We're obviously at the slide headed "Municipal Examples". I think that as you go to a new slide, if you could name the slide, it would be helpful. I see everyone flipping pages around.

This is page 7.

The Chair: Thank you, Mr. Regan.

Continue, please.

Mrs. Joanne McKenna: On page 7 are examples of some of the municipalities that have taken on a leadership role and have either developed sustainable and community energy plans or engaged in district energy mapping or looked at including municipal building standards into their legislation and into their communities.

Slide 8 is basically an illustration of how B.C. Hydro views a sustainable community and what the benefits are to B.C. Hydro. Across this picture you'll see some terminology.

Technology innovation in a sustainable community can help B.C. Hydro create what we call a smart grid, which is basically a grid by means of which we can send communications along the wires to say "We need you to shut down your appliance" or "We're having a crisis on the grid because of a load or a circuit failure and we're going to take power from your plug-in hybrid vehicle". Those are all in the future—the smart grid is potentially 10 to 20 years out—but these are things we need to start to think about now when we're planning these communities.

From a green buildings perspective, we get the demand-side savings. If it's a green building, it uses less energy.

From a district energy perspective, it can help offload from both heating and cooling standpoints and again use less energy; it's more efficient.

From a distributed generation point of view, it helps customers come up with solutions that are best fit for them and in some cases can add additional revenue streams to either their municipality or their industrial base or their industry.

Sustainable transportation is talking about the plug-in electric vehicles that basically can plug into the house. Hydro, in a future state, could call on that energy if it needed it because of some system crisis or constraint; it's fairly futuristic.

Mr. Roger Pomerleau (Drummond, BQ): So you'd be taking it from the car?

Mrs. Joanne McKenna: That's right; it's an electric car. Hydro is working on a hybrid electric vehicle pilot as well.

I'm going to skip the "Utility of the Future". You can read about it. It's just more on distributed generation and how municipalities could become their own generating plants.

I'm also going to skip over the hydrogen-assisted renewable power slide, which is number 10. That's an interesting project, which we can tell you about later, in the remote community of Bella Coola.

Why don't we get to the last slide, which has the recommendations? This is what we really want to leave you with.

I want to underscore that the federal government already has a number of programs that are helping us to advance renewables and are also providing opportunities to advance technologies. However, I think more leadership can be given at the federal level, and I'd like to talk a little bit about our thoughts on those opportunities.

We think it would be useful if we could apply an energy lens to all infrastructure spending, and that's looking at the Quest approach thinking about that when we think about the way we're building our roads or communities or hospitals. If we can get in at the ground level, we can build greener buildings or more efficiently run buildings. Look at creating flow-through share provisions for the class 43.1. Already on the tax credit side we have a depreciation through the Canadian renewable energy and conservation expense. It's at the pre-development stage; this looks at allowing a flow-through similarly, but it would go to the third party. If a third party were working with a municipality or another entity, it could take that tax advantage even though it wasn't the entity that had the facility. I think you could see creative partnerships with the private sector and local level governments to create solutions in those communities.

Concerning the green infrastructure fund, I think it's fabulous that there's this much money set aside. I guess our question is how it is going to be dispersed, what it is going to be linked to, how it is going to be coordinated. We suggest that it should be targeted to integrated community energy systems and to planning and infrastructure.

We of course would like to see increased funding for R and D and technology innovation. I know there are a number of programs. There's ecoENERGY; I'm not sure what the future holds for it. I know CANMET does some work, and NRCan does some wonderful work. We've had partnership opportunities with NRCan and have been able to do tidal feasibility studies up in the Queen Charlotte Islands. We'd like to see that continue.

● (1540)

That kind of touches on my last point, which is around the coordination of federal, provincial, municipal, and regional programs. When we looked at that feasibility study up in the Queen Charlottes, it brought together the Province of B.C., the federal government, and B.C. Hydro coming to look at a solution for a community that's currently on diesel and that's off-grid.

The other thing we could look at is encouraging our international partnerships and best practices. Canada is lagging behind in terms of technological innovations, particularly around the creation of sustainable communities and the way we use and treat our energy. We need to look to some of the leaders—and a lot of them are in Europe—to build those relationships and learn from those practitioners.

Finally, I want to underscore again that we need to work to implement practical solutions and quick wins to demonstrate that this can work, it can be cost-effective, and it can result in both energy savings and dollar savings in the long run.

Thank you.

The Chair: Thank you for your presentation, Ms. McKenna.

Now we'll go to Mr. Stout to start.

Mr. Douglas Stout (Vice-president, Marketing and Business Development, Terasen Gas): Thank you. I will start right in and go to the first slide about Terasen Inc. at the top of it.

I'll start by giving a little background. We're a natural gas and alternative energy utility in British Columbia. We have about $4 billion invested there. We're part of the Fortis group of companies, and the head office is in St. John's, Newfoundland. Fortis owns electric and gas utilities across Canada.

We serve over 900,000 customers in 125 communities, so we have a very broad footprint across the province of British Columbia. And we're regulated in our operations by the British Columbia Utilities Commission.

On the next slide, “The Players”, I'll get in a little here, and when we start talking about what we call district energy systems, or things like the Quest-type program, we break things into two components here, looking at what we call the actors, on this slide, or who the on-the-ground proponents and players are, and who the enablers are below that, supportive with different components.

When we talk about enablers, we're talking about the groups that set the policies, perhaps help with seed funding, and drive awareness and initiatives from that level of things. So we see the federal and provincial governments on that side of things, NGOs, and energy regulators in that same framework.

From an actor's side of things, which gets down really into the municipal governments, you're talking about areas within a municipal surrounding supported by builders and developers, the folks who are putting new infrastructure on the ground, utilities, who build, own, and operate energy systems, and obviously technology providers, and that goes from people doing R and D to people manufacturing and developing new technologies, such as solar panels, and so forth, across the board.

Let's move on to the next slide and talk about what the gas utilities bring to the table. When we think of gas utilities, we think a little more broadly than just our gas load by talking about ourselves as a piped energy utility. As we go through this, you'll see a lot of the energy forms move through pipes, quite often through a water medium, for the energy systems within the buildings.

What we look at is that the utilities obviously have operating expertise, scope, and scale within their various areas across the country. We're able to drive a pretty broad set of solutions. We have the expertise there to drive them across the whole service territory, so we're looking at the options that are available in various communities and really trying to optimize on a broader scale than by each community itself trying to optimize what's available for it.

We see that within that we're all private sector entities, investor-owned utilities, and it's really about bringing private sector capital and expertise to bear for this. So it relieves governments of the need to fund this infrastructure. There may be some component of that, but moving away from funding that new infrastructure. It may even release capital from existing buildings with the acquisition of energy systems, say boiler systems, for example, in a hospital, that can be built out into a district energy system in a town or a city. It enables governments to meet their climate change objectives, and those vary across the country, obviously, in different areas and within different municipalities, but it moves them along that path.

Through the regulated environment, we think we bring fair and competitive energy costs. So you have the regulated environment. There's oversight on what the costs are, how those rates are developed, and how they're charged out to the various customers.

There's a transparency that comes through the regulation, so there's the ability for any of the consumers, taxpayers, and various bodies to intervene in regulatory proceedings and gain insight into what's going on.

And I think most importantly, in the world we're in today, there's mitigating the risk of failure of the investing entity. Through the regulated process, there's great transparency on the capital structure of the entity doing the investing and, in fact, rules and regulations around what that capital structure has to be, and very much transparency into that, even through the process of issuing debt from an investor-owned utility, which falls under the scrutiny of those regulators as well, within the province. So it brings, we think, a good framework and foundation for the ability to develop these district energy systems.

