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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. We'll convene our meeting. Welcome to the 80th meeting of the Standing Committee on Government Operations and Estimates, as we continue with our very interesting study on energy efficiency, energy retrofit, and the savings potential these initiatives could bring in government buildings, structures, and public works.

We're very pleased to welcome by video conference two witnesses in two separate cities. We're really pushing the technological envelope, I think, but we'll see how that works.

Welcome to Mr. Laverne Dalgleish, principal of the Building Professionals company. He joins us from Indianapolis. Mr. Dalgleish, can you hear me?

Mr. Laverne Dalgleish (Principal, Building Professionals): Yes, I can. It's very clear.

The Chair: Very good. Welcome, Mr. Dalgleish. Thank you for making the time to be with us today.

From Edmonton we also welcome Mr. Brian Staszenski, general manager of Global Resource Efficiency Services. Mr. Staszenski was with us in a previous meeting that had to be cancelled due to votes and bells ringing. Thank you very much for taking the trouble to join us again. We don't foresee being interrupted this time. We welcome hearing from you. With us in person is Mr. Doug Cane, from Caneta Research Inc. Mr. Cane, welcome and thank you for being here.

Mr. Doug Cane (Principal, Caneta Research Inc.): Good morning.

The Chair: Also, from the Building Owners and Managers Association's local office in Ottawa, we have Mr. Dean Karakasis, executive director. Thank you for coming back again. I know that you were here once before and we had to shoo you away before you could give your testimony.

Mr. Dean Karakasis (Executive Director, Building Owners and Managers Association of Ottawa): At least I live close by.

The Chair: You're all very welcome, and we appreciate your being with us today.

I worked with Mr. Dalgleish years ago on this issue in Winnipeg. I'm very interested to hear his international perspective, the activities he has outside of Canada, although he is, in fact, based in Canada. We're going to begin with him, if that's all right with committee members, because he can be with us only for the first hour.

If you're ready, Mr. Dalgleish, we would welcome your presentation.

Mr. Laverne Dalgleish: Thank you, Mr. Martin, and ladies and gentlemen. I appreciate the opportunity to address you today.

I have a real passion for energy efficiency in buildings. The fact that you're looking at this and taking it seriously is a major step forward. I think that's actually where the federal government should be. We need leadership in how we treat buildings.

As we go through this, I look back and reflect that I got involved in energy efficiency in buildings over 30 years ago. I also represent Canada on the international scene at the International Organization for Standardization. We go to countries all around the world, European countries, Asian countries, and so on. When I first got involved with ISO, when you went to meetings, because you were from Canada you were automatically considered to be an expert. The National Research Council was one of the leading research institutes in the world.

We have an excellent base we're building our buildings from, and we're working on how to make them better. Unfortunately, we're losing that in a lot of cases, and we're no longer the leader in how we build and renovate buildings. Countries like South Korea and Thailand are actually ahead of us in getting some things done. I think we still have the opportunity to show leadership and show not only the citizens of Canada but also the world what we can do.

As a side note, I was on a conference call this morning with some people in Sweden. This is a project in which we're taking some of our energy efficiency projects to Scandinavian countries. One of our partners is an American-based company. He asked how it was going to be viewed in Sweden. The short answer was that it wasn't going to be that well received. They basically had the opinion that Americans don't know how to build buildings. That wasn't necessarily unusual or anything different, but then he went on to say that if you say you come from Canada, well, it's cold in Canada and you absolutely know how to build buildings. I was very heartened by that this morning, because it tells me we haven't quite lost everything.

When we take a look at energy efficiency in Canada, we have always said that we are a big country so our energy use is high compared with other countries. When we take a look at how we can reduce energy use in Canada, and this applies right around the world, buildings become the number one spot. If we're going to transport materials and goods across Canada, there are so many kilometres they have to go and we can make our trucks more fuel efficient, and those sorts of things, but when we get down to kilowatt hours and gigajoules, or whatever it might be, the biggest opportunity we have is in buildings. If we start to look beyond that into the environment and sustainability, I propose that the greenest building there ever is, is a building we don't build.

As we're looking at new construction, obviously we want to make it the highest quality in energy use and so on, but also we want to retrofit our existing buildings. Whether they're 10, 50, 100 years old, it doesn't really make any difference. We can retrofit these buildings, and we can save energy and solve all the issues we have with destroying buildings and building new ones.

Mr. Martin, as you mentioned, our office is in Winnipeg. We're in the downtown core. The building my office is in is over 100 years old. Most of the buildings around there have now been retrofitted and brought up to date. If we can make them energy efficient, that's great.

There are other things that we don't sometimes attach to energy efficiency in buildings.

About 40% of the garbage that goes into landfill is construction waste, so we're going to have a reduction there.

I am at a conference here in Indianapolis, and one of the presenters last night brought forward the issue that when we create energy.... We have a lot of hydro power in Canada, and we're very fortunate in that, but we still do coal and gas. On the American side, of course, it's much more. They don't have quite the same percentage of hydro power. For the southern Unites States, the amount of water used to produce electricity is equal to all the water that goes over the Niagara Falls on a minute-by-minute, second-by-second basis. One of the points he brought up is that as we expand the population and so on, people like it where it's warm. They're moving to places like Florida and Georgia. Those are the areas where it's the hardest to get water. We have some environmental benefits to do energy efficiency in buildings that go beyond just reducing the energy and reducing our costs.

● (1110)

Back to the potential, obviously any new building we build should be absolutely the lowest energy use that is possible. The terminology typically used today is “near net zero”. What we have to keep in mind is that of the existing buildings, 74% of the buildings we have were built before 1989, and 93% of the buildings we have out there were built before 2003. The potential we have for reducing energy use in buildings, federal government buildings or whatever, is phenomenal on that side.

As you move forward and you're looking at improving the government buildings, first of all, we should be setting an example with use of technology and efficiency and setting standards for energy use to show the industry and to help the industry move in that direction. We're doing that through the codes in some of the other areas, but that's a long, slow process. We need somebody out front to lead the pack there.

My company has started a project called Historic Zero, just because our buildings happen to be 100 years old. We're going to be renovating three buildings in downtown Winnipeg. Our whole purpose for doing this is to show that you can take a historic building, which would be considered the hardest to improve in energy efficiency, and bring it as close as we can to near net zero that's out there. We've been discussing this project. We have Manitoba Hydro involved. We have interest from BC Hydro. We have interest from a lot of architects and engineers in both Canada and the United States because we don't have any program out there that deals with existing buildings.

We've established 100 equivalent kilowatt hours per square metre per annum as the goal that we're trying to hit. That's another thing I would suggest be brought into the foray of dealing with government buildings: we should be setting energy targets. We should not just simply be adding some materials or changing motors or changing light bulbs, or whatever it might be, but we should actually bring it down to energy use intensity. Whether 100 equivalent kilowatt hours per square metre is the right one for government buildings or not, it will all depend on use, but if we don't have a target to go to somewhere, we're never going to get there.

An example of how that can happen is that the Army Corps of Engineers are renovating a lot of buildings in the United States. They have set, for example, for airtightness, when they renovate or build a new building, that building needs to be airtight to the point where the amount of air leakage in and out of the building is going to be about 1.25 litres per second per metre squared, at a 75-pascal pressure difference.

Now a typical building would be somewhere in the neighbourhood of 10, 15, 20 litres per second. To keep it very clear, when you build or renovate that building you do not get paid unless you meet this performance requirement, which is an extremely airtight building. When they first brought this out as a performance requirement it was deemed impossible, that nobody could do it. Now it's being done very routinely, and in fact they've moved from 1.25 litres per second per metre squared down to less than a half a litre per second per metre squared. The point of all that is just to show what happens when you start to set some targets, that not only can you achieve the target, but you can go beyond.

As an example, again, when we mentioned the 100 equivalent kilowatts hours per square metre per annum to architects in B.C., in Vancouver, where I had some meetings last week, they said that's nothing for them to achieve, they're currently achieving that today. So it shows where we need to go.

Now, obviously we do the standard energy-efficient things that we've done for the last 20 years, the light bulbs, the motors, the controls, and so on, but we need to get into some areas that we haven't got into. On a typical building we haven't worried that much about the air leakage. We're now realizing that air leakage accounts for somewhere around 30% of the energy loss due to air leaking in and out of buildings.

● (1115)

We haven't applied that. We've left the building envelope alone. We're starting to understand continuous insulation. It's extremely important that we get rid of the thermal bridges so the building will perform much better, rather than just throwing some vacs in the attic or vacs in the walls.

We need to also look at new and innovative products. We have a lot of new materials coming up. We have vacuum insulated panels. We have high-performance insulation. We have aerogels. We have high-performance equipment, and the list goes on. We need to start to take a look at how that can better us.

A quick example is a thermostat called Nest. It was designed by people who used to work at Apple. It's very simple, but it learns what you do. We're probably all aware and familiar with the setback thermostats, but this goes way beyond that. People who have installed it in their homes have seen their energy bills drop. We have to take that type of new technology, which is basically a smart thermostat, and apply it to some of the areas that we're dealing with.

