Legislative Assembly of Ontario

Assemblée législative de l'Ontario

Official Report of Debates (Hansard)

IN-15

Standing Committee on the Interior

Protect Ontario by Securing Affordable Energy for Generations Act, 2025

1st Session
44th Parliament

Tuesday 25 November 2025

Chair: Aris Babikian
Clerk: Stefan Uguen-Csenge

Journal des débats (Hansard)

IN-15

Comité permanent des affaires intérieures

Loi de 2025 pour protéger l'Ontario en garantissant l'accès à l'énergie abordable pour les générations futures

1re session
44e législature

Mardi 25 novembre 2025

Président : Aris Babikian
Greffier : Stefan Uguen-Csenge

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Hansard Publications and Language Services
Room 500, West Wing, Legislative Building
111 Wellesley Street West, Queen's Park
Toronto ON M7A 1A2
Telephone 416-325-7400
Published by the Legislative Assembly of Ontario

Journal des débats et services linguistiques
Salle 500, aile ouest, Édifice du Parlement
111, rue Wellesley ouest, Queen's Park
Toronto ON M7A 1A2
Téléphone, 416-325-7400
Publié par l'Assemblée législative de l'Ontario

ISSN 2816-7279

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LEGISLATIVE ASSEMBLY OF ONTARIO

ASSEMBLÉE LÉGISLATIVE DE L'ONTARIO

STANDING COMMITTEE ON THE INTERIOR

COMITÉ PERMANENT DES AFFAIRES INTÉRIEURES

Tuesday 25 November 2025

Mardi 25 novembre 2025

The committee met at 0900 in committee room 1.

PROTECT ONTARIO BY SECURING AFFORDABLE ENERGY FOR GENERATIONS ACT, 2025

LOI DE 2025 POUR PROTÉGER L'ONTARIO EN GARANTISSANT L'ACCÈS À L'ÉNERGIE ABORDABLE POUR LES GÉNÉRATIONS FUTURES

Consideration of the following bill:

Bill 40, An Act to amend various statutes with respect to energy, the electrical sector and public utilities / Projet de loi 40, Loi modifiant diverses lois en ce qui concerne l'énergie, le secteur de l'électricité et les services publics.

The Chair (Mr. Aris Babikian): Good morning, members. The Standing Committee on the Interior will now come to order. We are here today to resume public hearings on Bill 40, An Act to amend various statutes with respect to energy, the electrical sector and public utilities.

COMMUNITECH

ONTARIO HOME BUILDERS' ASSOCIATION

TORONTO METROPOLITAN UNIVERSITY

The Chair (Mr. Aris Babikian): The panel's presenters will each have seven minutes for their presentations, with the remaining 39 minutes reserved for questions from members of the committee.

We have one in-person and two virtual presenters today. Since our in-person presenter is not here, we will go to the virtual.

We will start with Communitech: Matthew Klassen. Please identify yourself and your title.

Mr. Matthew Klassen: My name is Matthew Klassen and I'm the vice-president of external relations for Communitech.

The Chair (Mr. Aris Babikian): Okay, go ahead. You can start. The floor is yours. You have seven minutes, and I will notify you when we get to the last minute.

Mr. Matthew Klassen: I'll be brief.

Good morning, Chair, and committee members. Thank you for this time this morning. I want to begin by thanking the Clerks for their flexibility and back and forth around scheduling. I had hoped to be there in person today but please accept my regrets for attending virtually. That being said, there's a whole world outside of Toronto and I'm proud to be joining you today from Kitchener and Waterloo region.

My name is Matthew Klassen. Like I said, I'm a vice-president for Communitech. We're an innovation hub located in downtown Kitchener, started in 1997 by some of Canada's most significant leaders in technology and entrepreneurship with the same vision that we hold today: to make Waterloo region a globally competitive tech ecosystem, anchored by homegrown companies that start here, scale here and stay here.

If you've not been out to Waterloo region recently, I would encourage you to visit. It will put in stark clarity the importance of the conversation we're having today. But don't take it from me; meet with the technology founders and their teams who are at the very frontier of adopting and commercializing disruptive technologies, namely, artificial intelligence and quantum.