Moving on to the next slide, “Alternative Energy Options”, this will give you a snapshot of a few of the different components that would go together, and these wouldn't necessarily all go together in one system. When you go across communities, there are going to be different opportunities within each community. There may be multiple opportunities within a city, and different mixes of the tools or energy components will be mixed and put together in order to develop an overall integrated energy system. What people call alternative energies here then get melded together with both the natural gas and electric grids, which provide the reliability and the support for these. Some of these are intermittent uses, so you have the back-stopping of the electric and gas grids and, as Ms. McKenna mentioned, also the ability to take energy off these—say on biogas, for example—or to take electricity out of theses systems as well into the grid.

● (1545)

Moving on to the next side, I'll touch on just a few practical examples from our experience. I won't go into great detail on these.

We have a number of projects under way in British Columbia, some that have been operating for a couple of years and some under development. The one in front of you here, on brownfield redevelopment, is in Coquitlam, British Columbia. It's redeveloping an old industrial site. We put the project together, a private developer is doing the development, we're working with them on the energy system, and the City of Coquitlam has provided the support from a zoning perspective and is helping us move down the path to make this come together. It will be a multiple-use, residential, commercial, industrial complex, with a mix of energy sources. There's a local recycling plant that has waste heat that will be incorporated, a geo-exchange or geothermal application, possibilities to add a biomass boiler and natural gas into the grid, and potentially even solar-thermal, those types of things, on each building—so a mix and match of where things go. This will be built out over a period of time, obviously as that neighbourhood develops.

Moving on to the next slide, it's another snapshot, a multi-unit residential complex on Vancouver Island. I won't spend too much time on this, but it's really a ground heat extraction system integrated with natural gas to be build out in a multi-family complex over a period of years.

The next system is an infill development in Victoria, British Columbia. It's an old retail building owned by the Hudson Bay that's being converted to condominiums. There are office complexes and a local hockey rink near this. What's contemplated there is a geo-exchange system on this condominium complex, and over time we'll build out and attach a variety of government office buildings, a skating rink, and other residential and commercial developments into an integrated district energy system within the city of Vancouver. So it's a mix and match of these.

We have smaller projects in smaller centres in British Columbia as well and have projects ongoing in cities in the north, in the central part of British Columbia, and the Lower Mainland-Vancouver area, all putting together different components of these types of systems.

I'll move on to the last slide, the community energy systems. I think this knits together the concept here, but really what we're looking for when we do these is this. You need one or more thermal energy sources, the ability to get heat out, because that's the bulk of what we're providing for heat and hot water. That thermal energy is transported through pipes and via water and you get the mix of end uses, which is what really drives the things. So if you have the combination of heating and cooling opportunities within that complex, then you're driving opportunities to optimize the whole system.

What we find when we put these together, really looking across the spectrum, is different solutions for different communities. So if you're going to be in British Columbia, Saskatchewan, or Ontario, there's a different climate, different types of industry and complexes there, and a built-to-suit solution for every community and every opportunity.

● (1550)

The Chair: Thank you, Mr. Stout.

Mr. Ydreos, go ahead, please.

Your presentation just continues in the deck you have.

Mr. Mel Ydreos (Vice-President, Marketing, Union Gas Limited): Thank you very much, Mr. Chair, and thank you very much for the opportunity to be in front of you.

I'm very pleased to be here representing Union Gas Limited. We are Canada's largest integrated transmission, storage, and distribution natural gas utility. We serve over 1.3 million customers in over 400 communities in southwestern, eastern, and northern Ontario.

One of the things we're trying to do in the area of integrated energy systems is not only talk about them but demonstrate some leadership. This afternoon I'll give you some examples of how we are participating and trying to facilitate some of these new concepts and some of these new ideas into the grid and into the way we think about energy and the way we use energy.

If we can move to the Burlington Service Centre slide, this is one of three service centres we're currently constructing. This one has been completed. It has been occupied for about nine months. The other two—one in Windsor, Ontario, and the other one in Kingston—will be completed later this year. What's unique about these buildings is not that we have chosen a very high standard in terms of their energy efficiency, that being the gold LEED standard, but we have fundamentally changed the way we view the buildings from an energy perspective. These buildings are self-sufficient. They use natural gas to generate the electrical needs of the buildings and the excess capacity is then thrown into the grid. These buildings have systems that exist on their own and are capable of moving electricity back into the grid while using the excess heat that is generated for the building.

What's important about this is that it's a fundamental shift in the way we think of energy systems, and this is the best example I can use. In these types of buildings, typically we would build back-up generators. These are important buildings; they have planning and dispatch functions, emergency functions, so we would build back-up generators in these buildings in the event of power outages. These buildings do not have back-up generators, because the grid is the back-up generator. Because these buildings generate their own electricity, you reverse the whole thinking in the way you design and build these sites.

We're very pleased also to have joined Burlington Hydro in their just-announced GridSmartCity initiative, which is a 10-point plan on how renewables, conservation, and systems like this can coexist within the grid and fundamentally rethink our whole approach to the way our energy is used and supplied within the community.

The next slide talks about the City of Guelph. As was mentioned earlier, the municipalities are stepping up their focus and attention on community energy plans. I'm very pleased to say we've participated with the City of Guelph and I consider the City of Guelph as one of the leaders in this area. They have been very proactive. They have really challenged the status quo and have aggressively pursued ways of rethinking how energy is created within a community, how it is distributed, and how it is used. The best example is that the University of Guelph is currently looking at building a fairly significant co-generation plant that will not only meet its own energy needs but will supply electricity into the grid and meet the needs of the city in that way.

These are very exciting opportunities. The role we play is that we can bridge some knowledge gaps, because other communities within our franchise area are having similar discussions. We can bring those common ideas and discussions to the table collectively and share our learning with these municipalities and then jointly look at what from the total tool kit works for that community, because as was mentioned earlier, this is not one size fits all. Every community has different characteristics—there are urban, there are rural—and therefore, you have to pick what technologies and what applications really make sense for that specific community.

● (1555)

Let me go to the next slide, on biogas. This is another recent development, at least within our franchise area. This is where we have the opportunity of turning agricultural waste into energy. Most of the discussion up to this stage has been to the effect that biogas would be generating electricity at the location where it gets turned into energy.

Well, we have technology now that can actually turn the biogas into pipeline-quality natural gas, and therefore it becomes a clean source in the natural gas pipeline system. Again it's very early, but it's very exciting. We're getting a bit of momentum going on this, and certainly we're keen to advance these ideas, because this provides us with a clean energy supply into our pipeline network.

I'll go to the next slide and speak a little bit about our international presence, which was mentioned previously.

I'm very pleased to say that the Canadian Gas Association is an active member of the International Gas Union. The International Gas Union is a worldwide non-profit organization that has 72 charter members. For all intents and purposes, all of Europe participates, Asia participates, as well as the Middle East and Russia. It is a worldwide organization. I currently have the privilege of acting as the vice-chair of a special task force on research and development in the natural gas area for this organization. What this gives us is really a window into the entire world, on what is being developed and advanced in the different regions of the world. It gives us access to tremendous information and knowledge.

The most exciting accomplishment in the IGU was back in 2003 in Tokyo, when we, along with eight other countries, were in a design competition on sustainable urban systems. I'm pleased to say that Team Canada was awarded the grand prize. Our submission was called Cities^{plus}, and with it we were awarded the first prize for being visionary in the way we think of urban systems and how those systems will be integrated. Vancouver was the city used as our study area, where we developed the concepts around what a city like Vancouver would look like 100 years from now.