The Chair: Mr. Dalgleish, excuse me. I'm going to have to ask you to wrap it up in one minute or so. We need to leave some time. We try to keep as much time as we can for questions from the committee members as well. I know that you have to leave roughly after one hour of being with us, but I would ask that you stay as long as you can so that committee members get a chance to question you as well after we hear from the other presentations.

Mr. Laverne Dalgleish: There's actually only one more point I would like to make. One of the places where Canada's lacking and we could move forward with government buildings is building labelling. Actually, it's a regulated practice in Europe that we have to label the building with how much energy it uses, and it is something that if you have the knowledge and you have the idea of what you're doing, then you can improve the building as you go along. Incorporating building labelling into government buildings would be a good way of introducing that technology into Canada.

With that, I thank you for your time.

The Chair: Thank you, Mr. Dalgleish. It was a very interesting presentation. I know there will be questions for you from committee members if you're able to stay with us as long as you can.

Next we'll go to Mr. Karakasis from the Building Owners and Managers Association of Ottawa, and then we'll go to Edmonton for the video conference, and finally to Mr. Cane here in Ottawa.

Mr. Karakasis, you have the floor.

Mr. Dean Karakasis: Good morning. My name is Dean Karakasis. I'm the executive director of the Building Owners and Managers Association for Ottawa and the national capital region, proudly at the service of the highest concentration of government buildings in all of Canada. Recently your committee showed a lot of respect for our organization by asking our national offices to address this committee and they told you that nationally our association represents about two billion square feet. To put that in context for you, for what I do, we represent about 100 million square feet in the city of Ottawa and the national capital region alone.

Our mandate is to be the voice of the industry, not the voice of our members, but the voice of the industry. In that regard we develop different programs to educate and document industry standards, but possibly most importantly to provide forums for the sharing of best practices and experiences from everything from building management to energy savings, as we're talking about today.

One such BOMA program that combines both standards and sharing is the BOMA building environmental standards or BOMA BESt program. It's a Canadian designed, Canadian operated, and Canadian maintained program. It's designed to address the impact of commercial office space on the environment by recognizing that you can't change what you don't measure. My national colleagues let you know that BOMA BESt assesses six key areas of environmental performance and management. Just as a reminder, let me tell you that the areas are energy, water, waste reduction, emissions in effluents, indoor environment, and environmental management systems.

Over 150 buildings currently hold one of our four levels of BOMA BESt designation in the BOMA Ottawa area. Many other buildings have run the program simply to assess where they stand and what they need to do to improve and reach one of our four levels. We at BOMA Ottawa are proud to say that since 2008 we have worked with Public Works and Government Services Canada as well as SNC Lavalin, who manage many of the government facilities, to put large segments of their building inventory through our program.

Our four level program helps property managers to understand where they stand in absolute numbers and where they stand against comparable metrics allowing them to consider initiatives that may reduce their buildings' impact on the environment.

A BOMA BESt level two certified building performs 6% better than the national average. Level three buildings perform 18% better and a level four building, our highest standard, perform 46% better than the national average. We are partners with government to ensure that the Public Works portfolio goes through BOMA BESt assessment. In March alone we with independent auditors reviewed 49 buildings, buildings that house government employees, a new record.

The reality is that many of the options available to larger, well-managed buildings are already being implemented. But there are three areas that we can address if our collective goal is to reduce the environmental impact of commercial office space in both government and the private sector, in particular in energy usage.

First is the need to invest in professional property managers and facility managers who manage the government portfolio or who interface with their alternate delivery providers. They need access to continuing education to allow them to learn about and implement best practices as they continue to evolve. It will make them contributors to the overall discussion. It will make them better managers and more valuable assets as federal employees.

Often I find myself managing a BOMA BESt file where the data is collected and entered into the system by a project officer or an environmental specialist while the property managers or the building operators are left to answer questions and conduct on-site verification tours unique to our program. These property managers or building operators are the front line for ideas for progress and for maintenance and they need to be participants in the measurement initiatives.

Second is the expansion of the federal mandate to those buildings that are not part of the Public Works and Government Services portfolio. I don't want to suggest that this isn't happening. There are many enlightened property management groups in Transport, DND, and other government departments that have sought us out and because of the affordability of our program are able to access it and implement it and receive the value of the evaluation. The ability to further realize savings by further reaching into building inventories is clear. You simply can't reduce what you don't measure.

Finally, let me suggest something that I'm not sure has been considered a lot. It might seem strange coming from someone who is supposed to represent buildings and building owners, but too often we concentrate on the building envelope and equipment that keeps the building running because it's easy and it's within our sphere of influence to change a system, to change a light bulb, to change a window. The fact is in today's world the replacement of windows or HVAC systems will always trend towards environmentally friendly options that are available in our industry.

● (1120)

A very well-respected property manager with a very large portfolio in this city said to me that you would have to try hard not to build a retrofitted building that is more harmful to the environment than what is currently being used.

In fact, the investments some of our industry are making in being environmentally responsible are not usually reflected in a positive way on the balance sheet, but environmental responsibility in the operation of the building is part of our culture now, and we're not going back.

What we struggle with is the constant evolution and improvement of those that reside in our buildings, our tenants. We place signs directing behaviour: glass here, plastics here, organics there. We put in place an infrastructure for them to participate in paper recycling, computer recycling, and battery recycling. These are all things we do constantly. But we don't have an obvious means of education, or recognition, or the capture of the input from the tenants in things that will make them a bigger part of the process. I don't mean suggestion boxes, whether they be virtual or real, but rather the idea that tenants can provide meaningful approaches to the problems.

The best sealed window in the world is of no use if it's left open all day. The most energy-efficient piece of equipment in an office is ineffective if it's left on when it's not needed. Users of office space are more environmentally conscious in their homes than they are in their office space, and the reason is simple: it's not their space. That culture is something we all need to work on in order to get tenants to understand.

We need to get them to feel they are a partner in this and we require more than just a memo for tenant contact. It means using traditional media, social media, and more to get the message out, and maybe branding the culture of environmental education, something all of us can do, both government and private sector, to all of our tenants.

Sometimes we feel we're trying to make buildings efficient in spite of our tenants. It's time to design programs to make them efficient with our tenants. Tenant engagement is the next horizon to energy and waste reduction.

I want to thank the committee for inviting me here today and listening to my message. As an industry we stand ready to partner in the development of even more innovative approaches to our collective future.

● (1125)

The Chair: Thank you very much, Mr. Karakasis. That's very useful and very helpful.

Next, we are going to go to Edmonton. Mr. Staszenski has been waiting very patiently to present to us; spanning a few weeks now, his patience has been tested. You finally have an opportunity, sir. You're very welcome and the floor is yours.

Mr. Brian Staszenski (General Manager, North American Office, Global Resource Efficiency Services): Thank you for the opportunity. I've been here for three weeks now, waiting for this. I'm only joking.

Thank you very much.

I run Global Resource Efficiency Services. We're a strategic energy management group. We operate across Canada. We're integrators and planners and we help clients implement energy efficiency measures.

We're now in Alberta where we have the highest electricity rates in Canada, thanks to deregulation. Lots of people don't like 22¢ a kilowatt hour. We like it because it's creating a lot of opportunities. We work on welding shops, high-rises, schools, Indian reserves, and on and on, because there's a lot of angst in the system right now about the high cost of electricity. Gas is still really cheap. Water is at times very expensive; it depends where you go. Waste is an issue as well.

For you, in getting right to the point of dealing with this topic, I see the federal government and the way it operates with its buildings operating in two different worlds, one where you lease a lot of space and the other where you own your space. I think more and more you are starting to lease more and more floor space. So how do you deal with owners who really don't care what your operating costs are and are passing on those operational costs to you? You pay them. You pay the electricity, the gas, the water and so forth. Really, I have only two thoughts on how you deal with that.

We deal with a lot of owners and tenants and leasing issues and so forth. The key to what the federal government should do on a policy level is to set standards of performance that you expect the owners of the buildings you are leasing space from to deliver to you. Do you want to move into a space that's got really high gas and electricity costs, or do you want standards of performance that set basic requirements for what you want to be able to pay for?

Do you want energy-efficient lighting in the buildings you lease? Do you want water efficiency and so forth? I think you have a lot of power there to demand that you deal with owners of buildings who will give you really reasonable operating costs.

The other thing you can do with leased buildings in general is make big improvements in terms of the building code. Provincial and federal governments continually run away from improving building code standards when they should be dealing with that, because you can solve a lot of problems.

When you phased out the T12 fluorescent tube in Canada everyone moved to the T8 and the T5 lamp, so a legislative tool like that has created a lot of changes in our system.

