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Chair

Mr. Pat Martin

Standing Committee on Government Operations and Estimates

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● (1105)

[*English*]

The Chair (Mr. Pat Martin (Winnipeg Centre, NDP)): Good morning, ladies and gentlemen.

I call the meeting to order. Welcome to the 79th meeting of the Standing Committee on Government Operations and Estimates.

We're eager today to continue with our study on energy efficiency in government buildings and demand-side management of our energy resources in general.

We're very grateful and very pleased to have representatives from two of our provincial jurisdictions, British Columbia and Manitoba, who are connected by teleconference. I understand everything is working well in terms of our long distance telecommunications.

Can you hear us, gentlemen?

Mr. Rob Abbott (Executive Director, Ministry of Environment, Climate Action Secretariat, Carbon Neutral Government and Climate Action Outreach, Government of British Columbia): Yes, we certainly can in British Columbia.

The Chair: Very good.

How about in Manitoba, *l'autre belle province*?

I see we have B.C. only at this time. I'm going to ask our witnesses from B.C. to go ahead and make their presentation.

Gentlemen, the way we work is that we invite witnesses to make a five- to ten-minute brief introductory presentation, and then we'll open it to questions from committee members.

We'll welcome Mr. Bernie Gaudet, the acting director of corporate sustainability, and Mr. Rob Abbott, executive director of the Ministry of the Environment.

Could you introduce any other guests you have at the table as well, sir? We'll give the floor to you.

Mr. Erik Kaye (Acting Manager, Energy Efficiency Branch, Ministry of Energy, Mines and Natural Gas, Government of British Columbia): Hi. I'm Erik Kaye. I'm the manager of energy efficiency policy with the Government of British Columbia. I'm here to assist my colleagues and to answer any questions you may have on broader energy efficiency policies outside of public sector buildings.

I'll let my colleagues Rob and Bernie do the opening statement at this time.

Mr. Rob Abbott: I am Rob Abbott, and I have to begin by saying it's a genuine pleasure to have this opportunity to share some insights, some experiences, and perspectives with this committee.

I'm going to speak first and speak briefly on some broader provincial policy that has created a framework or a set of conditions, if you will, that have allowed for a variety of operational and technical activities and achievements related to energy efficiency. So I'll set the table and then my colleague Bernie will fill in some detail in terms of what we're working toward in the province on energy efficiency.

As Erik has indicated, if there are additional questions that are best suited for him, as opposed to Bernie or me, he will chime in as appropriate.

If there is a single powerful message I wish to leave with the committee today it would arguably be this: putting a price on carbon can be a simple and effective way to change capital asset management and, by extension, lower greenhouse gas emissions, reduce energy costs, and demonstrate clean energy and technology.

More broadly, a supportive policy framework, including a revenue-neutral carbon tax, carbon-neutral government, community climate charters, and a provincial energy plan, among others, can create the conditions in which many operational and technical changes can be made that facilitate energy efficiency.

In November 2007, the Greenhouse Gas Reduction Targets Act made British Columbia the first jurisdiction in North America to make a commitment to carbon neutrality across all public sector organizations. This commitment focused the public sector on accurately measuring greenhouse gas emissions and identifying and implementing opportunities to reduce those emissions through energy efficiency upgrades, the use of low-carbon or lower-carbon energy, and behaviour change.

By including core government, school districts, health authorities, post-secondary institutions, and crown corporations, British Columbia has engaged 300,000 public sector employees in a strategic conversation about climate change, energy efficiency, and the need for individual and collective action. Beyond that, two million British Columbians who learn in, use, or visit public sector institutions are included in that conversation as well.

In June 2010, British Columbia became the first jurisdiction to achieve carbon neutrality across its provincial public sector, and since that time, 95% of all local governments across the province have committed to pursue carbon neutrality as well.

A key accomplishment of the carbon-neutral government program in B.C. has been focusing attention on the costs of energy and working with public sector organizations to reduce those costs through investments in energy efficiency.

Since 2008 British Columbia has taken the following actions in this regard. Through the public sector energy conservation agreement, we committed $75 million between 2007 and 2010 to reduce emissions across the public sector through targeted energy efficiency upgrades. We reduced emissions from core government travel by 60%. We introduced a new provincial policy that all new government buildings be built to LEED gold or equivalent standards. We required that all new vehicle purchases first consider hybrid or clean energy options. We established agreements with both BC Hydro and FortisBC to provide financial incentives to energy projects, as well as energy managers, to work with public sector organizations throughout the province to develop plans to reduce emissions and save energy costs. We have recently established a new carbon-neutral capital program that has so far provided $10 million toward energy efficiency projects in school districts to help them further reduce greenhouse gas emissions. And crucially, we've used the fixed price of $25 a tonne as a concrete financial incentive to change capital planning and influence behaviour change across the public sector.

● (1110)

In closing, British Columbia has begun a process of taking action on climate change in a systematic and rigorous way. In addition to the public sector milestones I've briefly highlighted, we are seeing signs of positive change in the wider economy. These include twice the Canadian average for hybrid vehicle adoption, 48% growth in our clean technology sector, the most active district energy market in the country, and one-fifth of all LEED gold buildings in Canada are here in B.C. We're the first carbon-neutral government in North America. The program improvements we have made over the last few years underscore our commitment to be the best. Within that context, we will continue to engage our stakeholders in a dialogue, much as we are doing today, about how to strengthen our program and broaden the scope of our energy efficiency efforts.

Thank you very much.

The Chair: Thank you, Mr. Abbott.

Mr. Bernie Gaudet (Acting Director, Corporate Sustainability, Ministry of Citizens' Services and Open Government, Shared Services BC, Government of British Columbia): Great. Thanks, Rob.

Just to set the context, I'm the director of corporate sustainability within the ministry of government that looks after core government buildings, ministry buildings. We also have clients from the broader public sector, and we consider them voluntary customers. They could access our services, but are not mandated to do so. We have about 15% or so of the square footage of the broader public sector, so the policies that Rob was referring to apply to the broader public sector. Our portfolio is about 15% of that. Because core government has a relatively high profile within the initiatives that are done—house-in-order type activities—we tend to apply a lot of the leading-edge policy and programs to trial them for both the broader public sector and the private sector. So our portfolio is across the province.

My technology is failing me here, so I'm going to be looking at my BlackBerry for my speaking notes.

We have a mature energy management program that was established about 30 years ago, recognizing that energy efficiency was an important part of government building operations. During the time the energy management program has been in place, we've improved the energy efficiency of our building portfolio by more than 50%. We measure performance by our building energy performance index, which is a normalized index that provides an account of energy consumption by square metre. Around 1980 our BEPI, our building energy performance index, was about 2,400. It currently is under 1,200. Just in the last five or so years, we've been successful in reducing our consumption by over 4%.

So our work continues. We look at energy management not as an event; it's ongoing. It's something that we can't let lapse. What we found in the nineties, from an operational perspective, was that when we started to refocus our efforts on general building operations and didn't maintain a focused view of energy performance, our energy performance slipped, resulting over the decade in approximately $2 million in extra energy utility costs. It reminded us that we need to maintain an ongoing focus for energy performance, and that it's not an event that should happen when a project is delivered.

Rob mentioned policy. Policy drives our initiative, and we have policy within government operations that includes an environmental stewardship policy. Within that policy, we have an ISO 14001 registered portfolio. Within that environmental management system, which is ISO 14001 registered, energy is considered a significant aspect. Within that cycle of management, the “plan, do, check, act” cycle, we set objectives and targets and we establish programs that will achieve the objectives and targets. This probably won't be new to you folks who are experienced in the realm of management, but it's a very simple concept that has caused some very successful results for us.

We also have in place technical standards. So above and beyond the building code, which applies to all new development, we have technical standards. They are not prescriptive but outline the performance level of the building components as they're replaced in existing buildings or as they're specified in new construction. Those technical standards help provide guidance to all new development and major upgrades to our facilities.

One of the lenses used to maintain those technical standards is energy performance. As buildings are continually maintained, they are continually improved by the energy performance resulting from the technical standards.

