

HOUSE OF COMMONS CHAMBRE DES COMMUNES CANADA

44th PARLIAMENT, 1st SESSION

Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities

EVIDENCE

NUMBER 130

Tuesday, October 22, 2024



Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities

Tuesday, October 22, 2024

• (1100)

[English]

The Chair (Mr. Robert Morrissey (Egmont, Lib.)): I call this meeting to order.

Committee members, could you take your seats? We are ready to begin. The clerk has advised me that we have a quorum.

Welcome to meeting number 130 of the Standing Committee on Human Resources, Skills, Social Development and the Status of Persons with Disabilities. Today's meeting is taking place in a hybrid format, but all of our witnesses and committee members are appearing in person in the room.

I would like to advise those in the room of a couple of items.

You have the option of choosing to participate in the official language of your choice. Translation is available through the headset. I suggest you get familiar with it before we begin, because we sometimes have a few issues with being on the right channel for participating in the language of your choice. If there's an issue with translation services, please raise your hand and I will suspend while it is being corrected.

As well, in the meeting process, please direct all questions and comments through the chair and wait until I recognize you by name before commenting or taking the floor.

Those with devices, please make sure alarms are turned off before we begin, because these sounds can cause issues for the translators. As well, please refrain from tapping the boom on the mic, because, again, it causes issues for the translators. We cannot proceed without translation services.

Pursuant to Standing Order 108(2) and the motion adopted by the committee on Thursday, June 3, 2024, the committee is continuing its study on advancements in homebuilding technologies.

I would like to welcome our witnesses.

We have Jim Facette, executive director, Canadian Roofing Contractors Association; Daniel Pascoe, chief commercial officer, Flexobuild Inc.; and Marcos Silveira, director of engineering at Printerra 3D Construction Printing.

Today we're going with one two-hour panel for the full duration of the meeting. Gentlemen, you each have five minutes for your opening remarks. At around five minutes, I will ask you to wrap up your comments whenever you can.

We'll begin with Mr. Facette for five minutes.

Mr. Facette, you have the floor.

Mr. Jim Facette (Executive Director, Canadian Roofing Contractors Association): Good morning, Mr. Chair. Thank you for having me back at this committee.

I was here in the month of June. Thank you again to all the committee members for the opportunity. Thank you for being here.

This past June, I appeared here during our industry's national roofing week. Perhaps someday we can have a national trades day during roofing week.

The Canadian Roofing Contractors Association represents over 400 Canadian industrial, commercial and institutional roofing contractors, companies and needed suppliers. Some of our members do both non-residential and residential roofing and building envelope systems. In fact, many may have started in residential and moved over to non-residential.

Our member companies vary in size, from as many as 6,000 employees across North America to as few as 12. Most contracting companies would likely be classified as small to medium-sized enterprises.

The following are our comments on some industrial, commercial and institutional roofing and building envelope advancements that can be used in multi-unit residential construction and perhaps someday in single-family units.

New housing investments of any nature create communities. These communities need infrastructure services, be they schools, hospitals, recreational complexes or shopping facilities. CRCA members will be called upon to meet the demand.

There is a related challenge. In the roofing and building envelope industry, there is an acute need for people in all facets of the business. We need skilled and unskilled labour. We need superintendents, project managers, estimators, engineers and so on. This is why the industry has turned to technological advancements as one way forward.

No matter the technology, innovation or other enhancement, we still need people to build and manage the construction of the build-ings.

Perhaps two of the more known ways that are used in the advancement of industrial, commercial and institutional roofing and building envelope construction are modular construction and insulation. Each has a residential application. Often used interchangeably, prefabricated construction and modular construction are different.

Prefabricated construction involves the creation of building components in a controlled environment before they are transported for assembly.

Modular construction, a subset of prefabrication, consists of creating complete modules or units in a factory setting. These modules can include walls, floors, ceilings and integrated systems, which form self-contained units.

The ICI construction modular systems use integrated components that include preassembled units that integrate insulation, membranes and structural elements. This has the potential to enhance overall performance and ease of installation.

Use of modular systems has the potential to speed up construction. Given that it is in a controlled environment, there are likely to be quality control improvements. There are many examples, but I'll only look at one because of time constraints.

The Hive in Vancouver, British Columbia, is a mixed-use development featuring modular construction for both residential and commercial spaces, with an emphasis on sustainable building practices. This project includes roofing systems that enhance energy efficiency, and the design facilitated rapid construction. It is constructed with advanced mass timber systems using prefabricated cross-laminated timber panels—CLT in the industry—and gluelaminated timber columns, bracing and beams.

When it comes to insulation systems, there is something called "continuous insulation" systems. These are wall assemblies where insulation is applied continuously across all structural elements of a building's exterior without thermal bridging. This is not the time for a class on thermal bridging. However, I will say that thermal bridging refers to the transfer of heat through conductive materials with insulated areas, leading to energy loss in the winter and heat gain in the summer.

One application for continuous use in systems in commercial and residential is exterior foam board. These attach directly to the exterior of the sheathing or framing. Such systems provide higher energy efficiency ratings. Given the limited time, I will say there are many examples of technological advancement in construction that will lead to greater efficiencies and faster outcomes.

However, technology alone will not resolve the current housing supply issue, and not all technological advancements are used on a mass scale to make a significant impact.

I said this in June and I say it often: We should all encourage our children, grandchildren or anyone else for that matter to pursue a career in a trade. We are all touched in some way by the current housing situation in Canada. The CRCA does not see a one-sizefits-all solution going forward. The housing crisis will not be resolved overnight. It's going to take time. • (1105)

Our members want to see governments and industry work together to build communities Canadians want to live and thrive in.

Thank you, Mr. Chair.

The Chair: Thank you, Mr. Facette. You're right on time.

We'll now go to Mr. Pascoe for five minutes, please.

Mr. Daniel Pascoe (Chief Commercial Officer, Flexobuild Incorporated): Good morning.

My name is Daniel Pascoe. I'm the chief commercial officer and co-founder of Flexobuild Incorporated, a Canadian company based in the Niagara region of Ontario.

In response to the current housing crisis in Canada, Flexobuild has developed a practical, long-term solution for neighbourhood housing, densification and new-home developments. We saw an opportunity to create a solution whereby multi-generational families could remain close by while maintaining their independence and dignity. Many elderly couples are interested in moving into their own ADU, or accessory dwelling unit, sometimes referred to as a garden suite or a laneway house, while their younger family members reside in the main home. It's a smart use of home equity and a way to revitalise neighbourhoods that have space for these dwellings. There is also an income opportunity for homeowners. Those with under-utilized large backyards can rent their ADUs on a long-term basis, providing much-needed housing for others. This not only helps address the housing shortage, but also allows homeowners to benefit financially from their existing property.

At Flexobuild, we use a prefabricated structural steel insulatedpanel system to assemble complete homes. This includes a floor, walls and roof, with home sizes ranging from 450 square feet to 1,300 square feet as standard models. These homes can be expanded or contracted in both directions to fit specific property lines, giving homeowners total flexibility. Our product is 100% Canadiandesigned and manufactured. We contribute directly to our economy and maintain the highest standards of quality. Flexobuild homes are suitable for installation in all provinces and territories across Canada, ensuring safety and durability in all environments. Leveraging the automotive industry standard of design for manufacturing and assembly, or DFMA, not only allows us to streamline the process and deliver homes that are fast to build and scheduled for exact, on-time delivery, but also ensures consistency in the final product. Our homes feature spacious interiors with ceilings up to 12 feet, creating a sense of openness and enhancing the overall feeling of space. Despite their smaller footprint, Flexobuild homes feel airy and spacious.

The Flexobuild system is delivered flat-packed on a flatbed truck to the client's site, which is just one of the unique aspects of Flexobuild. Importantly, the installation of the home does not require road closures, and we do not impede traffic in the local area. There is no need for heavy, large cranes and lift structures. Standard hand-operated tools are the only tools required on site. A local general contractor, part of our FlexoConnect program, handles the installation of the home, including essential services such as plumbing and electrical work. In just four to five days, the exterior of the home is complete, including windows and doors, with minimal disruption to the neighbourhood. There is no heavy equipment noise, making the process seamless and neighbour friendly. Every single piece of the home can be carried through a garden gate by two people, illustrating the ease of installation.

The standard foundation option of helical screw piles allows the home to be built above ground and installed on sloped properties, without concern for the ground type. Furthermore, due to the steel exterior of the home, our homes are critter-proof, adding an extra layer of durability. The FlexoConnect member would finish the interior of the home, making it move-in ready within about four to six weeks. The entire process of delivery, installation and interior finishing takes less than two months.

While the Flexobuild process is highly efficient, many of our clients still face challenges, especially with building permit applications. Many homeowners find the process confusing and indeed overwhelming, as building regulations can vary significantly between municipalities. Each area has its own specific sets of rules and processes regarding setbacks, building height, lot coverage and the comparative size of the ADU compared to the main dwelling.

New property developers also encounter significant obstacles when looking to place multiple homes in larger communities. Changing or adjusting local zoning and obtaining approvals for larger property developments can be a very complex and costly process, making it challenging to expand these much-needed housing solutions. Flexobuild has a solution and a product to help address Canada's housing crisis with rapid, efficient and family-centred solutions. With government support and regulatory reform, we can provide faster housing for thousands of families, while supporting local tradespeople and revitalizing neighbourhoods across Canada.

Thank you for your time. My name is Daniel Pascoe, and I'll be happy to answer any questions you may have.

• (1110)

The Chair: Thank you, Mr. Pascoe.

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

Dr. Marcos Silveira (Director of Engineering, Printerra 3D Construction Printing): Good morning. Thanks for having me today to speak about the potential of additive construction, commonly known as 3-D printing, and its role as a powerful tool to help address Canada's housing crisis challenges.

My name is Marcos Silveira. I serve as a director of engineering at Printerra 3DCP. In addition to my role at Printerra, I chair the ASTM WK84415 committee, which deals with standard practice for evaluation of structural printed elements. I also contribute to the ASTM F42 ISO JG80, focused on development of standards practice for additive construction in general.

I'm also part of some committees in the U.S., such as ICC and NIST. However, it's worth mentioning that Canada has yet to establish any standard committees for additive construction.