When you own buildings we really believe in utilizing something called AIM, audit, implement and monitor, where we deal with your buildings in a strategic way versus a tactical way. Tactical solutions to attacking buildings would be “I want to fix my lights.” That's a tactical decision and away you go and make the changes to the lighting, but you're really not thinking about what other impacts that change would have in your building.

When you remove old lighting you are really removing a lot of heating that's being generated from that lighting, so how are you going to deal with the heating and cooling issues because of that change in lighting? We therefore really believe in doing strategic planning in terms of how you're going to attack your building.

In the AIM process the first thing you do is get a strategic plan done. When you do a strategic plan you're looking at the capital renewal costs over a 25-year horizon, such as when you need to replace your roofs, windows, doors, the lighting and so forth. You have an analysis done on that and you see you have a lot of money to spend on building renewal. Well, energy efficiency measures can attack some of that problem. So if you have a plan that lays out and provides you with an analysis, you can then start to implement sound, really efficient decisions on how to move forward on retrofits for your facilities.

You tie capital asset planning together with energy efficiency measures. That is something that I think the bureaucracy within the federal government should be doing. That's a policy decision.

● (1130)

When you deal with the AIM process, you do the audits and all the planning, and then you move into implementation, that's where you attack the hard measures that confront you, i.e., the need to improve lighting, the need to do all of these different measures, and renewables and so forth. How do you that? As the previous speakers have talked about, if you don't have very good building managers and facility people in your system, you're going to have a hard time doing that. Training those people and resourcing them with tools and the money to do those changes is critical.

By the way, the money to make those changes is in the system. We really believe there's over 50% waste in our system, in our buildings. Give me a building and I'll find 50% savings. That's our philosophy and approach. One of the things I've been hearing about in terms of this committee is how you make these changes with internal staff if you don't have them.

Some people have been talking about energy performance contracts and utilizing ESCOs, energy service companies. That's an option, but when you choose that option, you have to know that you're going to be paying 20% to 40% more for those retrofit costs if you go that way. Those companies are going to be insuring the risk they're putting into the project. They're guaranteeing savings, and guess what? You're going to pay a premium for that kind of work.

Our belief is that you get the people in your system, have them available, and let them do the work. You bring in resources, consultants or whatever, to help them make those changes, but the best way is to have your own people make those changes, because they run them long term.

On the soft side of measures, and I like what I've heard already from the BOMA folks, is training of your building operators and providing them with the tools and resources on how to operate your facilities effectively. It can easily generate 10% savings.

ASHRAE has done peer review work on this type of work, and for sure, easily 10% savings can be generated in terms of how you manage your facilities. Involving the occupants, creating awareness programs for your occupants, and creating incentives and shared savings programs with them will also help.

I'm going to stop there. I prefer dialogue and discussion.

On a high level, do strategic planning; try not to do it tactically; do it yourself and you'll save a fortune; change the building code. Deregulate so that we have really high electricity rates all over Canada—I'm joking.

Voices: Oh, oh!

Mr. Brian Staszenski: Thank you.

The Chair: That's very helpful, Mr. Staszenski . Thank you very much. These are very useful, concrete points you've made. It was worth the wait to hear from you.

We're going to go now to Mr. Cane.

Thank you as well for your patience, Mr. Cane. You tried to present to us a number of weeks ago, and snow in Toronto kept you from being with us. We're glad to have you here today representing Caneta Research Inc.

Please take eight to ten minutes and give us your opening remarks.

Mr. Doug Cane: Caneta Research Inc. is a small energy consulting company in the greater Toronto area. We have 10 engineers on staff. Our core business is done under a company called Caneta Energy, which does energy modelling and energy consulting in connection with a number of building owners who are trying to improve their buildings and trying to qualify for LEED.

We do not do full LEED facilitation per se, but we often become involved with facilitators who don't have an energy modelling capability to help them meet the energy prerequisites in LEED and gather additional credits, perhaps under that same program.

We also become involved in doing modelling of 3P projects, public-private partnerships, that might be of interest especially in Ontario, B.C., and Quebec, in which there is a requirement for an energy target or energy guarantee on a new project. That's where the rubber meets the road, when it comes to providing accurate energy modelling.

In addition to that, in Ontario there is now a requirement to model to show code compliance. There are only a couple of provinces in which this is currently a requirement. I'll get into that a little later.

Our background, prior to 10 years ago when this Caneta Energy activity started under the old banner of Caneta Research Inc....

We have been in business for 24 years. We have advised and consulted with the provinces, the federal government, and agencies such as the National Research Council when they do their code development. We've advised these departments on new building energy requirements and also have worked with some government programs that a number of you may remember: the commercial building incentive program, which was offered by Natural Resources Canada for large buildings, and recently the ecoENERGY efficiency initiative, which is very similar. We provide support to those programs and also help clients get incentives or take advantage of what is being offered. We have worked for the Ontario Ministry of Municipal Affairs and Housing. It is the group responsible for the Ontario code. We've done this on two occasions, once in 2006 and again in 2011.

I'm only providing this background as I think it will be useful for the kind of questions you may want to put to me.

We have just completed a major study with the same agency, the Ministry of Municipal Affairs and Housing, for large buildings, developing code proposals for encouraging energy efficiency upgrades during renovation. At this time, there is no requirement to upgrade. For example, if you do a repair on a wall, there is no requirement to replace or upgrade the insulation in the wall. If you replace a piece of equipment, you do not necessarily have to meet the current energy requirements.

The province wants to change that. They want to be able to take advantage of anything that comes under a permit to call for more stringent requirements. They are currently looking at drafts for this requirement. It may take a few years to put in place, but at least it's encouraging to see that it's not all focused on new buildings.

I briefly mentioned the work with the National Research Council in development of the National Energy Code of Canada for Buildings 2011. I'm sure many of you are aware of it. It's one of the most stringent codes, I would think, in North America if not the world. We haven't had a chance to benchmark it against the European standards, but I'm sure it's up there.

My attendance today was prompted in part, from what I understood from Marc-Olivier, by a report we did for Public Works in 2001, a study in which we were challenged to identify how we could improve office-type buildings, from meeting a model national energy code for 1997, which was a benchmark at that time.... A couple of the provinces adopted this as an energy requirement. Public Works wanted to go 60% to 70% beyond that, which is very stringent.

It was relatively easy to get to 25%, and we demonstrated that. Programs have evolved since. The commercial building incentive program, for example, required that buildings show 25% energy savings compared with that MNECB, the model national energy code for buildings.

● (1135)

The current national energy code for buildings, which I just mentioned, which NRC came out with in 2011, shows savings in buildings typically 25% greater than it does with the old MNECB 1997. Considerable progress has been made so I didn't want to spend a lot of time talking about a 12-year-old report, but rather where we've come since then.

That work did show it was relatively easy to show you could get a 25% saving compared to the old code, MNECB, without any incremental capital cost, and that was promising. Anything beyond that is a different matter. It can get more expensive.

As I said, that whole approach of achieving 25% greater savings was later used in incentive programs across the country.

Today that same premise is the basis for the Ontario building code energy requirements. One of the paths to compliance is showing that your building is 25% better than the MNECB. I wanted to point that out. I think it is probably one of the more stringent jurisdictional codes that I'm aware of. We've benchmarked it against ASHRAE 2010 in the United States, 189 ASHRAE, which is a high performance standard, and as I say, the only thing left is how it compares to Europe.

I probably have spent enough time talking about that sort of thing.

I mentioned in my background, which I understand everyone has, that I did a presentation to the Toronto chapter of the CaGBC on all this, how we've come over the years, where we're going with buildings, including net zero. There's a little about net zero in that presentation, and how we could achieve that in buildings.

By the way, ASHRAE in the United States, the American Society of Heating, Refrigerating and Air-Conditioning Engineers, is targeting 2030 to be at net zero. I don't know whether they'll achieve that or not. That's a long way off.

One of the biggest challenges today in many areas—and I'll be concluding more or less with this point—is energy prices have changed dramatically since that 2001 study. The price of natural gas is 50% lower today than it was at that time. The price of electricity is double what it was at that time. I'm talking primarily certainly of the markets we looked at in that document. This has the effect of significantly increasing the payback periods associated with gas measures, if you want to save gas, while lowering payback periods for electricity measures.

Often when you do something in a building you're going to impact both electricity and gas use and you're depending on both to give you the savings you need to justify your capital investment.

I think you've already heard from the CaGBC, probably back in March when I couldn't make it, but it's making it very difficult to show a 25% cost reduction and beyond to get energy credits beyond the prerequisite in LEED because you can't depend the same on the gas savings because you're coming up with a percentage dollar saving.

I wanted to place that. That is something everyone is up against today, and any time we've looked at.... Recently, for example, the renovation study I mentioned we're doing for the code ministry in Ontario was one of the big issues we had. We had difficulty showing savings at a reasonable payback with the gas prices we had. Electricity is a different matter.

I think a lot of what we did in that old report that dated from 2001 would apply, for example, to existing Public Works buildings. A lot of the energy measures we've looked at there could of course be applied. There is an opportunity, especially if the buildings are undergoing equipment replacements, major renewals, or renovation.

