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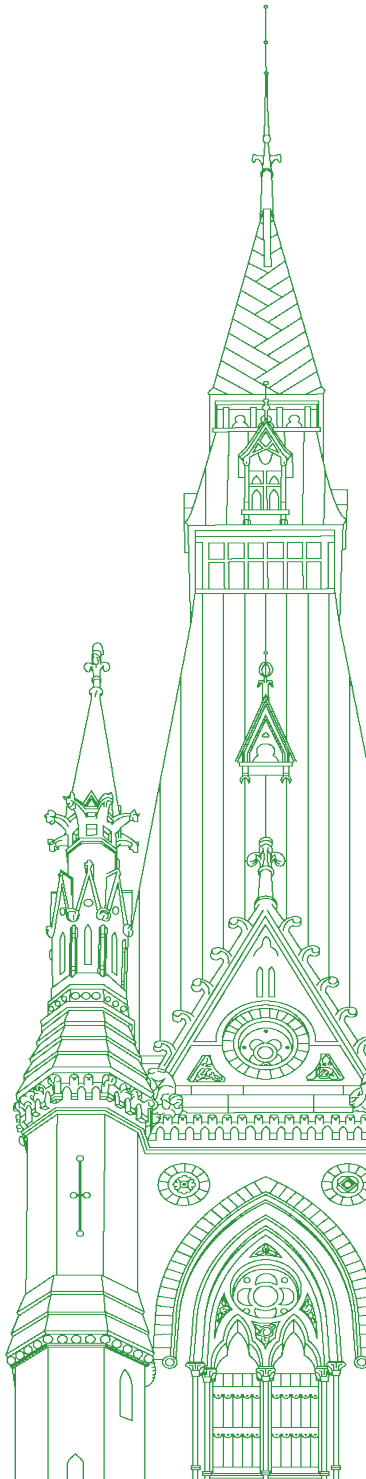

Chair: Shannon Miedema

Standing Committee on Environment and Sustainable Development

Tuesday, October 6, 2026

● (1535)

[*English*]

The Chair (Shannon Miedema (Halifax, Lib.)): I call this meeting to order.

Good afternoon, everybody. This is meeting number 48 of the Standing Committee on Environment and Sustainable Development. We're continuing today with our study of retrofits for home energy efficiency.

For those in person, please remember to follow the health and safety guidelines as per the cards on the table to prevent audio or feedback incidents.

Before we begin, members, the analysts are currently working on the report for the study on carbon pricing and are seeking recommendations by members before October 16. Please note that if you have recommendations that you would like considered by the analysts for the carbon pricing report, you need to submit those by end of day Friday.

For the first hour, we have two witnesses with us. Unfortunately, the third witness didn't receive the headset in time.

From The Atmospheric Fund, we have Bryan Purcell, vice-president of policy and programs, joining us virtually. From The ReCover Initiative, we have Lorrie Rand, senior adviser, joining us virtually as well.

You have five minutes for your opening statements. We do have a time card to let you know when you're at one minute and when you're out of time.

We will begin with you, Mr. Purcell. The floor is yours for five minutes.

Bryan Purcell (Vice-President, Policy and Programs, The Atmospheric Fund): Thank you, Chair and committee members, for the opportunity to speak today. My name is Bryan Purcell. I'm the vice-president of policy and programs at The Atmospheric Fund, a regional climate agency serving the greater Toronto and Hamilton area.

Advancing home energy retrofits is core to our work, because housing is a major source of carbon emissions, but retrofits are about much more than carbon reduction. They improve affordability, strengthen communities and support a more resilient and prosperous Canada. Home energy retrofits are like the Swiss army knife of climate action. They lower energy bills for families, improve housing quality and resilience, create local jobs that can't be offshored, and strengthen energy security by reducing reliance on natural gas imported from the U.S.

I have worked with affordable housing providers on energy retrofits for nearly 20 years. I learned quickly that an energy retrofit is never just about energy. It's about better homes and a better quality of life for real people. I remember one resident in one of the buildings we retrofitted reduced to tears as she conveyed her relief at finally feeling safe arriving home after her late-night shifts thanks to a lighting retrofit in the parking garage. I remember a mother whose child suffered severe asthma attacks triggered by second-hand smoke that entered their apartment from neighbouring units. After retrofitting the ventilation system, she told us how much less frequently those attacks were occurring. Energy-efficient, low-carbon homes are simply better places for people.

The powering Canada strong strategy set a target of retrofitting one million homes. We strongly support that ambition. However, achieving it over the next three years will require renewed investment and immediate action. I have three recommendations today, all focused on renewing programs that are expiring or have recently expired. These programs are proven, have established delivery systems and can be brought to market quickly. Federal officials already know how to administer them and how to improve them based on recent experience over the past number of years.

First, I recommend recapitalizing the deep retrofit accelerator initiative. Through this successful program, 13 organizations, including my own, have been supporting multiresidential housing retrofits across Canada, including dedicated programming for indigenous and northern communities. The program helps housing providers plan, finance and implement deep retrofits. It has engaged more than 1,700 building owners and supported retrofits in over 10,000 low-income housing units, with thousands more in development. The program's working well, but it expires in March. Without renewal, many projects risk being stranded.

Second, recapitalize the Canada greener affordable housing program, or CGAH. CGAH provides forgivable and repayable finance for large-scale affordable housing providers to retrofit their buildings. It is a perfect complement to the deep retrofit accelerator initiative. DRAI helps develop investment-ready projects and CGAH provides the capital needed to implement them. Despite its high performance standards, the program was quickly oversubscribed, but there remains a substantial pipeline of shovel-ready projects that could proceed if funding were renewed.

Third, recapitalize and extend the Canada greener homes programs for single-family housing. The grant and loan programs helped more than 500,000 Canadian households undertake home energy retrofits. Demand exceeded available funding. The program could be relaunched quickly, with improvements based on many lessons learned in the first phase, immediately getting the sector back to work retrofitting Canadian homes.

Canada is in a pivotal moment. Building Canada strong requires investments that can create jobs, improve affordability, strengthen energy security and get shovels in the ground quickly. Home energy retrofits do all of those things while also reducing emissions, improving housing quality and reducing reliance on U.S. energy imports. The fastest path to revitalize the sector is recapitalizing successful residential retrofit programs that have proven track records, existing delivery capacity and a pipeline of projects ready to move ahead.

That covers the main points I wanted to make today. I would be more than happy to take any questions any of you may have.

The Chair: Thank you very much, Mr. Purcell.

We will now turn to Ms. Lorrie Rand of the ReCover Initiative.

The floor is yours for five minutes.

Lorrie Rand (Senior Advisor, The ReCover Initiative): Thank you, Madam Chair, for inviting me to speak today. I am the director of sustainability at Habit Studio, as well as senior adviser with the ReCover Initiative, which is Atlantic Canada's deep retrofit accelerator funded by NRCan.

I recently co-authored ReCover's “Atlantic Canada Deep Retrofit Roadmap”, which modelled technical and economic pathways for retrofits to prevalent housing types in the Atlantic provinces. My responses to the questions of this committee will be informed by that research and by direct experience in working with homeowners to make their homes more energy-efficient and resilient and less expensive to operate.

There's no question that home energy retrofits and adaptation measures represent a meaningful opportunity to reduce greenhouse gas emissions and increase energy affordability. Energy savings of 50% to 80% and substantial greenhouse gas savings are technically viable, as found in our research. Retrofits increase energy affordability, but they don't always deliver overall cost savings. That's something we think is important to note. ReCover studied this using an economic model called the total cost of building ownership, or TCBO for short, which accounts for construction costs, financing, maintenance and energy bills projected over 60 years.

A significant driver of the TCBO is maintenance capital, meaning the end-of-life replacement of large items like roofs or HVAC equipment. We found that this can cost more than the energy of the building over the life of the building. Our modelling looked at construction in a range of costs between $1,000 and $5,000 per square metre. There is a good business case at $1,000 per square metre, but in the market we are seeing in Atlantic Canada, the costs are more in the $3,000 per square metre range.

Those results were sobering, but the answer is not to not support retrofits. Retrofits make homes more resilient to extreme weather. A well-insulated, airtight home stays habitable for much longer during a power outage, allowing occupants to safely shelter in place. Resiliency investment is critical in Atlantic Canada. Hurricane Fiona left about 80% of Nova Scotia and 95% of P.E.I. without power, with some locations experiencing prolonged outages of several weeks.

Also, a key finding of our research is that retrofit costs are not borne equally across beneficiaries. We call this the retrofit value gap. What this means is that homeowners pay for the retrofits, but a significant portion of the benefits are non-energy benefits that are societal, reducing burdens on health care and public safety, improving grid capacity and more. Managing that gap is important if we're going to accelerate retrofits.

Retrofit support does exist, but low-income households, renters, rural households and equity-deserving homes are being unevenly reached and not reached on the scale needed. The Canada greener homes affordability program is expected to reach about 1,600 households in Nova Scotia, for example, but Efficiency Canada estimates that over 113,000 Nova Scotian households are experiencing energy poverty.

The delivery system is also a barrier. We are facing a labour shortfall of about 12,600 construction workers by 2034. Experience in high-performance construction techniques is growing but uneven, and owners in rural and remote areas are being underserved. Owners receive inconsistent recommendations in pricing. Some owners have access to supports that are emerging, such as navigator programs, and we see that they're moving forward with more confidence. Most need to rely on their savings or credit from traditional banks to fund retrofits. There are emerging PACE programs, but the uptake is very mixed.

The flip side of this is economic opportunity, with residential retrofits alone modelled to reach $8 billion a year through to 2050 if the region can support it. Addressing the workforce barrier is critical to us unlocking this.

● (1540)

I would echo each of Bryan's suggestions to recapitalize the existing federal programs.

I have four other high-level recommendations that can be expanded on: multi-year predictable retrofit funding; building data that's treated as public infrastructure; clear conditions on all building programs for new and retrofit, meaning not just vaguely suggesting energy efficiency but tiers; and counting all retrofit benefits when measuring the value of a program.

Thank you.

The Chair: We will now go to questions from members.

We will start with Mr. Ross for six minutes.

Ellis Ross (Skeena—Bulkley Valley, CPC): Thank you, Madam Chair.

Thank you to the witnesses for their testimony.

I have a bit of history with composite materials for housing, as an MLA in B.C., specifically for first nations.