At Printerra 3DCP we provide additive construction services, and we are proud to be part of a larger group of construction companies dedicated to innovation in this space.

Additive construction techniques are demonstrating their value globally by enabling faster construction of high-quality, cost-effective homes. In countries like the United States, Germany and the Netherlands, 3-D printing is already producing entire structural components, from foundation walls to full housing units. These printed structures are not only faster to produce but also provide unique benefits such as enhanced material efficiency, optimized design integration and reduced environmental impact, making homes more sustainable in the long term.

Research conducted in Canada, including my own work as a research fellow at the University of Windsor, published in the Canadian Journal of Civil Engineering under the title "Structural performance of large-scale 3D-printed walls subjected to axial compression load", has demonstrated the potential of additive construction in producing robust structural components. These findings also suggest that additive construction can meet and exceed both Canadian and American masonry standards, further validating its role in addressing our housing needs. This research, by the way, was part of the Leamington project that Fiona Coughlin, the CEO of Habitat for Humanity in Windsor, mentioned to you all a couple of weeks ago. However, despite these advancements, Canada still faces several roadblocks that prevent us from fully leveraging additive construction technologies. Current regulations are not designed to accommodate innovation, including additive construction, which limits our ability to apply this technology in commercial and residential projects. The above-mentioned paper suggests that 3-D printed walls can be designed to meet masonry standards. However, interpretations differ across municipalities, resulting in inconsistencies. Developing new standards and guidelines for 3-D printing construction is crucial, but the process could take seven to 10 years, far too slow to meet society's urgent needs. Immediate solutions are required to make this technology impactful and address today's challenges effectively.

A comprehensive, unified research initiative that systematically addresses critical knowledge gaps in additive construction remains absent. Current research efforts are often disconnected and not aligned with industry needs, lacking focus on practical applications that could drive the development of the industry standards and building codes. A coordinated research strategy guided by these crucial gaps is necessary to ensure that findings directly support the creation of robust standards, design guidelines and building codes. To enable the widespread adoption of 3-D printing in Canada's construction sector, it is crucial to align research, industry expertise, and the development of standards and building codes.

The accelerated retirement of skilled workers and the lack of new talent entering the trades have led to a growing gap in the available workforce. The shift toward automation in construction requires workers skilled in robotics, new materials and innovative technologies. While traditional workers are experiencing conventional methods, they need specialized training to adapt to additive construction. Investing in targeted education and training will ensure our workforce can support this technology shift.

In conclusion, 3-D printing offers a transformative solution to Canada's housing crisis by reducing costs, enhancing sustainability and speeding up construction timelines. However, to fully realize this potential, we must address several key challenges: advancing targeted research to fill gaps identified by industry players, rapidly updating building codes and standards to accommodate innovation, and investing in specialized workforce training. With these important elements in place, additive construction can reshape the housing sector and significantly contribute to meeting the growing demand for affordable housing in Canada.

• (1115)

Thank you for having me.

The Chair: Thank you so much for that.

We now have ample time for an in-depth discussion on this very important subject. We begin with Mr. Aitchison for six minutes.

Mr. Scott Aitchison (Parry Sound—Muskoka, CPC): Thanks, Mr. Chair.

Thank you to the witnesses who are all here. There are a lot of similarities but a lot of differences too. It's really interesting stuff.

I'd like to start with Mr. Pascoe. The concept of home kits, like modular construction or factory-built homes, is not a new thing in

Canada. It was done in the past—I mean, you used to be able to order your home out of the Sears catalogue—but I'm wondering whether you can speak to some of the reasons that the pre-built home, the catalogue home or that whole industry is so much smaller.

• (1120)

Mr. Daniel Pascoe: I think that, with prefabricated homes as a whole, there were many restrictions with regard to that. For one, they need to be made in a factory. There's a huge investment required for that process. They're made in traditional methods as well. We speak today about robotic 3-D printed materials, traditional wood and metal construction and so on, but it still requires a significant investment and a large factory footprint to create these homes. Don't forget, of course, that they need to be transported to the customer or client's site, which, as you know—as you see one of these massive homes being driven down the 401—has issues in itself.

Whether that's one of the reasons for the decline in that, I do not know. However, the whole purpose of, in my case, Flexobuild, is that because the whole kit is flat-packed, literally, on a flatbed trailer, that trailer can get to virtually anywhere. It requires a simple forklift to unload the panels on site, including the panels, the frame and everything you need to assemble that home, including the fasteners. That's why we went down that route. It doesn't require too much investment in the sense of building a factory, and the method of getting those homes into the backyard of a home in an established neighbourhood is very practical indeed.

Mr. Scott Aitchison: Can you speak a bit about the approvals process? You can scale up a factory to build a lot of product pretty fast, but you have to have a place for it to go. Of course, getting those sites for the building to go is a municipal approvals process. How's that going for you?

Mr. Daniel Pascoe: The building permit process is the biggest roadblock of all. I mean, even if you have clients—and when I talk about clients, predominantly I'm talking about private homeowners who have equity in their home that they're willing to borrow against—getting that building permit process under way is an extremely overwhelming and daunting task. We all assume, "Just apply for a building permit," but every single municipality has a different process. You may have a brother-in-law or someone who had a great time in Milton, Ontario, but just down the road in Burlington it's a completely different process just to start the actual permit process itself.

You also have the money involved in doing so. That's potentially restrictive, because you are wondering whether it will get approved. Every single municipality is different, as I explained briefly, with regard to the footprint of the home and to the actual property itself, or in comparison to the actual main dwelling unit. The setbacks from the fence.... You may have, in one municipality, a three-foot setback, which means that the house can start at three feet from the property line, whereas another one could have 12 feet, and those 12 feet now, behind a home, are potentially a complete waste of space, as you can imagine, unless you have a kayak to put behind there.

Mr. Scott Aitchison: Aside from these different rules about setbacks and those kinds of things, do different interpretations of building code, delays in terms of getting approvals and all of those things add to the ultimate cost of the unit?

Mr. Daniel Pascoe: Well, let's be honest: Time is money, and time is enthusiasm. You know, in January you have a person who wants to build in spring, but spring has come and gone.

Don't forget that, because every single municipality is different in its process and requirements for meeting certain local bylaws, we need to standardize, across the provinces and the country, the basic understanding of what is included. It's not only that, but we need to make sure we have enough staff at the municipal levels to handle the volume of building permits. There should be enough staff in comparison to the population—or to the expected ADU applications in my case.

Mr. Scott Aitchison: I have to think that your product would reduce the need for municipal staff for inspections. You're governed by CSA standards, as opposed to local building—

Mr. Daniel Pascoe: In actual fact, we're not a CSA standard product, because we meet what I call a "part four" of the building code; it's an engineer-stamped drawing, in fact. CSA would be more applicable to a prefabricated home built in a factory.

Mr. Scott Aitchison: Okay.

Mr. Daniel Pascoe: The simplicity of our business model is sometimes not recognized at the building permit level, because every single municipality has a different interpretation of the building code, be it the provincial one or the federal one.

• (1125)

Having regulatory reform.... As I mentioned, there's a standard set of basic rules for them to adhere to. Not only that, but time limits are put on them. If a building permit is applied for, how long does a municipality have?

Mr. Scott Aitchison: Give them hard and fast deadlines to make a decision.

Mr. Daniel Pascoe: Absolutely.

There are certain municipalities I could speak of where there's a 10-day turnaround for any application. The municipality asks the client this question. When the client answers it—normally, they have the answer immediately at hand—they have up to 10 days to respond. They take those 10 days. Why is that? Where is the digitization of building permit processes across provinces, municipalities, federal...and everything else? It's so antiquated.

Mr. Scott Aitchison: Okay.

I'm out of time. I have a lot more questions for all of you, but I'll come back to them.

Thanks.

The Chair: Thank you, Mr. Aitchison.

Mr. Coteau, you have six minutes.

Mr. Michael Coteau (Don Valley East, Lib.): Thank you, Chair.

Thank you to our guests for being here today.

This has been an interesting study for us. We've listened to many different Canadian entrepreneurs, companies and researchers regarding the different technologies they're adopting, and it's been quite fascinating.

I have a couple of questions. I'll start with Mr. Silveira.

What made you decide to invest your time in 3-D printing, and why that technology? There are so many different technologies out there. What makes that different for you? You're an academic, but you decided you're going into structural printing.

Dr. Marcos Silveira: That's a good question.

I got my training in structural engineering. When I was doing my Ph.D., I realized that, even though we have some technology available, such as artificial intelligence, design optimization and generative design.... We have all of those tools available to design our structures. However, sometimes, as designers, we are not allowed to use them. The regular building process limits our use of them to enhance or optimize the potential of those structures, because they're going to have shapes that are much more like structures that come from nature, like a tree. It's very hard for us to produce that in order to build those structures using regular systems and construction processes.

When I saw additive constructions and 3-D printing, I saw an opportunity to enhance that potential from the artificial intelligence side of things.

Mr. Michael Coteau: At the end of the day, for typical construction with concrete and other materials.... With three-D printing, of course, there's probably an efficiency piece regarding timing. Is there a difference cost-wise?

Dr. Marcos Silveira: Yes, there is a difference.

Right now, depending on the size of the project and whether you're building one home or multiple homes, it's going to vary.

Here are a few numbers. For example, for a particular Learnington project I was part of during my period at the University of Windsor, we saved time. It was cheaper than building the exact same build right beside that one. We had savings on that. Keep in mind that we were still using the current regulations, building codes and design guidelines, meaning we were still not able to use an optimization process like artificial intelligence in that application. What we foresee in the future is that, once we get specific standards and guidelines developed for this technology—we know very well, as a community, what the behaviour is of those components we will enhance that reduction potential even more. This connects with the environmental impact. When using less material, we're going to, of course, use fewer resources.

Mr. Michael Coteau: Thank you very much, Mr. Pascoe, and thank you for being here.

Did you start the company? Are you the founder as well?

Mr. Daniel Pascoe: I'm one of the founders, yes.

Mr. Michael Coteau: What got you to this point where you decided one day that you're going to switch gears and go in this direction? What was the turning point for you?