I'll move on to the next slide, about taking the tool box to Canadian communities. In summary, what I've said is that integrated energy systems is about using a variety of applications that are suitable to the community and that make sense for the application. It's not one shoe fits all. The factors again include whether it is a rural community or an urban community, an existing community or a brand new community, and what the land use and zoning are. The tool kit has a sufficient variety of approaches that it can apply to all those scenarios in some meaningful and productive way to make our energy use much more efficient and also to reduce the level of emissions that currently we emit through the use of energy.

Finally, I'll go to the role of the federal government. I was in at the ground level when the idea of Quest was being talked about, and I participated in the first Quest meeting. It is simply astonishing what momentum we've been able to garner in just two short years. We have significant momentum from a multi-stakeholder group of organizations and individuals, and it is absolutely important that we continue to push Quest forward.

To do that, there needs to be some alignment in policies between the federal, provincial, and ultimately municipal governments, an alignment that makes them consistent with this concept of integrated energy systems and does not provide barriers to advancing these ideas.

● (1600)

We need to ensure that technology funding supports the development of integrated community energy systems. And it's very important that we recognize that integrated energy systems will offer a tremendous opportunity not only for employment development and for bringing communities and community organizations together. It's very important that we view the value this will have to our communities and that we therefore provide some incentives and funding towards development of the tool kit that I called for before.

Program funding to support integrated systems needs to be front and centre. The clean energy technology fund and the Building Canada fund criteria should be structured in a way that supports these sorts of projects and investments, because they are fundamental to how we'll redesign the way we view energy and consume energy within our communities.

I thank you.

The Vice-Chair (Mr. Alan Tonks (York South—Weston, Lib.)): Thank you very much, Mr. Ydreos, and thank you to all of our deputants.

This is an exciting initiative, and the committee is certainly dedicated to taking what you have said and attempting to develop policies that would be consistent with that kind of comprehensive approach, an approach through the municipalities, utilities, the developers—all segments and spectra of the economy. So we thank you for being here; it's very encouraging.

We'll go now to the seven-minute rounds, and we'll start with Mr. Regan.

Hon. Geoff Regan: Thank you, Mr. Chairman.

And to the witnesses, thank you again.

Let me begin by saying that I think one of the goals we probably all share is to promulgate and create more awareness of the kinds of activities you've been talking about today. Part of the question we all face is how we get this to happen more quickly. How do we get more Canadian communities to engage in this kind of activity?

I'll start with Ms. McKenna and perhaps go across the group.

● (1605)

Mrs. Joanne McKenna: That's a really good question, one we've been asked by some of our politicians in B.C.

It's probably a combination of a number of things, from my perspective. One thing is getting the word out, which is the education part, and dispelling some myths around the subject. There's a myth that green buildings and green and renewable technologies cost a lot more money and are inefficient or unreliable. We have to look at dispelling some of the myths around the subject and at creating a bit more of an education platform.

Also, I'd like to go back to leveraging the pool of resources we have currently. It's a big challenge. I want to underscore that I don't think this is something simple, in which you get people into a room and say this is how we should do it. It's very challenging to get at the multiple levels of government and get us onto one page. Part of it is complicated, frankly, by the political process, and part of it is determining how you select one community over another.

Really, some greater form of coordination among the different funding actors needs to be looked at, picking some projects that are going to be clear wins and good showcases.

The Vice-Chair (Mr. Alan Tonks): Would anybody else like to respond?

Mr. Ydreos.

Mr. Mel Ydreos: Thank you.

As I said, I think we have significant momentum with Quest, so any support of Quest would be very helpful. But I think the key is demonstrations of technology.

The decision we made on the three buildings, by the way, is to not deploy the same technology in every building. We're trying three different types of approach, so that we turn those sites into true demonstration sites, and proponents and customers can come in and experience and see this stuff. You can't tell someone to go to Spain to see something, or to go to Japan to see and experience something. We need to leap forward and support some of these demonstrations, because they are the ones that actually create the excitement and the momentum and spread the word.

Hon. Geoff Regan: Where do you see the shortcomings in current federal policy in achieving that, Mr. Ydreos?

Mr. Mel Ydreos: It is unclear to us, with the funding that has been set aside, whether community energy integration systems would actually qualify for some of the funding that is available through the stimulus package. They tend to talk about renewables, but renewables tend to focus only on large wind farms or large solar farms. These are much more community-based, much more integrated types of approaches that we're talking about here.

Hon. Geoff Regan: Let me ask another question to Ms. McKenna about B.C. Hydro. I know that you offer a number of energy efficiency types of programs at B.C. Hydro, such as refrigerator buybacks, appliance rebates, window offers, etc. How many of these programs involve federal participation? And is there more that you feel the Government of Canada could be doing to provide support and promotion of these kinds of programs?

Mrs. Joanne McKenna: That's a good question. I'm afraid I couldn't say definitively whether they include federal moneys. I think there are similar programs at a federal level. I'm not sure, but I think that if you are a resident in B.C. you'd still have to apply separately. It's not a coordinated credit, for instance; you would need to get your provincial credit and then go to the federal government. For a furnace, for example, you would go to the Live Smart BC website and get your money there, but you still might be eligible for something at the federal level under the retrofit. That could be an issue for greater coordination, I would suggest.

Mr. Douglas Stout: Mr. Chair, let me add on the question of coordination that the programs are there. It is a coordination question, but it's one of finding some way that people don't have go through multiple application processes. Probably a tighter administration could save some dollars and make it easy for people to get involved with it, so that they could deal through their local area in order to work through the programs.

● (1610)

The Vice-Chair (Mr. Alan Tonks): There is a minute and 45 seconds left.

Hon. Geoff Regan: I'll address you a very short question. I'll ask you what you think the top two or three challenges are to community-based energy systems and what the Government of Canada ought to be doing. What are the top two or three things you're dealing with?

I don't have time to ask many of you, but I'll start and go across. We'll see when the time runs out.

Mrs. Joanne McKenna: I think, again, it's integration, working collaboratively with the levels of government. There's a keen interest there, so I think we need to harness the desire and willingness to work to get an integrated urban system. But we're going to need to work together to integrate it, so getting out of the silo mentalities and starting to talk about it is one challenge.

There's a lack of funds. As some of my colleagues have said, the funds tend to be sometimes specific to a technology. This is a bit more of a comprehensive approach, which could employ many technologies or many different energy efficiency systems; it's not a matter of picking a single one all of the time. I think that's another issue.

Another one is, again, that it has to come back to education. I think people get nervous when you say biomass or biogas and think "emissions" and "dirty". It's not dirty; it's actually incredibly efficient. To capture gas at a landfill is probably one of the most efficient things you could do, but that's not really understood. I think we could take a role in getting that message out.

The Vice-Chair (Mr. Alan Tonks): I think that's as far down as we'll get, but I'm sure Madame Brunelle will have questions by means of which others can pick up on their theme.

Madame Brunelle.

[*Translation*]

Ms. Paule Brunelle: Good afternoon.

I would like to make one comment and ask you all one question.

QUEST advocates integration as a way to face the challenge of energy supply. However, there appear to be a number of differences between the provinces on the distribution of the costs of various forms of energy and also on the effects on the environment.

For example, for us in Quebec, most of the energy we use comes from hydroelectricity. It seems to me that, with the QUEST program, the federal government is moving into provincial jurisdiction. I would like to read you a section from Quebec's Act Respecting the Ministère du Conseil Exécutif:

> 3.11. Except to the extent expressly provided for by law, no municipal body or school body may, without the prior authorization of the Government, enter into any agreement with another government in Canada or one of its departments or government agencies, or with a federal public agency.