I'd like to start with the specific cost for a retrofit of a house built in the 1950s or 1960s. Is the cost a bit more than it is for a house built in the 1980s or 1990s?

That's for any one of you, if you think you have the answer, please.

● (1545)

Lorrie Rand: Your question is very difficult because it's a bit like asking how long a piece of string is. The housing stock has.... Many of our properties have received interim retrofits. The cost of a retrofit depends on the measures that have been implemented and the maintenance backlog that a home has, such as if the owners have been able to keep up with required maintenance.

Ellis Ross: I'm getting at the structure itself in terms of the building code. It was a lot different back in the 1950s.

Lorrie Rand: Yes.

Ellis Ross: Kitimat is an industrial town. It was actually built by the industry, the aluminum smelter. A lot of those houses are still lived in and sold today. Would those houses have a higher cost compared to an up-to-date house?

Lorrie Rand: Not necessarily.

Over the years, the structural elements that go into houses have changed with the codes. What we saw in the 1940s, 1950s and early 1960s were houses built with true two-by-fours, whereas the houses built in the 1980s and 1990s were nominal lumber, so they would be one and a half by three and a half instead of a true two-by-four. The older the wood, the stronger the wood. We're using cheaper lumber. The newer era is not necessarily less expensive to work on. I think that's maybe what you're getting at.

From an archetypal perspective—

Ellis Ross: Can I interrupt you?

Lorrie Rand: Yes.

Ellis Ross: Thank you for that answer. I know the question came out of left field.

In terms of the composite materials themselves, where is the supply chain coming from to put these materials together? Is it coming from within the borders of Canada? I'm talking about the polyethylene, for example. Is that being imported from someplace else?

Lorrie Rand: It depends. Some of it's made here. We have American products and we have Chinese products coming in, things like drywall and OSB. A lot of larger production builders will bring it in from China if there are big savings. They still have to meet certain standards. There's a wide disparity from coast to coast as well. B.C. is likely receiving materials from quite a different pool than from where we would be sourcing things here in Atlantic Canada. Actually, in our high-performance projects in Atlantic Canada, we source from Europe regularly because we can get things via shipping can from manufacturers in Europe that are producing very high-performance products.

Ellis Ross: Thank you for the answers. I know these are not really your area, but our other witness didn't show up today, so I'm just trying to throw it out there, hoping the Swiss army knife reference actually can come up here.

When we are talking about the content of these composite materials, there's a certain level of recycled content that goes into these. I don't expect you to know the answer, but when we're talking about recycled content, are we talking about plastics?

That's for anybody.

I know this is not your area. I get that. I'll probably send these questions anyway and get a written response.

Bryan Purcell: I'm not sure about plastics specifically and how many of them are recycled into the feedstock for new materials used in retrofits. Certainly, in other kinds of insulation, we see recycled paper products, newsprint boxes and cardboard being used for very environmentally friendly insulation that can be used in walls and attics as well.

There are definitely opportunities to use recycled products in retrofits, but it's not my area of expertise. I'm not sure if Lorrie could add more detail.

● (1550)

Ellis Ross: I understand that. It's a simple fact that polyethylene is being used and there is recycled content. We have a plastic problem not only in Canada but globally.

We don't have a very robust recycling program here in Canada, but it would be nice to know if there's a way to get recycled plastics into building materials. I'm okay if you guys don't know the answer.

Lorrie Rand: I don't know the answer to that one.

One thing I would say, particularly on the polyethylene side of things, is that as we move to more high-performance building products, we're moving away from that sort of sheet polyethylene and into more—I couldn't tell you what they're made of—different products.

I see Shannon's sign.

Shannon, your sign is so small on my screen, but it's yellow, so I'll stop talking.

The Chair: Thank you, Ms. Rand.

Mr. Ross, we are going to reschedule the witness who wasn't able to testify today because his headset didn't arrive on time, so we will get you your answers.

We'll now go to Mr. Greaves for six minutes, please.

Will Greaves (Victoria, Lib.): Thank you, Madam Chair, and good afternoon, colleagues.

Thank you very much to our witnesses for being here.

I'd like to start with you, Mr. Purcell.

Thank you very much for your presentation and also for the Atmospheric Fund's work in helping to reduce emissions in Canada's largest metropolitan area. We know what a critically important role the GTHA plays in our overall national emissions landscape and how important it is to drive down emissions there.

I think there are good lessons to be learned for smaller urban areas across the country as well, including my own riding of Victoria. Approximately half of the folks in my riding live in multi-unit dwellings or apartment buildings.

Could you expand a little bit, please, really at the core, on what role the federal government can play in helping to incentivize or encourage the owners of multi-unit dwellings, multi-unit buildings, to actually undertake these energy retrofits?

Bryan Purcell: You've raised a really important point. Nationally, I think about a third of Canadians are living in multiresidential housing. It often doesn't get the attention it needs when it comes to energy efficiency programming. It's a great opportunity to have efficiencies of scale. You can retrofit many, sometimes hundreds, of homes at once through a single project, so there are efficiencies to be gained there.

These buildings definitely need support for retrofits. The form of support varies a bit depending on whether you're talking about market housing, such as rental apartments, condominiums and strata corporations, or about affordable housing providers.

When it comes to affordable housing providers, whether municipal, provincial or non-profit, significant subsidies or forgivable loans are really helpful, because these providers across the country are really struggling with a very old, on average, housing stock that needs significant renewal. There's huge overlap between the renewal they need just to maintain habitability and the energy efficiency gains that we can make. They're almost completely overlapping. They have a huge backlog of maintenance and renewal needs across their stock. That funding, through programs such as the Canada greener affordable housing program, has been critical to moving those projects forward. We've had great success using those programs with our affordable housing providers.

On the rental side, different kinds of programs are needed. Low-interest financing has been made available through the Canada Infrastructure Bank. One of the core challenges is that they don't currently have a mandate to achieve these energy and carbon goals. They have very high expectations on the internal rate of return they would want to achieve through investments they make. Targeted incentives are really helpful for that sector, but they don't need to be covering such a huge share of the costs as we see with the affordable housing providers.

Condominiums and strata corporations shouldn't be forgotten. They're a huge segment of the housing market. They face unique constraints often in legislation about how they can use the money they raise for maintenance and renewal, limiting how much they can put on that towards energy efficiency upgrades. Similar to private rental housing, they need more targeted incentive programs that help to make that business case viable and attractive for condominiums and strata corps. The federal government can play a key role there as well.

In addition, all three of those housing types really benefit from the kind of support that retrofit accelerators are providing through the deep retrofit accelerator initiative. Retrofits in large buildings are complex. Often there's not a lot of extra capacity within the building management to plan and execute these projects. Having a team of professionals on hand, such as we and other accelerators are providing, really helps make these projects deliverable and deliverable with excellence, especially because in almost all cases we want to retrofit multiresidential housing while keeping residents in place. We don't want to move them out for a year to retrofit the building. It's very disruptive. That creates extra complexity. The support that we and the other federally funded accelerators can provide is essential to preserving occupancy through the retrofit process.

● (1555)

Will Greaves: Let me jump in on that point, Mr. Purcell. Thank you. It's exactly where I was going with my next question.

One of the challenges, obviously, of our current high cost of housing in many parts of the country is the risk that incentivizing energy retrofits or other kinds of programs will result in downloading of costs onto tenants of rental buildings or, as you've alluded to, in some cases will result in the displacement of tenants themselves.

Can you speak to how retrofit policies can be best designed to avoid either outcome: increasing costs for renters or displacement by way of renoviction?

Bryan Purcell: That's a really important point in the private rental sector.

In many markets across Canada, it would be standard operating practice when major capital investments are made to pass that through to tenants. In some cases, that requires applying for special increases where provinces have rent control legislation, such as in Ontario. The provincial frameworks will usually grant those anytime the building owner makes an investment. It happens a lot that these costs can be passed down to tenants.

The best way for a federal funding program, for example, to mitigate that is to just make that an explicit condition of the funding. If you take this funding that we're offering for the retrofit, you can't be applying for extra increases in rent on the basis of this project. That does require carefully calibrating the amount of funding on offer so it's attractive enough for them to still participate.

We had some challenges. For example, CMHC's coinvestment fund had a retrofit stream, but we had very limited private sector participation while it was available. They did have strong affordability requirements there, not only to not increase rent but to actually reduce rent, make the building accessible and achieve the energy and carbon goals. It was theoretically really great, but the amount of funding on offer was just not sufficient; therefore, private rental landlords didn't participate.

Once we decide on the goals for a program, we really have to calibrate the level of funding to make it make sense for the business community.

The Chair: Thank you, Mr. Purcell. That was excellent.

Our time is up, Mr. Greaves.

[*Translation*]

Mr. Bonin, you have the floor for six minutes.

Patrick Bonin (Repentigny, BQ): Thank you, Madam Chair.

Thank you to the witnesses for joining us.

Mr. Purcell, do you believe the measures the government is adopting to decarbonize buildings are sufficient to meet greenhouse gas reduction targets in this sector?

[*English*]

Bryan Purcell: I would say that presently with the current programs available, while there are some good programs available, they're not sufficient to get us on track for our carbon reduction targets for the housing sector. We need to step up the level of ambition and support. Importantly, over the last two years, numerous programs have come to an end as their funding expired, and they haven't been renewed as of yet, many of them. Others are about to come to an end imminently, and we're waiting to hear whether they will be renewed.

I would say there have been some good programs, but we really need to move towards making longer-term and larger commitments to these programs, not only to get on track for our carbon goals but also to enable the retrofit sector and the businesses that operate within it to plan for scaling over time, growing their operations and becoming more efficient. They need to have confidence in future demand rather than stop-and-start programs every few years, which is very disruptive for companies that are trying to meet this demand for retrofits.

● (1600)

[*Translation*]

Patrick Bonin: You are talking about program renewal. Some have not been renewed, and others are at risk of not being renewed.

Can you provide us with the list of existing programs that you think should be renewed or enhanced by the government so we can have the complete list, which seems quite extensive to me?

[*English*]

Bryan Purcell: I mentioned a few earlier. The Canada greener homes grant and loan programs expired, and it would be quite helpful if they were renewed. There are some improvements that could be made, but the main thing would be to renew them and provide a long runway to help market growth.