Mr. Daniel Pascoe: We discussed this among friends, of course. My co-founders are my friends. We were looking at how we could address this housing crisis. I don't mean from a business perspective, but just from an emotional aspect. Our largest inquiry base is from elderly people who live in very valuable homes in today's world. They used to be \$100,000, and now they're about \$1.5 million, or whatever it is. They're sitting on this equity. There are many methods of spending that equity or passing it down to their children. If they have a large enough backyard, they could build an ADU, as it was in our case. They can move in there, and the younger family, with grandchildren and so on, can move into the main house.

• (1130)

Mr. Michael Coteau: They're good parents.

Mr. Daniel Pascoe: Indeed. At some point, they're going to get the money.

Alternatively, of course, if they don't have a large enough backyard, they could sell their property, and their son or daughter may be able to add an ADU in their backyard. Just that emotional side of it, for me personally, I found very interesting. The speed with which we can develop empty ground to a finished building is very impressive. I'm from an engineering manufacturing background not the construction industry, I stress—so I found the whole concept to be the product. That's the result, and it's done. There are no variables there.

Mr. Michael Coteau: I noticed on the website that there was one cost for the actual kit, and one cost for the construction. Is that correct?

Mr. Daniel Pascoe: That's correct.

Mr. Michael Coteau: Do people sometimes come in and say, "We just want the kit; we're going to build it ourselves?" Is it always a package that comes together? How does that work?

Mr. Daniel Pascoe: Flexobuild just supplies the kit itself. As you said, on the website, you have the two prices there.

Mr. Michael Coteau: Right.

Mr. Daniel Pascoe: There's nothing worse than not finding prices on a website and having the daunting task of picking up the phone in this day and age. We wanted to make it as transparent as possible.

The second number there is a very good estimate of how much it would cost to employ a general contractor to install and finish the home in its entirety. No one cares how much the home kit is, because they're not construction people.

Mr. Michael Coteau: Right.

Mr. Daniel Pascoe: We want to make that as transparent as possible. When you go to buy a car, it starts off at \$45,000 and ends up at \$70,000. No, ours starts and finishes with that number, and that's the whole point behind it.

Mr. Michael Coteau: Thank you.

The Chair: Next, we have Madame Chabot, for six minutes.

[Translation]

Ms. Louise Chabot (Thérèse-De Blainville, BQ): Thank you, Mr. Chair.

Thank you to all the witnesses for being here.

Since the start of this study, we have seen that your sector is able to innovate. We know there has been a lot of innovation in the automotive sector, which is another important economic sector. Now we are seeing that in the residential, commercial and industrial construction sector.

I invited worker representatives from FTQ-Construction to appear as witnesses for this study. As you know, Quebec has its own characteristics, including the Régie du bâtiment du Québec, its building authority. The worker representatives made three very important points.

First, work has to be done with regard to skills. You talked about qualifications earlier. With your new models, including automation and robotics, there are challenges for workers. Secondly, attention has to be paid to workplace health and safety. Third, the culture or paradigm in the industry needs to change.

My question is for the three witnesses. What are the main challenges that your companies are facing with regard to the workers who contribute to construction and innovation?

[English]

Dr. Marcos Silveira: Yes, that's a good question, especially when you start to use automation in construction. A 3-D printer is an automation system. It's a system that can deploy concrete or other material, but most of the time we are working with concrete. It can deploy concrete based on your 3-D model and, of course, the closed operation doesn't require too much human interaction when you're doing the printing itself, meaning that your workers are going to be far away from the concrete deployment itself when you're printing the deployment of the concrete.

I don't have any official research data to show here, but it is expected to improve the safety of the workers by using automation, as you're keeping them a little more busy with the automation side of things, the programming of the machines and operating the machines far away from the deployment of the material itself.

• (1135)

Mr. Jim Facette: When it comes to safety, there's nothing more important in non-residential construction than the safety of the workers, period, end of story. Safety adds to the bottom line. Safety is the culture of any organization. It's exceptionally important.

When it comes to the technologies and how they impact the workers going forward, our members see technology as a tool to enhance the efficiency, not just of the construction process but also of training the people.

We are constantly looking at our training. As we know, Red Seal in Canada is the recognized trade training across Canada. Roofing is a Red Seal trade. We have two associations in Canada that train at the Red Seal level in British Columbia and New Brunswick. British Columbia's is outstanding. They do an exceptional job.

The irony is, notwithstanding the technology that we're seeing advance and push industry from our manufacturers and others, the training you can get in British Columbia to be basically what we'd call a tinsmith back in the day still exists.

There is still necessary work to be done on a roof or a wall that will require a human to do something. Are we at a place in time where maybe there will be more robotics? There's a possibility that the answer is yes. There is some work being done by a professor at the University of British Columbia who is of the opinion that robots could go on a construction site right now. I don't know about that, but having said that, we don't see an outright replacement of workers with new technologies.

We do see, as my colleague mentioned, that there will be a need for different types of training of people, absolutely, but at the end of the day, you're still going to need someone like my son, who is a superintendent with a roofing company, to coordinate in advance the people to do the work that's required.

What you don't see, when you look at a job site, are the consultants and the engineers. You don't see the superintendents. You don't see the estimating that goes on prior to the job even getting started. There are a lot of professionals who do a lot of work, and, yes, they're using technology—they use artificial intelligence to help them do their job—but at the end of the day, the chief estimator still has to take responsibility for that work. Technology will make work more efficient, but will there be an outright replacement of people? We don't see that.

[Translation]

The Chair: You have five seconds left, Ms. Chabot.

Ms. Louise Chabot: Thank you, Mr. Facette.

The Chair: Thank you, Ms. Chabot.

[English]

We'll now go to Madam Zarrillo for six minutes.

Ms. Bonita Zarrillo (Port Moody—Coquitlam, NDP): Thank you, Mr. Chair.

I certainly have some questions for the witnesses, but before I do, I just want to recognize, Mr. Chair, that we experienced an atmospheric river in B.C. this past weekend. In my community of Coquitlam, a dearly beloved elementary school teacher died. Her

home was swept away in the atmospheric river. Her name was Sonya McIntyre. I just want to recognize that today as we talk about housing and the need for safe, affordable, resilient housing.

I want to share with the panellists that, as a parliamentary committee and parliamentarians, we don't do operations. We do legislation and regulations.

I'm really interested in how the federal government can keep current and assist in getting affordable, accessible, climate-resilient housing built. I'm thinking right now specifically about remote and rural indigenous communities. We have an NDP member from Nunavut who talks a lot about the inability to get housing built quickly. I'm really interested in your knowledge, your skills and your experience around how we can access these remote communities and quickly get them housing that's going to be climate-resilient.

I'm going to ask everyone. Maybe I'll start with Mr. Pascoe, and then I'll go to Mr. Facette and then Mr. Silveira. You go to way more conferences than we do. You talk to way more people. I'm interested in what we need to know as legislators.

• (1140)

Mr. Daniel Pascoe: Speaking from my experience with Flexobuild, building in a rural community is quite straightforward for us. Getting the product there is easy in the sense that, like I said before, it's a flat-packed, "panelized" product on a flatbed truck, so you can get to the site.

Having skilled labour on site, obviously, is required. That being said, Jim mentioned the Red Seal programs, and these need to be encouraged across our country for the construction industry, because you do need to have a good skill base to assemble our homes on-site.

Getting the products to rural sites or first nations sites in the outer reaches of Canada is not problematic for us, but it does require the skill base on site there to assemble our homes.

Ms. Bonita Zarrillo: Thank you.

Maybe some investment in training and the ability to move-

Mr. Daniel Pascoe: Absolutely. That should be Canada-wide.

Ms. Bonita Zarrillo: Yes, as should be the ability to move from province to territory and territory to province.

Mr. Facette, go ahead.

Mr. Jim Facette: It's a challenge. The late Norman Schwarzkopf said that logistics win the war. The logistics of remote communities present a problem in terms of getting prefabricated materials up there. You have to do an awful lot of planning in advance. It's not that it cannot be done; it can be done, but it's all about the logistics. It depends on what you want. If you want multi-unit facilities to be built, you need to prefabricate as much as you can off-site, bring it up there and then, as my colleague to my left said, have the right people on site to assemble the units. Logistics become a challenge.

Having had a son who has worked remotely for a large multinational corporation, I know that finding people who will work in remote sites is difficult. There are younger people in construction who don't want to do it; that is the simple truth. My son did it; he loved it, and he got paid for it. He got paid handsomely for it as a young guy. I tease him a bit about making too much money at 23. However, it's the truth, so you have a challenge there.

As for things that governments can do, perhaps look at the tax structure. Are there incentives governments can offer people to work in more remote locations? Are there incentives they can offer companies to do work there? It does present its own challenges to work in the north. It's not about who's living on the land or who has it; that's not the issue at all. It's not there. It's more about the logistics and getting people to be there who want to be there. There's a lot of work to be done all across Canada, no matter where you are. It's just finding the time and giving the businesses and the people the right incentives to say, "Hey, we need you in this community to build X, Y and Z."

Ms. Bonita Zarrillo: That's interesting.

Marcos, please go ahead.

Dr. Marcos Silveira: It's good to make it clear that additive construction has a lot of applications. The application I have the most experience with is on-site printing, which means bringing the printer to the site to use local material and to use as much as you can from the local community to deliver your product. We are shipping a printer that is considerably big equipment, but it's not as large as some of the equipment. It fits inside a 20-foot shipping container, so it's not a big challenge to move this component to remote locations.

I also had the chance to work on a specific project that was accomplished in Alberta for the Siksika first nation community. The project was in a remote area more than an hour outside Calgary. We were pretty successful in accomplishing that project, because we were using local material, meaning that we were using local sand and gravel and trying as much as we could to use local Portland cement as well. Another thing we are working to reduce is the use of Portland cement, to improve the environmental efficiency of the technology.

This on-site additive construction is suitable for remote areas. In terms of what we can do to further improve the application of this technology for this specific problem that we have, that would involve the things I have already mentioned throughout my comments here.

It's pretty much a new technology. It's still new in this country. We still need to work on standards and updating building codes. That also brings attention to research, because those standards—

• (1145)

The Chair: Thank you, Madam Zarrillo and Mr. Silveira. You can continue on with that, I'm sure, with another member's question.