What makes our community unique is our approach to entrepreneurship, not just research for research's sake, but a focus on real world problem-solving across areas like health care, cyber security and manufacturing.

I'm delegating today in support of Bill 40's focus on both data sovereignty and economic development as components of how we think about our electricity system. We should not merely be as thoughtful and deliberate about our data and technology as we are about the trade and production of traditional goods, but more so. For most of us, controlling our data is about privacy and that's a good enough reason in and of itself. But for governments I think there's an additional imperative. If you look at the bulk of indexes like the S&P and their growth, it's big tech stocks. You can choose the acronym—FAANG, Mag 7, MANGO—the direction of the arrow is the same, as is its impact on Canada's relative competitiveness to the United States.

We think it's prudent that Ontario has the tools to be intentional about the use of our grid, namely, the infrastructure that supports our data and artificial intelligence tools. To describe the importance of this approach I'd like to take a step back and discuss federal policy.

Earlier this year Prime Minister Carney committed that the new Major Projects Office would help to establish a Canadian sovereign cloud. At a macro level this is an important and necessary development for our country's national and economic security.

At a more micro level, I try to put myself in the shoes of a founder, an employee or a student in Waterloo's tech ecosystem: What does the commitment to a sovereign cloud mean for me, how I build my business or how I think about scaling and growing in Canada? Given the current legislative landscape, it doesn't change the equation. If we make no value or economic judgment around data infrastructure and we don't prioritize the procurement of Canadian technology, then we simply repeat the past. This is why this current window and this current legislation is so important.

Chair, I would encourage the committee to think of Bill 40, as well as the newly introduced Bill 72, the Buy Ontario Act, as having the potential to help make this sovereign cloud real and tangible for Canadians and for those who are building technology in our country.

Bill 40 sets out the context to intentionally develop the next generation of Canadian data infrastructure, just as the AI opportunity is truly beginning to explode. This is a necessary step if we want companies to build their technology on this infrastructure.

Unfortunately, this isn't just a case of build it and they will come. Entire generations of builders have grown up on American cloud technology, and these are so often the tools of choice for our world-leading talent pool. And I don't think that's a cause for judgment. These same tools have been the vendors of choice for multiple levels of government, large corporations—and they still are. It takes concerted efforts over time to change inertia. Deliberate steps must be taken if we want to ensure that our best and brightest are building solutions and companies on sovereign infrastructure and that it is economically rational for them to do so.

This is where Bill 72 has the potential to be complementary. If implemented correctly, it could not just support the procurement of Ontario-made goods and services but of our technology and make it more compelling for Ontario founders to design solutions for domestic markets and the broader public sector—sectors like health care, education, municipal services—the big buyers. If we can change the culture within the broader public sector, we help to change the brand of the broader public sector as one that supports domestic innovation.

That's how we collectively help to ensure the next generation of Ontario founders are building companies that scale and stay here—that your and my data, their intellectual property, it all stays in Canada. This may sound like a lofty vision, but Bill 40 and Bill 72 reflect the necessary posture and intent that we must start taking around our data and our sovereignty.

In closing, I would like to remind committee members about their standing invitation to Waterloo region's nation-leading technology ecosystem and to reinforce our support of Bill 40's focus on data sovereignty and economic development as components of Ontario's electricity system.

Thanks for your time this morning.

The Chair (Mr. Aris Babikian): Thank you very much.

Now we will go to our second presenter, the Ontario Home Builders' Association. Please identify yourself and your title. You have seven minutes to deliver your deputation.

Mr. Scott Andison: Thank you, Chair. My name is Scott Andison. I'm the chief executive officer of the Ontario Home Builders' Association.

Good morning, Chair and members of the committee. Thank you for the opportunity to present this morning on behalf of the Ontario home builders, who represent the builders, renovators and developers who deliver the homes and communities that Ontario requires.

I'm here to speak this morning in support of Bill 40. One of the major themes in Bill 40 is securing affordable and reliable energy for future generations. From a housing perspective, this is critically important.

The cost of living in a home, whether owned or rented, is increasingly shaped by energy bills, and the delivery of housing is shaped by energy servicing. When the energy system is uncertain, slow or constrained, the housing system experiences the same problems. When the energy system becomes more affordable and predictable, housing becomes more affordable and predictable.