You can see my question coming. How can the federal government run the QUEST program? As Mr. Ydreos said himself, it needs the cooperation of the three levels of government. That is clearly encroaching into provincial areas of jurisdiction, something that is prohibited, in Quebec law, at least.

How do you see the role of the federal government as applied to the QUEST program?

[*English*]

Mrs. Joanne McKenna: I'd like to flip the order.

Voices: Oh, oh!

The Vice-Chair (Mr. Alan Tonks): Ms. McKenna, you can redirect if you like.

Mrs. Joanne McKenna: Wow, that's wading into quite a debate.

My point is that it's not the feds directing what provincial or municipal governments should do; rather, it's talking about what initiatives provincial or local governments want to work on and focus on. Then you channel or leverage those moneys.

I'll give you an example from Hydro. We're a crown corporation. We give moneys to a lot of different communities for things. This may sound like, again, a simple solution, but there are so many different departments. Let's say we got together and worked with the City of Quesnel. We could maybe do X, Y, and Z if we pooled our dollars and actually got a project up and running, as opposed to doing a feasibility study there, an energy audit there, something there, something here. I think you can look for a bigger bang.

That may not have answered your question, and I apologize if it didn't, but those are my thoughts on that.

● (1615)

The Vice-Chair (Mr. Alan Tonks): Mr. Ydreos, do you wish to reply to that?

Mr. Mel Ydreos: I think the federal government has a key role in laying out a vision for the country. That vision is important. You can look to other jurisdictions around the world—Sweden, Germany, Japan—who have actually laid out visions about how the country should look in the future from the perspective of energy consumption.

I think it's important that the vision come, at least notionally, from the federal government. That in itself then directs and sends a message and a signal to other levels of government, whether it be provincial or municipal, about what we're really trying to accomplish as a country.

[*Translation*]

Ms. Paule Brunelle: I have no problem with the federal government having a vision, but it seems to me that it should be sending money to the provinces who would then go about setting up their own systems and priorities. We know that that is very different, and seems to me that there would be better tie-in that way.

On another matter, Mr. Stout, is natural gas a pollutant?

[*English*]

Mr. Douglas Stout: Natural gas is a carbon fuel, so yes, there are greenhouse gases, or GHGs, associated with it. It is the cleanest carbon fuel, used across the world as a baseline or a foundation for these systems.

More broadly, as we develop these types of systems, we see the natural gas business as an evolution. From where we are today, with it being 100% of the energy that flows through our pipes, as these systems are built up, there will be an integrated system down the road. It's a much smaller component by 2050, let's say, and we do have all these different pieces here.

So we view that as a vision of where we see our role and the future of natural gas going across the board, as the lowest carbon fuel, but definitely we're going to see less use of that and slightly different applications as it integrates with all these different technologies that are available today.

[*Translation*]

Ms. Paule Brunelle: In your presentation, you suggested new energy options. I find that interesting.

Do you devote a portion of your company's budget to developing other forms of energy? Do you do research and development yourselves, without federal or provincial funding?

[*English*]

Mr. Douglas Stout: We don't do research and development on our own. I'd call it more applied research. We look around for what kinds of technologies are available in, say, Europe, the U.S., and Asia and can be brought to bear and put together as a system overall. But we do that with our own funding. The projects I outlined here are done with basically 100% funding from the utility to build these systems. Obviously we then charge the customers for the energy that's delivered to them.

Where there may be funds from, say, the gas utility for energy efficiency programs that are available, or from B.C. Hydro, or from provincial or federal governments, those would be integrated with the investment capital. That's where we say there's not a need, necessarily, for explicit funding for these. There's assistance for them and a way to help them along.

To get back to the earlier question on where the federal government could go, besides the encouragement and the vision, probably it's just looking around at the provincial and municipal levels—I think Ms. McKenna has this in her presentation—to see where the federal government has buildings or facilities associated, ensuring that those are available to connect to an energy system. Just from a practical sense, that would help further the cause and make things move along.

The Vice-Chair (Mr. Alan Tonks): Thank you, Madame Brunelle.

We'll go on to Mr. Cullen, please.

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

Thank you to our witnesses.

I suppose a lot of committee members are going to be interested in how to move these communities from the exception to the rule. We can point out various communities across the country that have done well in integrating their energy, but they still remain in the vast minority. The questions here, Mr. Regan's and others', have been trying to find out where the policy switches can happen so that this becomes the norm. The exceptions become the communities that are not integrating their power.

You folks talked about the application of a green lens across policies. I suppose the intention of government, when stated, that we're looking to reduce greenhouse gases, seems to be doing things to both encourage it and discourage it at the same time.

Mr. Stout talks about natural gas being the lowest-emitting greenhouse gas, but we have government policy that encourages it to be used to transfer bitumen out of the oil sands. That energy is then producing the world's highest intensity of greenhouse gas energy. It's a confusing policy for a lot of Canadians to grasp in terms of where government truly wants to head and whether we imagine a low-carbon future.

In terms of a green lens, I'm wondering about the application of a policy prescription that looks at the best bang for our buck in terms of government investment and government policy direction. And by "best bang for our buck", I mean specifically, certainly in these economic times, job creation. But second, where do we most effectively apply government spending to reduce greenhouse gases?

This is a specific question for our friends from B.C. Hydro. I'm a B.C. resident, and I've seen the jerking forward of B.C. Hydro in accomplishing this greener future. Would such a green lens application to government policy and spending be appropriate? Over the top of every decision, they would have to filter through this notion of where we most effectively are reducing greenhouse gases and most effectively creating green jobs.

● (1620)

Mrs. Joanne McKenna: I think the question is a complicated one. Ideally, I guess you could say, it would be great if you put a green lens on everything. I guess for me it comes back to this notion of net environmental benefit. At some point you need to weigh energy efficiencies and district heating and other trade-offs against green.

One of the challenges with green—I'm a huge advocate of green and renewable energy, because that's what I do at Hydro—is the reality that we can't have 100% renewable and have a firm energy system. That is just a fact. Unless you have a lot of energy storage capabilities, you're going to have that risk.

With regard to getting more communities on board, I think one of the hurdles is financial. They do not have the money right now, particularly in this climate, to focus that capital investment. If we could come up with policies that supported creative partnerships, I think you would see more of that.

Mr. Nathan Cullen: The government has been subsidizing the generation of wind power for a number of years now.

Mrs. Joanne McKenna: You mean federally?

Mr. Nathan Cullen: Yes. How critical was that to, say, B.C. Hydro's case?

Mrs. Joanne McKenna: Significant.

Mr. Nathan Cullen: So the cutting of the incentive to wind power, I would imagine, is significant in the reverse.

Mrs. Joanne McKenna: Yes. I think the challenge is that we're seeing prices escalate. Wind energy in B.C. is costly, largely because of the terrain and where the population is located. Again, those are just the facts.

For a wind project to be economic, it has to be big. It has to have great wind and it has to have an incentive. Hydro incents from a green perspective as well. We will buy the green credits, or the green environmental attributes, from a project and assign a cost to that. The IPP or the developer needs that to go to the bank, along with that incentive, to get the funding.

Mr. Nathan Cullen: Without that incentive, the likelihood of wind getting off the ground, in the case of B.C.—but I imagine it's similar for other provinces—

Mrs. Joanne McKenna: For everyone, yes, I think it would be more challenging.

Mr. Nathan Cullen: That goes back to my initial comments about government doing one thing and then pulling back. The government announces in this recent budget a whole bunch of green environmental energy aspects. Then it cuts the wind subsidy out from under a lot of projects that were hoping to get off the ground.