On the multiresidential front, the Canada greener affordable housing program, which serves large-scale affordable housing providers, ran out of capital funds just this year, so renewing that would be extremely helpful. That goes to subsidized housing providers, whether municipal, not-for-profit or provincial. It's really desperately needed, that funding, to move that sector forward.

Then I mentioned as well the deep retrofit accelerator initiative to do that market development supporting the end users, accessing the available funding programs and navigating contractors. That has been really helpful. That's the DRAI program.

We'd love to also see something for market multiresidential housing. We had something called the CMHC coinvestment fund that supported retrofits. As I briefly mentioned, there was very low uptake in the retrofit of rental housing because they didn't find the offer generous enough to offset the affordability and accessibility requirements that went along with the program. The program concept was good, but you need, if it was renewed, to calibrate the level of funding to the ambition that we want to set on affordability and accessibility so that it makes business sense to building owners to participate.

Those would be the key programs that I'd like to see renewed that have run out of funding.

[*Translation*]

Patrick Bonin: In your pre-budget submission, you talk about the deep retrofit accelerator initiative. Can you submit your pre-budget submission or an outline of your submission to the committee in writing, please?

[*English*]

Bryan Purcell: I'd be happy to send that to the clerk, yes.

[*Translation*]

Patrick Bonin: Okay. Thank you.

Have any analyses been done or have you done an analysis to determine where Canada stands when it comes to decarbonizing buildings compared to the most ambitious countries and governments? I'm talking about innovative objectives and programs, whether for the less fortunate, low-income households or the middle class. That would give us an idea where Canada stands.

Is Canada doing well? Should it do more? Are there other countries or governments that are more inspiring?

[*English*]

Bryan Purcell: I would have to look into specific published reports that benchmark Canada against other countries. I would say, based on my professional opinion and keeping up with what other countries are doing, there are other countries that are ahead of Canada. There are also others that are in a similar position or behind Canada. I wouldn't put us at the back of the pack, but there are certainly countries that have made a lot more progress on retrofitting and renewing housing stock.

We've seen, for example, in Scandinavia, some very ambitious programs on deep retrofits that have rolled across significant parts of the housing stock. We've seen significant movement in the U.K. and in France. I think there are a number of countries that are moving faster on retrofitting housing than Canada is, but I couldn't rank us specifically as of this moment.

The Chair: We will now turn to Mr. Leslie for five minutes.

Branden Leslie (Portage—Lisgar, CPC): Thank you, Madam Chair.

I'll start with Ms. Rand.

My understanding is the ReCover Initiative has received about $16.5 million through the federal deep retrofit accelerator initiative and about another $1 million through the greener neighbourhoods pilot program. How many buildings have actually completed physical retrofits as a result of that funding?

● (1605)

Lorrie Rand: To date, no buildings have received complete retrofits. We split the monies that we've received across three large buckets. One bucket is research and development. The second bucket is in capacity building, essentially working with workforce, industry and equity-deserving communities on understanding and supporting them through barriers in early stage retrofit projects. Finally, the rest of our work has been working with building owners in planning deep retrofits.

Initially, we have worked with property owners on feasibility studies. These projects take a very long time to frame up, so I believe only three have moved from the feasibility into the next stage, which is design and construction documents.

Branden Leslie: I noticed your research says that energy savings of up to 75% are technically possible. I assume, because there's been zero done, that's entirely based on modelling. That's not based on any actual evidence of an energy bill before and after.

Lorrie Rand: It is based on modelling, and the modelling was not completed in-house. We engaged two firms that had extensive experience working with Efficiency Nova Scotia and delivering their programs, so the scenarios modelled were taken from plausible scenarios that we're seeing in Efficiency Nova Scotia.

Branden Leslie: You had also mentioned earlier in your opening remarks what I believe you called sobering results from a study. Could you expand on what those key findings were in terms of the value proposition when considering actual cost savings?

Lorrie Rand: What we are finding is that at the cost of retrofits today, given we have seen across the country a pretty dramatic escalation in construction costs even before the pandemic, but it really skyrocketed during the pandemic, the projects that would have seen a business case in terms of the energy savings that would make the retrofit attractive to a property owner five years ago are not able to see those savings now because the capital costs are so high.

Branden Leslie: We heard testimony like that prior. How should we judge whether money going to organizations to plan and allegedly accelerate retrofits is producing better value than actually putting money towards insulation, heat pumps or upgrades in people's homes? You guys have received at least $17 million that I'm aware of and have yet to produce any retrofits. How do we judge that as a good investment for taxpayers?

Lorrie Rand: We actually think you should be paying for things like insulation, air sealing and better windows. However, the people we work with in the project we're working on would not be contemplating this work without the supports that are on offer. In many cases, some of these projects are in African Nova Scotian and equity-deserving communities. We've done 15 feasibility studies, and five of them are scheduled to move forward to actual implementation with an indigenous community, so they are moving forward, but these are groups that wouldn't move them forward otherwise.

As we're doing this, we're collecting invaluable information about the considerable barriers that are impeding people from doing retrofits. We're also bringing people into the retrofit workforce. We piloted and have now launched a program that is a job shadowing and introduction for African Nova Scotian youth to work on deep retrofits, both in construction and in engineering offices.

● (1610)

The Chair: Thank you very much.

We will now turn to Mr. Grant for five minutes, please.

Wade Grant (Vancouver Quadra, Lib.): Thank you, Madam Chair.

Thank you to the witnesses.

Madam Rand, in your introduction, you were concise. There were four recommendations at the end, and I know you wanted to go a little deeper into what those were. Unfortunately, my computer is not working today, so I wasn't able to write them down. Could you repeat those and go a bit deeper into what you were recommending?

Lorrie Rand: My first recommendation was for multi-year predictable retrofit funding either for supports or actual capital costs. This is needed. Bryan mentioned this. Industry, manufacturers and the entire building ecosystem need to see signalling that retrofits are going to be supported. We need retrofits to achieve our climate goals. Buildings represent 20% or more, depending on where you are, of greenhouse gas emissions. The business case is not fully there for owners. Public investment is warranted for health, safety, resilience and all the other non-energy benefits.

We want building data to be treated like public infrastructure. What I mean by that is this: Every single organization like mine begins every effort of supporting retrofits by, essentially, gathering a bunch of data, but we're gathering the same data over and over again. The federal government has a lot of this data in various places. It's just a lot of work to get it. Establishing some kind of pragmatic way of sharing that data.... It can certainly be anonymized, but it's very important to organizations and industry.

I recommend clear conditions on building programs. As an example, I wrote a letter to Ms. Miedema about this earlier this spring. We have programs wherein the federal government is investing considerable money in new housing infrastructure, vaguely saying that these houses will be energy efficient. I would like it to have a very clear target on any programs that it's launching for new...or retrofitting. This sends the right signal to industry: We care about energy efficiency and greenhouse gas emissions. In the case of new buildings, it means not building buildings today that are going to need a retrofit in 30 years, which is absolutely happening right now.

Lastly, I recommend that we count all retrofit benefits when we're measuring the value of a program. We need more understanding of the financial value of non-energy benefits. There are considerable health savings among populations that are not living in mouldy buildings, for example. That's an issue which is very dominant here in Atlantic Canada, where chronic lung conditions are high in number. We have really moist and mouldy buildings. I recommend the valuation of resilience benefits and the benefits to public security in terms of keeping people off the streets if they have to leave their homes in a bad storm. The cheapest form of improving our grid capacity is still deep retrofitting. It's a very unexciting issue or opportunity.

I think the biggest non-energy benefit.... I mean, it's an energy benefit, but not for the homeowner. If we conserve energy by doing deep retrofits, we can have a very significant impact on reducing grid strain and improving our electrical capacity. All these things need to be quantified and measured when we're considering the value of a program.

● (1615)

The Chair: Thank you.

[*Translation*]

Mr. Bonin, you have the floor for two and a half minutes.

Patrick Bonin: Thank you, Madam Chair.

Before I ask my questions, I would like to talk about a motion—my colleagues are aware—that I moved last May asking that the committee study carbon capture, storage and sequestration.

Since everyone agrees, even though my Liberal colleagues may have some reservations, it is important to adopt this motion, because, this summer, the Government of Alberta and the Canadian government announced a memorandum of understanding with the five largest oil sands producers. They want to implement what they see as potentially the largest carbon capture and sequestration project. This project would probably require an investment of $10 billion of public funds from the federal government, and we're talking about a technology that hasn't necessarily been proven effective. That could be very expensive.

I think my colleagues agree that we should review this project or, at least, the idea of carbon sequestration and capture. I don't know if you want me to read the motion moved on May 25 so it can be quickly adopted. It has been moved, but I don't know if my colleagues have the text. If not, I can read it quickly.

The Chair: Thank you, Mr. Bonin.

[*English*]

Mr. Malette.

Chris Malette (Bay of Quinte, Lib.): [*Inaudible—Editor*]

The Chair: Yes.

We're going to debate this motion.

You're bringing it forward now for a vote.

Does everybody have the notice of motion that Mr. Bonin put in place on May 25?

We'll take a brief moment to distribute the motion.

● (1615)

_____(Pause)_____

● (1620)

The Chair: We will begin again.

Witnesses, we're going to address this motion that Mr. Bonin put on the floor, but we're hoping to return to you before our time is up. If you could just stand by, please, we would appreciate it.

Mr. Bonin, do you want to read this into the record?

[*Translation*]

Patrick Bonin: The motion reads as follows:

> That the committee undertake a study of four meetings on carbon capture, utilization, and storage (CCUS) technologies in Canada, including their role in reducing greenhouse gas emissions, their potential to support the decarbonization of industrial sectors that are difficult to electrify, and their contribution to the global energy transition; that the study examine public and private investments made to date and planned, as well as those required for the deployment of these technologies, their environmental effectiveness, their economic viability, and their international competitiveness; that the committee report its findings and recommendations to the House; and that, pursuant to Standing Order 109, the committee request that the government table a comprehensive response to the report.

The Chair: Thank you very much, Mr. Bonin.

[*English*]

Do we have debate on the motion?

I have Mr. St-Pierre.

[*Translation*]

Eric St-Pierre (Honoré-Mercier, Lib.): Madam Chair, I would like to propose two minor amendments.

First, after the words “carbon capture, utilization, and storage (CCUS) technologies in Canada”, I propose adding the words “and other carbon dioxide elimination technologies”, because there is a fairly important distinction to be made between the acronyms CCUS and

[*English*]

CDR, or carbon dioxide removal.