● (1115)

Two years ago we launched something called the Leading Workplace strategy, and I understand PWGSC has a similar initiative, where the way the space is used is revisited. Rather than looking at work as being the space we work in, we look at work as work, and no matter where we are, we need to be outfitted to do our work.

The Leading Workplace strategy supports flexibility and mobility for all government workers. As a result of rolling out the Leading Workplace strategy in the Victoria capital region, as an example, we have reduced the portfolio footprint by over 3,800 square metres. When we shed space, we also shed the associated energy costs and conditioning costs that are required to maintain that space.

Over the next few years, we anticipate that Leading Workplace strategy will be a significant contributor to our energy efficiency interests.

We have an outsource service provider, as does PWGSC, and within that outsource service provision, energy performance is a mandated management and operational service delivery.

We have an energy management conservation strategy that we developed jointly with our outsource service provider, which provides focus to the efforts the outsource service provider does around the building operations in order to support energy efficiency. Areas of work that the outsource service provider contributes include things like operational best practices.

In the industry there is a big push right now to recognize the operational efficiency of our buildings rather than just focusing on high-efficient building infrastructure. We can have a very efficient design of the building, but we also need a very efficient operation of the well-designed building, and that's where we're putting a lot of our effort.

We have designed an HVAC best practices guideline and a self-assessment tool. As part of that contract we have with our outsource service provider, one of the requirements is that they conduct a self-assessment for every facility management zone and identify areas of continual improvement, so they can improve their ongoing ability to operate the buildings in their small portfolio more effectively. It's part of the framework of the environmental management system. Continual improvement is a required attribute of that system, so it complements that very well.

In terms of other efforts, we probably spend about $1.5 million specifically in energy efficiency projects. Those are recognized through routine capital programming, where the building systems are reviewed and opportunities for improvement are identified. We've converted most of our T12s to T8 lamps, and we have replaced a substantial number of the incandescent lamps with LED lamps within our portfolio.

The last thing I will say is that partnerships are very important for us, and one of our most significant partnerships is with the utilities in our province. Approximately 30% of our capital costs for projects are incented through our local utilities. BC Hydro is an example. It provided almost $1 million over the last two years in energy efficiency incentives, as well as human resources to help support the work we do.

That's a glimpse of some of the things we do around supporting energy efficiency in the province.

If you have any questions on the operational side, I'd be happy to answer them, and I'm sure Rob and I can provide some additional input on the policy side as well.

● (1120)

The Chair: Thank you very much, Mr. Gaudet. Thank you to Mr. Abbott as well. It was a very interesting overview of some of the work you're doing in B.C.

You mentioned BC Hydro's role in cooperation and in partnership. That's a nice segue for us to now introduce our next panel, which has representatives from both the Government of Manitoba and, at the same table, Manitoba Hydro.

Welcome to all of you. I understand our video link is now good with Winnipeg.

Can you hear me well in Winnipeg?

Voices: We can.

The Chair: Good morning. My name is Pat Martin. I'm the chair of the government operations committee.

Welcome to all of you, and thank you for sharing your time and your experience with us today.

Our normal practice is to have brief opening comments from witnesses, perhaps five or ten minutes from the Province of Manitoba and roughly the same from Manitoba Hydro. Then we open it to questions from our all-party Standing Committee on Government Operations and Estimates here in Ottawa.

Whoever would like to go first, I'll let you introduce your group and the floor is yours.

Mrs. Cindy Choy (Director, Green Building Coordination Team, Accomodation Services Division, Department of Manitoba Infrastructure and Transportation, Government of Manitoba): My name is Cindy Choy. I'm from the Government of Manitoba. I'm the director of the green building coordination team, a policy group supporting our green building policies. Perhaps I'll just let everyone around our table here introduce themselves first before I start in.

Colleen.

Ms. Colleen Kuruluk (Manager, Power Smart Programs, Manitoba Hydro): Good morning. I'm Colleen Kuruluk of Manitoba Hydro, and I look after the Power Smart program for residential and commercial customers in Manitoba Hydro.

Mr. Roberto Montanino (Commercial Programs Supervisor, Commercial Programs, Power Smart Programs, Manitoba Hydro): Good morning. My name is Roberto Montanino, and I oversee our suite of energy efficiency power smart programs specifically for commercial customers.

Mr. Leonard Lewkowich (Utilities Analyst, Operations Branch, Accomodation Services Division, Department of Manitoba Infrastructure and Transportation, Government of Manitoba): I'm Leonard Lewkowich. I'm the utilities analyst in the operations division of Manitoba Infrastructure and Transportation.

● (1125)

Mr. Dave Cushnie (Technical Engineering Officer, Operations Branch, Accommodation Services Division, Department of Manitoba Infrastructure and Transportation, Government of Manitoba): I'm Dave Cushnie, and I'm also with the operations division.

Ms. Susanne Parent (Director of Operations, Operations Branch, Accomodation Services Division, Department of Manitoba Infrastructure and Transportation, Government of Manitoba): Good morning. I'm Susanne Parent, and I'm director of operations for the accommodation services division. We look after about 400 government-owned buildings.

Mrs. Cindy Choy: I'll start. My primary responsibility is relative to what we have in Manitoba, which is the green building policy. This policy was established in 2007. It establishes or identifies green building standards and practices that enhance energy and environmental performance for publicly funded buildings. That includes, of course, publicly owned buildings.

The standards and practices are designed to protect occupant health; improve air quality; reduce waste; use energy, water, and other resources more efficiently; reduce the overall impact of building construction and operation on the environment; and minimize the strain on local infrastructure.

The standards and practices apply to building construction projects funded in whole or in part by the Manitoba government, a crown corporation, or a government agency. Residential, industrial, and farm buildings are exempt at this point.

The standards and practices apply to new construction, major renovation, and addition projects where the occupancy is assembly, care or detection, and business and personal service as defined by the building code. Our area threshold is 600 metres or more. Renovations apply if the renovation cost is more than 50% of the cost of building new.

Building projects outside the scope of the policy are encouraged to apply our standards voluntarily. Our standards do not require strict compliance. There is an option for variance under our program.

The building projects within our policy are required to verify the implementation of key performance deliverables. In particular, because we're talking about energy efficiency, we have established a 33% better performance than the model national energy code for 1997, and this is proven through designation under our Manitoba Hydro Power Smart designation program and/or energy modelling under the LEED Canada program.

The requirements for these projects also require LEED certification, or, as I mentioned, under variance, another equivalent or similar system.

As I said, this policy applies primarily to new building projects, but the intention is to expand the green building policy into other aspects, with a life-cycle process involved. We're currently in the process of starting to approach existing building operation on the other side of new construction. It's our intention to engage in post-occupancy reviews to determine the effects of green building design on occupancy satisfaction and behaviour.

We're also starting to look at utility monitoring reporting practices, primarily under new construction, establishing at the very minimum the ability to track and monitor utility consumption. We intend to follow up on these with projects using post-occupancy briefs conducted by the green building coordination team.

We're currently also engaged with an interdepartmental working group to expand the scope of the policy, or at least explore that for the operation and maintenance of existing buildings. Our partners and colleagues here at the table have been instrumental in the work and exploration of that group. We're currently looking at a pilot over the next couple of years to identify initiatives for existing buildings. We're exploring the feasibility of Portfolio Manager, which NRCan will be launching in June of this year. Again, my colleagues here would probably be better able to speak to that, as they will be our primary pilot partners.

It is the intention of the green building coordination team—my group—to analyze the information provided and prepare reports to government summarizing the effect of green building standards, energy efficiency practices, and water efficiencies, if I may add, and the effects they have on our local economy and industry's capacity to provide design and construction services with regard to energy and environmental performance.

We also have the intent to take these standards and practices, review them, and improve on the performance targets as our industry and our community here improve on their ability to deliver. While there may be some increased capital costs needed to implement the green building standards, we expect they would be offset by lower operating costs, improved productivity, and enhanced asset values, which we hope to be able to quantify in our post-occupancy studies.