That concludes my opening remarks. I hope I can address some questions you might have.

● (1140)

The Chair: Yes. That's excellent, Mr. Cane. Thank you very much.

We will go to committee members for questions now. I should say that it's now a quarter to twelve Ottawa time. We'll be finishing this at a quarter to one as we need 15 minutes to do some committee business.

Mr. Dalgleish cannot be with us for the whole time. If committee members have questions for Mr. Dalgleish, they should ask them at the front end, rather than waiting too long.

The first questioner for the NDP will be the critic for Public Works, Linda Duncan.

● (1145)

Ms. Linda Duncan (Edmonton—Strathcona, NDP): Thank you very much, Mr. Chair. I do have a question for Mr. Dalgleish.

Thank you to all four of you for your excellent testimony. We really appreciate it.

Mr. Dalgleish, you raised the concern that Canada's losing its reputation for leadership on energy efficiency. Yesterday, I happened to come across a report specifically on this topic by the North American Commission for Environmental Cooperation.They apparently formed a task group of Mexicans, Americans, and Canadians, to look specifically at improving energy efficiency in buildings, including government buildings.

Among their recommendations, which I'm hoping we will take a look at since they're in both official languages, is that the government lead by example to spur investment by private industry.

Would you concur? I think you and some of the other witnesses mentioned that. Could that be a factor in spurring investment by private enterprise, including those who lease buildings to the federal government?

Mr. Laverne Dalgleish: Absolutely, I would agree with that. I think that's the opportunity the federal government has. If we look back in history, we can see that any time somebody has taken that leadership, we've moved forward, whether it be deleting the T12s, or whether it be a demonstration project.

The building industry is prepared to do things, improve things, provide better products, and provide better services, but they need to know that they're going somewhere. If the federal government showed leadership, that would give the message to the industry that we are moving to a more efficient building industry and they would respond.

Ms. Linda Duncan: If you have any more information or contacts on Historic Zero, the federal government has a lot of historic sites and it could benefit from that knowledge and experience to make our heritage buildings more energy efficient.

Mr. Staszenski, we haven't really heard this testimony before. We've heard it somewhat, but it's very interesting that you're talking about the difference between tactical decisions and strategic decisions. This may be particularly important for the federal government and their buildings because of the challenge of needing to invest now to have energy savings but they would have to spend the money now and there are tight budgets.

You say you don't think these performance contracts are necessarily a good idea because they could cost too much. Do you have other suggestions on how the federal government could approach this? Is it worthwhile to be making an investment now because of savings into the future? What's the challenge for governments?

Mr. Brian Staszenski: First, the money required to make changes is already in the system. It's going out the window. If you have inefficiency in the operations of your buildings, the money's there. What you do is capture those funds and capitalize them. You don't need new money; you already have it in the system.

The federal government might even borrow money at 2%, 3% or 4% to do the changes but the savings created would pay for that financing. You don't have to go and look for new money; it's in the system.

The other thing related to ESCOs and the energy performance contract world is you go there when you're desperate, when you don't have people and when you don't have the resources to do that work but you're going to pay for it. Our approach or our belief is design-build: do it with the people you have in the system; bring in a few resources to help you do that, but do it yourself. Have your people do it themselves, because they make the changes and they have to run the buildings so why not just do it that way. You'll save a lot of money.

Ms. Linda Duncan: Thank you.

Mr. Karakasis, you raised a really important point. You said that the challenge is the tenants. I think the vast majority of federal office space is leased as opposed to owned. Our focus is on federal buildings and savings for the federal government as opposed to the private sector.

Can you share—and we could hear from others if they'd like to add to this. Do you have experience with the federal government's taking this seriously as a tenant? Also, what innovative measures could the federal government take? Have people previously opened up leases? Is that a possibility to open up a long-term lease and seek investment in energy efficiency?

Mr. Dean Karakasis: When I talk about engaging the tenants, whether it's a situation where the government owns the building or they lease space from the private sector, you still have physical human beings occupying the floor space. When you talk about engaging the tenants, it's about helping them understand how they are part of energy reduction or waste reduction.

● (1150)

Ms. Linda Duncan: I'm specifically interested in where we might lease the building, because then we're the tenants.

Mr. Dean Karakasis: Where you lease the building, our challenge is that my members don't actually speak to the tenants in many ways. They have to go through Public Works, who then go through the client group, who then go to the tenants. Our opportunities become floor space: a sign in the elevator, a sign in the lobby.

There needs to be a much more coordinated effort between government and the private sector in those circumstances to ask how we engage tenants, how we help them make the right choices to move forward and to save energy. We have no control of that. We're not allowed. We have no control whatsoever.

Ms. Linda Duncan: How about opening up leases?

Mr. Dean Karakasis: I'm not sure what you mean in terms of opening up a lease. Change the terms of a lease? That doesn't engage the tenant.

Ms. Linda Duncan: I'm presuming a lot of leases are long term, 10 or 20 years, and so you set the rate that you're paying, but as the federal government wants to reduce its energy costs, it may potentially have to open up that lease and negotiate something.

I'm wondering if any of the witnesses have had experience with that in buildings.

Mr. Dean Karakasis: I appreciate that concept, but when I speak to tenant engagement, I need us to get away from the idea of the person who's dealing with the lease versus the people who are physically occupying the space. It's really about behavioural change.

Ms. Linda Duncan: Right. That's my second question. I'm wondering if you could address that.

Mr. Dean Karakasis: When you talk about opening up the lease to change terms and conditions within a lease, to create targets, I would say a more fundamental way of doing it is simply upon renewals, which happen all the time, to make them part of the specifications for getting into a building. That's what Public Works is already looking at doing.

The Chair: Thank you, Mr. Karakasis. That's all the time we have for that round.

Next for the Conservatives is the vice-chair of the committee, Mr. Peter Braid.

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

Thank you to all of our witnesses for being here and for very helpful and thoughtful presentations today.

Mr. Dalgleish, I'll start with you, given your time constraints. You mentioned in your opening remarks that you were concerned about the possibility of Canada's losing some leadership role on the world stage in this area.

In December, through NRCan, the federal government finalized a new Energy Star rating system and labelling system for residential homes at least, at a minimum. I believe that the program over time will be expanded to commercial and office buildings as well.

Are you familiar with the program? Do you have any thoughts on the program, and will this type of program help us to regain some leadership?

Mr. Laverne Dalgleish: The short answer to your question is yes, I'm very familiar with the program. About 70% of our business is on the American side now, so we work closely with both the Department of Energy and the Environmental Protection Agency.

I think the step forward that the government has taken on this is very good. I think we've got to do a lot more, but if you're taking this back to the leadership, we're picking up a program that the Americans developed. We should have developed the programs and had the Americans pick them up from us, but it's better than not doing anything at all, absolutely, and I think it's a major step forward, even on simple things. We had our energy use scale backwards, and the world had it the other way. We're now switching it around to the energy scale that everybody else uses, where zero is zero; if you don't use any energy, then your scale is zero. In Canada we had 100 as zero.

EnerGuide 80, for argument's sake, is one of the things that we looked at in the building codes, but we just weren't harmonized, and it was hard for consumers and building owners to understand that if they got 100, that was good.

Again, going back to your question, I don't think that addresses the leadership issue, but it definitely helps us move forward.

Mr. Peter Braid: Thank you. If only the Americans would adopt the metric system, we'd be in great shape.

You mentioned the NRC as well, and so did Mr. Cane.

Mr. Dalgliesh, do you have any thoughts on the role of the NRC? Is there anything that it could be doing today that it's not to help promote energy efficiency in buildings generally across Canada and specifically for government buildings?

Mr. Laverne Dalgleish: I think the NRC is in position to actually do a tremendous amount of work to assist not only the federal government in improving the efficiency of its buildings, but in getting back to leadership.

I've been working with NRC for about 30 years. When I first started working with them, they were known throughout the world as leaders in how to make energy-efficient buildings, materials, and so on. Over the years, for a bunch of other reasons, cutbacks and all the rest of the stuff, NRC has become a lame duck, and that's such a shame because, if you talk about experts in thermal insulation and building efficiency and so on with people around the world, it's the Clifford Shirtliffes, Mike Swintons, and Kumar Kumarans and all these people who have brought Canada forward.

NRC is still doing some good research and things like that, but they could do so much more, and it would help everybody, including the federal government, with their buildings.

● (1155)

Mr. Peter Braid: At this point I'll go to Mr. Cane.

Any thoughts on that? Is the NRC a lame duck? You've been involved with the NRC in the building code. Do you have any comments?

Mr. Doug Cane: I was going to say I know the year he was talking about. I worked there when I first graduated, in the division of building research. The point I made earlier about code development, I think that's critical, but NRC doesn't have a mandate to get the provinces to adopt the code, right? That's something that NRCan is responsible for. That would go a long way: how we promote the code to the provinces to ensure they adopt it.