[*Translation*]

Also, in the English version, after the words

[*English*]

“including the role in reducing greenhouse gas emissions”, I would add, “while developing a competitive economy”.

[*Translation*]

I propose that we adopt these two small amendments, after which we will be ready to vote on the motion.

[*English*]

The Chair: Can we as a committee consider these friendly amendments and unanimously adopt those changes?

Some hon. members: Agreed.

The Chair: That's excellent. Those will be made.

(Motion as amended agreed to [*See Minutes of Proceedings*])

The Chair: Witnesses, we are back on track.

● (1625)

[*Translation*]

Mr. Bonin, you have the floor for two and a half minutes.

Patrick Bonin: Thank you, Madam Chair.

Mr. Purcell, can you tell us how much annual funding is tied to grants for greening the real estate inventory? How does that compare to the funding of fossil fuels in the country?

[*English*]

Bryan Purcell: There are a number of programs at the federal government level that support making housing more green. I believe that the Canada greener homes grant program was $2.2 billion over about five years, so something like $300 million to $400 million per year. The deep retrofit accelerator initiative that I mentioned was about $200 million over four years, so about $50 million per year. Other retrofit programs at the federal level have been in a similar range, so typically well under $1 billion per year.

It's not on the scale of some of the investments in fossil fuel infrastructure that we hear about, certainly, such as pipeline projects where there's a $20-billion to $40-billion public investment. Those are major infrastructure projects with a different level of investment and support. Of course, the big difference is that those fossil fuel infrastructure investments play a fundamentally different role. They grow fossil fuel production, grow carbon emissions and they potentially generate important benefits for the economy in doing so, whereas energy efficiency programming reduces reliance on energy to begin with, reduces carbon emissions and brings us closer to our long-term net-zero ambitions.

Our main concern, when we see fossil fuel investment, is just carbon lock-in, as we call it. That's the idea that we're investing in projects that may take 10 years just to build out and that make sense only if we're going to continue relying on fossil fuels for another 20 to 30 years after that. It implies that we're planning to continue our fossil fuel consumption at current levels for very long periods of time.

The Chair: Thank you, Mr. Purcell.

We will now go to Mr. Rowe for five minutes, please.

Jonathan Rowe (The Eastern Peninsulas, CPC): Thank you for having me here today.

My first question is for my friend in Atlantic Canada. She said a lot of great stuff. I was looking forward to asking a lot of great questions, but I kind of got stuck on something that I'm just going to have to ask about.

Correct me if I'm wrong, but I believe you guys have said that you have invested $20 million in research on these projects. Where does that money come from? Is that mostly federal funding, a mix between federal and provincial funding, or from organizations and donations? I'm just curious where the $20 million originated from.

Lorrie Rand: Some $16.5 million came through the deep retrofit accelerator program. Another $1 million came through the greener homes pilot program. The additional money was foundation funding from the McConnell Foundation, the Trottier Family Foundation and a few other organizations like those.

Jonathan Rowe: It would be about $2.5 million that was fundraised.

Lorrie Rand: Yes.

Jonathan Rowe: Those other two would be federal funding, so around $17.5 million from federal organizations. I know you do great work, but $17 million is a lot of money. That's almost 1,200, 1,300 or 1,400 heat pumps that we could be putting into the homes of seniors and struggling families throughout Canada who are getting off oil. What makes your organization, what you provide, different from, say, building code textbooks that already lay out the benefits of these utilities?

Lorrie Rand: ReCover was established to develop solutions for deep retrofits. What we see on the ground is a very fragmented ecosystem where people want retrofits and don't know how to get them. We have building owners with various barriers. We have some very sophisticated building owners who have capacity issues. Either they can't mobilize to get the services they need or they are at the other end of the spectrum. We have a lot of small property owners who own only one or two buildings, and they really don't know how to make these kinds of projects happen.

We have an incredible problem with.... Our DRAI funding funds projects that are more in the commercial institutional space. The greener homes program is what funded our work on the part 9 or single-family level. In that segment of building owners...first of all we have the highest rates of energy poverty in the country. We have some groups that have an extremely difficult time accessing.... There are no programs that help African Nova Scotian property owners get retrofits at all.

● (1630)

Jonathan Rowe: I heard you speak of the energy poverty. I'm just curious. Are you talking about the issue that Nova Scotia has where there may not be enough electricity on the grid to handle these large [*Inaudible—Editor*]—

Lorrie Rand: No.

Jonathan Rowe: Can you double down on that a little bit?

Lorrie Rand: There are a few different definitions of energy poverty. I won't get into the actual numbers because different groups define it differently.

Essentially, it means that households that experience energy poverty pay a disproportionate amount of their household income toward energy. That's energy for all things. It's to keep their homes heated, or generally heated. Most of our low-income households don't have cooling at all. It's also transportation. A very high percentage of our population, between 40% and 50%, is rural, which means that people don't have a choice but to own a car in our region. That's across all of Atlantic Canada. These households have to choose whether to keep the heat on, buy groceries or get medicine. Those are real choices that are being made in more than 30% of households in our region.

Jonathan Rowe: I'm glad you talked about that, because that is a big issue. Energy is essential for heating our homes and moving in our vehicles. That's why the Conservatives are big on axing the tax on these energies, increasing salaries in the country and bringing home powerful paycheques so that we can increase the income such that people are not in energy poverty.

Thank you for your clarification.

The Chair: Thank you, Mr. Rowe.

Finally, we will turn to Mr. Malette for five minutes, please.

Chris Malette: I thought I was in hour two.

The Chair: Okay.

We'll go to Mr. Watchorn.

[*Translation*]

Tim Watchorn (Les Pays-d'en-Haut, Lib.): Thank you, Madam Chair.

Thank you to the witnesses for joining us.

I live in a slightly more rural area where there aren't many multi-unit buildings. Often, those with limited means are not eligible for the programs we are talking about. These programs are often based on the property assessment of the house and, in a region like mine, the property assessment criteria do not allow people with limited means to access these programs.

I'll give you an example. The septic systems in the region often fail and cause pollution issues in the lakes. Working with the municipalities, we found a solution, which is to allow people to add the expense of having their septic systems repaired to their property tax and spread it out over several years. There is no credit issue with banks, the interest rate is very low and we are solving the environmental problem.

Let's talk about energy efficiency. There is a mayor back home who very strongly supports the property assessed clean energy, or PACE, funding model, which we talked about.

Mr. Purcell, I would like to know whether you think this model could apply in my region and whether it would allow people who don't normally have access to assistance programs for energy retrofits to benefit from this model.

● (1635)

[*English*]

Bryan Purcell: The question relates to what's called PACE, property assessed clean energy, financing. That's a mechanism whereby municipalities can finance energy retrofits in homes or other buildings and have homeowners repay that over a long period of time through the property tax system. We've seen it succeed in some markets in Canada. It has widespread use in the United States as well. I think it makes home retrofits more achievable for many people.

There are still challenges. For example, many PACE programs require homeowners to get the consent of their primary mortgage holder, and most banks will not approve that for people on the middle- to lower-income spectrum. Unless programs are enhanced for them, they won't necessarily make it accessible for lower-income households, though that's a challenge that could be managed in different ways, such as loan guarantees or loan loss reserves that would offset the risk for banks.

It is a good mechanism, though. It's been used in many markets. We have it here in Toronto, and hundreds of homeowners have taken part already. It's a promising mechanism, and it's good as a complement to things like the greener homes grant program. You have that small rebate to get homeowners interested in putting in a heat pump or insulating their home, and then you have a municipal financing PACE program to help them recover the residual costs. I think it works quite well with that kind of program.

[*Translation*]

Tim Watchorn: Thank you very much.

I recently had the opportunity to work with Hydro-Québec. We announced that 20,000 households with limited means would be allowed to install a heat pump in their home to increase energy efficiency.

My question is for both witnesses: Do you think the federal funding model and its application in the provinces are working well? I would like to hear what your experience is with that. It works very well in my region, but homeowners have to pay first and wait for a refund.

Is it something that works for you?

[*English*]

Lorrie Rand: I'm happy to answer that first.

Helping people get heat pumps is extremely valuable. Certainly, it is more successful when the property owners, when they have a low income or are in a lower-income bracket, have the funds up front. Nova Scotia has a long history of heat pump incentives, and for a little less time than Nova Scotia, the Atlantic provinces have as well. The thing I would say about that is when we're looking at retrofits, heat pumps are absolutely worth investing in, but they're not the only answer, and we need to look at things more holistically than just heat pumps.

The Chair: Thank you very much.

Thank you, Mr. Watchorn.

Thank you, witnesses, for your time today. We really appreciate it.

We will now suspend and switch over to our next set of witnesses.

Thank you.

● (1635)

_____(Pause)_____

● (1645)

The Chair: I call the meeting back to order.

We are back with our second hour of testimony for the home energy efficiency study.

We have three witnesses with us for this hour. In person, we have Brendan Haley from Efficiency Canada. He's the the senior director of policy strategy. We also have Daniel Dicaire, senior manager of conservation and sustainability with Ottawa Community Housing. Online, we have the Pembina Institute and Kevin Lockhart, director of buildings.

Welcome.

Thank you to our witnesses for joining us today. You will each have five minutes to provide opening statements. I will give a little reminder when you have one minute and when time is up for you.

We will begin with you, Mr. Haley. The floor is yours.

Brendan Haley (Senior Director of Policy Strategy, Efficiency Canada): I'm the senior director of an energy efficiency policy think tank that's based out of Carleton University, where I'm also an adjunct professor.

I want to present to you today three policies to make home retrofits available to everyone at the speed and scale required.

To introduce my first solution, I want to say home retrofits are a lot more than just a challenge of delivering a lower-interest loan. The problem is often that we put too much responsibility and too much risk on customers, who must often navigate quite a complex market, often with predatory lenders or bad advice.

We also don't give customers the solutions they need at the right time. A critical moment is, let's say, if your furnace breaks down. You're not going to replace that furnace with a heat pump unless the financing is available on that same day and the customer trusts that it's the right solution for them. Previous zero-interest loans couldn't be accessed during those emergencies. The customer also really didn't have much recourse if the equipment wasn't installed properly or if the work was not effective.