● (1130)

At this point, I will pass it over to Susanne Parent and her team to talk about our building portfolio.

Ms. Susanne Parent: Thank you, Cindy.

Before I begin, I just want to make sure—and I'm hoping—that everyone has a copy of the PowerPoint that we sent through. Please let me know whether or not you do, because I'll frame my comments accordingly.

The Chair: I think we all have copies of the PowerPoint tablet. It's not on a screen, but we have hard copies with us.

Ms. Susanne Parent: Perfect. I just wanted to make sure. Thank you.

I'll go ahead. Again, I just want to introduce my colleagues from the operations branch. Like our colleagues in B.C., we look after government-owned infrastructure that does not include hospitals or schools, but it includes pretty much everything else. So we'll just get right into it.

We're going to focus on one initiative today, so it will be a little bit more of a technical discussion, and it's something we're moving forward on. As discussed earlier, there are many initiatives going on across Canada, not just in our jurisdiction. Cindy has highlighted the green building policy. Hydro is going to talk about their suite of programs, which, when and if we can, we participate in. Sub-metering, lighting,...there are so many things we could talk about today, but we want to focus on one with you, and that is digital control in building operations. Our colleagues in B.C. highlighted that too, and how there are huge savings to be had through that.

Just to give you a bit of an overview of the variety of portfolios, which might be a little bit of a surprise, we'll go to slide 2. As are other jurisdictions, we're managing buildings that were built anywhere from the 1800s up to last year, when we just opened a new women's correctional centre here in Manitoba. Also, as many of you are aware, we have to deal with a pretty extreme climate in our province.

The Province of Manitoba owns and operates the Churchill Town Centre Complex, and also the Emerson Tourist Information Centre, right at the U.S. border. We have courthouses and nine correctional facilities. Basically, the next slide shows the variety within the portfolio. If you go to the next one, it will show you the Old Law Courts Building, the Selkirk office building, and Milner Ridge Correctional Centre.

One thing all of them have in common, and what we're working towards installing if they don't have it already, is direct digital controls, or DDC systems. It doesn't matter whether the building was built in the 1800s or it just opened, we want to be consistent across the entire portfolio.

For those folks on the panel who aren't familiar with those, they're basically the same as the thermostat in your house, except imagine being able to control the heating, ventilation, and air conditioning system for an entire correctional facility or a complex like a mental health centre or a residence for developmentally delayed adults. We have huge complexes to manage, as do, I'm sure, our colleagues in B.C.

What types of systems can be managed using DDC? We've moved forward from the typical things. Again, there are some examples there for you. There are heat pumps, hot water tanks, and cooling towers. District energy was mentioned by our colleagues in B.C. as well. They have also been implemented in our central power houses for our complexes. The other thing we're looking at is alarming critical systems, for example, water supply in correctional facilities.

I'll give you just a little bit of background on our projects and installations. We started moving towards this just recently, in 2005. We have DDC systems in 146 buildings, and we are moving forward to expand throughout the portfolio. Over 700,000 square metres of building space are being controlled. The advantages, as we say here, go well beyond energy use reduction.

I also want to echo Cindy's comments. We really are focusing on water as well. They are closely related. Water is used to cool as well, and to heat if it's a steam plant. So we have to talk about water at the same time, and we always talk about them together. That can be a bit of a challenge, I know, because in most jurisdictions water conservation is controlled by one department and energy by another. But we really try to talk about them together all the time.

I'll just talk about some of the opportunities that DDC presents. We have improved building equipment efficiencies. We can speak to, if you like, specific examples that we've realized. As you can see, there's huge potential for reduction in our utility costs, since we have $13 million in annual utility costs and use 19 million cubic metres of natural gas annually.

● (1135)

Going on to the next slide, one of the best assets about this is we can track our use. I know it's something we always say, but you can't manage something if you're not measuring it.

One of the things we're looking at is increasing our capability in being able to store and trend data. The other thing you can find out very quickly—this is getting back to all the other initiatives, whether it's implementing portions of the green building policy, changing our lighting, or changing any equipment—is that success or failure can be tracked and measured very quickly.

The other thing, from a business continuity plan—this is a spinoff—is that it's not just about energy efficiency; we know if the equipment is in failure mode, and that is huge for government buildings. As we know, many of our goals are 24/7. We're also very concerned about client comfort.

Going on to the next slide, as I mentioned, we have remote access. All our building operators have 24/7 access to their DDC system and their facilities. They can alarm 24/7, and we have remote monitoring going on. This helps with client comfort and supporting our client programs, particularly in corrections and health care. The programming can be adapted to include multisystem programs and to address the complexity of operating the types of buildings we all operate these days.

I've already touched on business continuity. We consider the DDC a critical service and a critical component, and, accordingly, a challenge or a barrier to having enough IT capacity to support all the data that's coming in. We are increasing our ability to support our DDC system. We also have a backup system in every facility, so if the Internet goes down, we can monitor the systems online, on site.

Working environment: This is the difference when we're talking about energy efficiency today, but I think because they're government-owned buildings, and the folks who are usually in government-owned buildings are colleagues, they expect a lot from us. They expect the buildings to be comfortable, and that's a huge part of this too. Energy efficiency is one piece of it, as is water efficiency, but it also has to be a comfortable building that our colleagues want to work in. The DDC system allows us to be adaptive and responsive to that. Again, we have some examples of buildings we can talk about later, if you would like.

It would have been great to have our colleagues in some of the other government departments here too, because they're doing some pretty amazing things in housing and the RHAs. I know they're going to the DDC systems too, but they have a lot of other initiatives. I wanted to flag that for you.

We wanted to highlight some of the opportunities in different initiatives: automated lighting control, scheduling for specific government programs and specific buildings, adapting to 24/7 programs, and just typical office buildings.

The programming equipment reset can also be of huge assistance. We had a challenge with equipment failure—you can also make adjustments—and, if you like, we can tell you a very sad but interesting story about a 15-storey office building when we get to the question period, when we had to adapt to not having chilling when it was 40 degrees Celsius with the humidity. That was a bit of a challenge, and the DDC was a huge assistance with that.

Our future plans: We're proceeding with portfolio-wide installation. The other thing we want to talk about for just a couple of seconds is sub-metering, which is huge. We have a lot of work to do with that, and to move forward with tracking so we can set the targets we need on energy and water. That will be a big part of the legislation that's going forward.

● (1140)

Another area where we definitely need to do some work is training. That would be for operators across Canada, helping staff to be cognizant of the opportunities for DDC to help them run their buildings more efficiently and get back to the business continuity planning and critical services that some of our buildings provide to the public.

We're also going to be going a little further with DDC than just HVAC equipment. We are going to be monitoring critical systems, particularly in the corrections facilities.

That's it. The last slide is a nice picture of our ledge. The snow is actually about three feet deep here today and it's pretty cold out, but it's a nice spring day.

I'll conclude there. I'm going to turn it over to our colleagues from Manitoba Hydro.

The Chair: Thank you.

Mr. Roberto Montanino: Thank you, Susanne.

Thanks for the opportunity...[*Technical difficulty—Editor*].

As was mentioned, Manitoba Hydro has a very comprehensive suite of energy efficiency programs, which is available, of course, to our residential customers, but also to our commercial and industrial customers. The suite of efficiency programs are branded as Power Smart, so I may refer to the term “Power Smart” in speaking to our efficiency programs.

We work a great deal with the private sector, but also with the public sector, with all levels of government—municipal, provincial, and a lot of work with the federal government as well. I'll highlight some of the results of our work in Manitoba with federal buildings.

I will provide a little history. The Power Smart initiative is designed to assist our customers to use both electricity and natural gas in a more efficient manner. We supply both fuels throughout the province, and one of the mandates of our energy efficiency programs is to promote the adoption of a wide variety of products and also best practices and services. Our electricity programs have been in place for over 20 years. In 2006, natural gas programs were added, which was as a result of us, Manitoba Hydro, purchasing the local gas utility.