The last time, when we did the MNECB, only two provinces...in fact, it was just the City of Vancouver and the Province of Ontario that adopted the MNECB. I don't know how it's going currently on the National Energy Code of Canada for Buildings 2011, but I'm hoping that more provinces will adopt it. That's a starting point, a significant starting point. That is an NRC-led undertaking.

Mr. Peter Braid: That's a good point.

Mr. Dalgleish, this is out of the scope of our study, but you mentioned it so I'm going to ask you about it. Forty per cent of landfill is construction waste. That seems very high to me. Is there not an opportunity to bring that down or to recycle construction waste? Can we not do a better job there?

Mr. Laverne Dalgleish: Absolutely. We can make a tremendous improvement in that area. The point I was trying to make is that, when we think of energy efficiency, we think of saving kilowatts, or gallons of oil, or therms of gas, but there are so many other benefits. Our landfills are being strained in some cases beyond capacity, and a lot of this stuff doesn't have to end up there. It can be recycled, reused. There are a lot of small organizations doing this type of thing, but there's no major push in that direction that I can see.

We've actually had our first success on the National Energy Code of Canada for Buildings 2011. The Province of B.C. officially adopted it last week, and the City of Vancouver will be following very, very shortly, so at least we're going in the right direction.

Mr. Peter Braid: Great. Thank you.

The Chair: That concludes your time, Peter. Thank you very much.

Next, for the NDP, we have Denis Blanchette.

[*Translation*]

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

I also want to thank our guests for joining us today.

My first question is for Mr. Dalgleish.

You implied that we should not necessarily focus only on ways to save energy. You seem to suggest a more holistic and comprehensive approach to the construction and renovation of buildings. We could eventually want to achieve net zero energy consumption in buildings. There may be some other concerns, including those mentioned by my colleague Mr. Braid.

Conceptually, do we have what it takes to plan the construction and renovation of buildings with that approach in mind?

[*English*]

Mr. Laverne Dalgleish: I fully believe that we do. I think we have an opportunity for leadership. When I was thinking about this, I was hesitant about using the word “leadership”, because to me that's a little bit passive. I think we have an opportunity here for the federal government to be very active, and that goes beyond just doing a building. How do we get the message out? How do we show other building owners what can be done to the building? We'd need it more holistic. But we do have the technology, whether it be high-performance insulation, high-performing windows, or extremely high efficiencies on mechanical equipment. We have efficiencies in lighting. Some of the architects in Vancouver, without any encouragement, are now meeting the requirements of the 100 equivalent kilowatt hours per square metre per annum. So, yes, we have the technology and the ability to do that to our buildings.

● (1200)

[*Translation*]

Mr. Denis Blanchette: Thank you.

My next question is for Mr. Cane.

You said that we should gradually replace the American model with the European one.

Could you tell us what we would gain—more specifically in terms of public buildings—by adopting European building codes?

[*English*]

Mr. Doug Cane: With respect to my point earlier about the Europeans, people have already mentioned that the Europeans have adopted a system where they have a target of so many units of energy per square metre, and each building has a label under its building code. I don't think they have any technology that we don't have. I don't think that's a limitation. I really don't know how to address your question, other than to say that I think everything's available to us that would be available to the Europeans. We don't have that approach, the building labelling approach. Maybe something like that instituted in Canada, along with our codes, would be helpful. I think the next version of the National Energy Code of Canada, in 2015, will likely have building targets.

[*Translation*]

Mr. Denis Blanchette: So the technologies used in Europe are clearly available here.

What specifically do we need to turn those available technologies into results? It seems that the Europeans are more effective than we are in using a technology to achieve objectives and results. What does our public administration need to transform those technologies that have potential into the desired results?

[*English*]

Mr. Doug Cane: That's a good question. I would think what the government could maybe do is consider demonstration projects to show how, for example, we can achieve a net zero in buildings. That will use a lot of technologies that you wouldn't see on a day-to-day basis in building design. A lot more renewable energy would be used in buildings. Perhaps that's one approach that could be taken.

[*Translation*]

Mr. Denis Blanchette: My last question is for Mr. Karakasis, and it is about the relationship with tenants.

You told my colleague that lease renewal was perhaps the best time to put incentives on the table. However, in the case of a 20-year lease, a long period of time will go by before something is done.

Is there a good way for tenants and owners to start to prepare gradually? After all, even if they were to start today, given the length of the lease, I would presume that any savings would end up in their pockets before a lease could be renegotiated.

Can you tell me what other kinds of incentives they will need?

[*English*]

Mr. Dean Karakasis: I think it goes back to the statement about what they do differently in Europe. There's will in Europe; there's an attitude. People are different in their approach to how they consume everything, not only electricity but garbage, everything. The cost of energy does have a lot to do with it. it's much higher, so they have an incentive to do that. When you talk about what to do in the interim, as I said before, arming personnel with knowledge is number one. What can be done? Mr. Dalgleish talked about a plan. When we talk about our BOMA BESt, one of the requirements is to have a plan, to have a strategy.

Second is building business cases for those investments, if you're going to make investments so they have a payback, so they make sense. Third is really about getting tenants to be a part of the process and to have the will to make the changes, not to consider that the money that is spent is not there and so is irrelevant.

[*Translation*]

Mr. Denis Blanchette: Thank you very much.

The Chair: Thank you, Mr. Blanchette.

We will now go to a representative of the Conservative Party. I yield the floor to Jacques Gourde for five minutes.

● (1205)

Mr. Jacques Gourde (Lotbinière—Chutes-de-la-Chaudière, CPC): Thank you, Mr. Chair. I want to thank all the witnesses for being here and for sharing their expertise.

My first question is of a general nature.

Managers have to make decisions about certain buildings' energy efficiency. They have to decide whether to renovate a building completely or build a new one. It is sometimes difficult to make the right decision. They have to determine whether, over a period of 20, 25 or 30 years, it would be better to renovate or build something new.

Do you have any indicators that would help managers decide whether to build something new or renovate existing structures?

[*English*]

Mr. Brian Staszenski: I can answer that. Oh, sorry, go ahead.

Mr. Dean Karakasis: From our industry perspective there's always a business case to be made, and there will always be a dollars and cents analysis. From your perspective in your own buildings, you're going to have to throw in the extra decision of the idea of recycling a building, if you will. It's a very hard concept to get around. But when you abandon a building.... Ottawa's going to see a lot of movement in the next little while with renovations going on in several government departments. I think of the Bank of Canada as well, and EDC just moved, so you have to figure out a way. What is the cost of recycling a building? If it's an asset that's owned by the crown, unless you're prepared to sell it off, you're going to have to recycle that building somehow anyway.

It isn't a simple choice, but it's one I would advocate the government throw into the discussion, not only the bottom line dollars and cents cost of moving, cost of building versus the cost of renovating, but the disposition of the asset that you'll be leaving. That is something you have to throw into the equation. We do it in private industry all the time.

Mr. Brian Staszenski: It's Brian here. Let me add something in there.

We just dealt with a facility like that in Calgary. Do we keep it or do we buy another one? What we did with that facility was a capital asset plan, looking at a 25-year horizon. There are 25 components in a building. What is the cost of keeping that facility up to standard over five-year blocks of time? It was about $6 million, and they had a $24-million building asset. They decided to keep it because we showed them how energy efficiency measures can bite down some of that capital cost. You retrofit your facilities where renewal is coming at you, but you get the energy savings to pay for it so it becomes economical.

I want to add in something about how you crack the lease and get a building owner to help the tenant make improvements. We've been doing that with tenants who want the building owner to make changes, and the building owner says, “I don't care what your bills are. I'm passing them on to you. You have fun with them. You pay them.” They say, “Just a second. We want you to upgrade but we are going to bear some of the costs of that.” The building owner does the upgrades and will over time pass those costs on to a tenant. It's being done. It can be done. It just means you have to have a strong tenant who says, “This is what I want. I have buying power. Let's get it going.” There are mechanisms to do it. The building owner can do that work, pass it on, and they can even write it off. There are solutions out there.

That's what I wanted to add.

Mr. Laverne Dalgleish: Perhaps I may add to that too. I agree you do need to add something in there. In the case of my company, we actually targeted older historic buildings because we just like them. We put a value to that, and we paid extra money, if you want to think of it that way, simply because that's our desire to use an existing building, to renovate it, make it energy efficient, rather than simply going out and either buying or building a brand new building. Part of it is the philosophy that you are bringing there too.

The Chair: Merci, monsieur Gourde.

Next, then, for the Liberal Party, we have the other vice-chair of the committee, Mr. John McCallum.

Hon. John McCallum (Markham—Unionville, Lib.): Thank you, Mr. Chair. I'm glad you're still there, Mr. Dalgleish, because my first question is for you.