To make retrofits work, we need delivery platforms that specialize in financing the most effective solutions at the right time, delivered by someone that the customer can trust and that can stand behind their work. Some examples of these platforms could be utility on-bill financing or financial technology companies partnering with contractors that can provide financing at the point of sale.

My first recommendation is that the federal government provide low-cost capital to a variety of different delivery platforms. I would call it a national home energy performance fund. It would learn from examples like Australia's home energy upgrades fund, green banks and other public banks.

A key benefit of this approach is more bang for the federal buck, because the platforms can blend low-cost public capital with capital from other investors, also using platforms that can solve these non-financial barriers around trust, convenience and performance. This means that you don't necessarily need a large interest rate subsidy, which would avoid competing with private capital and enable public capital to be recycled into more retrofits.

Again, this isn't about just low-cost finance that could just subsidize banks temporarily. Instead, it's about transforming markets to work for customers and high-value contractors. A national fund can meet that goal by setting requirements for the use of its capital. It can refuse financing to HVAC contractors that give bad advice, such as that a heat pump doesn't work. We've heard that. It can also offer better terms to business models that prioritize customer fairness, accountability for performance and building science-based advice that can support high-road business models that can give them a competitive advantage over predatory lenders or laggards.

These platforms will work well, I think, for middle- and upper-income households. However, when it comes to low-income households, they don't need to take on more debt. They need lower bills right now. That's why the greener homes affordability program supports no-cost, direct-install retrofits.

My second recommendation, given that the government has committed to retrofitting one million homes, is that we should dedicate 20% of that budget to expanding retrofit programs for low-income and indigenous communities.

My third recommendation is to change the retrofit process to increase its speed, scale and performance. Right now, how we retrofit is quite bespoke. We could, instead, retrofit entire communities, retrofit groups of buildings, develop economies of scale and deploy what we're calling modernized methods of construction. There are two programs that are supposed to be working on this. These are the greener neighbourhoods pilot project and the deep retrofit accelerator initiative. Both of them are more short-term pilot projects that are running out of money. I would suggest giving them much clearer, mission-oriented objectives to improve retrofit productivity, adopt modern methods of construction and support Canadian businesses and technologies.

That's a three-point plan, if you will, to make home retrofits work for everyone at the pace and scale required.

Thanks for your consideration.

● (1650)

The Chair: Thank you very much, Mr. Haley.

We will now turn to Mr. Dicaire for five minutes. It's over to you.

Daniel Dicaire (Senior Manager, Conservation and Sustainability, Ottawa Community Housing): Thank you, Madam Chair.

Good afternoon and thank you for the opportunity to appear before the committee.

I'm Dan Dicaire, senior manager of conservation and sustainability for Ottawa Community Housing.

OCH is Ottawa's largest community housing provider and the fourth largest in Canada. We manage approximately 16,000 affordable homes and have direct experience delivering energy retrofits at portfolio scale. That experience has shown us that retrofits are not simply environmental projects. They are investments in preserving social housing, protecting affordability and extending the value of public assets for future generations.

OCH delivers across the full housing mandate. We build new affordable homes, preserve existing housing and acquire properties to protect long-term affordability.

Today, I will focus on preservation. Much of our portfolio was built during the 1960s, 1970s and 1980s, when federal and provincial governments made significant investments in public housing. This increased supply greatly, but energy efficiency was not a central design consideration. Housing is not truly affordable if high energy costs simply shift the burden to tenants and housing providers for decades.

When critical maintenance and retrofits are deferred, those costs compound and affordable homes are placed at risk of being lost. The national Human Rights Commission estimates that Canada loses 10 to 15 affordable homes for every new one it builds. Preservation must therefore be treated as a core housing and infrastructure investment.

To illustrate the value of retrofits, I'll focus on Canada's first net-zero panelized deep energy retrofit. This is OCH's Presland project, which the committee has received photographs of. That project started with a four-unit block of three-bedroom townhomes built in the 1960s. OCH staff and local contractors built and installed 24 panels, measuring 20 feet by nine feet, to create a whole new high-performance building envelope over the existing structure. The project replaced natural gas-burning equipment with electrified heat pumps for heating, cooling and domestic hot water. The retrofit reduced the building's energy consumption by 66% and greenhouse gases by 100%. We added a 35-kilowatt solar array, which generates as much as the building consumes, making the project net-zero energy and net-zero GHG. This was all done with the tenants in place.

The impacts extend beyond the environmental benefits. First, the retrofits lowered utility bills for low-income households. Before accounting for the solar generation, total utility costs were reduced by 30% to 40%. With the solar generation, they were reduced by 50% to 70%. The value proposition for social housing is lower costs for tenants and providers today, combined with more durable affordable buildings over the long term.

Second, the retrofits freed up capacity on our energy network. The Ontario Clean Air Alliance has found that conservation costs about one-tenth of new generation because it utilizes existing infrastructure. Significant qualities of low-cost energy can be recovered from existing buildings and should receive attention alongside investments and new generation. Alternatively, retrofits can also free up the capacity for the additional housing Canadians need.

Third, the project employed local workers and entrepreneurs with materials and technologies that Canada has in abundance. The manufacturing facility that OCH developed was intentionally designed with a very low barrier to entry. Quite simply, it was a poured concrete slab and two sea containers with trusses over them, filled with non-technical or non-specialized equipment. Any contractor from coast to coast to coast could replicate this approach and create local jobs while retaining more investment within Canadian communities.

These are just a few examples of the multiple co-benefits that retrofits bring, which extend to health, safety, housing stability and affordability. This approach is also supported by studies, like “The Public Housing Dividend”, which have estimated that for each dollar invested in energy efficiency and affordable housing, we get three dollars of economic benefit back.

The opportunity is to treat housing and home energy retrofits as core infrastructure. As you heard earlier, federal funds are already supporting market development efforts through the greener neighbourhoods pilot program, which the Presland project is based on, and the deep retrofit accelerator initiative, with dozens of teams across the country ready to support broad-scale deployment for these types of projects.

● (1655)

For social housing, this is a practical nation-building opportunity in protecting homes, lowering long-term costs and extending the value of public investment. Think of it this way: Every envelope retrofit makes kilowatt hours of capacity available on our grid, just like a power plant, and every single heat pump installation extracts heat from our backyards, just like a mine.

Overall, major investments in housing retrofits could employ Canadians in every community across the country and keep profits in our communities while improving affordability and making our economy more resilient.

Thank you. I would be pleased to answer any questions.

The Chair: Thank you, Mr. Dicaire.

We will now turn to Mr. Lockhart, who is online.

It's over to you for five minutes.

Kevin Lockhart (Director, Buildings, Pembina Institute): Thank you.

Thank you for the opportunity today to share the Pembina Institute's perspectives on home energy and adaptation retrofits today. My name is Kevin Lockhart—

The Chair: Could you move your mouthpiece more in front of your mouth? Then we'll see if translation can work.

Go ahead. I'll interrupt you if we need to make an adjustment.

Thank you.

Kevin Lockhart: Thank you.

Retrofitting our homes and buildings is a high-return investment that's increasingly important to prepare Canadians for the coming decades. It's also important [*Technical difficulty*] and affordable [*Technical difficulty*]—

● (1700)

The Chair: Mr. Lockhart, we're going to take you off-line to test your audio. Translation can't hear you well. Actually, we can't hear you well in this room. I think we'll go to our first round of questions for the two witnesses in person and see if we can come back to you. Thank you very much.

To begin, we will go to Mr. Bexte, please, for six minutes.

A voice: [*Inaudible—Editor*]

David Bexte (Bow River, CPC): Burn it down.

Voices: Oh, oh!

The Chair: Save the trees.

David Bexte: Save the trees, yes. Trees are renewable. They're renewable.

Thank you, Chair, and thank you, everyone.

Thank you to the witnesses for being here today. I really appreciate the opportunity to ask some questions and get some answers. We've heard a lot about the nature of retrofits. Some of the plans are very ambitious and some of them are very incremental. I think there's a place for lots of them across our broad nation with lots of different circumstances.

I guess both Mr. Dicaire and Mr. Haley can comment on this.

Given the challenges, what are your views on how we measure, really analytically, the effectiveness of these programs?

Mr. Dicaire, you're a chemical engineer. Spreadsheets and numbers are right in the wheelhouse. How do we measure effectiveness? Is it in terms of ROI, value for money?

Daniel Dicaire: Before retrofit energy modelling, we have extremely good technical tools, whether they're static models or dynamic models, that are able to really give us an answer on what that building should operate. Obviously, there's always the factor of how people are going to operate the building. Once you actually have completed a retrofit, a whole building air test is pretty much the gold standard. You'll actually be able to see how well you've sealed up that building and be able to confirm if you actually hit the target of what your retrofit was intended to do.

David Bexte: Let me back up and maybe clarify my question: It's how to do it in terms of the effectiveness of that assessment and what to do when it's not. We've heard some testimony and evidence in those discussions that these retrofits aren't really as effective as we had hoped they would be, especially based on modelling. We're trying to measure reality versus hopes. How do we address that discrepancy?

Brendan Haley: I think this is much more sophisticated, I would say, than the federal government in that public utilities that run demand-side management programs have all their programs evaluated after the fact and are compared with basically the cost of power plants and transmission lines. The data back from that is that saving kilowatt hours of electricity costs about three cents to six cents a kilowatt hour through most programs, as compared with power plants, which can cost 13¢ or more a kilowatt hour.

The other thing that is often measured, and is hard to measure but is very important, is what we call non-energy benefits, such as benefits to health, benefits to productivity—

David Bexte: Can I back up and clarify something? Did you just say that power plants are 13¢ to 15¢ per kilowatt hour or per kilowatt?

Brendan Haley: It's kilowatt hour.

David Bexte: A kilowatt is a fixed unit of energy.

Brendan Haley: Yes.

David Bexte: All right. I just wanted to be clear on that.

Brendan Haley: You can measure in kilowatts too, but a kilowatt hour is what it—

David Bexte: One is a capacity and the other one is a unit over time.

Brendan Haley: Yes.

David Bexte: It still leaves the implementation problem. You know, the actual work being done is often not effective.

Brendan Haley: Yes.

David Bexte: It is not exclusively effective. Sometimes very good work is done, but the right technical solution isn't necessarily brought to the right problem.