I have a question around the feed-in tariffs. We've seen that this has been very successful in Europe. We've talked about best practices, where communities were able to go to the bank with a feed-in guarantee from the utility in hand, borrow the money, and then own, as a municipality, some of its own power production, oftentimes green power production. Why do we not do that in Canada?

Mrs. Joanne McKenna: I think that might be a question for all of you.

Mr. Nathan Cullen: Ah, good; I'm glad.

Is it not a utility's decision to allow that exclusively?

Mrs. Joanne McKenna: If you regulate it, it's challenging.

Mr. Nathan Cullen: Is it simply from the provincial government, then?

The Vice-Chair (Mr. Alan Tonks): Mr. Cullen, Mr. Ydreos would like to address that.

Mr. Mel Ydreos: If you look at the green energy bill, which was just introduced by Minister Smitherman a couple of weeks ago, it does actually envision that system. The Ontario Power Authority right now is looking at what will be the price signal, what will be the guarantee. So Ontario is definitely moving that way.

Mr. Nathan Cullen: To go back to my friends from Hydro, we have a lot of folks poking around northwestern British Columbia, where I live—you've mentioned Bella Coola and Haida Gwaii—looking for hydrocarbons. If you want to drill, the federal government's been highly supportive of the contentious idea of drilling in the Hecate Strait, which is the windiest and waviest place pretty much on the planet. Has any effort been made by Hydro or the province to map out the green energy of Canada? We have lots of maps all over the place about where coal, gas, and oil exist. Have we mapped our green potential?

● (1625)

Mrs. Joanne McKenna: That's a great question.

I know we have this in B.C. We actually undertook, I think in 2002, to make a map of all the green or renewable resources in B.C. We did talk to the federal government. I think they were very interested, particularly Natural Resources Canada, in looking at that across the country. For one, it could help enable development. If people knew where some of the resources were, they could focus some of their attentions there.

The danger is that this mapping is done at a very high level. It's not like putting in a pin that shows this is where the resource is. We need to balance that and manage the expectations with the development, but I think it's a useful tool.

Mr. Douglas Stout: Perhaps I could add to that.

On the green resources mapping, I know we tend to focus on electricity, and looking for opportunities to generate electricity is slightly different. But if we look at these systems, when we talk about these things we're talking about integrating them with solar, with geo-exchange. Every piece of ground has some green potential to it.

I think that's the idea behind this. The whole country has those capabilities to various degrees, right across the board. You can map that together with opportunities that require electric generation. That is a slightly different piece of it, but it's about knitting them all together to come up with a solution.

You mentioned the oil sands. When you look at the full cycle of greenhouse gas emissions, from production to end use, and start measuring things that way and looking across, then you start to optimize the decisions, I believe.

Mr. Nathan Cullen: That's very interesting.

Thank you.

The Vice-Chair (Mr. Alan Tonks): Thank you, Mr. Stout, and thank you, Mr. Cullen.

We will go to Mr. Trost now.

Mr. Bradley Trost (Saskatoon—Humboldt, CPC): Thank you, Mr. Chair. It's good to see you up there.

An hon. member: It suits him, doesn't it?

Mr. Bradley Trost: It does. He looks good up there. If the other chair continues to skip out, maybe we could consider a permanent replacement here.

Some hon. members: Oh, oh!

An hon. member: Flattery will get you everywhere.

An hon. member: You're on the record, Mr. Trost.

Mr. Bradley Trost: I'm on the record. What can I say?

We compliment the other chair on his hair more often, though, so.... That's an inside joke.

To the witnesses, thank you for being here today.

I'm going to change a little bit of the orientation of the questions and move to some of the other things. I don't get quite as overjoyed or excited as some of my colleagues do when people talk about reduction of greenhouse gases and things of that nature. There have been jokes that the only thing green I've ever had when I've come to committee has sometimes been my tie, and even that has been fairly rare. I tend to be a little bit more concerned about the bottom line, good capitalist that I am.

My underlying question—I'm playing the devil's advocate a little bit here—is that if this is such a good idea, all the integration and so forth, why would we as a federal government even need to push it? Shouldn't it be self-evident on a bottom-line basis for municipalities, developers, etc., to do an integrated energy system? Yes, it may take a little bit more capital, but at the end of the day, wouldn't it be more profitable for them? In terms of price signals, they'll take it from the market and go from there. Why should we give it a little more push?

As well, can you demonstrate to me that this is financially the best use of resources?

Both groups can take it away from there.

Mr. Douglas Stout: I'll go ahead and leap into the fray and see what happens.

The projects that I noted in here, including others we have, were done with private developers. Their concern was looking at how they could take this development over time, sell it to someone who's going to live and work and own a business there, and make it economic. These things do stack up with the cost of other energy forms. When you look at the cost of using natural gas or electricity stand-alone, and look at these integrated systems, they are economic—although not on every scale; there will be spots that make sense and some that don't in terms of pure economics.

We found that most people would like green, providing it doesn't cost more than the other options out there. There's no doubt about that. But we do see, when we look at this through the Quest initiative, that there are other spots that make sense. They don't make sense everywhere. They're not all perfect. You have to look at this not as a bright-line test of economics; there's a range of guessing on where the world will be 20 years from now in terms of the cost of energy.

Mr. Bradley Trost: These are private sector people looking at it and crunching the numbers. Do you find it as much when municipalities are involved? We have a few examples here. If I'm a municipal politician, there's a bit of a risk with this. At the end of the day, if I can keep taxes low.... Incumbents get re-elected at a higher rate in municipal politics than in our business here. It's easier to do. Do they demonstrate, on that broader municipal level, that integration as well, that return of value to taxpayer dollars?

● (1630)

Mrs. Joanne McKenna: I'll take this on to a certain degree. I want to make a couple of comments.

One, in my personal view—I won't speak for B.C. Hydro on this—the federal government's job is to enable. Part of enabling, I think, is to be strategic on how you use your funds. That means it might not be for every technology.

I think we have to look at what technologies are closer to commercialization than others. There is a spectrum. I know it might depend on who you talk to, but generally speaking, there is a recognition that solar will tend to be further out, as will fuel cells, but some of the biofuels and biodiesels and district energy systems are not that expensive.

I think one challenge is the payback. Developers and municipalities—in particular, municipalities—have a five- to seven-year payback period. They're bound by that. If they go to seven years, they have to have a referendum. Or they do in British Columbia; I don't know if that's true everywhere.

So that's a constraint. That's a barrier. For agricultural land, to develop a greenhouse and have a generator to capture the carbon dioxide and put it into the greenhouse, it means you have to change the agricultural land reserve zoning in B.C., and maybe in other jurisdictions. I think it highlights some of the barriers. Some of it is funding, and we do need some money, but I think it has to be strategically oriented. It is going to be different across the province. You can't give it to wind and think it's going to work everywhere, because it won't.

Again, I would re-emphasize that it's not one size fits all. It requires a longer-term view. I know that's challenging when you're in a four-year—

Mr. Bradley Trost: What four years are you talking about?

Some hon. members: Oh, oh!

Mrs. Joanne McKenna: Yeah, well...12 months.

The Vice-Chair (Mr. Alan Tonks): I think Mr. Ydreos would like to continue.

Mr. Mel Ydreos: These are early days, and any time you launch into something as significant and new as this, there are entry barriers from a pure economics standpoint.

We're looking for some seed money and some support so that investors like us who are investor-owned are actually willing to step up and make these investments and be helped along by some of the immediate economics. Once commercialization starts to take place and you start to get momentum, the actual cost of these systems will decrease in the long run. So that is one of the issues.