Bill 40 recognizes that Ontario needs a long-term, stable energy plan and that electricity demand will grow significantly in the coming decades. Planning accordingly is not just an energy issue; it's a housing issue as well.

Across the sector, we regularly see delays caused by energy servicing constraints, whether that means transmission congestion, distribution capacity or local utility bottlenecks. Bill 40 takes a meaningful stand to address these challenges. It modernizes and strengthens Ontario's long-term energy planning framework; streamlines regulatory approvals and provides clear procedural tools for the OEB; improves the ability to plan, fund and deliver new transmission; ensures that planning bodies consider economic growth and job creation, which aligns directly with the needs of new housing construction; and clarifies municipal franchise processes, which reduces the potential for unnecessary delay.

These improvements matter. They mean more predictable timelines for subdivisions, more certainty for multi-unit and rental housing and fewer surprises that drive up costs or delay getting shovels into the grounds.

Each year, thousands of new homes are delayed because servicing capacity does not arrive in time or because approvals move more slowly than the speed of construction. Bill 40 strengthens the Ontario government's ability to plan and build the infrastructure required to support these growing communities. For our sector, these changes improve servicing certainty, timeline predictability, cost stability and the confidence to proceed in new housing supply.

Housing supply hinges on the availability to coordinate land use planning with energy planning, and Bill 40 moves Ontario towards a more integrated, transparent and forward-looking model.

Builders are delivering increasingly energy-efficient homes, more EV-ready homes, more heat-pump-equipped

homes and buildings that are prepared for future clean tech integration. Bill 40's emphasis on electricity planning, clean generation, hydro development and long-term system expansion is welcomed. At the same time, OHBA supports an all-of-the-above approach to energy. While electrification will grow, other energy sources, including natural gas, continue to play an important role in providing reliability, affordability and flexibility for homeowners, for renters and particularly during periods of extreme weather or peak demand.

0910

Our position is simple: Ontario's energy system should support consumer choice, support affordability and maintain flexibility as technologies evolve. Bill 40 helps set that foundation without closing the door on future innovation or other energy options. Bill 40 explicitly recognizes economic growth as an objective in energy planning. This aligns with the role of the home-building sector, which plays a role in supporting hundred of thousands of jobs, driving billions in economic activity, creating local supply chains and building communities that attract investment.

Ontario cannot grow its economy without growing its housing stock, and Ontario cannot grow its housing stock without strong, reliable and affordable energy infrastructure. Bill 40 ties these systems together. A growing economy requires a growing housing supply, and a growing housing supply requires affordable, reliable energy infrastructure. Embedding economic growth into economic planning aligns these priorities and supports the conditions that are needed to build homes faster and more affordably. By modernizing the regulatory framework supporting transmission investment and ensuring long-term sustainability, this legislation helps create the conditions for sustained housing delivery across the province.

In closing, OHBA supports Bill 40 because it's rooted in the same principles that we drive in the housing sector: reliability, affordability, long-term planning, clarity and growth. As the government moves into regulation and implementation, we encourage continued attention to:

—ensuring energy planning and housing planning remain aligned;

—maintaining consumer choice and system flexibility;

—ensuring cost impacts on homeowners and renters remain manageable;

—strengthening coordination among utilities, municipalities and provincial agencies; and

—keeping approvals timely and predictable so that housing projects can proceed on schedule.

Bill 40 provides a solid foundation for meeting Ontario's future energy needs. In doing so, it supports the ability to deliver the homes Ontario families needs. Thank you for the time this morning, and I'm happy to take any questions.

The Chair (Mr. Aris Babikian): Thank you very much.

Now, we move to our third presenter, which is Toronto Metropolitan University. Please identify yourself and your title. You have seven minutes to finish your deputation.

Go ahead. The floor is yours.

Dr. Mohamed Lachemi: Thank you, members of the committee. My name is Mohamed Lachemi, and I'm the president of Toronto Metropolitan University. I'm here because Bill 40 represents an important step in modernizing Ontario's approach to managing electricity demand from large energy-intensive facilities.

The bill creates a new category of specified-load facilities, which includes data centres, and establishes a framework that will guide how these facilities connect to Ontario's grid. This is a very significant development. Ontario's approach to regulating high-demand data facilities will shape the province's economic and digital future.