I'll highlight another example. You gave the example, Mr. Dicaire, of the electrification of residential houses in Ottawa, which is fantastic when there is access to nuclear power, but what about Alberta, where the available base energy unit is natural gas? For a chemical engineer, the loss on transformation of power from burning it to electricity, when we're electrifying something and we could just keep burning natural gas to make the system more efficient, so the heat pump doesn't work anyway....

Does the heat pump work in that system? Are we incentivizing the right tools in every part of the country?

Daniel Dicaire: The first thing I'd say is that your energy retrofit is giving you more capacity across the board. Whether you want to use less natural gas, or whether you want to use less electricity, the retrofits that I described can save you 60% of your energy consumption, regardless of what you are deciding to spend for that one.

● (1705)

David Bexte: I take that is on air loss.

Daniel Dicaire: Yes.

To your comment about the effectiveness, I know that you've heard testimony that was a kind of scorecard to previous deployments. That ends up not necessarily being a reflection of the retrofit or of whether it's a retrofit of that program or policy that is trying to get those things out there. In terms of making sure that the proper quality control measures are in place, with our project, we kept that project very specific and close to the chest so that we could see and prove that we could get the results we had intended.

Brendan Haley: I was trying to get at this in my opening remarks, but let's talk about some of the policy reasons for why performance might not be what was predicted. Especially on the homeowner side, there's very little in the business models of, say, contractors, that gives them an incentive to do very high performance. If you are installing a heat pump, for it to be sized properly, you should really do a heating load calculation first. After you install the heat pump, it should be commissioned, and ideally it should be monitored after the fact, but contractors don't make a lot of money doing that kind of work.

David Bexte: The margins are low.

Brendan Haley: They make money by basically installing the system and going away. There's nothing in federal policy, if we look at the former grant program, that tried to provide some sort of accountability for that performance, that tried to say that, if you do these things, such as commission the system, monitor performance and actually hold yourself accountable for performance, you'd get more incentives from the federal government.

David Bexte: How tuned are the—

The Chair: I'm sorry, but your time is up.

We'll now go to Mr. Fanjoy for six minutes.

Bruce Fanjoy (Carleton, Lib.): Thank you, Chair.

Thank you, witnesses. It is good to see you again.

Mr. Haley, last Friday, in the Senate, Senator Mary Coyle introduced Bill S-251, an act to establish a national strategy to end energy poverty. That gets to the heart of what we're talking about here at the ENVI committee. One of the specific objectives of this study is to understand how we make home energy retrofits accessible to low-income Canadians, who are disproportionately affected by higher energy costs.

What does an effective retrofit program look like for a low-income household? What barriers do we need to remove beyond simply providing financing?

Brendan Haley: Yes, Mary Coyle has introduced a bill to develop a national strategy on energy poverty. A lot of other countries have done this. Essentially, it's very simple. Let's define the problem, measure the problem, have experts look at the problem and then hold ourselves accountable for solving that problem. That's what her bill would do.

I think that's really key, because right now we do have a program, the Canada greener homes affordability program, which is targeted for low-income homeowners. It's a program, but it doesn't really have a strategy, or a super clear goal, wrapped around it. I think having that national goal around eliminating energy poverty would help direct that program towards the performance we need.

Yes, it doesn't make sense to put a low-income household into debt. There can be a role for some financing for lower- and middle-income households, but in general, you want their bills to be reduced right now to get them out of energy poverty. That's why that program is no cost and direct install. It's also coupled with, and actually implemented by, utilities, which already have those types of programs in market that are cost shared by those utilities and other administrators.

Bruce Fanjoy: Efficiency Canada has said that Canada needs to increase annual building retrofits from about 1% to over 2.5% by 2030. What's preventing Canada from reaching that target today?

Brendan Haley: That's a big question.

One thing is that there is no mission-oriented policy to say how we're going to do this over the next number of decades. We're talking about essentially retrofitting the entire building stock. We have had programs, but they seem to be in a boom-and-bust dynamic. They come and they go away. You can't really operate a contract or business around that. It's also difficult for customers to understand who to trust in that situation. That's one of the reasons I'm suggesting a financing platform approach, which would be able to recycle capital. It could help us get away from that boom and bust.

The other thing is that we need to retrofit differently. Right now, we retrofit in quite an artisanal or bespoke way—every single building, one at a time. If we're talking about retrofitting the entire building stock, we could think about it as more of an industrial process. This is what Dan has pioneered by using panelized construction to industrialize the retrofit process more.

● (1710)

Bruce Fanjoy: Thank you.

Mr. Dicaire, what are the unique challenges that you and Ottawa Community Housing have discovered while retrofitting older buildings?

Daniel Dicaire: In terms of the experience OCH has, the first thing is that we have a very low vacancy rate. The reason we did the retrofit the way we did—a panelized, exterior energy retrofit—is that we can't displace our tenants to do these upgrades. We need to do them with the tenants in place, so we came up with a strategy that allows us to do them while the tenants are in place.

The second thing is the workforce. We started this project back in 2018. I will say that it officially started in May 2020, so we did this through the pandemic. Back then, we used our own forces because there wasn't a whole lot of market development, in all honesty. Nowadays, we're starting to see a lot more of those contractors and entrepreneurs who are able to offer a panelized solution, whereas, back then, we didn't really have an option. There was so much risk priced into the quotes we were getting that we decided to do it with our own forces. We have seen that expansion as a result of the interest. There are many other contractors who can pick up and bid on this work.

The third thing is financing. It is always a question, as Brendan described. Providing stable, predictable, long-term funding is the best way to make sure that you incentivize and create the market.

Bruce Fanjoy: I have one further question.

Sometimes we talk about how cold our ridings are across the country. Ottawa can be a very cold city in the winter. We certainly had a cold winter last year.

What was your experience in terms of the comfort of Ottawa Community Housing residents after the retrofits?

Daniel Dicaire: I will tell you that, since the retrofit, the tenants have had a great experience in terms of the level of comfort in their units on both the heating and the cooling sides. Those units did not have cooling previously. I can tell you that the biggest smiles I got from those tenants was on that first long May 24 weekend, when it got really hot. All of a sudden, they had air conditioning, and all sins were forgiven with respect to the construction process.

The Chair: Thank you, Mr. Fanjoy.

We are going to turn back to Mr. Lockhart.

I think everything has been resolved, and you now have five minutes to give your remarks. Thank you for hanging in there with us.

Kevin Lockhart: Thank you.

I'll jump right into it because I've heard my colleagues speak to the benefits of retrofits, and Mr. Dicaire spoke to the durability of markets.

We know that retrofitting our homes is important and that there are high returns on investments, resulting in both lower energy costs and utility savings today. Also, in terms of decades to come, we need to prepare our homes, prepare our households, for increasingly frequent extreme weather.

The point I want to make is that these benefits won't reach households at scale through short-term incentives or through isolated projects. To meaningfully increase the rate of retrofit activity, we need that durable approach that builds a reliable and, preferably, made-in-Canada retrofit industry that attracts both public and private investment.

Retrofit measures that prioritize efficient use of energy and materials can, as well as helping with climate resilience, help protect people from extreme temperatures—things like wildfire, smoke and other hazards. They also, as we've heard, help reduce energy waste and emissions. At the Pembina Institute, we've seen this through our own retrofit of six multi-unit residential buildings, each housing vulnerable tenants, to which we've been able to add cooling, thus enhancing the resilience of those buildings. In doing so, we've really seen this as a pilot project, in which we are encountering challenges, many of which you've heard today, but we are seeing breakthroughs with each iteration.

On the residential side, retrofits are important because they do protect insurability. This is a growing concern across Canada as insurance premiums are rapidly increasing, and we're now seeing areas that are at risk of uninsurability due to the losses from extreme weather. Those same retrofits are also supporting economic development and affordability.

On the affordability side, we've heard about the reductions in energy costs, lower energy and operating costs for households. Again, we've seen this through our reframed buildings, where households have cut energy costs by more than 50%. We've also seen these same retrofits use measures that help to harden the building against extreme weather events: This could be something like hail-resistant roofing. These are important measures, this hardening of the building and climate resilience retrofits, because they can help protect Canadians and save Canadians the three dollars to four dollars of uninsured costs, paid directly or through their taxes, that are associated with each dollar of insured losses.

These retrofits also help build the economy. Ten jobs are created for every $1 million invested, which surpasses job creation in conventional sectors like oil and gas, forestry and trucking. However, as I've heard my colleagues express today, there are connected barriers to scaling retrofits that continue to remain. Households may lack affordable financing, trusted advice or a qualified contractor. Renters have little control over building upgrades and may not receive the benefits of those retrofits if those costs or disruptions are passed on to them. Apartment owners may struggle to coordinate upgrades or secure approvals. Governments, utilities and municipalities all may offer programs that are fragmented, difficult to navigate or short-lived.

How do we achieve a long-term and durable strategy for retrofits that combines public policy and market-led investments? Today, this may include maintaining public funding supports. We've heard that the much-needed advancements, through the deep retrofit accelerator initiative and the greener neighbourhoods pilot program, have worked towards embedding essential delivery models and workforce capacity in the market. Again, we've seen this in our reframed cohort of buildings, in which the capacity for things like panelization, which Mr. Dicaire spoke to, for procurement of high-performance retrofits has been improved over the course of that project.

A new approach would also look at targeted delivery. This is really the continuation of things like the greener homes affordability program, as well as the CMHC affordable housing fund. Each of these help to improve affordability and living conditions for the the nearly two million Canadian households that experience energy poverty today.

● (1715)

Going forward, the federal government can also help create this durable retrofit market by shifting from an incentive dependence environment towards market enabling policy, really de-risking private capital rather than subsidizing it.

It's really using the financial levers that we've heard about: loan guarantees, clean building tax credits, project aggregation and more. All this helps finance and insurance better recognize asset value, durability and reduce climate risk, and make those benefits visible in standardized financial and climate risk evaluations. It will then help insurers and finance utility markets all recognize and reflect risk-reducing retrofits in pricing and compensation.

For government's part, it can reinforce these through procurement, stringent building codes and long-term program signals, all of which help create demand and certainty that help bolster supply chains and also give workforce an anchor to build their career around.

The Chair: Thank you, Dr. Lockhart.

[*Translation*]

We will continue with questions.

Mr. Bonin, you have the floor for six minutes.

Patrick Bonin: Thank you, Madam Chair.

Thank you to the witnesses for joining us.