I'll quickly speak to some of the components of what is included in the Power Smart suite of programs. In addition to financial incentives, we also offer a service to our commercial customers, where we would be visiting their properties and conducting a walk-through to identify some opportunities to improve energy efficiency. Once that has been established, we can also provide technical support, through a group of professional engineers who we employ at Manitoba Hydro, to help our customers identify the options and analyze what may be the best choice for them. The incremental product cost of many energy efficient products can be a barrier to maximizing their adoption, so we do also offer financial incentives —to help offset the incremental costs and to make the opportunities as economic as possible for our customers.

Something that I don't have listed in the slides you may be following is that we also have a mandate to provide education in the market and to build capacity within the industry in areas where we don't believe it fully exists within the province.

Some of the benefits that we recognize exist and that our customers enjoy when they're taking advantage of our energy efficiency programs are as follows.

Naturally, one is lower energy costs.

Something our customers deem very important is reduced emissions, and that's because of natural gas and electricity savings.

An increase in property values is also something of great benefit to our customers.

Susanne talked about this one: improved occupant comfort through more consistent heating and cooling, and better lighting levels. That's something of great value as well.

Another benefit of energy efficiency projects, of course, is extended equipment life. More efficient equipment tends to not need to work as hard, therefore extending the life of the equipment. In addition to that, there are reduced maintenance costs, typically because systems last longer; they are more efficient and require less servicing.

I'd like to identify some of the common opportunities that we see with our commercial building stock in Manitoba. I'll start by speaking to some whole building strategies. We offer a program that promotes a number of key pillars for the construction of energy efficient buildings. Integrated design is a practice in which all vested groups and all trades are involved from the start, to ensure that the building is planned and constructed in the most efficient manner possible.

● (1145)

Building simulation and energy modelling are tools to ensure that the planned construction comes to fruition and those savings are realized. With respect to building commissioning, once the building is constructed we need to ensure that the systems are set and operating according to their design. The commissioning process ensures that ongoing energy management systems and practices are in place so that those savings persist into the future.

For buildings that have been constructed and may not be performing to the level available to them, we also offer a program that promotes the optimization of existing buildings. This program promotes both retro-commissioning and recommissioning. Recommissioning is for a building that has been constructed with systems set up to operate based on a number of assumptions, like off-business occupancy levels and patterns of behaviour in the occupants. Over time, these things can change. The building settings can be manually overridden because of occupant complaints, changes in patterns of behaviour, and hours of operation. Those system settings need to be revisited over time. We offer a program that works with our customers and encourages that process to be undertaken. Retro-commissioning addresses buildings that were constructed and never commissioned or not commissioned properly.

Another area of significant opportunity is heating and cooling. We have a number of programs that offer incentives for heating boilers. We promote both condensing and near-condensing technologies. These are natural gas boilers that utilize the exhaust heat as a means of pre-heating incoming air. Those technologies can provide significant savings. As for cooling, larger buildings typically are cooled with chillers. We offer support and incentives for customers who are implementing energy efficient chillers. The installation of CO_2 sensors is another ventilation strategy. Many buildings are set to exchange the indoor air according to an assumed level of occupancy. The air is exchanged and outside air is brought in, which requires heating or cooling. This involves a lot of energy use. This technology allows buildings to avoid over-ventilating and introducing air from the outside that needs to be heated or cooled.

Geothermal is also a very energy efficient opportunity in Manitoba, and we offer support and incentives for the installation of geothermal ground source systems.

In Manitoba, with the climate we have, building envelope is a key area in making sure that buildings are operating efficiently. We promote both insulation and energy efficient windows. We provide incentives for insulation upgrades for various types of commercial roof structures as well as wall systems. We're trying to avoid the loss of conditioned air from the building space.

Another important program in Manitoba promotes energy efficient windows. With our climate, advanced window systems and curtain wall systems are important for commercial buildings. Through our program, we promote windows that have a U-value of 1.7 or less. Typically, that window would be a triple-paned window that would be treated with a low-e coating. It would be constructed with argon gas between the panes. It's a very efficient window that helps promote the airtightness of the building envelope.

● (1150)

Lighting is another area in which we have a very advanced program to address. B.C. had talked about converting most of their T12 linear fluorescent lights to T8s. This is something that has been done extensively in the Manitoba marketplace, with incentives in place for a number of years. We've been promoting T5 linear fluorescent lighting systems as well, typically used in settings where there might be higher ceilings and open spaces. Compact fluorescents are also—

The Chair: Mr. Montanino, could I interrupt you there? We do try to keep some time for the committee members to ask questions. We're not as interested in the specific technical things that we're doing in energy retrofitting so much as what are some of the benefits, costs, financing opportunities, etc., on a broader policy level, which I know you have touched on.

If you don't mind, we'll ask you to conclude in a minute or two and open the floor to questions from committee members.

Mr. Roberto Montanino: Of course.

The last thing I'll touch on is a synopsis of some of the participation we've seen from federal buildings.

The last slide of the PowerPoint presentation quickly highlights some of the participation we've seen from federal buildings within Manitoba. We've had over 250 different energy efficiency projects from federal buildings that we've collaborated on, with significant energy savings. Speaking specifically from a utility bill perspective, we've had over a million dollars in annual energy savings because of these projects.

I'll turn it over with that. Thank you.

The Chair: Thank you very much, Mr. Montanino, and thank you to all of the panellists for the interesting presentation. We're particularly cognizant that it's very early in B.C., so thank you for getting up early to be with us today, panellists from B.C.

We go around the table in five-minute rounds for questions and answers. We try to keep our questions concise and the answers as brief as possible to allow as many committee members as possible to question witnesses.

We'll begin with the official opposition, the NDP, with Ms. Linda Duncan for five minutes.

Ms. Linda Duncan (Edmonton—Strathcona, NDP): Thank you to both of you for participating. I really appreciate it. We're hoping we can benefit from lessons learned in the provincial jurisdictions to improve the energy efficiency at the federal level, and we appreciate your long-term experience.

As I was sitting here, I was thinking with amusement. I come from a coal-fired province. We also have privatized electricity. In many ways, you're both exactly the same. You both have crown corporations and you both rely on hydro power. It's interesting to see the two of you together. It would be nice to hear from Saskatchewan or Alberta about how they're meeting the challenge, because of course carbon emissions are a bigger issue for them.

I'm not sure you gave answers in detail, so I'll ask both jurisdictions these two questions. One of the big challenges for the federal government is that a lot of the office space, space for housing, facilities, and so forth is leased as opposed to owned. I'd be interested in any kind of policy or incentive you have to trigger investment by the private entities that own the facilities you're having to use.

In connection with that, Cindy Choy I think spoke quite a bit about this digital control, automated lighting, potentially retrofitted lighting, low flow water use, and so forth. I'm wondering what your experience has been in trying to get private building owners to actually introduce those. Or are you only using this digital control when you have already retrofitted a building in a major way?

● (1155)

Mrs. Cindy Choy: There are two pieces. Relative to the direct digital controls, I'll ask Susanne to speak on that.

But relative to incentivizing or motivating private industry to move...our green building policy has been in effect for about five years. It really has affected about 40% of the industrial institutional commercial building market in Manitoba. We extrapolate from this that with that scope of effect for our green building policy, which requires energy efficiency in the processes associated with it, and local fixtures' water efficiency, we're motivating and moving the market, at least in terms of ability and capacity to deliver for private projects too.

If I could just reiterate, our policy and program extends not only to government-owned but to government-funded.... Relative to provincial and federal funding for projects, we cover or we effect municipal projects, community projects, food banks, in addition to the typical kinds of buildings you'd expect for government relative to any office buildings we construct and institutional properties, such as schools, health, and corrections.

I'll let Susanne speak to you—

Ms. Linda Duncan: Let me interject here.

I understand you are talking about buildings whose building you help to fund or that you build and use, but I'm rather curious about what percentage of the government space used by the provinces is leased from someone else versus the percentage that you have built, and about whether you are using those mechanisms to also figure out a way to get the private property owners to do that kind of work.