You seemed to express pessimism that Canada had fallen behind other countries in terms of energy efficiency. I wanted to ask you two things. First, why is that? Maybe it's largely to do with the higher costs of energy in Europe. Maybe it's other things. Is there some kind of action the federal government could take to reverse that decline in our performance or reputation?

● (1210)

Mr. Laverne Dalgleish: The decline that we've had in the reputation, in my opinion, is because we're not showing leadership. We're not at the front of developing new products, new systems, new methodologies. That is really an issue of where you put your priorities. The opportunity is still there. There are a lot of things that can be done to improve buildings. What I'm seeing literally around the world is that everybody's starting to take a look at buildings, and they're realizing that it's where the major energy savings are going to be done. What the federal government needs to do is to get that message out that we want to be leaders. That's going to affect organizations like the National Research Council, NRCan, and so on, so that we have the will to do something different and something better. We have a fantastic opportunity still ahead of us. I'm just not seeing that we're even considering going down the path.

Hon. John McCallum: It's easy to say the federal government should show leadership, but can you tell us a little more specifically what that would consist of, what the federal government should do?

Mr. Laverne Dalgleish: I'll go back to my NRC example. NRC was a leader in research, and the federal government funded a lot of that research. That's why we were where we were. Over budget cuts and all the rest of things, they became...where they needed to bring money in. There's nothing wrong with that. I fully support that, but you have to tell industry. We're sitting there as part of the building industry, and we're thinking the federal government doesn't care anymore. When you start digging around, you find out that it can't be all one-sided. Industry has to pony up and bring some money to the table. Then we can go ahead with some research. But if you don't tell the people out there, we don't know that.

I have three projects going right now with the National Research Council, where I went out to my respective industries and was able to pull the money together to have the projects go forward. We will continue to do those things, but again it gets back to leadership and a vision. We just don't have the same vision at the NRC or at any of the organizations that we want to be a leader in building energy efficiency.

Hon. John McCallum: I'd like to come back to the topic that has come up a little bit, which is the federal government as a leaser rather than owner of its buildings. I'd like to ask Mr. Karakasis the question, even though the federal government leases the building, I'm assuming it is responsible for paying the energy costs?

Mr. Dean Karakasis: The costs are all passed through, yes.

Hon. John McCallum: So, the tenant does have an incentive to have lower energy costs.

Mr. Dean Karakasis: All operating costs.

Hon. John McCallum: Yes, okay.

Mr. Staszenski said that the main way to go about this is to set performance standards for owners, so the government would have a law saying that owners of buildings which may be leased to the federal government have to meet certain performance standards. Do you agree that this would be a good solution to this issue?

Mr. Dean Karakasis: Creating specifications in terms of the law, you'll find this quite challenging because everything's a little bit different across this country. Quebec has its electricity coming from a different source than Alberta does and B.C. does, so there are a lot of challenges in that. But the idea, just in general, of having specifications when it comes to lease time is just good business. Creating specifications that require certain energy performance is definitely a way you can go.

Hon. John McCallum: Mr. Staszenski, could you elaborate a bit because your solutions sounded very elegant and simple, but is it workable across this big country?

Mr. Brian Staszenski: First of all, you have buying power as the federal government, so when you approach whomever—Oxford, O&Y, or whomever—you're going to lease so much space, you've got buying power. You don't need a law.

Laws would be nice, but you just say, “Here are the standards of performance we want for lighting, air change, whatever, and we want to see that in your offer to us, and if you don't have it, we're going to shop around.”

You've got buying power, so use it.

● (1215)

Hon. John McCallum: Mr. Karakasis, you represent those owners who would have these conditions imposed on them. How would they respond to that?

Mr. Dean Karakasis: I would say the same thing. He talks about standards; I talk about specifications. When you go and lease space, you say, “This is what my needs are”, and put in those specifications, call them standards, and use your buying power. It's well within your prerogative. That's what businesses do all the time. It's not so unusual. The federal government hasn't exercised that option, but certainly it's within your power to do it.

Hon. John McCallum: It seems like a very good way, then. The two of you seem to agree to solve this issue of not owning the building.

Mr. Dean Karakasis: You may find that the bigger challenge is in writing that specification for all government buildings all across the country, but it's not impossible. We go back to challenging federal government employees to be as knowledgeable as they can be as buyers. In that case, now they become buyers, not property managers, to be able to put those definitions in place.

Hon. John McCallum: Thank you. I think my time is over.

The Chair: You're well over time, John. Thank you, nicely done.

The last speaker for this round of questioning, for the Conservatives, Mr. Dan Albas.

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

I want to thank all of our witnesses for coming here today.

Mr. Chair, sometimes I think we need to keep in mind certain things. First of all, when we hear the word “leadership”, it's a fair word to use, and I appreciate Mr. McCallum's mentioning leadership and asking what we would say should be done, but I have noticed that it is sometimes human nature, Mr. Chair, to forget what has gone on.

We've discussed the federal building initiative, which provides on average 15% to 20% in savings for every building that has been done. My colleague Mr. Trottier has pointed out that there seem to be fewer returns over time, because some of the low-hanging fruit, if you will, Mr. Chair, has gone away.

I've taken the time to visit NRCan's research development for building products. While it may not be as flashy as spending large amounts of money, which some opposition members might want to see in this area, what it does is it allows individual companies to bring forward new and innovative products, which they test here in Ottawa. They have two houses side by side. They will put an energy-efficient water heater in one side and then put a standard one in the other; then they'll test the two under very similar circumstances.

Rather than say that the federal government has not been taking leadership, I would argue that it's probably because we have such great and innovative building products that we get such great energy efficiency. Whereas Mr. Karakasis says that most new buildings are as energy efficient as can be, it's almost as though you would have to try in order not to be energy efficient, mainly because of the buildings.

There has also been some discussion regarding the waste disposal for particular items. Mr. Chair, I want to point out, as a former city councillor, that in the City of Penticton we work with our regional partners on landfills. One of the major challenges is that if you put greater regulation in place for getting waste to the landfill, construction materials, etc., you will actually create illegal dumping: you are adding to the costs of a retrofit. The whole point is that every time you retrofit, you get a better and more energy-efficient project in its stead.

Second, Mr. Chair, one of the issues when the materials go to landfills, whether they be private or publicly owned, is that the landfill owners feel rather pressed to allow individual groups, whether volunteer civic society groups or actual for-profit businesses, to collect and recycle those materials. Again there's not a want to see those things; it's legal protection and jurisdiction.

I am actually going to get to some questions today, Mr. Chair. I know that you and I can get into these discussions, and they get pretty heavy, but I'd like to speak to the gentleman from Alberta, Mr. Staszenski.

Mr. Staszenski, you mentioned that when a lease.... By the way, I appreciate your pointing out that leases are typically closed contracts: you can't just open them up. But there is a capacity for you to say to your landlord, if you want to improve their facilities, that you will pay for the extra costs and they will get a better building out of it when you're done with it.

You mentioned a 40% premium on some of these energy efficiency guarantees. Is that correct, sir?

Mr. Brian Staszenski: Well, that's the historical premium. They've had to come down because of competition. But when you do an energy performance contract, you're buying insurance, and they put a premium on the retrofit. That's why it's more expensive.

● (1220)

Mr. Dan Albas: Okay. What would you say the premium is currently? Your testimony was that it was 40%.

Mr. Brian Staszenski: No, I said 20% to 40%, and it depends which ESCO or energy service company you're working with,.

Mr. Dan Albas: Okay. I'll take that point to Mr. Cane.

Mr. Cane, you've done some of these energy audits. In your experience, is 20% to 40% accurate as a premium?

Mr. Doug Cane: I think that's reasonable, yes.

Mr. Dan Albas: Okay. So there is an extra cost to it.

Mr. Chair, I also want to refer to Mr. Cane's comments earlier about the Province of Ontario looking to basically regulate common sense by saying that when you open something, you have to put something better in. I want to raise the point that if you make a law such as that, what will end up happening is that people will say that if they rip off a wall, they're going to have to fix more than just the one problem that's in the wall—a leak or whatnot. People may either choose not to do it or they may choose to do it illegally without proper permits. I think sometimes, Mr. Chair, we have to look at these things and ask whether we are actually creating disincentives for energy efficiency.

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

The Chair: You're actually over time, but what you're saying is so interesting. You're such a contrarian, I think it's important to hear you.

Mr. Dan Albas: You know, Mr. Chair, I just appreciate these little conversations you and I have and thank you very much for the time and again to the witnesses here.

Again, it's a very interesting topic. Thank you.

The Chair: Thank you very much, Mr. Albas. Those are very legitimate points.

That's the end of our first round of questioning. I know Mr. Dalgleish has made extra time to stay with us. Just before we move to the next round, I want to ask him about one point in case he doesn't get time to make it elsewhere.

In some of our private conversations, Laverne, you've indicated to me that in your many years in business you're actually finding more interests and more business outside Canada than you are within Canada.

Would you like to speak on the record briefly about how you're frustrated that our own Canadian market isn't as enthusiastic with its public buildings as some of your customers abroad?