Mr. Haley, can you explain the difference between a financial strategy that simply subsidizes banks and one that would put in place, for example, better renovation platforms? It is not that easy to understand.

Can you explain that, please?

● (1720)

[*English*]

Brendan Haley: We could have a strategy where the federal government says that the banks already provide some products to retrofit your home, usually through some sort of mortgage-backed instrument, so let's just reduce their interest rates by buying them down. I think if you did that, you'd buy down the interest rate for a couple of years. Then, once that went away, I think the banks would just continue to essentially provide the same product.

I think if you really wanted to change the game, you would create a platform that would do all the things the banks don't want to do but would find valuable, a platform that could find the consumers when they need the service, a platform that would have a contractor network and all the due diligence and performance accountability on the contractors.

If you could do that, you're essentially taking away all these transaction costs that would be very valuable to the bank. I think that would be a longer-term, more investable product. Ideally, a financier wouldn't just be saying, “I want to provide you, as an individual, with a loan, and I'm going to take away your house if you don't pay the loan.” They would actually provide finance to a business, and for that business, the cash flows would be from the energy savings or from some of the other services in terms of comfort and energy performance.

[*Translation*]

Patrick Bonin: Thank you.

Let's talk about program design. Canada is a big country that includes the Quebec nation. Hydro-Québec, for example, can be quite innovative when it comes to deployment.

How do you see programs adapting to regional or national needs, in the case of Quebec?

[*English*]

Brendan Haley: Previously, we had some programs that were not very regionally flexible. For example, there was a program to replace oil with heat pumps. That's great, but in Quebec, you could replace electric baseboards with a heat pump and it would save a lot of people money. That is very important for saving electricity within Quebec right now.

That flexibility region by region is really important because there are different climate zones. That's one of the reasons the Canada greener homes affordability program, which is the low-income program, is actually being administered by Hydro-Québec within Quebec. That does provide that regional flexibility, that provincial flexibility. That's also why I think a financing program that would support these platforms makes a lot more sense. You could have a platform that's dedicated to serving, say, the Quebec market.

[*Translation*]

Patrick Bonin: We hear a lot about programs and that there's not enough funding, that there should be more. Shouldn't there also be regulations in place? The ratings for buildings could be made mandatory, for example. Some states, like New York, have banned natural gas in new homes. The Communauté métropolitaine de Montréal has done the same.

Isn't that regulatory aspect essential? Without that, we can't be sure the objectives will be met. What could be proposed?

[*English*]

Brendan Haley: If we want to reach net zero, those types of regulations are definitely important. Quebec and Montreal have actually been leading, thinking through some of those policies on mandatory performance standards for large buildings. I think there's a federal role in enabling those types of policies at the regional level.

One key tool that the federal government has within its jurisdiction is the Energy Efficiency Act, which regulates appliances and equipment. One thing which I think makes a lot of sense is that it doesn't make any sense to have an air conditioner in this country that only does air conditioning. An air conditioner could also be a heat pump. You could, for instance, use the Energy Efficiency Act to say that every air conditioner sold in most of the country could also operate as a heat pump. That's just a better product. It's only a couple of hundred dollars in terms of technological cost to make that change. That is one type of regulation that I think could be done immediately.

[*Translation*]

Patrick Bonin: Do you think there has been a decline in the number of options on the table for greening buildings since the election of the so-called new Liberal government, the Carney government?

● (1725)

[*English*]

Brendan Haley: At the beginning of the new government's mandate, they cancelled the greener homes loan program, and I think that was a good indicator of the disruption.... I critiqued the greener homes loan program here. I think that loan program could really be improved, but we don't improve anything by disrupting these programs in this kind of boom-and-bust dynamic.

If the greener homes loan program was going to be brought right back, I think the natural question from, say, contractors would be, “When is it going to go away again?” We need to find something that is more permanent and gets beyond this boom and bust that both contractors and consumers can rely on.

[*Translation*]

The Chair: Thank you very much, Mr. Bonin

[*English*]

We will now turn to Mr. Leslie for five minutes.

Branden Leslie: Thank you, Madam Chair.

Mr. Haley, I'd like to pick up on that topic.

Going back to your opening remarks, as well as what you just talked about, Mr. Bonin, two things intrigued me. One is the emergency nature. If somebody in my life has a broken furnace and it's October, not January 20, they have time to figure it out. In certain situations, though, you're going to want to act quickly. I really like the idea of a pre-approved contractor.

My understanding is that the Manitoba government's version of this federal program that's being delivered to them has pre-approved contractors for geothermal, depending on the retrofit, or a system like that. I would like to clarify if that is what you're talking about, because I think there's a way to get government more or less out of this.

Brendan Haley: Yes.

Branden Leslie: How do you define eligibility for that? If you're going to backstop the pre-approved contractors, you mentioned that it would be middle- and high-income people for that type of scenario versus lower-income people, who would have a different tool available.

Would you do it based on income or reduction in electricity usage? I think those are important things to try to categorize beforehand. How would you go about that?

Brendan Haley: That's a good question.

I don't think it makes sense if someone who has a low income wants to take on financing. If they qualify for the financing, though, we can't stop them from doing that, and you wouldn't want to do that. I think it makes sense to have the offer in the market to say that because their income qualified, we have a no-cost option for them, or we could pay for a significant portion of this through another program.

Branden Leslie: Going back to the Harper government's version of this program, recognizing boom and bust, it has been up and down, and challenges exist there, there was a loan associated with it. You could get a loan directly from the federal government at zero or low interest as part of the application to get whatever type of retrofit. It was less on an emergency basis, but more on a planned basis.

Do you think that this would be an ability to remove one of these steps? We've heard during the study that we're giving millions of dollars to organizations to help build capacity and things like that.

How do we stop paying third parties to be involved in this when we can be directing more money towards actual retrofits for individual homeowners, whatever their income is?

Brendan Haley: Essentially, you're trying to create the platform that does a lot of the work that we're now putting on the shoulders of customers. There are various strategies to do this. There is an administrative aspect to this. There are fintech companies in Canada right now. A big one is FinanceIt. It is working with contractors right now. You can get financing on the spot for all types of upgrades, including energy efficiency upgrades. However, the interest rate is 12% in some cases.

There's an opportunity to buy down that interest rate, but I think there's also an opportunity for the federal government to say that it wants to ensure there's customer protection and that the right methods are being put.... Ideally, if you have a contractor that's saying they're only going to get paid if you actually save energy, I think that's an ideal business model.

Branden Leslie: I love that, because that was my next question.

You used the word “goal” earlier, saying there's a lack of a clear goal. In your assessment, what should be the single most important measure for success of a federal retrofit program? Is it lower household bills, lower energy use and lower emissions, or is it the overall number of projects or homes completed?

Brendan Haley: That's a good question.

I would think about it in two different scales. I would think about it from the household scale. It's whatever the household wants. It's—

● (1730)

Branden Leslie: We're the ones doling out taxpayer money, so I would be mindful of that. What is the best success from the taxpayer's perspective?

Brendan Haley: I think from the taxpayer perspective, it would be whether we are retrofitting in a way that is reducing societal costs. There's a whole bunch of money to be saved by reducing demand on the electricity system. There's a whole bunch of money to be saved in terms of health costs, especially on the low-income side. People have fewer sick days and fewer doctor visits, and they are more productive at school and work because of the health benefits. There are fewer issues with mould in the house. Those would be the indicators I would look towards.

My point about the consumer is that if somebody is saying that they really need air conditioning, and it's the thing they need to do, the consumer is right about that, and we need to give them the most efficient option.

Branden Leslie: Madam Chair, in my final seconds—

The Chair: Mr. Leslie, I'm sorry.

Branden Leslie: Are you sure?

The Chair: Yes, it was five minutes.

We'll now go to Mr. St-Pierre.

[*Translation*]

You have the floor for five minutes.

[*English*]

Eric St-Pierre: Thank you, Madam Chair. I'm glad we're counting every second and every penny.

Mr. Haley, Efficiency Canada recently produced a report titled "How Federal Policy Can Transform Building Retrofits in Canada". I'm wondering if you can provide a copy of that report to this committee and, in less than a minute, maybe summarize the key policy recommendations. Give us the very short version.

Brendan Haley: That report is saying we need to retrofit differently. We can't retrofit just one building at a time. We need to retrofit on a more industrial scale. It was looking at this retrofit accelerator and the greener neighbourhoods pilot project and what they've done.

Essentially, our findings were that, yes, they've created a pipeline of projects, but we also think you could have much clearer innovation-based goals. The way we think about those programs should not be about how many buildings we're retrofitting. It should be about whether we innovating and changing the way the markets work to begin with, and that's why we think there should be clear objectives along those lines.

Eric St-Pierre: Mr. Haley, Wednesday, October 7 is energy efficiency day, an important day to recognize the contributions of the energy efficiency sector in saving Canadians money, creating jobs and also reducing greenhouse gas emissions and pollution. I put a notice motion last year, M-19, to try to recognize this important day, and I recently sponsored a petition with 2,400 signatures, which calls for energy efficiency to be recognized as a nation-building priority.

Mr. Haley, I'm curious why Canadians should be excited to have energy efficiency day or celebrate this important milestone.

Brendan Haley: I think every day can be energy efficiency day if you want it to be.

To your point and to what you've mentioned in the House, I think that in this country we're talking about building a more sovereign, productive and resilient economy. Energy efficiency, I think, delivers all those things a lot quicker than a lot of more traditional megaprojects spread throughout the country, so a lot more equitably. I actually think that it, almost by definition, improves productivity for businesses and individual households, so I think it makes a lot of sense in this moment in time.

Eric St-Pierre: That's great. I'm excited that you'll be celebrating energy efficiency day as well.

You mentioned earlier the Canada greener homes affordability program,, which this summer was refinanced, or there was an increase to, I think, $500 million or $300 million federally, spread across five provinces. In mid-September, our government also convened an investment summit in Toronto to think about the role of private capital and how we can leverage private capital.

I'm curious about the investment piece. How can our government take an approach to retrofit, say, a million homes through investments rather than through grants? Are there any low-interest loans or green bank models we should be considering? I'm curious if you could speak to that.

Brendan Haley: As I said, the old loan program, the greener homes loan program, did a lot of good for a lot of people, but it actually had no mechanism to really attract other types of private capital. It arguably crowded out some other types of private capital, because that zero per cent interest rate was competing against other retrofit loan products in the market.