At Toronto Metropolitan University, we believe that universities play an important role in helping Ontario prepare for that future. This is done by supporting innovation, protecting privacy and security, and developing the talent Ontario will need in the decades to come. Our purpose today is to highlight why a large-scale domestically controlled AI data centre must be part of Ontario's future and why the regulatory framework established in Bill 40 is essential to make that possible. Where our data is processed determines where economic value flows and who controls the benefits that come with it.

First, a large-scale Ontario-based AI data centre is essential for economic competitiveness. When AI processing occurs outside the province or outside Canada, a substantial portion of economic value flows elsewhere. Domestic data centres keep that value here in Ontario and strengthens our innovation ecosystem.

Second, this is about privacy and public trust. When health, financial and other sensitive data crosses borders for AI processing, it becomes subject to foreign legal frameworks and vulnerabilities. A Canadian-controlled data centre allows us to safeguard this information and Canadian privacy standards, as Ontarians expect.

Third, data sovereignty is a national security requirement. A secure, large-scale Canadian facility is foundational to ensure national security in an increasingly data-driven world. To fully realize these benefits, we must also prepare the people who will build, operate and innovate within this infrastructure. For that reason, TMU recommends that, as part of Bill 40's consideration, we reserve up to 5% of the data centres or computer facilities for the training of students and academic research.

Through a partnership between TMU and private sector collaborators, this capacity can be shared across universities in Ontario and at the national level, giving students hands-on experience with advanced AI systems. This builds the workforce Ontario and Canada will need for decades to come.

In short, an Ontario-based AI data centre, in alignment with Bill 40, is more than an infrastructure investment. It's an economic strategy, a privacy safeguard, a national security requirement and, with included dedicated educational capability, a national building asset.

This is why TMU is strongly in support of Bill 40, and we believe that its passage will lay essential groundwork for Ontario's AI future.

Thank you, and I look forward to your questions.

The Chair (Mr. Aris Babikian): Thank you to all presenters for your input.

Now we will move to the first round of questioning. We will start with the government side. MPP Cuzzetto.

Mr. Rudy Cuzzetto: I want to thank all three presenters here today, but I would like to ask my question to the Ontario Home Builders' Association.

I'm in Mississauga–Lakeshore, and I have two of the largest developments happening in the province: the Brightwater development and the Lakeview development, both on Lake Ontario. One used to be the old Texaco refinery, where my father worked in 1953, and the other one was the old coal power plant that used to produce electricity, which was closed down 24 years ago when Elizabeth Witmer, a former Progressive Conservative Minister of Energy, closed down the coal plants, and that was the transition of getting rid of coal in our energy grid. How important is energy affordability for future homeowners moving forward?

Mr. Scott Andison: I would say it's actually critical. Energy powers homes. We need all forms of energy, and we also emphasize the importance of consumer choice. At the same time, when builders—you mentioned Brightwater and others—when they're looking at developing these master-planned communities, they have to look at all costs going into that. Every cost that a builder incurs, whether it's in the early planning stagings, through site plan approval, whether it's through the energy forms that are ultimately going into the development, all of those costs find their way to the ultimate cost of the home.

Builders are very conscious about making sure that prices match the affordability parameters of their customers, so they're looking for every opportunity to make sure that it balances consumer choice with something that is affordable at the end of the day. The energy costs drive the ability for builders to build homes, particularly if that energy source is not available at the time that they're ready to move into the construction phase.

Mr. Rudy Cuzzetto: What do you think of Bill 40 that we are presenting here today?

Mr. Scott Andison: I think it does two main things. One, it really emphasizes the need and the opportunity for all energy integration as their integrated planning going forward. The other thing, of course, is on the availability or the possibility of helping to keep prices down. When we're looking at—again, I emphasize consumer choice and builders being able to meet the needs of their ultimate customers. But when you look at our ongoing support for electrification—when gas currently is 40% of all energy sources going into residential construction and it provides four times the power that electricity does, it's going to take a lot of electricity sources to be able to offset that. So we're very conscious, as that integration, as that change over time happens, that we make sure prices remain manageable for consumers

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Mr. Rudy Cuzzetto: Thank you very much.