Mr. Laverne Dalgleish: Yes, we started out originally about 30 years ago and I would say 100% of our business was in Canada at least and a big chunk was in the province of Manitoba. As we moved forward, that changed. We didn't have the same type of momentum and drive. We didn't have the same type of opportunities in Canada.

Right now, as I mentioned earlier, about 70% of our business is on the American side to the point where we had to even up an office in Washington, D.C. because Americans like dealing with Americans.

That has now been taken even past that and we're into discussions with a number of countries, South Korea, Sweden, Mexico, Spain, and some countries in Africa, about how to take the programs over there. We fully see our growth in our personal business either on the American side or in other countries. We haven't projected any growth in Canada over the next 10 years and that's just a personal business decision we've taken.

The Chair: Okay, I won't go any further with that, but thank you, it's interesting.

Next for the NDP, Mathieu Ravignat.

[*Translation*]

Mr. Mathieu Ravignat (Pontiac, NDP): Thank you, Mr. Chair.

I have just come back from a parliamentary visit to Europe. Energy was among the issues we discussed. I was pretty impressed by the measures the Europeans have implemented to decrease energy consumption within the European Union. I was somewhat envious, as our approach is different here, in Canada.

All of you have done business with the government, in one way or another. The testimonies we have heard over the course of this study have left me with the impression that the approach is inconsistent across departments.

I am wondering whether you feel the same way about the government's commitment in this area.

[*English*]

Mr. Dean Karakasis: If I may, I don't know if I used the word “commitment” or not. It is piecemeal, but often because the delegation of authority is split between the people who run the buildings and environmental officers who are charged with the responsibility of the environmental programs. I assume they go to more than energy, but I'm speaking in terms of what I deal with.

For our program of BOMA BESt, it's usually an environmental officer who's doing the programming for waste use, water use, energy use, but it's the property manager who understands the building best. I think there's a need to connect those more or use the property manager to play this role as opposed to an environmental person, just because the day-to-day tactics of things that you can do is really something a property manager or a building operator have much more hands on in.

Your environmental person can certainly play a role in marketing in helping the tenants, the physical human beings in the building, to better optimize the infrastructure that's been put in place for recycling, turning off your computer, turning off your power bars, turning off lights if you leave a room if there aren't sensors that do so. They can certainly play a role in that.

I found it piecemeal in that sense.

● (1225)

[*Translation*]

Mr. Mathieu Ravignat: Perhaps the other witnesses would like to comment on this.

[*English*]

Mr. Brian Staszenski: I can add something.

We do a lot of training and working with all the different people in charge of different parts of the buildings. You have facilities, capital planning, the operations people, and so forth. They deal with their responsibilities in silos, and they don't talk. There's no coordination. We want people that run facilities to think the other way. If I'm doing capital asset planning, I want to talk to the energy efficiency people to see if I can't utilize their solutions and expertise to buy down the costs of doing capital asset planning. You need a team approach versus the silo approach, and that's the problem. If Public Works sets the standard for performance, and they run it across all the different departments, that will help as well.

Mr. Doug Cane: I'll add something to the comments you've received so far in your question. The work we did in the early 2000s for Public Works, that was done for their technology directorate. I don't even know if it exists any longer. I do know that we always wondered why there wasn't any implementation following some of the work we had done. We later did it for retrofitting existing buildings, too. There was another study done at that time. They're dealing with real estate division, I guess. There is some difficulty there, maybe, taking some of the ideas and putting them into effect.

[*Translation*]

Mr. Mathieu Ravignat: Thank you very much. That is very thought-provoking.

I would like to go back to Mr. Karakasis to discuss consumption habits and the fact that we do not have a consistent approach in that area.

Do you know what kind of measures the Department of Public Works and Government Services is implementing to change the habits of clients, consumers, public servants and others?

What kind of an approach do you suggest?

[*English*]

Mr. Dean Karakasis: I won't claim to be an expert on all they things they do. They certainly have campaigns. They have posters up: turn off the lights when you leave the room; don't use water more than you have to. They certainly have that, but I wouldn't be expert in a lot of what they do.

What we advocate is measuring what they do so that they can feed it back to the staff. We know that this doesn't happen. Consumption is not relayed back to end users. If end users don't know what the consumption is, how will they possibly know how to reduce it?

The Chair: Thank you, Mathieu. That concludes your time.

Next, for the Conservatives, we have Mr. Bernard Trottier.

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

I'd like to get some points of view from the witnesses. I really appreciate your testimony. We all recognize there are opportunities for the federal government to save money and provide all kinds of environmental benefits by having more energy-efficient buildings. The challenge is overcoming the hurdle when it comes to capital and cashflow, of making improvements, especially where the federal government is a tenant, which is the majority of cases.

Energy performance contracts have been proposed by a number of witnesses. I'd like you to describe your experience with that. In an existing lease, which could be a long-term lease, public sector or private sector, where the tenant proactively suggests a retrofit, everything is a negotiation on that particular building and the length of the lease. The tenant offers to put money into the building. In exchange, the landlord agrees to reduce lease rates. They work out the cashflow details through the energy performance contract.

I'll start with Edmonton, because you're addressing the committee remotely. Are there successful instances that you've seen in the use of energy performance contracts in a tenant-leaseholder situation?

● (1230)

Mr. Brian Staszenski: Well, I have a lot of experience in that world, and it's tough. It's tough, if you're the tenant, to engage an ESCO, an energy service company, to do an energy performance contract; that has to be done by the owner. You have to say to the owner that either they upgrade the facilities or you're starting to shop around, but that they can pass on those upgrade costs through the triple net approach, and you will pay for it that way. They have to take the responsibility and make the changes.

In the case where you own the facilities, the best thing Public Works could do is have a revolving fund set up for the use of all the departments to access capital, create savings, and pay that back, interest free or whatever. That would be a great opportunity to create some opportunities in your existing buildings that you own.

There's the other part that I'll add really quickly. With all of the occupants, one of the best ways to catch their attention and get them engaged is to have a very simple shared savings program where they may get 10% of the savings to spend on whatever they want to do on their facility. You create a carrot. It's money: "I'm willing to turn off the lights, okay, and I care about the environment, but hey, I'm also going to get some of the savings."

There are some ideas.

Mr. Bernard Trottier: Thank you, Mr. Staszenski.

Mr. Cane, can you comment on that? Is that your experience or are those your observations with respect to energy performance contracts?

Mr. Doug Cane: The only experience we've had is on 3P projects. There, it's an owner system. There's a 30-year lease. The energy is guaranteed over 30 years. At the end of that time, the building is turned back over to probably a public sector entity. I haven't had the same lease experience that these gentlemen have had and are talking about.

But that's one thing: if you're going to own the building, that's certainly one approach you could take, a 3P approach, to achieving this objective. On the lease side, it's certainly going to be more complex.

Mr. Bernard Trottier: The vast majority of the federal government's stock is leased buildings. The challenge is that if it's a 30-year lease you don't just wait until the end of the 30-year lease to maybe shop around for a new building that has a more favourable energy performance. How can you take on that challenge when you're right in the middle of a lease?

Mr. Karakasis.

Mr. Dean Karakasis: No one would ever turn down an opportunity to work with them, at least if there's at least one major tenant. It becomes complex when you have 10 or 15 tenants in a building, but if you have a building.... There are many like this that have one major federal government tenant, have approached the landlord, have said that they'd like to find a way to collectively reduce energy, and have asked if the landlord is open to these kinds of investments.

The first thing is to do an energy audit and figure out where the opportunities are in any building, in any major building. There are 1,500 buildings in the BOMA BESt program. They all must have an energy audit; that's a requirement. That will always identify opportunities. Then it becomes a cost-benefit analysis. That's where the opportunity comes in: when you have a major tenant that's willing to be a participant in making those changes. Like I say, no major landlord would ever turn it down.

On the suggestion of getting tenants into some sort of competitive situation, I think profit sharing was more or less the recommendation made. I've also seen a lot of buildings that will do it on a contest basis and say "if we do this we will make a contribution to...". That works too. That goes back to my original suggestion of tenant engagement, of having your tenants incented and motivated to want to be a part of the savings, as opposed to, "This is my workspace, and I don't pay for it, so I don't care."

Mr. Bernard Trottier: Thank you, Mr. Chair.

The Chair: Thank you, Bernard. You're out of time.

[*Translation*]

We now go to Mr. Blanchette, who has five minutes.

● (1235)

Mr. Denis Blanchette: My question is simple, and each of you will have one minute to answer it.

Let's pretend that you are writing our report. When federal buildings are being renovated and their performance is being enhanced, what should be the primary focus and what should be set aside for later, regardless of the reason?

We will begin with Mr. Karakasis.

[*English*]

Mr. Dean Karakasis: Measure every one of your buildings in your portfolio and understand how they're performing and what they're doing, because you can't take steps to reduce if you don't know what you're using.