We'll now go to Mr. Seeback for five minutes.

Mr. Kyle Seeback (Dufferin—Caledon, CPC): All of you have talked about skilled trades, which is something I want to delve into a bit because it will, of course, affect building innovation.

I wanted to say, Mr. Facette, that my family started in the roofing business. My grandfather started a company, Seeback and Sons Roofing, in Toronto in 1935. I understand the importance of getting work like that done.

We have a trades deficit. You've all talked about it. I know that from my travel across the country. The Red Seal program is fantastic.

One of the things the government has done is to cut the apprentice completion grant. If you don't know of that, the apprentice completion grant will give you \$1,000, up to \$2,000 for every level you complete on your Red Seal as you go through it. At level one, you can get \$1,000. At the next level, you can get another \$1,000. It's a great incentive for keeping people in the skilled trades and drawing people into skilled trades.

Do you think this cut is going to help recruit people into the trades or help with the trades deficit, or is this going to be a problem? Any one of you can answer that.

Mr. Jim Facette: I'll go first, Mr. Chair.

Anything that can be done to encourage people into a trade is welcome. Cutting something could have the opposite effect.

That said, it's not a simple equation. If we go back in time to the 1950s, we had a large number of people come from Europe post World War II. My in-laws were part of that. They had a trade, although not construction-related.

Society valued trades in the bigger picture. I question whether that value is there today in society, and that's a bigger problem. When I suggested encouraging your children, your grandchildren and your friends to go into construction—I said that to the Minister of Immigration in a meeting in October of last year—I meant it. The old expression is, "Charity begins at home." That's a small way to encourage your own family to at least consider it.

As I mentioned earlier, there are levers that the federal government has to encourage people to look at a trade in construction, the tax system being one of them, and then encouraging provinces and municipalities to get rid of some of the regulations that Daniel talked about a little earlier. Yes, I think cutting any kind of incentive could diminish the ability of people to pursue a trade, but it's really important that everybody really value their role in society. It's changing in certain pockets, but it's not changing enough.

Thank you, Mr. Chair.

Mr. Kyle Seeback: My family has gone full circle. My grandfather was a carpenter. My dad became a lawyer. I became a lawyer. My son is now a carpenter's apprentice, so we've gone full circle. We're certainly trying to do our part.

Innovation's great, but input costs are also a problem. We have an affordability problem with respect to homes and building homes. I think everyone would agree with me on that. Input costs are a big factor. I did my own little investigation, and Canada produces 13 million tonnes of cement. Cement is obviously used in construction. It's 0.6 tonnes of CO2 that's emitted for every tonne of cement. At \$65 per tonne, the carbon tax works out to be half a billion dollars that's added to the cost of cement.

Would you agree with me that making inputs in the construction industry more expensive increases the affordability challenge that Canadians have of buying homes?

Mr. Daniel Pascoe: Obviously, any increased tax or any other levy that may be put on construction materials or labour is not help-ful. That's obvious.

Now, the carbon tax is a whole new subject, which I'm certainly not an expert on. If you say to me that because of this, it's now more expensive and it's now going to get passed down to the homeowner, who now has to borrow more money, perhaps at a higher interest rate than they're used to, and so on and so forth, it's obviously not going to be helpful in increasing our houses on the ground program.

You mentioned the removal of the \$1,000 incentive for an apprentice. I would look at this from a different perspective, actually. That \$1,000, obviously, is a nice gift to give to an apprentice. Would that be enough to entice him to go into the trades rather than into IT? I wouldn't think so.

What you may want to consider—again, it's a much bigger subject to discuss—is where the incentive is for the employer, the trades guy, the existing tradesperson, the existing Red Seal tradesperson. What is his incentive? He's offering his time to train up a young man or woman to become an apprentice. Truly, where is his incentive?

We have many tradespeople retiring and no one coming up from behind. Where is their incentive to bring on new apprentices? They're being paid minimum wage now. Next year, it will be \$25 or whatever it might be, but that apprentice may leave at any given time. They have a five-year apprenticeship of 9,000 hours or whatever it might be, but in year three, they may go. That's a big problem.

• (1150)

The Chair: Thank you, Mr. Seeback.

We'll now move to Mr. Van Bynen for five minutes.

Mr. Tony Van Bynen (Newmarket—Aurora, Lib.): Thank you very much, Mr. Chair.

My first question will be for Mr. Silveira.

I had the opportunity to visit your site at York University and was quite impressed with the progress you're making.

You mentioned a project that you had in Learnington. Can you tell me more about that project? Was it a group of single-family dwellings? Was it a multiple-dwelling unit?

Dr. Marcos Silveira: It's important to mention that my involvement in that project was through my employment with the university when I was a research associate there. It has nothing to do with my current employment right now.

That was a one-storey building for four tiny units, and that building is being used by an institution called The Bridge. They deal with youth in need in Learnington, Ontario. It's a residential building, but it is being used by that institution right now.

Mr. Tony Van Bynen: Are you doing multiple storeys with that technique?

Dr. Marcos Silveira: Yes. I had involvement in multiple-storey projects as well. The maximum that we accomplished here in Canada was in Kingston, Ontario. It was a three-storey building. We printed the basement, the main floor and part of the second floor.

The technology right now.... There are a few printers available, and we have two different printers. One of them is able to print up to three storeys without needing to move the printer up. With just one position, you can print three storeys.

The other printer is a bit more flexible. We can print multiple storeys by moving the printer up. It's a very light printer. It's 2,500 kilograms. With a small crane, you can bring the printer to the next floor.

Mr. Tony Van Bynen: You mentioned earlier that to realize the full potential of this, and I think other innovation technology, we need to address some key issues.

There's advanced, targeted research to fill gaps identified by industry players and rapidly updating building codes. We keep hearing this over and over again. You've said that time is money. There are delays. It takes up to seven years.

How do we crack that logjam?

Dr. Marcos Silveira: One of the good things about technology is that you can build faster. However, when you are applying for the building permits, for example, it's going to be a longer process, because the current building code.... For example, the Ontario building code doesn't have any specific guidelines for innovative solutions, so you fall under, for example, the alternative solutions chapter. If you have the chance to look over that chapter, you're going to see that it's a one-page chapter that gives the building official the ability to require whatever they want to have from you in order to approve that project. That means that in most of the cases they're going to be asking for—requiring—tests like fire tests, fire-rating tests, some structural testing, some thermal testing.

Those are just the tests on day one. It's going to take more than a year or two for you to get that testing done. Across municipalities, this is going to change, because if you go to a different building official, they can require a different thing.

I think number one would be to have the building code allow for innovation that has already been proved through research. If you have research data that can back up your claims, you potentially don't need to redo all that testing. The second thing would be to develop the standards specifically for additive construction. That technology has been shown to be a good technology to produce faster and more efficient structural components.

• (1155)

Mr. Tony Van Bynen: I have only one more minute, but I'd like to ask one question of all three of you.

Can you give me an example of a municipality that has an expedited and efficient process for the approval of buildings that we might invite here to give us examples of breaking the logjam of having the building code and development approvals?

Mr. Daniel Pascoe: I could actually speak to that.

In fact, our show home for Flexobuild is in Pelham, Ontario, just south of St. Catharines. In actual fact, that building permit, I believe, was approved in less than eight days.

Mr. Jim Facette: An example would be the city of Vancouver.

Dr. Marcos Silveira: I would add Leamington, Ontario.

Mr. Tony Van Bynen: Okay.

Do I still have some time?

The Chair: You did have two seconds, but it's gone.

Mr. Tony Van Bynen: Thank you.

The Chair: Thank you, Mr. Van Bynen.

[Translation]

Ms. Chabot, you have the floor for two and a half minutes.

Ms. Louise Chabot: I will let Mr. Pascoe answer the question I asked everyone earlier.

Workers have told us that all innovative processes have to take workers into consideration because they are also part of the solution. They have to be involved up front. They said that sometimes great plans are presented, but the workers have not been included in the process.

What role do you see for workers in the innovative processes which are being implemented and which we commend?

[English]

Mr. Daniel Pascoe: Thank you.

You were mentioning before the safety-on-site aspect, I believe. Obviously, workers' safety is of paramount importance to everyone in the construction industry.

Workers play a tremendous role. We have had automation in factories for some years now. In the construction industry, any prefabricated product—be it the whole house itself or elements of that house—in a factory environment.... Safety procedures are a lot easier to control, because you have machine guarding, automation and so on. You have a known entity being done, whereas on a construction site, as you know, there are many variables that could be caused by simple things such as the weather.

In our particular case, which I can speak to with authority, we do not have any high work environments. If we have a two-storey home, it's only two storeys. We don't use heavy equipment per se, so that in itself is very safety-driven. The power tools we use are handheld, battery-powered tools. There's no danger in that regard with common sense and, obviously, fundamental training.

In the prefabricated world at the factory level, I think safety is a lot easier to control, as I explained. Construction sites always have an element of risk. Proper safety training and adherence to those standards are of paramount importance, and that starts from the foreman down, as we all know.

[Translation]

Ms. Louise Chabot: What is the percentage of women in your sector?

[English]

Mr. Daniel Pascoe: I don't know the exact number, but I would estimate around 10%, 15% or maybe even 20%. When you go to a trade school now, there are a lot more women involved in the trades, which is obviously fantastic. We should be encouraging all genders to participate in a trade program.

As I explained before, I think incentives can be given to the students themselves, but I think more incentives should be given to the final employer, the Red Seal tradesperson. I think that would be a much more effective method of spending money to entice trades to become more spoken about around a dinner table.

The Chair: We'll go to Ms. Zarrillo for two and a half minutes.

Ms. Bonita Zarrillo: I'm going to ask this of Mr. Facette and then Mr. Silveira.

The Bank of Canada has been really bothering me for a couple of years. I know that tomorrow we're going to have an announcement on the interest rate. There are many discussions that the Bank of Canada went too far on the raising of interest rates.

What really has me bothered is the mandate of the Bank of Canada, which is part of the government's jurisdiction. The finance minister sits on the governance model for the Bank of Canada. We're continually told that the Bank of Canada has one tool, and it's keeping inflation stable. That's it. The Bank of Canada Act does not talk about people and the impact on people. It's to protect Canada as a state. Unfortunately, the Governor of the Bank of Canada refused two invitations to this committee. He didn't come and doesn't think that housing has anything to do with him. I would like to see some modernization.