The Burlington service centre is a good example. It cost us about a 25% premium to build it to gold LEED standard. When we did the economics, the actual payback is there, but you have to front-end the capital to get the long-term operational savings to make the economics work. So there is a front-end cost to this.

Mr. Bradley Trost: Let me put out this question, which probably won't apply to the private sector but may apply to municipalities.

Would it then be an idea for other levels of government to front the capital to municipal governments on a sort of loan program, so you are not bound by the five- or seven-year restrictions depending on your province? Would that be a way to get around it? The message seems to be that we put more into capital, and then we save on operational costs. Would that be an idea? I'm not arguing for it; I'm just putting it out there, and I'm curious to hear your response.

Mr. Douglas Stout: Being a private sector guy, I would say that municipalities would benefit from dollars for feasibility studies and analysis. Putting dollars out that may or may not go anywhere—in other words, analyzing whether or not there's an opportunity there—is a bridge to get over.

I think there is capital that can be brought to bear so the municipality doesn't have to tie capital up in things that others will put the money up for. It can be directed to other things that the private sector won't, can't, or shouldn't invest in. So there is a window there to help move those things along.

It's encouraging that municipalities are working with credible players, because the danger with these things is that people leap on the bleeding edge versus the leading edge technologies and stumble, have a problem, and then forever things fall by the wayside because we've thrown our money away on something that doesn't make sense.

Mr. Bradley Trost: I need a quick response as I think my time is bleeding away here, and I have a couple more questions. Do you have anything more? If not, I have another question here.

● (1635)

The Vice-Chair (Mr. Alan Tonks): Mr. Trost, I'm sorry, your time is gone. I'd like to give you some of my time, but the motivation behind it would be immediately suspect.

Mr. Cullen, if you could take the chair, I'm going to take the questions that I was on the list for, if that's all right with the committee.

The Vice-Chair (Mr. Nathan Cullen): Mr. Tonks, go ahead for five.

Mr. Alan Tonks: Thank you very much. This is very helpful. I'm particularly taken by the sense of a framework in British Columbia that is communicating down from the utilities through the province into the municipalities.

I would like to use my area as a case in point. I have a 70-acre site that used to be a brownfield site mainly occupied by Kodak Canada. I would really like to position this site as an opportunity, since it's in the transit hub and there's public ownership of part of the site, for some type of an integrated energy systems approach that has been the focus here.

How far along are other provinces in terms of developing that kind of framework? The City of Toronto for example, could take the same approach as has been taken in British Columbia. How far along, to your understanding, are they? Are they as enlightened...? Has Mr. Smitherman touched the sensitive nerve through a policy proposal? I'd like to have a feeling for that so I know where to go when I leave this room and start to hammer away at some doors.

Mrs. Joanne McKenna: Sure.

I'm not sure how far along other jurisdictions are. We do keep an eye on what's going on elsewhere, but I have to say Ontario does appear to be leading. Certainly that new act is quite interesting, and it is quite interesting to folks in B.C. who are looking at that. But beyond that, I don't really have any experience.

Mr. Alan Tonks: Mr. Stout, would they call you in and say, if you can do it—it ain't boastin'—tell us how to do it?

Mr. Douglas Stout: Well, in our experience, you have to find a willing developer, a kind of progressive developer that's willing to take on the land and step out with it, and a municipality that's supportive of the whole concept as far as changing zoning and working around some different avenues go. I think it's a question of getting the collaboration on that side, and it really pushes from the bottom up, from the community level up. B.C. does have a slightly different framework overlying that, but some of these projects had started down the road before the environmental rules and such were in place in B.C., so stuff has happened on that front.

Mr. Alan Tonks: Regarding the urban-rural opportunities, one size does not fit all, but what about something that is suburban-urban? Have you had experience with respect to matching the tools that are available to both those types of settings?

Mr. Douglas Stout: I won't claim that we have, but I'd point you to a project that's in Alberta. It's owned by ATCO Gas, and it's in the town of Okotoks, just south of Calgary. It's a fully residential subdivision with single-family detached homes. It has a combination of geothermal and solar thermal heating systems backed by natural gas that have been operating for a couple of years. It's a stand-alone community, and it's all single- family residential housing. So it can work.

Mr. Alan Tonks: I have one final question. In terms of your rhetorical question with respect to finding a receptive developer, have cost-benefit analyses been done that one could take under one's arm into a developer to say, listen, here are some examples where the cost-benefits and the paybacks are within a competitive regime with respect to traditional energy applications and planning applications?

Mr. Douglas Stout: As I say, we have some in the projects we've developed. I think Dockside Green in Victoria is another example. You've heard of that. So there are practical examples that can be pulled out to show people how it's worked through with the energy proponent as well as with the developer. It's a bit of an iterative process, but it can be done, for sure.

● (1640)

The Vice-Chair (Mr. Nathan Cullen): Thank you very much, Mr. Tonks.

Now we'll go to Mr. Anderson for five minutes.

Mr. David Anderson (Cypress Hills—Grasslands, CPC): In the future, as these develop, do you expect to see them as being primarily private, municipal, or tied to utilities? I'm interested in that, because there were a couple of comments made about things like having to shut down your vehicle plug or having your appliances shut down while other people need the energy or whatever. I don't have a problem with that if you belong to a community where it's voluntary, if you've had a private developer and you've chosen to buy a place there, and that's part of the rules, but at a municipal level, it starts to concern me because you're pulling power from one section to another.

I'm just wondering what you see in the future, how you see this developing.

Mrs. Joanne McKenna: Maybe I'll take that question, because I think I uttered those words, and I'd like to contextualize this.

This is the utility of the future, and we would never do that to customers who didn't agree to it or sign a contract with us. They would get reduced electricity rates if they were entering into a contract whereby Hydro could come and shut down a smart appliance or take energy from their electric car. It would never be done willy-nilly. We would never do that.

Regarding your question on partnerships or who would own it, B. C. Hydro is at the beginning of developing a distributive generation strategy. Actually, I'm leading that initiative. One of the things we're looking at exploring is creative partnerships. So in some cases there are communities across B.C—and Mr. Cullen is probably well aware of these—where reliability and energy security are huge issues, and there may or may not be private sector solutions there. So there may be a need or a reason or a compelling rationale for why Hydro might step in. I'm not saying we would, but I think the door can be open at this point to explore those creative partnerships in which potentially a utility or a municipality and/or the private sector would be involved. We're seeing this increasingly in the U.S.

In Austin, Texas, the utility basically bought an asset, put it in a children's hospital that was having reliability issues, and paid for it. It's run by the hospital, and the hospital reaps the benefits. It did that because it was cheaper for them to do that.

Mr. David Anderson: I have a concern about this, because in my province we do have monopoly energy providers. I'd be interested in the other gentleman's observations on this as well.

Mr. Mel Ydreos: On the gas side, currently we do have interruptible rate schemes. A customer can contract for a firm supply, or some portion of that firm can in fact be interruptible on four hours' notice. They would actually load-shut, but they know what they're doing. They're sophisticated customers. They see some advantage to that and they contract that way.

But to speak again of the green energy bill just introduced in Ontario, that bill now allows for utilities to invest in renewable projects up to 10 megawatts and actually put those into rate base. That, then, sort of opens up the door for even a utility like Union Gas, a gas utility, to actually invest in a renewable project up to 10 megawatts, put those costs into rate base, and be awarded the regulated rate or return for those projects.

Mr. David Anderson: So will that restrict the size of the projects? My next question was going to be about how big you see these energy partnerships being. Do you see them being complete municipalities in some of the larger cities? The opposite side of that is how small they can be. I brought this up last week. I live at the end of an electrical grid. How big do they have to be to be feasible?