The Chair (Mr. Aris Babikian): Thank you.

Next? MPP Gallagher Murphy.

M^me^ Dawn Gallagher Murphy: Thank you, Chair, and through you, thank you to all the presenters this morning. My question is directed to President and Vice-Chancellor Mohamed Lachemi of TMU. Thank you very much for being here this morning virtually. I'm going back to some of your comments here about how data centres must be part of Ontario's future, because where the data is being processed, that's where the economic activity is. And if it is not being processed here, that economic activity goes elsewhere.

So you've talked about privacy and public trust—and I do believe that as a government we need to ensure that we are instilling it, and this is what Bill 40 does. You're right: It does lay the groundwork for the future of AI, and we want to be a leader in the AI sector.

My question to you is how, specifically, is TMU supporting the emerging sectors, such as clean energy, AI, cyber security and advanced manufacturing? Thank you.

Dr. Mohamed Lachemi: Thank you very much, madam member of the Legislature. You talked about the economic consideration, which is very important. I can tell you AI processing is happening outside Ontario or outside Canada. What it's exporting is a substantial proportion of economic value with each digital transaction, potentially in the range of 20% to 30%, which is quite high. I think Ontario has a lot of advantages with the ability of creating those data centres here.

Your question about the role of our university—of course, we are in an area that is important for Ontario. In our sector—I'm talking about universities—we are preparing to balance for tomorrow, for the future of Ontario. I think all the areas that you mentioned are extremely important for the economy of our province. Of course, artificial intelligence is important, but also cyber security and other areas. Our university is very active in those areas in collaboration with the private sector, but also in collaboration with the province, with the government of Ontario, and also with the federal government.

M^me^ Dawn Gallagher Murphy: That's great. Thank you. And I know you made a comment that up to 5% of the data centres should be reserved for training students. Could you quickly comment on that further?

Dr. Mohamed Lachemi: I think it's important for us to give our future leaders the ability to be trained using those facilities, and our recommendation is to reserve up to 5% of data centres' computing capacity for the training of highly qualified personnel, including, of course, graduate students but also undergraduate students, and also for academic—

The Chair (Mr. Aris Babikian): Thank you, Mr. Lachemi. The time is up for the government side.

We will move to the official opposition. MPP Glover.

Mr. Chris Glover: Thank you all for being here. It's a really important conversation because it is setting up the future of our energy system and our data system. I'll start with a question. I'll let Mr. Lachemi from TMU continue with this.

I've been to TMU; I've toured the DMZ zone there. TMU is one of the global leaders and one of our university

leaders in developing technology and entrepreneurs. You mentioned 5% of the data centres should be available to students. How would that benefit the students at TMU who are working in the innovation centres?

Dr. Mohamed Lachemi: Thank you very much for your question and for your comments about what TMU does. Of course, we are known to be a university that is focusing on entrepreneurship and innovation. All the areas that are important for the future of our province and our country are important for us to prepare the next generation of talented people.

You mentioned what we do at the DMZ, which is considered one of the best university incubators, where we want to prepare people not only to seek jobs but to create jobs for our city and our province. I think areas of artificial intelligence, cyber security and other areas that are fundamentally important for the economy of the province, we need to push more.

For your information, we have a national centre for cyber security that is located in the city of Brampton. We are actually now leading an effort at the international level in partnership with a Canadian company. We have created, with the help of the federal government, a centre of excellence to train people in cyber security in South Asia. The centre of excellence is located in Kuala Lumpur, in Malaysia. Those are examples where we want our students, our innovators, to lead in areas that are super important for the economy.

Mr. Chris Glover: Thank you very much for that. I fully agree. I used to be the colleges and universities critic, and I toured most of the universities and colleges in Ontario and I saw these innovation centres at just about every one of those colleges and universities. They're partnering with local businesses, they're helping to develop technology that those local businesses can then take to market and improve their own business practices.

But one of the challenges is that with our public colleges and universities we have the lowest funding per student of any province in the country. We are at about $10,000 for university students whereas the provincial average is $17,000.

What would TMU be able to do if you had funding raised to the provincial average of $17,000 per student?