You mentioned, Mr. Facette, that the workforce is modernizing. It has a different thought process and a different culture. I really think the Bank of Canada needs to do the same. I'd love to hear your thoughts on what the Bank of Canada should be measuring in the modern economy and how it can help get homes built.

• (1200)

Mr. Jim Facette: That's a loaded question.

I can tell you that, from a monetary perspective, the Bank of Canada's decisions likely have an impact on private investment in the longer term. There is uncertainty in the marketplace right now. I have a board member whose company has had three jobs delayed due to the uncertainty.

In terms of this mandate, Mr. Chair, through you to the honourable member, to be honest with you, this is probably outside of my scope. There are many other jurisdictions that can look at that question more carefully. There are pros and cons to having the Bank of Canada expand its mandate, and it's out of my purview, Mr. Chair.

Ms. Bonita Zarrillo: Mr. Silveira, do you have any comments about that?

Dr. Marcos Silveira: I'll say the same; it's out of my scope.

Ms. Bonita Zarrillo: Mr. Pascoe, do you have any comments to share?

Mr. Daniel Pascoe: I'll join that train, I think.

Obviously, money is everything in this day and age. The Bank of Canada has been very influential on private investment over the last five or six years, as we know, and we're all anticipating that tomorrow will be a big news day.

Ms. Bonita Zarrillo: What would an announcement of a significant drop tomorrow do to the industry for house building?

Mr. Daniel Pascoe: For private clients—not talking about general contractors, but obviously they're included as well—if their interest rate drops down by half a per cent or three-quarters of a per cent, whatever it might be, that is real money in the back pocket. That is money they can now invest in their home and the future, for themselves or their children.

For property developers, it's enormous. There are millions of dollars that a property developer has to put up front many years from completion before he gets that money back in home sales.

Bank of Canada interest rates are fundamental to what's happening in the building industry, in my humble opinion.

The Chair: Thank you, Ms. Zarrillo.

Ms. Falk, go ahead for five minutes.

Mrs. Rosemarie Falk (Battlefords—Lloydminster, CPC): Thank you very much, Chair.

Thank you to the witnesses for being here today.

Mr. Silveira, I'd like to start with you. You made a comment regarding a project that you were able to be a part of, an hour outside of Calgary.

That's not remote by any means. That might be rural, which is very different from remote.

I come from rural Saskatchewan, a landlocked province. Everything has to come by truck, by train or by air. There are communities in my province, some first nations communities in particular, where the only way you have access to them is by plane. That's the only way. There are no major runways, so planes are very small in order to get things up there. There's even a point where you're going so far up north that you don't have paved roads. If you're driving, you're driving on dirt roads.

Are any of you able to provide services to remote communities, those that are fly-in? Are you able to take your materials, plop them on a plane and send them?

Mr. Jim Facette: I'll take that.

The short answer is yes. The non-residential construction world has experience doing it.

Mrs. Rosemarie Falk: Does "non-residential" mean "commercial"?

Mr. Jim Facette: That's right.

Our industry has a lot of experience in doing that already. If you look at the number of remote sites, as I said earlier.... I'll reference my son for a third time. He worked an hour north of Kapuskasing, and it was fly and drive. They can produce local materials on site, but logistics are a major part of it, as you referenced. They're critical.

Regardless of whether you're building homes or what you're doing, you need to plan in advance and do as much as you can in fabrication in advance. If you have to fly things in on smaller runways.... I do have a bit of an aviation background. There are some aircraft that can land and take off in some shorter areas, but road access is always preferred.

If you look at the ring of fire project in the province of Ontario, the first thing they're doing is they're building a \$1-billion road to alleviate that very infrastructure need of having to fly things in to remote areas and engage with the local first nations communities.

We do have experience doing it. We do it now. We can build those multi-unit facilities that are required on-site, but it really does boil down to logistics.

• (1205)

Mrs. Rosemarie Falk: Yes.

Dr. Marcos Silveira: I can also comment on that.

You're right. We got there by road, which, by the way, was a decent road. It was not a back road—

Mrs. Rosemarie Falk: It was paved.

Dr. Marcos Silveira: Yes, thanks for the correction.

Our technology comes down to three main components: We have the machine, the robot; we have the materials; and we also have the structural engineering design, the final product itself. When it comes to the machine, we have a machine that is very flexible. It goes through a regular doorway. The weight is 2,500 kilograms, so that can go into a small plane for sure.

To have a solid response for you in terms of whether it's possible to build with this technology in a remote area, it's going to depend on the materials that we have available in that remote area. Again, we want to be using as much as we can from local materials, meaning sand and gravel—

Mrs. Rosemarie Falk: I just want to challenge you guys to not leave out the rural and remote places. When you're inventing and being the innovators that I believe a lot of businesses are, I challenge you to not forget about those communities that are rural and sometimes far up north. I think that's very important.

I just want to follow up quickly, because I don't have a lot of time. We know that the carbon tax costs...on everything. We know that. That's something that everybody knows, especially Canadians. Therefore, I'm wondering, how does the added transportation cost impact the interests of Canadians or business in taking up these projects? You mentioned commercial, Mr. Facette. Is that a deterrent for people to invest in this?

Mr. Jim Facette: It can be. When someone looks at investing in a construction project, they're going to look at all of the input costs, and they'll make the determination on whether it's worth it or not. To the extent that you're able to lower those input costs, it increases the feasibility of the project's getting done. It's as simple as that. It just boils down to the math, so the short answer is yes.

Mrs. Rosemarie Falk: Okay, thank you.

The Chair: Thank you, Ms. Falk.

We'll probably get back to that.

We'll now go to Mr. Collins for five minutes.

Mr. Collins.

Mr. Chad Collins (Hamilton East—Stoney Creek, Lib.): Yes, thanks, Mr. Chair.

Thanks to the witnesses for your attendance here today.

I'll take us back to the study, which is housing innovation and how the government can assist both public and private partners with incentivizing new supply and getting us the units that we need to get us out of this housing crisis.

Mr. Pascoe, I'll start with you.

I've always found, through my time representing my constituents at two levels of government, that when all three levels of government work together, we find a greater success in whatever problem we're trying to tackle. In this instance, it's housing. We could certainly sit around the table today and call out municipalities and mayors across the country who we feel maybe aren't doing their part. However, that doesn't get us any further along the way in terms of getting us new supply and driving innovation in the housing sector.

Our government's taken a bit of a different approach. We created the housing accelerator fund, which speaks to many of the issues that you raised in terms of the delays there can be in the municipal process. We don't control municipalities. They fall under the jurisdiction of the provincial and territorial governments. However, we do play a role in the housing sector.

The housing accelerator fund seeks to incentivize municipalities to change the way they do business in terms of possibly creating a red-carpet process to incentivize new supply.

I know that in your area of the country, the City of St. Catharines has created a grant process for accessory dwelling units. They're using federal resources to provide those grants to your customers.

How do programs like that, along with those grants and the incentives, assist in terms of driving customers through your facility or to your door, and also how do they help in terms of driving innovation in your plant and in the industry?

• (1210)

Mr. Daniel Pascoe: Certainly, we've had direct involvement in the housing accelerator fund, in the sense that St. Catharines was awarded some \$24 million, I believe—don't quote me on that—to offer homeowners who want to put an ADU in their backyard up to \$80,000. This is tremendous. It's absolutely fantastic. We're quite close to St. Catharines. Since then, we've had numerous inquiries. We're very active right now in the building process for those ADUs.

However, if I had to criticize the fund—this is based on my personal knowledge—St. Catharines has \$80,000 to give out until the pot is empty. That is fine. It has to empty sooner or later. It has to end. However, neighbouring municipalities like Thorold, Pelham and so on get nothing. Rather than giving it to an individual municipality, I think a regional approach could possibly be much more effective. I can say that Thorold, which is quite near St. Catharines, has a much higher ADU uptake per head of population than St. Catharines, but they receive nothing.

Although the housing accelerator fund is excellent, obviously, a better understanding of how it could be distributed would certainly be more effective.

Mr. Chad Collins: That's a great recommendation for the study.

There is some question, of course, about next year, because different governments have different priorities. There'll be some question as to whether programs like that should stick around.

Can you provide recommendations on how the federal government can further incentivize or expand upon, as you just referenced, the current programs we have?

Mr. Daniel Pascoe: Absolutely.

I keep coming back to tradespeople. You know, we can give out money left, right and centre, to be perfectly honest. "Here's all the money in the world." However, if you have no one to build them, that's when it stops. Again, the incentivization of apprentices in the Red Seal trades, or of the employers of those apprentices, is something that should be discussed at some level to at least acknowledge it is problematic.

It's not because people don't want to go into the trades. It's because the jobs may not be there when they finish their training.

Mr. Chad Collins: Mr. Silveira, I attended York University to see what you have, in terms of the program you offer and some of the innovation you're driving on site.

One of the questions I have is this: How do we bridge the gap between the innovation you're driving—your process—and the traditional homebuilders who have their own blueprint that's worked for many decades? Some of those processes haven't changed for almost 100 years. They're doing things today the same way they may have done them decades ago.

How do you introduce your innovation to the industry, when some might feel a bit of discomfort adopting that as the new way of doing business in their realm, municipality or part of the country?

Dr. Marcos Silveira: It comes down to two components: training and research.

In order to better know about the technology, we have to invest in research. We need to have a guided research plan in order to identify the gaps we have from the industry side of things. In the industry, we're going to see exactly what the gaps are. That covers research. Then, the research data are going to inform the development of standards, which is a very important component for the large-scale adoption of additive construction as a whole.

The second and probably most important one is training. You need to have the available workforce. I already said that the available workforce is hard to find. Everyone agrees on that, at least most of us here. The available workforce is already decreasing. Training the tradespeople who are already in the industry, especially the concrete industry, for example, is going to be much easier than training people from outside the industry. This applies to the robotics industry as well. The auto industry uses a lot of robots already, so getting those people and bringing them into construction is something we also see as possible.

• (1215)

The Chair: Thank you, Mr. Collins.

Mrs. Gray.