Mrs. Cindy Choy: We're investigating options or possibilities for including energy efficiency in our leases. Certainly, in our standard schedule B, which sets out requirements for lease properties, we ask for low flow and we ask for performance criteria, but it's through our RFP and our specifications that we attempt to do this.

Mr. Bernie Gaudet: Would you like B.C. to pipe in on the lease question first? Then we can both talk about the question about DDC.

Ms. Linda Duncan: Sure.

The Chair: Go ahead.

Mr. Bernie Gaudet: About 80% of our commercial portfolio is leased, so we have the same issues, I imagine, as the federal portfolio would, or similar issues.

There are two areas around which we focus our efforts. Similar to what we were I think collectively talking about regarding both Manitoba and B.C., there's the operational side and there's the retrofit side.

On the operational side, our out-source service provider is obliged to provide energy efficiency equally in our leased portfolio and in our own portfolio, and we're quite clear about that in our contract with them.

There are obviously different areas of jurisdiction that our out-source service provider has. For example, in some of our leased space the base building systems are controlled more by the landowner. However, in our contracts or leases with the landowner, there are clauses that indicate that we may present to them areas of interest for improvement—if we notice that, for example, the ventilation system is working overtime, or in the summer that the boiler is working, and that kind of thing. Because we pay the energy in most of our leased facilities, we have the authority to request of the landowner, and to have them respond reasonably, to ensure that the building we occupy, that we're leasing, performs efficiently.

There is the operational side. On the retrofit side, our leases are typically in five-year increments. What we try to do, when the leases are renegotiated, is build into the negotiation whatever retrofits on the building systems we'd like to see happen. There is an assessment of the building as we enter that negotiation period. We are more than willing to share the incentive and the cost associated with retrofitting the building systems for our leased portfolio as well.

● (1200)

The Chair: Thank you, Mr. Gaudet.

I'm afraid that concludes your time, Ms. Duncan.

We really try to keep the questions fairly brief and succinct and the answers as short as possible so that we can give more committee members opportunities.

Ron Cannan is next, for the Conservative Party.

Hon. Ron Cannan (Kelowna—Lake Country, CPC): Thank you, Mr. Chair.

And thank you to our witnesses.

Let me say to my colleague across the way that I grew up in her riding in Edmonton. Given the Alberta and the Manitoba winters, 23 years ago I got wise and went west to beautiful British Columbia, so I have the honour of representing the constituency of Kelowna—Lake Country.

The Chair: No editorializing is allowed.

Hon. Ron Cannan: To our friends in British Columbia, I offer a welcome to our meeting today. I just have a couple of questions.

We're very blessed to have an abundance of hydro energy and clean energy supply. We know that conservation is the key to ensuring that we have a cost-efficient energy supply, which, as we also know, is very important for a vibrant economy.

In your opening comments you alluded to your success in reaching carbon neutrality, one of the goals of your 2008 energy efficiency plan. Could you expand a little on how much the Province of British Columbia invested to accomplish that goal?

Mr. Rob Abbott: I'd be happy to speak to that.

The background on carbon-neutral government is that the legislation mandates every public sector organization on an annual basis to measure its greenhouse gas emissions as rigorously as possible, to take steps to reduce those emissions as much as possible, and to offset the balance through the purchase of offsets from the Pacific Carbon Trust, a crown corporation that was specifically created to assist the public sector in that regard.

We have achieved carbon neutrality for 2010 and 2011. We are confident that we will achieve carbon neutrality again for 2012.

In the first two years that we have achieved carbon-neutral government, it has cost the public sector approximately $19 million in offset purchases. I would hasten to add, however, that the provincial public sector in British Columbia spends just less than $400 million a year on energy costs. So we are using the incentive of $25 a tonne to purchase offsets as a very direct economic incentive to look for energy efficient opportunities.

Obviously, our eye is on reducing our reliance on offsets going forward, but equally on reducing the cost of energy within the public sector. That is why we're so encouraged by some of what we've seen in our energy efficiency efforts.

Hon. Ron Cannan: I appreciate that.

We also heard about green jobs created from the greening of the buildings. Do you have any idea what numbers of jobs have been created as a result of this initiative?

Mr. Rob Abbott: I can speak to job creation related to the carbon-neutral government effort, and my colleagues Bernie and Erik may choose to comment on potential job creation as a result of some of the other energy efficiency efforts.

What I can say with respect to carbon-neutral government is that it is our contention that driving emission reductions in the public sector and investing in emission reduction projects, or indeed in offsets, makes good business sense.

Research in 2012 by PricewaterhouseCoopers pointed out that our offsets portfolio and the investments the public sector has made in that regard stimulated an estimated $320 million in capital spending, $240 million in provincial GDP contribution, just below $50 million in contribution to government revenue, and, specifically speaking to your question, the creation of 2,800 jobs. It's a small but we believe growing component of the economy.

● (1205)

Hon. Ron Cannan: Are these 2,800 full-time jobs or just jobs over a certain period of time—so many job-hours or person-years?

Mr. Rob Abbott: Those are full-time positions.

Hon. Ron Cannan: Okay. Thank you.

I have one other question for Mr. Abbott, before you go.

Are you the Rob Abbott who is the founder of Abbott Strategies?

Mr. Rob Abbott: I am indeed.

Hon. Ron Cannan: I was just looking at your website. I don't have much time, but I want to know whether you can clarify the buzzword “sustainability”.

I served nine years on local government and have been around for a little more than seven years federally, and in many cases this word is overused. On your website you refer to a lecture that talks about sustainability and says:

> And therein lies both the challenge and the opportunity for society: to reframe sustainability as shorthand for innovation that can grow bottom lines while shrinking environmental footprints; that can solve real-world environmental concerns while protecting the economy; that can make business more efficient, not less, thereby improving our quality of life.

I know it's international poetry day, but maybe you could clarify this statement a little. It's a lot of nice words, but what were you meaning by it? I know you show that engineers have a responsibility, but how do you implement it, focusing on protecting the economy and the environment?

Mr. Rob Abbott: There are many ways of approaching sustainability. A simple way of thinking about it, I believe, is that sustainability is fundamentally about how we create financial and social wealth and well-being without damaging the environment long-term.

Hon. Ron Cannan: Is there any other way other than—

Mr. Rob Abbott: There is a tendency sometimes to think of sustainability as a higher, faster kind of environmental management, but I think it's important to link that to financial and social wealth and prosperity. The trick—and in fact this is one of the rationales for our carbon-neutral government program—is to foster innovation, deliver the same kinds of government services, redesign our conception of what government services might look like in the future with a view to providing that service with a reduced carbon footprint. That's consistent with this idea of how do we create wealth and well-being, prosperity, without damaging the environment long term.

Hon. Ron Cannan: I'm running out of time. I just want to know, is there any other way besides carbon tax?

The Chair: You were out of time a long time ago, Mr. Cannan. I can always tell a veteran because he asks a really long question just when his time's running out, so it extends things.

That was an interesting diversion, though. I appreciate it very much.

Hon. Ron Cannan: A taxing question. Thank you.

The Chair: You will have to wait until the next round, I'm afraid.

Next for the NDP, Mr. Denis Blanchette.

[*Translation*]

Mr. Denis Blanchette (Louis-Hébert, NDP): Thank you, Mr. Chair.

Thank you to our witnesses for joining us this morning. Here, it's already past noon.

I will start with a question for our friends from Manitoba.

In your presentations, you really stressed the importance of digital controls. What I'd like to know is this. In terms of the energy savings, as far as your ability to save money and reach your targets goes, what portion do building renovations account for versus digital controls? How did that work for you?

[*English*]

Ms. Susanne Parent: Is someone going to be providing translation for us for the question?

The Chair: We understood you did have simultaneous translation at that end.

Ms. Susanne Parent: No, we don't.

You're asking about DDC and you're asking about the thought behind the DDC. Is that correct?

Mr. Denis Blanchette: You talk a lot about your numeric control. You also talk of renovation. I want to know globally, what is the importance of one beside the others?