That's why this green bank model I've been talking about is not the government providing retail finance to homeowners. It's the government saying that we have low-cost capital, and if you want to use our low-cost capital, we will do it for platforms that are doing particular things, protecting consumers and meeting climate goals. The benefit of that is that the platform can blend that capital with other forms of capital. It can be private capital, but a lot of the other capital in this area that would be interested is social impact capital, utility demand-side management programs that have energy savings objectives, and municipalities, so it can also be other forms of public or quasi-public capital.

● (1735)

Eric St-Pierre: That's great. Thank you.

Mr. Lockhart, I'll throw in one last question.

On September 17, the Pembina Institute, along with some other organizations, signed a letter about a “double-double-double” approach to doubling electrification by 2050 and doubling energy efficiency by 2050.

Could you provide a copy of that letter to this committee? In 20 seconds, could you explain why we should double energy efficiency by 2050?

Kevin Lockhart: Absolutely, we can provide that copy.

The idea is that we can go down two paths. We can go down one path and double electricity supply, or we can go down another more effective and more efficient path and double energy productivity through electrification, putting many of those demand-side management or distributed resources within the communities where that energy is used.

The Chair: Thank you very much.

[*Translation*]

Mr. Bonin, you have the floor for two and a half minutes.

Patrick Bonin: Thank you, Madam Chair.

Mr. Haley, we often hear about energy sobriety in Quebec, but not necessarily about energy efficiency. Do you think energy sobriety should be promoted more? Do you differentiate between energy sobriety and energy efficiency?

[*English*]

Brendan Haley: Yes, I think so. It goes back to the questioning about why some of these energy-saving projections are not met. We need technical energy efficiency like insulation, air sealing and heating systems, but we also need what I'd call people-based energy efficiency, which is about helping people. Some people don't know how to operate a thermostat. We need education on how to use a thermostat, how to manage a home and how to get feedback to customers. There's almost a behavioural aspect of helping people manage their own energy usage. That's one aspect that I would think about in energy sobriety.

[*Translation*]

Patrick Bonin: Should there be an energy sobriety strategy? Should people be informed and educated on it? Should we set up programs or something else?

[*English*]

Brendan Haley: It can be difficult because of the way we often want to analyze or evaluate these things. It's a lot easier to evaluate something, like when you drop a piece of equipment on your foot and it hurts, than it is to evaluate a behavioural intervention.

There are ways to measure the behavioural intervention, but I'd go back to this idea of platforms that give consumers energy services. It doesn't have to be just that we install a heat pump and then we'll see you later. It can be that we are under a service agreement with you, and we are going to continue to give you tips and monitor your energy usage. If we see a spike, we might come in and talk about what is going on to see if there are problems in your home or in your building.

[*Translation*]

Patrick Bonin: Do you think Canada should have a carbon budget specific to the building sector, like the United Kingdom, with an action plan to meet its commitments, such as the 2030 targets, including a pathway to net zero?

[*English*]

Brendan Haley: I've written some reports about taking a more mission-oriented approach to how we do retrofits. Right now we tend to think about it one home at a time, whereas what we are really talking about is how we retrofit essentially the entire building stock up to a performance level. That's what we have to think about.

The Chair: Thank you, Mr. Bonin.

We'll turn to Mr. Rowe for five minutes, please.

Jonathan Rowe: I should have had this done earlier.

Thank you very much.

My first question is for Mr. Dicaire.

You talked about how, years ago, they built homes quickly and cost-efficiently and never really focused on energy efficiency. I don't want to put words in your mouth, but if I remember correctly, you alluded to how we should be building more efficient homes now. I did some quick research, and it seems that high-efficiency homes cost around 15% more per home.

Our country is in a housing crisis, so I'll ask you a multiple-choice question. In scenario A, we could build 100 regular homes, and in scenario B, we could build 85 high-efficiency homes. What target should we go toward?

Daniel Dicaire: The first way I'd answer that particular question is by saying that OCH recently commissioned a specific total cost of building ownership study on our new developments, because we are planning on developing thousands of new units.

We found that the actual cost for a high-efficiency building is somewhere around 5% for 50% energy savings, which is where we are targeting our new developments. I would present our study in response to that stat, because we have found that as we are building right now—OCH has been delivering thousands of high-efficiency homes—we are doing it for a much lower cost. Our study confirms that.

Next, from OCH's point of view, we are developers, owners and operators of these affordable public assets for the long term. Therefore, the value of making that incremental 5% investment that we have seen comes back in dividends in the operating in the long term. We are also seeing it right now as a mechanism to access financing, whether it is through some of the mechanisms that Mr. Haley described or whether it is through the different federal programs we are accessing that are incentivizing affordable, accessible and energy-efficient homes.

● (1740)

Jonathan Rowe: I have a question for Mr. Haley.

I believe you mentioned a technique to correct contractors when they give the advice that heat pumps don't work in certain homes.

Would you be able to elaborate on your suggestion for that?

Brendan Haley: Thank you for the opportunity to nuance that point. There are stories about contractors saying a heat pump isn't going to work, and that's not great advice in lots of markets. In other markets, it is not very good advice to say, “I'm going to install a heat pump and it's going to save you money.” That's actually not the case in most places, like Alberta or Saskatchewan, for example.

Again, I think it gets to the question of whether you are making sure the consumers get the right expert advice for their particular needs and for their particular climate zone.

Jonathan Rowe: To clarify, you're not suggesting that we blacklist certain contractors for advising that heat pumps don't work in certain areas.

Brendan Haley: I'm saying that I think if contractors or other types of financing providers are not protecting consumers or are essentially not providing fair advice or fair deals to consumers, they can still continue to operate on the market, but I don't think they should be given the benefit of, say, low-cost federal government financing.

An example in Ontario that is quite prominent is that a lot of people are locked into hot water tank rentals that last for years and years and they can't get out of them. If they do need to get out of them, they have to pay thousands of dollars. That is not an example of supporting customers. I don't think the federal government should throw its weight behind that type of business model.

Jonathan Rowe: Last week when I was here, a witness suggested that our government should prioritize giving funding to people who aren't going to make those household changes anyway.

I believe what you're suggesting today is that we should, in fact, encourage people to make that transition when their furnace gives out and they need it.

Would you like to elaborate more on the importance of how we can succeed by using that urgency?

The Chair: Please give a quick answer.

Brendan Haley: It's an anecdotal stat, but we think 80% of heating systems are replaced on an emergency basis. If you're not tackling that, you're not really tackling the problem.

The Chair: Thank you very much.

Finally, we will turn to Mr. Malette for five minutes, please.

Chris Malette: Thank you.

First, quickly, Mr. Dicaire, can we have you submit the study that you just referenced to the committee for our use?

Daniel Dicaire: I would be thrilled to.

Chris Malette: Thank you. We would be thrilled to receive it. I appreciate that.

My first question is for Mr. Haley.

Mr. Haley, home energy labelling is sometimes compared to nutritional labelling because it makes energy performance visible to homeowners. How widely used are home energy labelling approaches in Canada today, and what evidence do we have that they influence consumer decisions or even reduce energy consumption as a result?

● (1745)

Brendan Haley: In Canada, it's not very widespread. Under the EnerGuide system, when you had an audit done, you would get a label, and if you wanted to, you could stick it on your electric panel.

However, the key moment when you should understand the performance of a building is often when you're purchasing a building or you're purchasing a home. It should be part of the information you get. There's no province right now that is mandating that transparency when a home is sold.

Chris Malette: Is that something we could possibly consider? Would it be seen as usurping various jurisdictions?

Brendan Haley: There was a promise to do this federally. I think it was a couple of mandates ago, and I'm trying to think of when, but the federal government had trouble finding the jurisdiction to do it.

Chris Malette: Okay.

Brendan Haley: It has opted for trying to enable it by providing a common platform for things like virtual energy labels to happen. There are places I would look. It might be hard to mandate across the board, but CMHC provides mortgage insurance, and if you were to provide a mortgage insurance product, as you did that you could say that you should also have a label.

Again, through these platforms that I'm suggesting, we could also say that when someone gets a retrofit, we want to make sure there's a label and we want to make sure that label is available if someone were to purchase your house.

Chris Malette: You get one for your car.

Mr. Lockhart, what would it take to move Canada from individual retrofit projects to a permanent natural retrofit industry, in your estimation?

Kevin Lockhart: As mentioned, there are initial steps that we need to take, such as support for the deep retrofit accelerator initiative and the greener neighbourhoods pilot program, which are developing the mechanisms for how those projects get delivered but are also working through important challenges in things like panelization, the sweater around the building, that allows tenants to stay in place.

Those are good technologies. They've been proven in other countries. We have a slightly different building stock. It is not as homogenous, so demonstrating that those approaches work can help us reach scale.

The next challenge would be how we unlock private capital. How do we bring private capital into the retrofit equation? Largely, as mentioned, it is through things like PACE financing and clean tax building credits but also, and I think most importantly, by demonstrating that there is value beyond energy. It could be resilience or avoided losses. It could be the addition of things like distributed energy assets that allow buildings to participate as both generators and consumers of electricity. How do we achieve that?

Chris Malette: Mr. Lockhart, in your estimation, what is the biggest constraint currently to that strategy? Is it money, skilled labour, materials, contractor capacity, demand or a combination of the above?

Kevin Lockhart: A combination of the above is a good answer, but I will point to the regulatory path.

There is no mechanism to point to a performance standard for existing buildings. For new construction, at the time of construction we have the building code. If we had something like a building performance standard that set that threshold for performance across all the building sector, then behind that, finance, workforce, supply chain, manufacturers and more could all set a target and work through ways to meet that target.

Chris Malette: Thank you, Mr. Lockhart.

Thank you, Madam Chair.

The Chair: Thank you very much, Mr. Malette.

That concludes our time with the witnesses.

Thank you very much to all three of you for being with us this afternoon. We really appreciate it.

Because we approved the motion by Mr. Bonin today on carbon capture and underground storage, it will be pretty important for us to get the list of witnesses as soon as possible if we want to start scheduling those meetings this fall. If possible, get your witnesses to the clerks by the end of the day on Thursday of this week, which is October 8. That would at least allow them to get going with the scheduling. That's the end of the day Thursday for witnesses for CCUS, if possible. That's perfect.

● (1750)

Our next meeting is on Thursday at 3:30 p.m.

We are adjourned.

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