Mrs. Tracy Gray (Kelowna—Lake Country, CPC): Thank you, Mr. Chair.

Thank you to all the witnesses for being here today.

The Canadian Roofing Contractors Association's 2024-27 strategic plan includes a goal to "be the change" by being proactive and leading. This study is looking at innovation in homebuilding and how government red tape in municipalities or federal agencies like the CMHC is undermining it. Are there bureaucratic regulatory requirements that roofers encounter that are getting in the way of homebuilding?

Mr. Jim Facette: I don't know if there are necessarily federal ones getting in the way of building homes across the board.

To the extent that federal policy can link what it does right down to the municipal level, to say, "Hey we have this. We want to give it to you. However, we need to see something," it might be helpful. We're already seeing linking funding to outcomes in current government policy. That might be helpful.

The other thing it can do is.... My colleague Daniel mentioned incentivizing employers to take on apprentices, because it is a major commitment for an employer to take on an apprentice. If there's something the feds can do in that regard, it would be helpful.

I think the greatest impediment to growing one's business is, in fact, the availability of the people right now, even on the immigration side. I know that immigration right now is getting a bit of a rough ride, but when it comes to roofing and building envelope construction, these are good-paying jobs. They pay between \$35 and \$75 an hour. These are not low-paying jobs at all.

Making sure that roofing and building envelopes, from a federal government immigration policy perspective, is carved out from any kind of perception that it's low-wage would be helpful.

Mrs. Tracy Gray: We've heard other testimony that the capital gains tax increase is causing investment, in particular in innovation, to leave Canada. In a press conference in June, the finance minister said the Liberal capital gains tax hike is going to increase the number of homes being built in Canada.

My question is whether you think the capital gains tax hike will increase innovation and homebuilding.

I'll go first to Mr. Pascoe.

Mr. Daniel Pascoe: I think I said it earlier, but any tax, levy or charge put upon any sort of homebuilding entity is a negative result.

I'm not an expert on tax law or what you just mentioned—I'm sorry—but anything that is prohibitive against homebuilding is not a good thing. I think raising taxes, charges or levies is obviously a negative.

Mrs. Tracy Gray: Thank you.

Mr. Facette.

Mr. Jim Facette: Somebody must have been at my board meeting last week, because our board talked about this then.

To quickly answer your question, no. It's having an effect that I don't think was intended at all.

Dr. Marcos Silveira: No comment. **Mrs. Tracy Gray:** Okay. Thank you.

We've heard other testimony that Canadian home builders are now moving to the U.S. and are actually building the same number of homes, either in Canada or in the U.S., due to red tape, bureaucracy and increasing taxes and costs in Canada.

Have you heard about this, and why would building in the U.S., for example, be more favourable than in Canada?

Mr. Pascoe, do you have any comments?

Mr. Daniel Pascoe: I personally haven't heard that story, to be perfectly honest. I can only speculate as to why they would do that otherwise.

Mrs. Tracy Gray: Mr. Facette.

Mr. Jim Facette: I've heard it directly, including from my son, who said, "If I get a job offer in the U.S., Dad, I'm probably not coming back."

Mrs. Tracy Gray: Wow.

Mr. Jim Facette: It's very real. A lot of it has to do with the ability to afford to buy a home themselves. From a personal perspective, there are opportunities down in the United States and the taxes they have to pay here versus there.... It's very real.

I've heard it directly, and I can tell you from first-hand information that they are going.

Mrs. Tracy Gray: Mr. Silveira.

Dr. Marcos Silveira: Within our industry, of course.... I mentioned at the beginning that I'm part of various committees and we are developing standards and doing research across the border. There is a lot more development on the other side of the border.

I cannot say exactly why, but in most cases, they have more abilities to.... For example, when it comes to building permit applications, they have the ability to use innovation in a faster way without going through long permit processes, because they're using something that is still not regulated. That is needed for the technology to develop.

• (1220)

Mrs. Tracy Gray: It's less red tape and bureaucracy.

Dr. Marcos Silveira: Yes.

Mrs. Tracy Gray: Thank you.

The Chair: Thank you, Mrs. Gray.

Mr. Long.

Mrs. Tracy Gray: I'm sorry. I have a point of order, Mr. Chair. For clarification, this was five minutes. Is that correct? Yes. Okay.

The Chair: Yes, but because the other one went over a little.... You're correct, Mrs. Gray.

Mr. Long, you have five minutes.

Mr. Wayne Long (Saint John—Rothesay, Lib.): Thank you, Chair.

Good afternoon, colleagues.

Thank you to our witnesses.

The New Brunswick Roofing Contractors Association is in my riding of Saint John—Rothesay, and Ronnie Hutton—I assume, Mr. Facette, that you know Ronnie—is a good friend of mine. I got to go there a few years back, probably three years ago now, and tour the facility on the Golden Mile with Ronnie. I was blown away by what I saw with the training. To your point, the fact that roofers can be Red Seals.... He was telling me that roofers can make over \$100,000 now, and I said, "You're kidding me." I was totally impressed with it.

In a previous life, when I was a student, I worked at a home renovation place, like the past Home Depot, and I sold roofing. Obviously, in those days, roofing was basically three-in-one shingles and tar paper roofing. I'm dating myself. Now, you're progressing, and you still see asphalt roofing, but you see metal roofing and rubber roofing.

I know I've seen green-roof initiatives and cool-roof initiatives. Green-roof initiatives, I think, weren't spearheaded in the province of Ontario, but they were about controlling rainwater runoff. Cool roofs, obviously, would help reduce carbon, because the houses wouldn't have to work so hard to cool down. Can you just give us your comments on the leading innovative technology you're seeing and comment on green roof and cool roof?

Mr. Jim Facette: Thank you for the question.

I'm glad to hear that you visited the New Brunswick facility. The trainer there is Edgar. He is one of the most sought-after or the sought-after trainer for Red Seal in the province of New Brunswick. The man's outstanding. I met him myself. He's absolutely a super person.

When it comes to different roofing systems—cool roofs or blue roofs are what they're also referred to as—and green-roof systems, there is a company in Toronto called LiveRoof that does a lot of that kind of work. We're seeing more and more of it on commercial roofing. On residential, you're getting the solar panels and whatnot that get done. There is that kind of work that's out there, and the whole idea is that it's about energy efficiency and about dealing with the water when it comes to—

Mr. Wayne Long: Is the Province of Ontario incentivizing builders to use green roofs and cool roofs? Is it proper...?

Mr. Jim Facette: I honestly don't know. I think what we are seeing—and we spoke this afternoon about it—is the building code. There is a national effort to harmonize the national building code. That's hopefully going to be done by 2030. We'll see if that actually happens.

Right now, the provinces adopt the building code, and it has no enforceability at the national level from the National Research Council. What we see being put into the building code is more of this kind of thing going forward.

We are seeing those kinds of incentives, and we're also seeing private owners who want to make use of new technologies to reduce their energy costs and to use the rain runoff, to get it away from the roof—

Mr. Wayne Long: Yes. That's fascinating.

Mr. Jim Facette: —because I can tell you that with the rain that took place in the course of the weekend, my son was in up to a foot of water on a roof this weekend. He got awfully wet. He was dealing with it in a very real way, so I can attest to that for sure.

There are some incentives, but it's really privately driven...what's out there. Yes, green roofs are there. They're viable. The cool roof is around, but I don't know that we're seeing the cool roofs necessarily, yet, to the extent that maybe some people would like.

• (1225)

Mr. Wayne Long: Thank you.

I'm going to share what time I have left with MP Fragiskatos.

Thank you.

Mr. Peter Fragiskatos (London North Centre, Lib.): Thank you.

Chair, it's always a learning opportunity to hear what Wayne Long has done in his life. He owned a hockey team, a fishery and who knows what? The list continues with roofing now.

In any case, thank you very much to the witnesses for being here.

Mr. Silveira, I'll begin with you. I'm interested in the international context and what you know about what's happening abroad with respect to the issues that we've touched on here today. Are there other countries that have put something in place, whether it's incentives or other policies, to really propel this kind of building forward?

Dr. Marcos Silveira: It's specifically about these technologies when it comes to, for example, standards development—is that right?

I can say a bit about the United States, because I'm part of some of the committees there. NIST, the National Institute for Standards and Technology, put together a committee. They are putting together academia, researchers and industry—all of the players around this industry—to develop these standards, because you have multiple levels of these standards.

For example, when it comes to testing, even here in Canada we still use ASTMs. That's the American Society for Testing Materials. Over there, of course, they use ASTMs. When it comes to design guidelines—for example, structural design—you're going to be using CSAs. There's the CSA for concrete and the CSA for steel and all of that.

In the States, they created this group and they identified the gaps that needed to be filled. They have resources being put towards research, which is informing the standards development. They're starting from ASTMs and moving up for the ACI, the ICC and all of those.

Mr. Peter Fragiskatos: Thank you very much.

The Chair: Thank you.

[Translation]

Ms. Chabot, you now have the floor for three minutes.

Ms. Louise Chabot: I have the floor for three minutes, Mr. Chair. Is that correct?

[English]

The Chair: I'll go to six minutes with you too.

[Translation]

Ms. Louise Chabot: I would like to continue on the same topic.

Mr. Silveira, I don't know much about this, but I would imagine that the standards have to change more often in response to changes in the industry. As you said, the current standards may no longer be in effect in 15 years.

In terms of innovation, how can we make sure that research and development support you? What steps should we take to ensure that standards are updated regularly?

[English]

Dr. Marcos Silveira: Usually those standards committees are continuous, right? They start before the publication of the first version of the standards and they are going to be in place until that standard is still enforceable. Then, once we find that another version of the standard is needed, we come up with a new publication. That goes on usually on a three-year basis, or maybe five years, depending on the type of technology.

For example, reinforced concrete structures have been around for a little while. That standard is not updated that often. I wouldn't say that there's not much progress, but the progress is not as much as it is in new industries like additive construction, for example.

The process would be that you do your research, and your research findings are going to form the first version of the standard. Then you keep updating that based on ongoing research.

I hope that answers it.

[Translation]

Ms. Louise Chabot: In Canada, is the process for updating standards satisfactory? Could it be improved? Has your sector been consulted on that?