Mr. Mel Ydreos: I think it'll vary. We have 650-megawatt combined gas plants being built in Ontario, where you see partnerships, where you see OPG partner with TransCanada, for example, as investors in that. I think there's a variety of ways of doing that. In terms of regulated and monopolistic utilities, I think the intent here is to actually limit them to those small projects, not the larger ones. Other investors can come in and invest for the larger projects.

Mr. David Anderson: Mr. Stout, did you have a comment?

Mr. Douglas Stout: On that front, maybe in B.C. it's a little bit different. We'll find out. We're probably going to push our regulator a little on the framework of things. We see a model whereby that regulated utility would be allowed to invest in all these kinds of projects and attach them into that utility so there's some scope and scale and some security and reliability benefits for each of these communities, which don't need to have each one meeting stand-alone criteria.

That said, this would not preclude municipalities from either partnering on those things, owning a piece of it but getting the expertise that goes with it, or generating a royalty stream. For example, we have communities that were serviced with natural gas many years ago and they attained a franchise fee; a portion of the revenue that goes to the municipality. They use it for general tax purposes.

I think there's a variety of models that can work. The key is having the right credibility, I think, because you want this thing up and running and reliable in the long run for folks if you're going to get this to promulgate and more people to buy in and make it work across the country.

Mr. David Anderson: People have asked—

● (1645)

The Chair: Thank you, Mr. Anderson. Your time is up.

We will go now to Madame Brunelle from the Bloc Québécois, for up to five minutes.

[*Translation*]

Ms. Paule Brunelle: Ms. McKenna, on page 5 of your presentation, you show several aspects to your program for meeting future energy needs, including conservation through the Power Smart program. I understand the program; in fact, Hydro-Québec does roughly the same thing.

You mentioned buying more. What links do you have with the wind sector? How does that work? Do you own wind turbines or is it done through royalties? How does it work?

You also mentioned building more, but is that not at odds with the idea of using cleaner energy? Some people even criticize hydro-electricity because forests are flooded and people are displaced.

How do you reconcile your different missions?

[*English*]

Mrs. Joanne McKenna: I'm going to provide what I hope is some clarification.

The way this is presented is basically in three pillars. Hydro's first pillar and priority is to conserve more. We do have a 50% conservation target and we need to meet that. That's what we do, first and foremost.

The second pillar is buying more with the private sector. That's generally done through competitive calls. Currently we have a call for clean power. We're looking for clean power, the rationale being that we have a 90% target for clean: we need to maintain clean energy or electricity in the province. So we buy from the private sector, they bid in for us, and we basically look at a portfolio approach. Wind sometimes gets in. Biomass might. We haven't had any geothermal yet, but basically this is about comparing the prices against one another.

The third pillar, building more, has two components. The first is that we build onto existing infrastructure. In the case of two of our larger hydroelectric facilities, Revelstoke and Mica, when we built those facilities, I think Revelstoke, for instance, had room for five or six generating units, but we only put in three at the time. Now we're adding another one or two. The structure is already there. It's just a matter of actually putting a turbine into the structure.

However, site C would be a new large hydroelectric facility. The province has given us the approval to at least move forward to undertake consultation. That will be quite a lengthy process because, as you've stated, when you're flooding lands you're potentially displacing people in first nations and other communities. That needs to be looked at.

But we see site C as being further out on the spectrum, and I guess if we were able to meet our growing energy needs with the other two, or even part of the third one, maybe we could push the building of site C further out into the future.

[*Translation*]

Ms. Paule Brunelle: How much did BC Hydro receive from the federal government to subsidize the QUEST program, or other programs, for this year or last?

[*English*]

Mrs. Joanne McKenna: I couldn't give you an exact figure. I can tell you that some of the communities we worked with, like Dockside Green, received federal funding. I can tell you that a tidal feasibility study up in the Queen Charlotte Islands received federal funding.

On some of the other projects at this point, we are not far enough along to get any federal funding. We've applied different times for funding with SDTC when we were looking at some ocean wave technology. I believe federal funds have been allocated towards that, but they're not specifically B.C. Hydro programs or projects.

● (1650)

Ms. Victoria Smith (Manager, Aboriginal and Sustainable Communities Sector, Key Account Management, B.C. Hydro): The only thing I would add is that a number of the communities we're working with are receiving federal funding. That's how we're leveraging some of our Power Smart program funding. The funding doesn't come directly to B.C. Hydro. It's going to the communities to leverage.

[*Translation*]

Ms. Paule Brunelle: My next question is for you all.

Could the QUEST program work in large cities? I am thinking specifically about Toronto. It seems to me that it would be so complex to put it in place. You have experience in smaller centres, but could it work in large cities? Would that take 100 years?

[*English*]

Ms. Victoria Smith: I'll comment on that.

A number of the studies we're undertaking now are with our largest urban centres, the City of Vancouver and the City of Surrey, and they are really taking a holistic approach to how they're doing their community planning. I don't think it needs to take 100 years, but I think some of our leading communities are taking a long view and doing their design charrettes looking out much further into the future to plan for and design for their renewable energy options.

We believe it can work in large urban centres. Most of our projects on the renewable energy mapping and design charrettes now are with large centres.

[*Translation*]

The Chair: Thank you, Ms. Brunelle.

[*English*]

Now we go to our final questioner, Mr. Allen, for up to five minutes.

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

Thank you very much to the witnesses for coming. I have about six questions, so I guess I'll have to see which ones I'm going to ask. It has been a very informative session.

First, Ms. McKenna, you talked about getting quick wins, and I agree. I know this will vary a little bit, but on average and assuming the type of system, how long would you typically have in lead time from one end to the other to plan, design, and implement an approach for a community?

My second question goes with that. Has there been an analysis done on the jobs and the green jobs that are created with these community energy systems as opposed to a major energy project like a 600-megawatt coal plant?

Mr. Alan Tonks: That's a good question.

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

Mr. Douglas Stout: We don't have one on the timing. It varies, depending on the size of the project. Probably for a greenfield project, it's two to five years from conception, design, construction to operation, and that will depend on—

Mr. Mike Allen: That's greenfield, you say?

Mr. Douglas Stout: That's starting from scratch.

Even to integrate systems together, you're probably talking about one to two years, if you were to start taking existing buildings and connecting them together in a grid. So it will vary depending on where you are and what components you're putting together.

Mrs. Joanne McKenna: I want to comment on the lead time as well.

I think, in B.C. at least, speaking from our own experience, there are a number of projects that I would say are in a high state of readiness, which I think we could capture as quick wins.

Regarding the question on the number of jobs, we had done some analysis years ago. I'm not going to be able to give you any figures. If you do want those, I can dig them up. A large part of this comes when you start to look at this innovation idea and creating these centres of excellence or centres for technology innovation. If you look at B.C. again, we looked at creating a bit of a hydrogen centre there. There's an opportunity on either coast for wave and tidal.

So there are opportunities, I think, to create centres of excellence or innovation that will, or could, in the longer term create both training opportunities and jobs, and that, I think, could lead into manufacturing opportunities as well. But that's not going to be immediate. Part of what I understand from some of those manufacturers is that you have to demonstrate that there's a desire on the part of the country or province, and that they are needed there, and that you're actually going to build projects that would support that.

Mr. Mike Allen: Mr. Chairman, just to follow up on that, if she could send that data on the employment to the committee, that would be much appreciated.

Ms. Victoria Smith: I'd like to add something to that.