● (1210)

Ms. Susanne Parent: We just want to make sure we're answering the question correctly. You're asking us why the emphasis on digital controls? Is that the question?

Mr. Denis Blanchette: What part of the improvements is based on numeric control, and what part is based on renovation?

Ms. Susanne Parent: They go hand in hand. We would be undertaking energy efficiency initiatives and water efficiency initiatives in existing facilities, and also taking the opportunity, when it's new construction, to make sure that we're meeting energy and water targets for new construction. But at the same time, we are going through our existing portfolio and retrofitting with digital control systems. So it's all tied together. Sub-metering, all the different initiatives that Manitoba Hydro talked about, it's all done at the same time.

Mr. Denis Blanchette: Thank you.

I have an open question for both provinces. We don't want to make the same errors others have already made. What are the principal lessons learned from your experience?

Mr. Bernie Gaudet: I can speak from B.C.'s perspective. Similar to what is happening in the industry, lessons learned include not sitting on the laurels of doing a project and making sure that whatever is implemented from an infrastructure perspective is followed through with good operations. It's connected with some of the things Manitoba has outlined with regard to recommissioning, retro-commissioning, making sure that the systems in place are operating the way they were designed to operate, and to follow through with good operations. Those are probably the most significant lessons learned. We shouldn't just spend money on good infrastructure; we should also focus on good operational practices, to make sure the infrastructure is operating well.

The other thing would be to maintain solid and clear policy relating to a mandate of energy efficiency. As I've mentioned, in B. C. we have been doing energy efficiency for three or so decades. We really got a boost when the legislation came in and the associated regulation and policy reinforced that mandate. Consequently, our efforts continue effectively because we do have that very clear mandate provincially that translates into a focused practice on a divisional level.

I would say those two are probably the most significant lessons learned for us.

The Chair: Thank you, sir.

Is there anybody from the Province of Manitoba who would like to chime in briefly?

Mrs. Cindy Choy: I suppose relative to our policy position we're not unlike B.C., moving from a green building policy focused on new construction and moving through the life.... So similarly our lesson is that we recognize the importance of green building operations, and we are in the process of establishing what those criteria are. Certainly, internally, we've also identified the value of ensuring that these buildings are operated on a continual basis, according to their optimal performance, and that comes up I think in all of our programs around this table.

Ms. Susanne Parent: I would just add one thing, and B.C. highlighted this during their presentation. One of the most important things is partnerships. I would say that a lot of our success is from having partnerships with our utilities, and for other jurisdictions that don't have crowns, working with their utilities, and with our colleagues across government. There is a lot of left hand, right hand, and there are some huge lessons learned from other line departments and crown departments. Consistency in policy, too, is huge and sets the benchmark for everybody.

● (1215)

The Chair: Thank you very much. It's a point well taken.

Next, for the Conservatives, we have Mr. Dan Albas.

Mr. Dan Albas (Okanagan—Coquihalla, CPC): Thank you, Mr. Chair.

My mom encouraged me as a young boy to always try new things and to learn about things I know nothing about. Unfortunately, Mr. Chair, I have failed her, and I am going to continue to talk about things that I know about, which is British Columbia, so I'll be addressing my fellow British Columbians today.

I will also let you know, Mr. Chair, that getting up at 8 a.m. for a government meeting is easy for these guys. They can handle it.

The Chair: Do you think so? They are rough and tough.

Mr. Dan Albas: I do believe so.

First of all, gentlemen, I'd like to focus specifically on your energy efficient building strategy. How many buildings does the Province of British Columbia occupy?

Mr. Bernie Gaudet: In core government, there are over 2,000 buildings in our portfolio.

Mr. Rob Abbott: For the broader public sector it's about 6,500.

Mr. Dan Albas: Approximately how many of the core buildings are leased?

Mr. Bernie Gaudet: Eighty per cent of the commercial portfolio is leased. That's relative to space.

Mr. Dan Albas: Is that the core, or is that inclusive of the other arm's-length agencies?

Mr. Bernie Gaudet: That's core government. I expect it would be significantly less for the broader public sector because the health care and education sectors—

Mr. Dan Albas: That's broader. Thank you very much.

Were the retrofits targeted within your initiative to government-owned buildings, or was there a combination of changes to lease?

Mr. Bernie Gaudet: For core government, we primarily focus on owned facilities, although, as I've mentioned, when leases are renewed and when there is an opportunity to apply a retrofit to increase the efficiency of building systems, that's when we would do it. That cost could either be split or it would be absorbed by us, by the province, so long as it falls within that five-year repayment schedule.

Mr. Dan Albas: In regard to the retrofits themselves, was this financed through taxpayer dollars? Was there any appeal to the private sector for funding?

Mr. Bernie Gaudet: In B.C. we get our funding from Treasury Board, so it's public sector funding. The business case for all the energy efficiency initiatives is based on the return on investment. In other words, the initial capital cost must be repaid by cost avoidance, operational cost reduction within a threshold period of time. In these facilities it would be five years or less.

Mr. Dan Albas: The investment was $75 million?

Mr. Bernie Gaudet: That's for the broader public sector under an agreement we have with the utilities. Perhaps Rob could speak a little bit more about that.

Mr. Dan Albas: We'll leave the utilities out just for the meantime. I'm sure someone else will pick up on those, and if we have time I can go back to them.

In regard to the $75 million, that was done over three years. Did you get all the buildings done that you thought you could?

Mr. Rob Abbott: We did. If we had had more money, we would likely have wanted to do more buildings.

But we're also doing a fairly deep dive in terms of evaluating: did we not only get the number of buildings done that we wanted to do, but did we actually achieve what we set out to do in terms of emission reductions, improvements in energy efficiency, and so on?

For virtually all of these projects there was an estimated reduction and an estimated cost return, etc., and we're in the process of evaluating that now.

Mr. Dan Albas: In my understanding, then, you have a program, and you can't say that it has been successful, but in your opinion there has been some real progress over the past three years. Now you are quantifying those results so you can take that forward. Is that correct?

Mr. Rob Abbott: That's absolutely right.

Mr. Dan Albas: The reason I mention this is that our Treasury Board Secretariat authorized a similar program in 1991, and it's been running since then. By 2010 the program had facilitated over 85 retrofit projects.

The one key part I would just focus on—because I believe these kinds of forums, Mr. Chair, are really meant to share information—is that we've seen over $320 million in private sector financing for these. On an average of each project, we've seen a reduction of energy costs of 15% to 20%. Again, that's an average cost.

I always bear in mind, Mr. Chair, that many of these projects have some of the older buildings. We had the nice presentation from the people from Manitoba, a great province, I hear. They cite that they have 100-year-old projects, and obviously those take a lot more to bring up to modern standards.

How much time do I have left, Mr. Chair?

● (1220)

The Vice-Chair (Mr. Peter Braid (Kitchener—Waterloo, CPC)): Your time has now expired.

Mr. Dan Albas: I just want to say thank you to my friends from B.C.

Also, there are private corporations that operate in B.C. for electrical and otherwise—for example, FortisBC—but they're all ruled by the B.C. Utilities Commission, and that's a good thing, I think.

Mr. Bernie Gaudet: I would just add that no matter where we get our funding, it forms part of our debt load, so in B.C. there is not necessarily an incentive to go to the private sector for funding. The business case is built on return on investment, as opposed to where the funding comes from.

Mr. Dan Albas: I'm sure it is. My time is up, actually, so—

Mr. Rob Abbott: I will just very quickly add that....

The Vice-Chair (Mr. Peter Braid): Thank you very much.

We will now go to our next questioner, Mr. McCallum.

Hon. John McCallum (Markham—Unionville, Lib.): Thank you.

Thank you to the witnesses.

What I am looking for is some sort of summary statistic or goal or financial measure to assess how well we are doing. For example, since 2005 the U.S. federal government has invested $3.1 billion to improve efficiency of federal government facilities, and they say the result has been cost savings of approximately $8.5 billion over the life of the energy saving initiatives.

I wonder if either B.C. or Manitoba has some such summary statistics that could provide a measure of your success or otherwise in what you are doing.