Dr. Mohamed Lachemi: TMU, in collaboration with other universities, is always working with the government to talk about the importance of investment in post-secondary education, and I hope that we can see some good progress in the future, because I know that the Ministry of Colleges and Universities is working now on a project that I think will define a new funding formula for universities and for colleges, and I'm very optimistic about the work that we do as a collective organization with the government.

Mr. Chris Glover: Thank you very much for that.

I'm going to move to Mr. Andison. I appreciate your work here and your expertise in this. I used to build log houses with my uncle. It was very small scale, one house at a time, and we just plugged into the grid that was existing there. But we're trying to build 1.5 million homes in Ontario. What do we need in terms of grid expansion in order to be able to accommodate those 1.5 million homes?

Mr. Scott Andison: In terms of being able to accommodate rapid growth—right now, our market is not in a great state in terms of economic conditions. It is not promoting the ability to build homes at a price that most consumers can afford. So what we're looking at is large-scale developments. There's a term called mega projects, which is 3,000 units or more being constructed. This requires some significant planning in terms of capacity.

There are 64 utilities across the province, natural gas, through Enbridge, being one of those 64. So can you imagine the amount of integration that needs to be done to accommodate this. It requires a lot of advance planning, it requires accurate forecasting and it requires the support and resources that are needed.

0930

The Chair (Mr. Aris Babikian): One minute left.

Mr. Scott Andison: So the planning and discussions going into this are significant. We believe that this bill actually pushes the need for that type of integrative planning. This is something the home building industry has been calling on for quite some time. There have been too many situations where a builder receives the municipal approvals to proceed with the development but their own municipal utility is unable to provide the energy capacity, so these discussions earlier will help.

Mr. Chris Glover: Okay. Thank you for that. I didn't know there were 64 agencies. That's really quite shocking.

I have got 30 seconds left. I wish we had stuck with Ontario Hydro as one public utility in this province. We were paying four cents a kilowatt hour for electricity, and we never had these kinds of planning issues when we had that. Now we're subsidizing a private, for-profit corporation $7.1 billion to keep our rates at 16 cents a kilowatt hour.

I appreciate the challenges that you're facing.

The Chair (Mr. Aris Babikian): Thank you, MPP Glover. The time is up.

We move to the third party. MPP Hsu.

Mr. Ted Hsu: Thank you to our witnesses. I want to focus on seeing if we can improve this bill that we're looking at today.

First of all, I want to say that I agree very much with the witnesses from Communitech and TMU. I think that having sovereign data, a sovereign cloud, is really, really important. I think AI is an area that's attracting enormous amounts of investment. In fact, it's the largest demander of investment dollars around the world, and it's going to transform all sorts of things.

With that in mind, if you look at the specified connection requirements in the bill—if it's in front of you, it's schedule 1, section 7, subsection 5—it's about the requirements and what kind of criteria would be considered in putting together the regulations for a connection. At the moment, the bill as it is currently only lists economic development and job creation. I feel we should add data sovereignty, innovation, competition.

My question for, I guess, first Matthew from Communitech and then Mohamed from TMU: Would you support supplementing economic development and job creation with, explicitly, data sovereignty, innovation, competition so it's clear we're not talking about buildings or highways and that we're seriously considering a very, very transformational sector of our economy and our future that we have to think about when we're deciding connections to the electricity grid?

I'll start with Matthew.

Mr. Matthew Klassen: Yes. Thanks to the member for the question.

I wouldn't want to compete with other sectors in terms of economic development. What's in there in terms of, "Is it economic development? Is it innovation?"—I think we're broadly supportive of the spirit behind that. I think how you get to that and how you define it is probably another question. You may have seen the chatter online of how you define what is Canadian. I think it's important for us to think about that.

I would also encourage the committee to think about what the guardrails around that are so that we're very, very deliberate. There are lots of companies, too, that will say that they're doing innovation. We see some innovation-washing around, where people say, "Oh, we're doing innovation," and they're not, or where they slap "Canadian" on the end of the company that they represent and say that they're Canadian. I think we probably need to think quite thoughtfully around how you define that and how you enforce that.

Mr. Ted Hsu: I guess my question—

Mr. Matthew Klassen: I guess I would—oh, sorry. Yes.