[English]

Dr. Marcos Silveira: Right now, we don't have any committee being undertaken here in Canada—for example, at the CSA level or the NBCC or OBC levels. My short answer is no.

• (1230)

[Translation]

Ms. Louise Chabot: If you have any recommendations for us in that regard, you may submit them to us.

HUMA-130

In your opinion, is there enough research and development?

If the federal government wants to focus on climate change and the environment, among other issues, it should also innovate in the residential construction industry. Any measures taken must address environmental concerns.

Mr. Facette and Mr. Silveira, as an employer and as to calls for tenders, does Canada make sufficient use of the type of industry that you support?

[English]

The Chair: Give a short answer, please.

Dr. Marcos Silveira: In terms of R and D effort, yes, we have a large R and D effort in place. The problem is that the research is being conducted independently, meaning that every single researcher is going to have a different approach or is going to be looking at a different problem. Sometimes we miss some gaps; some of the gaps are not being covered, and some of the gaps are being covered two or three times.

I think what we are missing for the rapid development of this technology, for example, is a unified research initiative. For example, as I responded to the other member, NIST in the States put together this committee that they are using to identify the gaps. Based on those gaps, they are creating research efforts in order to solve a real problem.

The Chair: Thank you, Madame Chabot.

Ms. Zarrillo, you have three minutes.

Ms. Bonita Zarrillo: Thank you, Mr. Chair.

I just want to start by saying today that I was reminded of something when you were talking about your son potentially going down to the States. It reminded me of when I lived in Texas. When my child went into kindergarten, she didn't go to play dates alone; I always went with her. When she went to grade one, she went on play dates alone, and I was reminded, almost on her third play date, that most people have a gun in their home, and they're not necessarily locked up all the time.

I had to start thinking about, if I sent my daughter to a play date, whether that family locked up their guns. I used to think about that when I went to work, too. As a Canadian, it never even crossed my mind that I was going to the office every day and a disproportionate number of folks had a gun either in their purse or on their person. When I decided to have another child, I came back to Canada, because it's just too expensive; I couldn't even have a child. There are just so many other choices that come along with living in the United States.

I also hear a lot about research and that the Canadian government does not invest in research. We know that, for Ph.D.s, they haven't been investing. We talk about productivity in Canada, and we know that Canadian companies skim all of their profits and don't reinvest to the same degree in research and development, in capital investments. American companies that come up here want to make sure their Canadian component is not making money so they don't need to pay taxes. I want to go back to what we can do federally on research and development to get research done here, to become centres of excellence on innovation. What can be done?

Dr. Marcos Silveira: I think there's a lot to be done. Specifically, one of the problems that we are running into right now, for example, in engineering is finding a graduate student locally. It's very difficult, because the wage that we pay a Ph.D. student is not attractive at all. Most of them come from overseas. I'm an example of that.

Right now, with the immigration change, this is making our life as a company that sponsors research throughout the universities, throughout NSERC grants, for example.... We are having a hard time getting those students here, because you don't have them available in the country, and bringing them from overseas is kind of a challenge right now.

Ms. Bonita Zarrillo: What do we need to do as a federal government?

Dr. Marcos Silveira: I think wages need to be reviewed, that's for sure, because it's not competitive at all, especially in engineering, because, as an engineer, you're going to have access to better wages as opposed to going to a Ph.D. program, which is a four-year program after you've already accomplish your master's. You are already at least 26 or 27 years old and, in order to get your Ph.D., you need to go over that low wage kind of thing. That's one thing.

On the research side of things, I think, for us as a company, we lack having access to larger grants that are going to enable us to perform those research programs in order to use those data for the industry, not just for us as a company but also to inform the community, as a whole, by using those data, those results, to inform the standards that are going to look after the safety and quality of the products that we deliver to everyone.

• (1235)

The Chair: Thank you, Madam Zarrillo.

I'd like a little direction from the committee. We have about 25 minutes on the clock. Does the committee want to continue?

We're going to go with Mr. Aitchison, so I'll follow the same slot. If anybody doesn't want to participate, they can pass their time to somebody else, so keep that in mind.

We'll begin.

Mr. Michael Coteau: Are we agreeing that we get one slot each and one more round? Is that fair?

The Chair: If that's what you want, that's okay. Done.

Mr. Aitchison, you have six minutes.

Mr. Scott Aitchison: Thanks, Mr. Chair.

Again, thanks to everyone for being here. We've heard a lot of interesting stuff.

I want to hone in on the approvals process, not so much at the municipal level but at the federal level, and some of the innovations that are occurring.

I'm sure you're all familiar with Kevin Lee, the CEO of the Canadian Home Builders' Association. When he was here, he said: We need the provinces, with the support of the federal government, to step in and create harmonization at the municipal level. We also need a national code interpretation centre that is binding, so that code solutions that are proven in one town aren't rejected in the next town.

We also need a less expensive and more nimble Canadian construction materials centre that can help new technologies become acceptable solutions in the building code more quickly.

I hammer away at municipalities all the time about the development approvals process and the outrageous costs and charges. This government loves to pat itself on the back for its housing accelerator fund, which makes no difference in terms of what cities do with their development shares. They keep increasing them, making it more expensive and, therefore, slowing things down.

At the federal level, I wonder if you can speak to what a federal government that truly gets it and is seized with the matter could do to bring parties together to say, number one, the national building code does not take affordability into consideration. The way we approve new technologies and review them is painfully slow, and, as we know, it can be interpreted differently from one town to the next, never mind one province to the next.

We don't have lots of time, but I'd like each of you to imagine you're running the show and you could wave a magic wand. What would you do at the federal level to knock heads together and get everyone in this country moving in the same direction with real action?

I'll start with you, Daniel.

Mr. Daniel Pascoe: Making the municipalities.... The federal government can do so much, but I think financial encouragements, or other types, normally move things. I think putting limits on the time it takes from a building permit being submitted to being approved would be the easiest thing to start with; start there.

If there are different rules and regulations from one municipality to another, provincial or otherwise, whether they're following the Ontario building code, the Manitoba one or the national one, so be it, but put a time limit on it. What should it be? It doesn't matter what it is, but if you can actually make that time limit a real thing, then people can work with that. They can budget for that.

Mr. Scott Aitchison: Would real, hard time limits be your number one thing?

Mr. Daniel Pascoe: Yes, because you would know what to expect. You could budget production; you could budget labour; you could budget everything, because as soon as that building permit's approved, it's go time.

Mr. Scott Aitchison: Force some timelines into the process that are tangible, reliable and—

Mr. Daniel Pascoe: My opinion is to start there.

Mr. Scott Aitchison: Okay, that's great.

Jim, what would you do?

Mr. Jim Facette: The question was about what the federal government can do, and it's about leadership. At the end of the day, I don't see any cabinet minister focused on construction, period. That's the end of the story. I don't want more bureaucracy, so don't get me wrong, but if we had someone focused on construction who could bring the parties together in a room and work towards long-term solutions.... I don't have all the steps worked out, but if there were someone responsible at the federal level for moving construction along and having different mandates and whatnot, I think that would be leadership.

• (1240)

Mr. Scott Aitchison: Great, thank you. That's a good answer. I like that one.

Marcos, go ahead.

Dr. Marcos Silveira: On the innovation side of things, I'm going to start with what we have in place right now. For example, when you don't have published standards available for your technology, you can apply to the CCMC within the NRC. The CCMC process is, indeed, a long one. You're trying to cover something that is not covered by the national building code or the Ontario building code with what is still a long process. The first phase is going to take at least 18 months, and then in those 18 months they're going to tell you what tests you need to do, so it will take them 18 months to tell you what you need to test.

After that, you're going to be partnering with universities to get those tests done, and those are going to take at least two more years, maybe three, and then you will have the results to go back and apply for that certification. I don't think this is exactly something that is going to bridge the gap in technology that is not covered in the national building code, so having a process similar to the CCMC's, but faster, would be my number one wish.

Mr. Scott Aitchison: Thank you all for that. That was amazing.

I'm going to take the remaining seconds I have to move a motion, if I could, Mr. Chair. It's on notice.

The motion reads:

That, with respect to the article published by the Canada Mortgage and Housing Corporation, or CMHC, and Mr. Aled ab Iorwerth on October 3, 2024, titled "In 2023, higher rates resulted in 30,000 fewer housing starts", the committee hold one meeting for two hours with the following witness from CMHC:

Aled ab Iorwerth, Deputy Chief Economist, CMHC.

The Chair: The clerk has advised me that it has the 48-hour notice. Mr. Aitchison has moved it.

Is there any discussion?

Madame Chabot.

[Translation]

Ms. Louise Chabot: I was going to say that we didn't receive notice of the motion 48 hours in advance, but you're right.

When did the committee receive the notice so I can locate it please?

[English]

The Chair: The motion was circulated on October 4. We are now on October 22.

Is there any discussion on the motion?

Mr. Fragiskatos.

Mr. Peter Fragiskatos: If I remember, we already passed the one calling for the CEO to come. This is the one for the deputy economist.

The Chair: Yes.

We have Madam Zarrillo on the motion of Mr. Aitchison.

Ms. Bonita Zarrillo: Thank you, Mr. Chair.

I'm fine with the motion, but I'd like to make an amendment that we also invite the Governor of the Bank of Canada to appear at that meeting. We know the reason CMHC is so important to the work that is involved in housing is that regular financing can be very difficult to afford. Thank you.

The Chair: We have an amendment now.

We have Mr. Aitchison, on the amendment.

Mr. Scott Aitchison: I just have a question on the amendment. I suspect it's entirely likely that the gentleman from the CMHC is more inclined to come here than the Governor of the Bank of Canada. If the Governor of the Bank of Canada declines but the fellow from the CMHC says he can come, are we still having a meeting, or is this going to be held up by this amendment that we have to have both?

• (1245)

The Chair: Any request can be attached to a motion. It's left to the witness to be called. Just for clarification, the last time we did this, the Governor of the Bank of Canada said that he attends the finance committee meetings and can discuss housing issues there, which he has. That's a committee that he appears before.

Mr. Scott Aitchison: I'm fine with that. I just want to make sure that it doesn't eliminate the meeting altogether if he doesn't show up.

The Chair: To my knowledge, it does not, no.