Before you answer, I'll just mention one thing for Manitoba and one thing for B.C. Manitoba has something called the green building coordination team, which assesses the impact of policies, so perhaps through that group you have some measure of success.

In the case of British Columbia, you talked a lot about carbon neutrality. I wonder if this objective has been met, and if so, how much did it cost to achieve it, how much did the government invest, and what were the benefits arising from it?

Those are my questions for both provinces.

Mrs. Cindy Choy: Relative to our green building policy, the only investment that Manitoba made, apart from the investment that we're going to make for the community projects anyway, was the establishment of the team to support and augment. So far we've tracked the effect of the policy on market ability to deliver and we've witnessed.... We're in the process of trying to find that, so sadly I can't give you specifics, other than to say we have had a significant impact on the number of buildings created in Manitoba. We've seen an increase in new jobs providing those services in the building and construction industry.

For financial specifics, I wonder if Power Smart has.... Because Power Smart invests more specifically in energy efficiency, I'll ask them to....

The incentives are not specifically government buildings, but they do have incentive programs that are broader in scope.

Mr. Roberto Montanino: I apologize. We didn't separate the data specifically looking at provincial buildings, but on average, the investment Manitoba Hydro has made with all its commercial.... I have the figures, including our investment with our residential customers. It may be misleading.

● (1225)

Mr. Rob Abbott: I might jump in from British Columbia, if this is an opportune moment, and address the questions around the investment of $75 million and carbon neutrality.

The investment of $75 million is estimated to be generating approximately $12.5 million in energy savings annually and reducing greenhouse gas emissions within the public sector by about 36,000 tonnes annually. As I indicated to a previous member of the committee, we are in the process of quantifying those benefits more rigorously, and I would be pleased to report back to this committee when we've completed that review.

But at this stage, those are the estimated annual savings financially and in greenhouse gas emission reductions. I would also add parenthetically that the $75 million included money that was leveraged from private sector partners, such as FortisBC.

With respect to the question around carbon neutrality, the Province of B.C. established this objective some time ago. We achieved carbon neutrality for the 2010-11 fiscal years, and we are confident that we will achieve carbon neutrality again for the 2012 year. Costs to achieve this in the acquisition of carbon offsets have been approximately $19 million in each of those two years.

Hon. John McCallum: Thank you.

The Vice-Chair (Mr. Peter Braid): Thank you very much, Mr. McCallum and our officials.

I am the next questioner, so I will take the opportunity to proceed with my five-minute round from the position of chair.

I'll start with our friends from British Columbia. During the opening presentation, you indicated that one of the things you've been successful in doing is shedding or reducing your building footprint. Could you elaborate a little on that, specifically what you've done and how you've done it?

Mr. Bernie Gaudet: Sure. I was speaking about the Leading Workplace strategy, which is the strategy that is redefining the workspace, or the work point, as we call it. It's moving from identifying our work as the place that we work, going from the space that we share to the space, to the work. So it's that progression away from identifying our work from the actual physical location, to the actual deliverable that we provide, no matter where we do that.

In rolling out the Leading Workplace strategy, what typically happens is the programming requirements or needs of a particular client, a ministry—our own, for example—are reviewed, and a survey is done to see whether anybody within that particular work area has the ability to be mobile or flexible. In other words, they don't need a permanent desk location in order to conduct their work effectively. From that information, the space is replanned for that area. What typically happens—the statistic, generally—is that at least 40% of us are not at our work desks at any given time. So why should we be creating workspaces, designated workspaces, for 100% of the folks who are on the payroll? The space is redesigned to essentially facilitate 100% capacity in a smaller footprint, by recognizing that very infrequently 100% of the people will be there. There are alternative workspaces in government offices for all of us to work.

For example, I don't work out of this building, but I'm connected in the same way. I can conduct my work in this space where I'm speaking to you right now as I would in my home office or as I would in my designated workspace in the building that has been designated to my ministry. In so doing, the size of the workspace is generally reduced by about 30% to 40%, which generates, as I mentioned, those cost savings.

● (1230)

The Vice-Chair (Mr. Peter Braid): It sounds like a very innovative approach, and we can certainly follow up on this ourselves. Are you aware if the federal government has a similar program or concept in its workplace?

Mr. Bernie Gaudet: Cindy actually may be able to help out on this one in terms of recalling the presentation that PWGSC provided at our last federal-provincial-territorial meeting, but I do understand they have a similar initiative. My understanding was that for both of us, the interest is in making sure that we have resources available to accommodate this strategy.

We pay for the interior retrofit, the tenant improvements, by shedding the space. For the spaces that we would otherwise have occupied, those lease costs are put into the tenant improvements in order to redesign the space, accommodating more people. That's how we essentially resource it.

The Vice-Chair (Mr. Peter Braid): Thank you.

I want to try to exercise some Canadian fairness here and present a question to our friends from Manitoba.

Through your presentations you seemed to indicate that some of your programs are perhaps new and emerging. With respect to energy efficiency targets or greenhouse gas emission targets within Manitoba government buildings, do you have specific targets to achieve? I missed whether they were specific targets that you've set and were working towards.

Mrs. Cindy Choy: We've set an energy target for new buildings, so any new government building would be required to hit an energy efficiency target that was 33% better than the model-compared building under the 1997 energy code. Certainly, we will be looking at updating that as the new energy code comes forward.

Specifically, relative to energy, the requirements under the green building policy would apply to, as I said, major renovation—that's a complete gut of a building—and new construction. Those are the targets we've set thus far.

The Vice-Chair (Mr. Peter Braid): Is this not existing buildings currently?

Mrs. Cindy Choy: It's not existing buildings as yet, no.

The Vice-Chair (Mr. Peter Braid): Sorry, were you going to conclude with a thought there?

Mrs. Cindy Choy: I seem to have lost it.

The Vice-Chair (Mr. Peter Braid): I apologize for the interruption.

My time is now up.

Madam Duncan is our next questioner.

Ms. Linda Duncan: Thanks, Mr. Chair.

I'd like to go back to my second question that I asked originally and we ran out of time to answer.

You'll notice that we're asking a lot of questions about what efforts your two jurisdictions are doing to retrofit existing buildings, because, similar to the federal, it sounds like most of the provinces' space is leased.

You alluded to it a bit, but not really clearly. I'd like to hear how each of you actually are moving forward on reducing energy use in leased buildings. I'm presuming, like most governments, most of your leases are long-term leases. If you could, please speak to that one way or another, and how you're managing to open up those leases. Are you offering to pay for part of the retrofit, or are you putting any attention to that at all? It sounds as if in Manitoba that's not a big priority right now, but maybe it is in B.C.?

Mr. Bernie Gaudet: Sure, I can speak to that.

Our leases are typically five-year leases for our commercial portfolio. As I mentioned, about 80% of our commercial portfolio is leased. To advance the energy efficiency initiatives, the building operations teams that are present in the buildings will identify infrastructure updates that will support energy efficiency, and we'll enter that information into a rolling spreadsheet that's created through the year under what's called the routine capital program. It's the same routine capital program that's used to identify when roofs need to be replaced for our own facilities, etc. It doesn't matter if it's an owned building or a leased building; that's identified when it's entered onto that database. But if there's an energy efficiency opportunity in a lease base, it's incorporated into that list. The information is then provided to our lease services department, who consider the information when they're renegotiating the lease for that space every five years.

● (1235)

Ms. Linda Duncan: My question is if they're 20- or 30-year leases, how quickly can you actually require the changes?

Mr. Bernie Gaudet: They're five-year leases.

Ms. Linda Duncan: Only five years.

Mr. Bernie Gaudet: Typically five-year leases, and there are very few, a handful at the most, that are beyond that. Our head office for our ministry, for example, is a 10-year lease. But typically we have five-year leases to maintain sort of a nimble portfolio perspective on our space requirements. The programming that's offered to citizens in the province, similar probably to other jurisdictions, changes quite quickly, so our ministry—

Ms. Linda Duncan: When you renegotiate—

Mr. Bernie Gaudet: —when lease space is obtained—

Ms. Linda Duncan: I'm sorry to interrupt, but I need a shorter answer. I'm trying to get at when you renegotiate, how do you get the owner of the building to invest in those retrofits? Do you offer to cost-share, or do you simply say, “We're not going to lease your building unless you retrofit”? How do you go about doing that to try to implement those measures in those leased buildings?