Mr. Ted Hsu: Sorry to interrupt, because I only have a few minutes. The bill is silent on all these things that you've said. Why not include productivity? Because that productivity speaks to innovation, competition—all these good things. Right now, the bill is silent on everything that you brought up. Why not put something in about innovation, competition or sovereignty?

Mr. Matthew Klassen: My understanding—and I would be happy for the member to correct me if I'm wrong—is that there are opportunities for—I can't remember if it's the minister or some sort of designated authority—to direct what that actually means in practice. So, I think if you're ensuring that there's flexibility there to identify those needs as they emerge and change, then absolutely.

I guess, with all of these, I think there is some subjectivity in terms of how we address it. Data centres aren't necessarily, in and of themselves, the largest job creators out there. I think the reason is partly about the jobs, but it's partly about what you're building and the capacity you're developing with the data centres themselves. I don't know if that makes sense.

Mr. Ted Hsu: Okay.

Maybe I can go to TMU now. The bill, as it is now, is silent about the concepts that you brought up: data sovereignty, innovation, competition. Why not, instead of just mentioning economic development—which could be, as the example I gave, highways; highways are fine. I really believe what you said today: that it's really important to talk about AI and where we need to go with that.

Would you support adding something explicit in the bill around innovation, competition, productivity or data sovereignty?

Dr. Mohamed Lachemi: I will leave the details of the bill to the MPPs. But I think my intervention here was very clear: that economic consideration is extremely important. But we need also to address data privacy, data sovereignty and national security. I added to that the importance of talent development. I think it's extremely important that what we are proposing here is to ensure that we have.

The Chair (Mr. Aris Babikian): One minute left.

Mr. Ted Hsu: Okay. Thank you very much.

I only have a minute left, so let me go to the Ontario Home Builders' Association. Is this bill perfect, or is there an amendment that you have in mind to improve the bill?

Mr. Scott Andison: One of the things that we see as a positive about this bill is there is opportunity to get into the specifics through regulation. As one of the most highly regulated industries in the province, let alone across the country, we find sometimes that overregulation over legislative reach stifles innovation.

Where we find that there is the greatest opportunity is where there is the most flexibility on how we approach this. When we are looking at 24 mega projects currently in the province, each one of them is unique, each one of them is different. I would be cautious about thinking that one size would fit all. So, where there is flexibility to—

The Chair (Mr. Aris Babikian): Thank you very much. The time is up. That concludes our first round of questioning.

We will start with the second round. We will go to the government side: MPP Pinsonneault.

Mr. Steve Pinsonneault: Thank you to the presenters for being here today and taking time out of your busy schedules to be part of this process.

Our government is all about building homes and growth and looking after our provincial economy, as well as the Canadian economy.

My question is for Communitech and Matthew: What opportunities do you see for local companies because of Bill 40's commitment to buy-Canadian procurement? I know you touched a little bit on it, but what do you see on that for the local front?

Mr. Matthew Klassen: Yes. Thanks to the member. Certainly, there are a number of energy companies and clean-tech companies that we work with in Waterloo region doing really impressive things to manage how the grid is deployed and how we're managing energy systems.

I guess I would say that the larger thing for us and for our ecosystem is the intent around supporting local, supporting Ontarian, and what that means for the culture of government and for the brand of government.

I think, too often, what we've heard across Canada is that companies have to go to other markets to scale. The challenge with that is then there's always that alluring pull

of a bigger market of venture capital that sits somewhere else that wants you to move and, with you, bring your IP and bring your jobs. So we're supportive of measures that ensure that companies can grow and stay and scale here.

I think there are some real low-hanging fruit—particularly in this time of trade tensions, largely with the United States, but across the world—to think about how we can support Canadian companies, and how the broader public sector can be not just a customer, but one of the best customers for companies. Thinking about their growth, validating their products, reducing some of the procurement timelines and making sure that they can scale and grow here, because it's our view—we're obviously quite biased in Waterloo, but it's our view that we only close the productivity gap by having technology firms that are homegrown and can scale.

0940

Mr. Steve Pinsonneault: Well said. Thank you for that.

The Chair (Mr. Aris Babikian): MPP Vickers.