[*Translation*]

Mr. Denis Blanchette: Thank you.

Mr. Staszenski, what do you have to say about that?

[*English*]

Mr. Brian Staszenski: For the buildings you own, of course you need to take a strategic approach, but you start with an assessment: what is the building energy intensity of each of the facilities you own? You start with the worst. Say you have 100 buildings. The worst are the ones you attack first, but you have to create the support to make those changes, such as a building revolving fund and shared savings programs.

The key is that throughout the government buildings you own, you have very understandable standards of performance that you want to see happen. That's your power as parliamentarians. You can set those standards and then let the bureaucracy implement them. That's what I would say.

[*Translation*]

Mr. Denis Blanchette: Thank you.

Mr. Cane, go ahead.

[*English*]

Mr. Doug Cane: I would add that I know that Public Works used to have an energy use database for their buildings; they had all the records for their buildings. I'm not sure about the lease versus owned category, but that certainly is, as he said, a place to start. You could even create your own benchmarking using the buildings against each other, the same vintage, the same size, and by location. It would identify the outliers and you'd be able to improve those to meet the more efficient buildings in that same grouping.

[*Translation*]

Mr. Denis Blanchette: Thank you.

Linda, you may continue.

[*English*]

Ms. Linda Duncan: Mr. Staszenski, you raised an interesting idea about revolving fund. I know that you've been involved in the energy area for a long time and also in the generation side. One of the aspects that nobody has talked about yet in our review is the indirect benefit to ratepayers if the federal government reduces, majorly, its energy use because it's a big user of energy. That means less need for new generation which means lower rates for consumers.

I wonder if you could speak to those kinds of innovative ideas like PG&E in California, and whether or not you've had experience with other jurisdictions that use revolving funds or ideas like that.

Mr. Brian Staszenski: The city of Edmonton has one; the city of Toronto has one. I think the city of Toronto has $22 million; Edmonton's is small, $5 million. These kinds of revolving funds exist in New York. There are lots of examples of where they exist.

The beauty of it is that you create, say, half a billion dollar fund for federal buildings. It sits there and it's always regenerated and repaid from the departments doing the upgrades, so that fund will always sit there. That's a nice way to make things happen. The savings that are created from the upgrades are used to pay back that loan.

The cities of Edmonton and Toronto, and so forth.... It's interest free so those entities can go and get that money, and make the changes, pay it back, and then the next building owner comes along and accesses it as well. You've got to create some money to make those changes. We have a 4% fund that we use out here and you wouldn't believe the lineup from private sector that's coming forward to use that because we have the highest electricity rates in Canada.

So, yes, create a fund; make it happen. The Federation of Canadian Municipalities has half a billion dollars and it's sitting there to help municipalities do upgrades. The problem is that they created so much bureaucracy to get at that money, it sits there dormant, so get that money back from them and use that half a billion dollars.

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

Our next questioner is Mr. Cannan.

Hon. Ron Cannan (Kelowna—Lake Country, CPC): Thank you, Mr. Chair, and thanks to our witnesses.

To our friends from Edmonton, I was born and raised there. I was actually there a couple of weeks ago and my in-laws are still there. My father-in-law just turned 79 and his concern was that his roof was going to cave in because there's still too much snow. I said, "Well, I'm from Kelowna and I just cut my grass". We have a choice of where we live and just in two provinces there's a difference in the climatic conditions we face in the second largest country in the world. It's one of the issues we deal with regarding energy efficiency as some of my colleagues had commented earlier.

Considering the diversity of our country, there was a concern about changing the building codes, which are generally provincial. Were there some comments about changing the building codes from your perspective, from Alberta, or a national building code change?

● (1240)

Mr. Brian Staszenski: Let's start with the national effort first and that's where you create the leadership. Provinces have a lot of say in building codes, for sure, but I think the national standard should be there and the provinces should coordinate it, so you create some synergy across the country.

Right now, for example, in Alberta, geothermal for homes doesn't make sense because our electricity rates are so high and geothermal needs electricity. How do you deal with those kinds of issues as well?

The national government should create the leadership and say to the provinces, "We're coming into a new era here; let's get coordinated".

Hon. Ron Cannan: Geothermal in my community has been very popular. In one subdivision it's been a great success and one of the assets for residents in the area. Do you have any specific examples of where building codes could be changed from a national perspective without impeding provincial jurisdiction?

Mr. Brian Staszenski: Well, just use fluorescent lighting. The federal government passed legislation to say no more T12s. You can't import. You can't manufacture. You have to move to T8s. That permeated across the country, and all kinds of lighting retrofits occurred because of it. There's one example right there. When you change out T12s to T8s or T5s, you're getting an incredible 40% or 50% reduction in consumption. That's federal leadership.

Hon. Ron Cannan: Why have the provinces been reluctant to move in that direction?

Mr. Brian Staszenski: On that topic, they have. That's part of our business. I'm still changing out T12s. I can't believe I still find them in the system. We're doing two towers in Calgary right now. They're all T12s. They're not going to live with them, because they have to move to the new technology that was legislated by the federal government. There's a good example.

Hon. Ron Cannan: That is an example that's in place. I'm just wondering if you have any other ones that are not. What would you recommend this committee include in our report that might help provide some national energy efficiency models without conflict between provinces and territories?

Mr. Brian Staszenski: Staying on lighting, there has been this whole debate about getting rid of incandescent lights and going to CFLs or LEDs. There could be leadership in those areas. In our business, for instance, with homes, we don't talk about furnaces any more. Forget furnaces; their life is long gone. Boilers that create not just your heat but your domestic hot water and that heat hot tubs—those kinds of technologies are out there. The federal government knows about them. Start picking them and creating some legislation to say, "This is the minimum standard for Canada. Let's go". There are tons of opportunity there.

Mr. Dean Karakasis: Just for the committee, when you lease a space from the private sector, it's the national code that will apply in your lease, not the provincial code, or the provincial code if it's higher in terms of standards. For the scope of the discussion here, it is the national code essentially that applies unless the provincial code happens to be higher.

Mr. Doug Cane: You have to realize there are only a few provinces, a few jurisdictions in this country that have an energy requirement, if that's what we're talking about here. The national building code would apply. The provinces adopt the safety aspects of the national building code, but there hasn't been the same adoption of energy codes. Ontario has one. Vancouver has one. The rest of the province of British Columbia has a separate code from Vancouver's. Quebec has one, an old one, but nonetheless an energy efficiency requirement.

None of the other provinces have energy efficiency requirements for their buildings, if you're not aware of that.

● (1245)

Hon. Ron Cannan: This is a supplemental. Mr. Dalgleish commented on setting energy targets. How do you come up with them? There were some arbitrary numbers sent out, but do you have any examples from an industry perspective that we could set as realistic goals, sort of graduated goals?

The Vice-Chair (Mr. Peter Braid): You have 10 seconds.

Mr. Doug Cane: I could just say that I'm aware that work has been done at the National Energy Code for Buildings 2011 committee. They're projecting levels for 2015, which they're going to put forward at that time. I can't tell you what they are—they vary by building type—but there is work in that area.

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

Thank you, Mr. Cannan.

In our remaining one minute, I understand that Mr. McCallum has one burning question, and then we'll wrap up.

Hon. John McCallum: I have one question, but it's a good one for all three of you. In a sense it goes to the heart of what we're doing, because Mr. Dalgleish said the key thing was for the federal government to take leadership in this area.

What I would like to ask each of you briefly is whether you agree with that statement by Mr. Dalgleish that the federal government should take leadership, and more importantly, if so, what are the one or two things that you think the federal government should do?

Mr. Dean Karakasis: I'll agree. The federal government can take leadership if it so chooses.

The things to do are: number one, measure your inventory and understand where you are; number two, set targets that you think they should be at. There's lot of data out there to draw from. Use some industry norms. Be better than them if you like, and set that as your target. Number three, you have to invest to hit it.

Hon. John McCallum: Thank you.

Mr. Doug Cane: I think the federal government should concentrate a lot of its effort in getting the provinces to adopt this latest version of the national code. I know it's going to be tough sledding, but it is something that's adjusted to climate and it can take into account energy cost. So it should apply anywhere in this country.

Mr. Brian Staszenski: I agree with the previous two statements and also with creating the revolving fund. I think that's a good one. That makes all kinds of economic sense.

In terms of leadership you're our leaders, so lead away.

The Chair: On that note then, Mr. Staszenski, I thank you very much for being with us here again and for your very concrete and very useful recommendations.

Also, Mr. Cane, thank you again for taking the trouble to be with us here today. Mr. Karakasis, thank you for your patience and your testimony.

We are going to add your remarks to our final report. I'm sure you will recognize many of the good comments and recommendations you have made when you read the report. So I hope you will feel your time was worthwhile.

I'm going to suspend the meeting briefly while our witnesses leave the room and then we'll reconvene on an in camera basis to discuss some future business.

[*Proceedings continue in camera*]