I have to deal with the amendment of Madam Zarrillo.

Do you have a comment on the amendment, Mr. Fragiskatos?

Mr. Peter Fragiskatos: Just quickly, we've been down this path before. We know that the Governor of the Bank of Canada goes to the finance committee. Ms. Zarrillo is interested in what he has to say—that's very valid. She can, with respect, go to the finance committee meetings and listen to the governor of the bank. He appears there many times a year. I am interested in hearing from the deputy economist as well.

I think we have a straightforward motion on the table. I'm not sure where the rationale for the amendment is coming from, considering, as you just said, Mr. Chair, that we've been down this path before.

The Chair: Thank you, Mr. Fragiskatos-indeed we have.

Ms. Zarrillo.

Ms. Bonita Zarrillo: Thank you, Mr. Chair.

Yes, we have the Bank of Canada governor who has twice denied a request to come to this committee. I was elected by the people of Port Moody—Coquitlam, who are very concerned about interest rates, their mortgages, housing and the ability to put carriage houses on their properties. They can't afford to carry that right now.

I actually find it quite insulting that I'm supposed to go to the finance table because this table doesn't warrant the presence of the Governor of the Bank of Canada. I find it insulting, not to me, but to the residents of Port Moody—Coquitlam, that the Liberal government, the parliamentary secretary to the Minister of Housing, is saying to the residents of Port Moody—Coquitlam that they can get lost, that he doesn't care what they're going through in regard to housing and the prices of their mortgages, that if they want to know what the Bank of Canada governor has to say, they can go to the finance committee.

I'm going to say that the reason women don't come to this table, why women aren't sitting at municipal tables, why there are hardly any mayors who are women, is input like Mr. Fragiskatos just put to this table, which is that finance is more important than social issues, more important than persons with disabilities. It's more important than a family, more important than people being able to carry their mortgage.

I see Mr. Fragiskatos is talking over me right now, because he doesn't like to have a light shone on the fact that governors of the Bank of Canada are equally as important to this committee as they are to the finance committee, and that social issues and issues that disproportionately affect women, that matter to women and diverse genders in this country, are equally as important as finance ones.

I'm making these comments only because I am here for a short time, and it is important that a woman's voice be heard. I find it misogynistic of Mr. Fragiskatos to continue to protect not just the Governor of the Bank of Canada but all of those corporate landlords whom I have repeatedly asked to come here.

Mr. Fragiskatos, when I said I wanted to summon some of those people, you said that's nuclear, because we know that gentlemen's agreements—

The Chair: Madam Zarrillo-

Ms. Bonita Zarrillo: I have the floor, I think, Mr. Chair.

The Chair: Madam Zarrillo, I'm the chair. Please keep your comments to the amendment that you made.

Ms. Bonita Zarrillo: This is so important.

The Chair: To the amendment that you made-

Ms. Bonita Zarrillo: He said this would be nuclear because gentlemen's agreements protect gentlemen.

I feel very strongly, Mr. Fragiskatos, that as the parliamentary secretary for housing, you are "gentlemen's agreement-protecting" both these corporate landlords and the Governor of the Bank of Canada. Canadians want to hear from them, and I don't understand why you continue to block it.

Thank you, Mr. Chair.

• (1250)

The Chair: Thank you, Madam Zarrillo.

Seeing no further discussion, I'm going to call a recorded vote on the amendment of Madam Zarrillo.

(Amendment negatived: nays 6; yeas 5)

The Chair: We'll now go to the vote on the motion of Mr. Aitchison.

(Motion agreed to: yeas 11; nays 0)

The Chair: We will now move to Mr. Van Bynen for six minutes, and that will conclude us.

Mr. Tony Van Bynen: Thank you, Mr. Chair. I'd like to share my time with Mr. Coteau.

I know we're talking about the construction of units, but I keep hearing that getting to the stage of construction is where the big logjam is. Has the construction industry undertaken any initiatives with the federal, provincial or municipal levels of government to try to get through that logjam?

When we were having a study on the accelerator funding, where we required improvements in the approval processes, there were mayors sitting here as witnesses saying that the system is as efficient as it can get. To this very day, 15 years ago, I started as mayor, and the very first building project that was proposed in the neighbourhood is finally under construction. How do we get through that logjam? Has the industry done anything to try to advance its concerns?

I'll start from right to left, so I'll go to Mr. Pascoe first and then to Mr. Facette.

Mr. Daniel Pascoe: I can't talk to the industry as a whole with regard to any sort of bodies representing the industry. I think any change needs leadership. I mean, as my colleague Jim mentioned, be it the federal, provincial or municipal level, it needs leadership, someone who actually wants to change it, someone who actually has the passion to change it, not the reason to change it. He should be impassioned about wanting to change it. Anything that someone wants to do normally ends up getting done. If you've been told to do it, that's not necessarily the result you'll have.

Mr. Tony Van Bynen: Okay. I'm keen about the industry.

Mr. Facette, do you have any industry experience?

Mr. Jim Facette: In short, yes, the construction industry, broadly speaking, be it non-residential or residential, has done a great deal of advocacy work at all levels of government to speed up the process, to eliminate the approval process and to make it more efficient—to get rid of the paper burden, if you will, and whatnot. That goes on.

The reality, though, is that the approval process.... Depending on where you are, there are some people who just don't want things to get built, period, end of story. They see things getting built as a negative, not as a positive, whether it's commercial facilities or residential. This NIMBY theory of "not in my backyard" is still around, and it doesn't help.

The industry has done, and continues to do, a great deal of advocacy work at all levels of government to make the approvals process much easier. Having said that, it's not getting less expensive. The approval process, the permits that are needed, the money that's required, and the per-unit costs—whether it's a multi-unit facility or a single dwelling—just keep going up and up, and you have the levels of government that are depending on those fees to do what they do. They see it as a cash cow, as opposed to delaying the immediate cash they get from the developer and then getting it later on in having the housing or the commercial establishments built and getting the tax base there. They want the fees up front. Yes, the industry has done a lot of work and will continue to do so. What will get done in the next 10 years remains to be seen.

• (1255)

Mr. Tony Van Bynen: Thank you.

I did mention that I'm splitting my time with Mr. Coteau.

Mr. Michael Coteau: Thank you.

Mr. Facette, you spoke a bit about the creation of this minister of construction. We all know that the federal government is responsible for funding, strategy and policy. We know that the provincial governments are responsible for regulation and administration, and the municipal governments are responsible for the implementation.

The federal government today is giving more money than any other government directly to municipalities and provinces to build. We've seen the GST removed from purpose-built housing. We've seen a lot of different incentives put in place. Are you saying on behalf of the contractors, the roofing contractors, that you represent across this great country that you think there should be a minister put in place to actually be responsible for construction? If so, what would this person do?

Mr. Jim Facette: They say in leadership that it's about vision first and the details follow.

We are also, at CRCA, part of the National Trade Contractors Council of Canada. One thing that we in that group have put forward is a minister responsible for construction in some way.

The vision—and it's just a vision—is that someone, a person, is actually bringing the industry and all levels of government together to solve these kinds of problems and identify options going forward. I don't have all the answers—

Mr. Michael Coteau: What's the job of the housing minister, from your perspective?

Mr. Jim Facette: I'm in non-residential, so I'll defer to someone else on that.

I think that the important thing is to have some kind of vision.

Mr. Michael Coteau: I understand your point.

So non-residential

Mr. Jim Facette: Technically it's called industrial, commercial and institutional—the ICI sector. To use layman's terms, "non-residential" is probably the best term to use.

Mr. Michael Coteau: Thank you.

The Chair: Thank you, Mr. Coteau.

Thank you to the witnesses. That will conclude it.

We have only a minute, and I need direction from the committee on one item. Thank you. Mr. Silveira, Mr. Facette and Mr. Pascoe for your extensive testimony today in questioning from the committee members. You can leave at will.

There is one item before we conclude that I need direction on. In the eventuality that ministers are not available to appear on October 31 and/or November 5, members were asked to submit names and contact information.

Madame Chabot, members were asked to submit the names and contact information of at least two witnesses for the study on workers in the seasonal economy in the employment insurance program.

What deadline does the committee wish to set for the rest of the witness list for this study?

I have to be able to schedule timing. I'm suggesting Friday, October 25, as the deadline for witnesses for the study.

Madame Chabot, that's your study on seasonal industries and employment insurance.

Do we have agreement on that?

[Translation]

Ms. Louise Chabot: Mr. Chair, I'm sorry, but there is a delay in the interpretation.

I am trying to understand what you are saying. Are you talking about briefs? We have already been asked for our witness list by 5 p.m. today.

[English]

The Chair: It's the witness list.

[Translation]

Ms. Louise Chabot: I can't hear anything. I don't know what you are saying. I don't hear the interpreter when you are talking. There is also a problem with the device.

Could someone please tell me what the chair is asking me?

• (1300)

[English]

The Chair: I'll ask the clerk to clarify, Madame Chabot.

[Translation]

The Clerk of the Committee (Ms. Ariane Calvert): First, the chair asked for each party to submit by the end of the day two names of people they would like to invite as witnesses. The chair then asked whether the committee agreed to the deadline for submitting the remaining names to be added to the witness list, that is, by the end of the day on October 25.

Ms. Louise Chabot: Okay. I was told November 25. That's why I got mixed up.

Thank you.

[English]

The Chair: It's October 25.

There is nothing else on the agenda. Is it the will of the committee to adjourn until Thursday?

Some hon. members: Agreed.

The Chair: We are adjourned.

Published under the authority of the Speaker of the House of Commons

SPEAKER'S PERMISSION

The proceedings of the House of Commons and its committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the Copyright Act. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the Copyright Act.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the House of Commons website at the following address: https://www.ourcommons.ca

Publié en conformité de l'autorité du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Les délibérations de la Chambre des communes et de ses comités sont mises à la disposition du public pour mieux le renseigner. La Chambre conserve néanmoins son privilège parlementaire de contrôler la publication et la diffusion des délibérations et elle possède tous les droits d'auteur sur celles-ci.

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la Loi sur le droit d'auteur. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre des communes.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la Loi sur le droit d'auteur.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web de la Chambre des communes à l'adresse suivante : https://www.noscommunes.ca