As part of our provincial energy plan, I know there were some forecasts done on both energy savings and person-hours of labour created in order to reach some of those targets. We can follow up with that information for you as well.

Mr. Mike Allen: I appreciate that. Thank you.

The Chair: Thank you.

Mr. Mike Allen: I'm interested because we have about $700 million or more left in that ecoENERGY for renewable power program. I know they want to start a wind power project in my area, and we're starting to get a little bit of fragmentation in terms of who supports it and who doesn't.

So when you talk about these renewable energy systems, what kind of “not in my backyard” issues have you run into with respect to these different generation systems, and have you run into that, along with push-back from the local community?

● (1655)

The Chair: Who would like to start on that one?

Mr. Stout, go ahead.

Mr. Douglas Stout: I'll start with the easy ones, when we talk about the solar, geothermal, geo-exchange, or those kinds of things. That's an easy one. Out of sight, out of mind, right? So that is a lot easier thing to get off the ground and move along, in most cases.

Mrs. Joanne McKenna: I think the other matter—and I referenced it earlier—is getting the message out that biomass and biofuels are not dirty, and that landfill gas is not dirty. If you look at our European friends, who have much tighter densities in their areas, they're actually extremely efficient in the use of their municipal solid waste and their waste recovery, and I think we could learn a lot from that. But part of it is going to be that education piece.

And do you know what? Start young, because it's the kids who come home and tell us.

The Chair: Mr. Ydreos.

Mr. Mel Ydreos: I would just add that I think if you try to build anything these days, you're going to find opposition. It seems to be that society's turning that way.

One cure for that—and again I refer back to the green energy act that was just introduced—is to set out to meet certain setbacks that have to be met for wind projects, for example. As long as those setbacks are met, from key positions, these things can be built. In fact, regarding the setbacks, the approval process has been taken away from the municipalities and has been put into the provincial arena in order to fast-track a lot of these projects and get away from all this localized opposition to just about anything you're trying to construct these days.

Mr. Mike Allen: Okay.

The Chair: Thank you, Mr. Allen.

Thank you all very much for coming today. You've provided a lot of very useful information for the committee. I wish you an uninteresting trip home.

We will suspend the committee for two minutes to go in camera for discussion of committee business, but first we will deal with a motion from Mr. Regan.

Hon. Geoff Regan: Thank you very much, Mr. Chairman—

The Chair: Excuse me, Mr. Cullen, we're going to deal immediately with Mr. Regan's motion. We'd like the witnesses to move away from the table as soon as they can so that we can get right to the motion.

Hon. Geoff Regan: Mr. Chair, I too would like to have gone back and thanked the witnesses, but I'll have to do so at another time.

The Chair: Yes, go ahead, Mr. Regan. Let's start.

Hon. Geoff Regan: Thank you, Mr. Chairman.

As you know, I gave a notice of motion on this a week or so ago. Here is the motion.

In light of the deep concern expressed by every member of the Standing Committee on Natural Resources with respect to the impact the current economic crisis is having on key resource sectors, I move that the committee ask the natural resources department to provide the committee, through the clerk, with updates that contain the number of job losses or job gains in the following sectors—mining, forestry, energy; and that the clerk circulate these reports to the members of the committee, and that the first report should be delivered to the clerk on April 1, 2009, followed by reports on June 1, August 1, October 1, and December 1, 2009.

The Chair: Would you like to speak to your motion, Mr. Regan?

Hon. Geoff Regan: Mr. Chair, I think all of us are concerned about what's happening in the economy. It seems to me that it's our responsibility, as members of this committee, to keep an eye on what's happening in the parts of the economy for which we have, in a sense, responsibility.

Clearly this kind of information would probably originate with Statistics Canada. However, there's no doubt in my mind that Natural Resources Canada keeps a close eye on this. They would be watching it and would be able to assemble the kind of information we're looking for.

What I say in here is that the first report should be delivered to the clerk on April 1, 2009. What I have in mind is that they would give us the most recent information available. I'm not saying what dates it must cover, but clearly we'd like to have something up to date, giving us a clear picture of what's happening in these sectors of the economy. I think it would be valuable for all of us to have that. And maybe it wouldn't be too bad to make sure that the department is actually watching this. They probably are anyway, but it doesn't hurt to make sure of that.

An hon. member: Hear, hear!

● (1700)

The Chair: You have heard the motion. Would anyone like to speak to it?

Mr. Cullen, and then Mr. Trost.

Mr. Nathan Cullen: Thank you, Chair.

My first thought is that we do have our parliamentary secretary back, and I want to hear from the government side on what accounting Natural Resources does in terms of tracking jobs. I want to make sure we're asking the department to do something that they actually do. And if they do, then I think the idea of a comprehensive report is a “state of the economy” type of thing.

I would also be curious to know, through you to the parliamentary secretary...because in some government agencies there are projections done as well, or estimates, that obviously are not held fast and firm. It's important for the committee, if we do receive these reports periodically, to see that point in time. Some agencies also attempt to do some sort of projection based upon the numbers they're getting in terms of investment cycles, etc.

I'm initially supportive, then, unless there seems to be some reason this couldn't be done. Coming from a sector of the country that has all of these industries represented, I know the job losses in the last little while have been extraordinary. And I would suggest that these are structural job losses. These are not temporary. There is something structurally shifting in our resource extraction economy in this country. Obviously it's beyond worrisome—an understatement.

So I am initially supportive, but I'm curious to hear from the parliamentary secretary on the viability of this motion.

The Chair: I had Mr. Trost as next on the list, but Mr. Anderson, if you would like to respond, Mr. Trost appears to be willing to let you proceed.

Mr. David Anderson: I want to be careful here about what I say, because I don't have full knowledge of how complete the department's analysis is of job statistics.

That said, having been involved with the department for a year and a half now, I am not aware of anywhere in the department where they collect job loss and job gain numbers. They may do that; if you want, I can check into it.

My perception is that they do what many of the other departments do, and that is work through Statistics Canada. They collect the data for departments to use and to release publicly. I don't want to be held to that for sure, because I'm not fully confident on that. I can find that out for you.

Perhaps an amendment could suggest that the clerk gather the information when it becomes publicly available and present it to the committee. That would allow us to take Statistics Canada's numbers and get the reports. But that would be up to the committee. We can certainly vote on it.

We'll be opposing this motion as it's written, but I think we would be comfortable with having the clerk gather the information when it becomes publicly available and make a presentation to the committee.

Hon. Geoff Regan: I have a point of order, Mr. Chairman.

The Chair: On a point of order, Mr. Regan.

Hon. Geoff Regan: This may be helpful. I did mention that Natural Resources probably gets information from Statistics Canada, but it would seem to me that surely the minister is made aware of what's happening in this regard on a regular basis.

What I'm going to propose, Mr. Chairman, is that we suspend debate on this motion and I'll hold it in abeyance until the next meeting and ask Mr. Anderson to check with the department on this, because it seems to me this was probably not a difficulty for them in particular. They probably do get this. Yes, they may get it from Statistics Canada, but they're watching this kind of stuff, I would think, and could easily provide it to us.

The Chair: Okay, are you moving to adjourn debate on this motion—

Hon. Geoff Regan: And defer it until the next meeting.

Hon. Navdeep Bains (Mississauga—Brampton South, Lib.): That is with the understanding that some homework be done.

The Chair: That's okay.

The motion is to adjourn debate. There is no debate on that. We'll go to a vote. Those in favour of adjourning debate on this motion?

(Motion allowed to stand)

The Chair: Now we'll just take a minute to go in camera and then we'll discuss the calendar for our committee for the next weeks and months and years, if you wish.

[*Proceedings continue in camera*]

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