Mr. Bernie Gaudet: If it's a measure that can be repaid, if the return on investment is within that term, we will probably pay for that retrofit. If it goes beyond the lease term, then the negotiation will happen between the landowner and the lease negotiator to share the cost.

Ms. Linda Duncan: Interesting.

Does Manitoba want to comment on that at all?

Mrs. Cindy Choy: Well, we're in a different situation. We own most of our portfolio. We have a very small commercial portfolio, and our leases are 20 to 30 years, so it's a totally different scenario. Our focus is on the owner portfolio right now.

Ms. Linda Duncan: Are there a few minutes left, Mr. Chair?

The Chair: A half-minute is left.

Ms. Linda Duncan: Okay.

I would appreciate, Ms. Choy, if you could, then, give me a little bit more information about the digital controls, and whether you are trying to negotiate putting in at least some of that kind of mechanism into your long-term leased buildings.

I understand that you're very interested in the NRCan Portfolio Manager program. Are you able to implement that into some of the areas that you lease as well, so that you can track and report on energy use?

Ms. Susanne Parent: I'll talk about the digital controls, and it's convenient that Manitoba Hydro is here too. They, in partnership with a lot of landowners in Manitoba, and in Winnipeg specifically, would be aggressively going after the commercial building sector on their own as a crown, because it benefits the whole province in terms of energy efficiency. Their utilities are owned by the people of Manitoba.

As to our implementing or encouraging DDC use and water efficiency initiatives in commercial buildings, at this point that is encouraged. But the model is there. As part of going into leased buildings, among the things we require as part of our schedules is accessibility, and renovations and other tenant improvements are required in order for a landlord to qualify.

So if you're looking for an opportunity, it's there. It's up to the jurisdiction to decide whether they want to implement it or not.

I'll turn it over to Cindy to answer the second part of your question.

Do we have time?

The Chair: Please make it very quick. We're well over time.

Mrs. Cindy Choy: Our region's Portfolio Manager is a pilot project at this point. We're exploring the ease of implementation of that program through NRCan. Portfolio Manager is an energy benchmarking and energy labelling tool that we have migrated up from the States. NRCan has adapted it to Canada, and we're investigating through a pilot its application in Manitoba. The idea would be, once we have piloted and have the lessons learned, to look at expanding it to other sectors that we will be influencing. We could speculate on its application—

The Chair: Thank you, Ms. Choy. Thank you, Ms. Parent.

We just have time for one more round. We will go to Mr. Bernard Trottier for the Conservatives.

You have five minutes please, Bernard.

Mr. Bernard Trottier (Etobicoke—Lakeshore, CPC): Thank you, Mr. Chair.

Thank you, guests, for being available this morning. Appearing before us by video conference is an energy saving measure, as you can imagine, with the cost of commuting.

What I want to talk about is related to what Linda Duncan and Denis Blanchette were talking about: smart building and smart measures, versus the traditional renovations for insulation and better windows and so on. Denis was asking about the relationship between making those smart building investments and traditional renovations.

Could you describe at a high level the types of returns on investment? We know there's a certain return on investment when you make improvements in insulation, window glazing, and so on. When it comes to smarter building operations—for example, reducing the lighting when you're not using it, reducing heating when you don't need it at night. I'll give you one example and let you comment.

I worked with retail customers for a number of years, and like governments, they have very large real estate footprints. There's a magnitude of energy consumption within which you can look at certain savings.

One of the big impediments to making investments, especially in renovations, is that you hate to shut down a store to put in new insulation and new windows because you lose millions of dollars in sales when you do that—the return-on-investment hurdle is quite high because of it—whereas making smart investments using computer technology would not require shutting down a store, and you could immediately get some benefits.

Could you describe the return on investment in some of those smart kinds of technologies versus traditional renovations?

Perhaps I'll ask Manitoba to start, because you alluded to this in your presentation.

● (1240)

Mr. Roberto Montanino: I would consider retro-commissioning and recommissioning of buildings to be what you're describing, as not being technically capital investments but rather investments in improving the operational efficiencies.

Our experiences suggest that typically the opportunities that are identified through retro-commissioning or a recommissioning process would be paid back within one or two years. The investment made would be recouped through lower energy bills in one to two years.

Ms. Susanne Parent: We can give you a really quick example. A three-storey provincial office building in rural Manitoba with about 250 civil servants on four levels implemented a digital control project there in 2006 and had savings of $30,000 in electricity. Obviously the building wasn't being operated properly.

The other big lesson is that a lot of buildings aren't commissioned when they're built. That building is of 1970s vintage, and a lot of our portfolios are.

Mr. Bernie Gaudet: I'd like to echo that. In B.C. there is the continuous optimization program delivered by our BC Hydro utility. That one-year to two-year return on investment is reinforced through this example, and the result in energy savings is typically 7% electrical improvement and 12% natural gas improvement.

Mr. Bernard Trottier: Thank you very much.

A voice: In Manitoba it's 7%.

Mr. Bernard Trottier: Thanks.

The other smart work practice that you mentioned was the concept of hotelling, which many private sector companies have adopted.

For several years, by the way, when I worked as a business consultant, my office was basically a briefcase and a pair of shoes. You moved around and you occupied and got your work done in whatever space was appropriate, whether it was at a client's site or at home or in an office building somewhere. There are ways you can do things in government that are similar in concept. If you reduce the space requirements, you obviously reduce your energy requirements.

Can you describe from a government point of view whether there has been much adoption of hotelling in B.C. and in Manitoba, and some of the impediments?

There has been some pushback in the private sector, by the way. You have probably read about Yahoo's new CEO basically telling people to stop telecommuting and come in to the office. Energy costs are not borne by the employer in that case—the energy costs of commuting for an hour behind the windshield of a car every day, or more.

Could you describe your experience with hotelling and telecommuting in your jurisdictions?

Maybe we can start with B.C.

Mr. Bernie Gaudet: Under the Leading Workplace strategy, the business case to advance it is “triple bottom line”; it's not just energy savings.

The demographic emerging into the workspace is interested in flexible mobile working. There's not an interest in the corner office anymore as being the sign of success. Recognizing that, the way the Leading Workplace strategy works is primarily through collaborative tools. Working at home or working at a different office or even a different space in the same building still requires interaction.

To maximize and maintain the quality of that experience, part of the rollout.... There's the building part that I've spoken about, but as you mentioned, the IT side is equally important, and there is as much focus on that part as there is on what the space looks like if it is to accommodate people. We use Live Meeting regularly and routinely. We have opportunities, such as what we're doing here, to video conference each other in whenever we need to. We have smartphones that have a high capacity to access our files, which are centrally located on a centralized system. Those IT tools are critical.

It's been said that the most energy efficient space is the space that's not needed. That's essentially where we're going: doing demand-side management efforts, starting from asking whether we actually need the space, and if we need the space, how we can design it or maximize its efficiency to reduce the energy load requirement, and then once we know what the load requirement is, what system we should be putting in to provide that energy.

It starts from questioning whether the space is needed and how we should use it to maximize its utilization.

● (1245)

The Chair: I'm afraid that's about all the time we have, Mr. Trottier. Thank you.

That wraps up the time we have set aside for this today.

I want to thank the panellists, the witnesses from both B.C. and Manitoba, for very helpful input. You are very knowledgeable and committed people doing very important work in both of those provinces, and we will definitely benefit from your testimony today.

Thank you very much, ladies and gentlemen, for being with us today.

I'm going to suspend the meeting for a minute or so while we disconnect the teleconferencing. We will reconvene in camera for 10 minutes or so.

Thank you again, ladies and gentlemen.

[*Proceedings continue in camera*]

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