MPP Paul Vickers: Thank you to the presenters for coming today before us and giving us your insight on Bill 40.

My question is to Mr. Klassen also. Other jurisdictions like Texas, British Columbia and California have also introduced measures to manage the growth and impact of data centres. What are your thoughts on Ontario taking similar steps to these other regions?

Mr. Matthew Klassen: I'm part of a peer group with some similar American organizations where we contrast and talk about different policy and technological developments that we see within our communities and try to claim best practices and things that we can do. I guess what I would share with the committee is that the way that American jurisdictions think about their data infrastructure and their data sovereignty as an economic tool and about their energy sovereignty as an economic tool is very telling, I think, for the way they think about economic growth and their economy.

So I'm certainly supportive of Bill 40, in the way that I think it somewhat aligns with that sense that we do live in a world where there is some co-opetition at times or just all out competition, and that we need to be much more robust and aggressive about how we protect our grid, but also protect our intellectual property, protect our jobs and our talent pool.

MPP Paul Vickers: Thank you.

The Chair (Mr. Aris Babikian): MPP Dowie.

Mr. Andrew Dowie: Thank you to all the presenters for being here.

My question is actually for Mr. Lachemi from the Toronto Metropolitan University. I know that universities can play a very strong part in ensuring that collaboration with industry can deliver results. We know that from an academic perspective that Bill 40 opens some doors to further co-operation with industry. One area that I've seen used successfully across the sector is where pieces of equipment and the research activities that develop new technologies can be shared between many, many businesses, with the university as the host.

I'm hoping you could explain a bit for us how you see your ability at TMU to collaborate with businesses and government throughout the province on future energy innovation.

Dr. Mohamed Lachemi: Thank you for this very important question. I think it's fundamental for universities—and I'm talking on behalf of TMU here—to give opportunities to train the next generation of leaders in collaboration with industry partners, because that's the best thing you offer to them: hands-on education and training and preparing them to use advanced technologies to be able to be ready for their careers. I think that's the bottom line at TMU: We offer experiential learning opportunities to every student at our university, and this bill is extremely important because it opens the doors for those—

The Chair (Mr. Aris Babikian): One minute.

Dr. Mohamed Lachemi: —opportunities to work with industrial partners in areas that are super important for the future of our province.

Mr. Andrew Dowie: With the remaining time, through you, Chair, I'm hoping you can describe TMU's activities right now that you might want to share with us, projects that you're involved with.

Dr. Mohamed Lachemi: We have collaboration with a lot of industry partners. I mentioned the example of the centre that we lead, the centre for cyber security. We have collaboration with the government of Ontario, with the government of Canada, but also we have partnerships with—

The Chair (Mr. Aris Babikian): Thank you very much, Mr. Lachemi. Unfortunately, the time is up for the government side.

We will move to the official opposition. MPP Glover, the floor is yours.

Mr. Chris Glover: Thank you all for being here. I am going to focus, in this round, on intellectual property and developing and maintaining intellectual property in Canada, which has become such an urgent issue with the sovereignty threats and the tariff threats from Trump in the States.

One of the things that bothers me as a Canadian is that we develop incredible technology here, we have an incredible talent pool, but our talent pool often gets drained down to the United States, and our technology gets bought up by foreign corporations. Corel was a global leading company for a long time; it got swallowed up. RIM got surpassed.

I'll start with Mr. Klassen from Communitech. How do we both develop and protect our data sovereignty and our IP in Canada and in Ontario?

Mr. Matthew Klassen: Thank you to the member for the question. It's been a while since I've heard Corel referenced.

Mr. Chris Glover: And you don't even have any grey hair, so—

Mr. Matthew Klassen: I've got a couple, just on the temples.

I think there are a couple of things. The president talked around a number of the opportunities that exist. I think we

find, for us, that one of the great opportunities when thinking about protecting our intellectual property is giving it that path to grow and scale and stay—or the founders and the owners of the intellectual property.

Certainly, there's a number of programs that specifically help founders and their teams to protect and to manage their intellectual property: Intellectual Property Ontario; there's an IAC asset collective; NRC runs a program. We also have partnered with ISED federally to run an intellectual property program. I think those programs are very, very important.

I think also thinking about how we make it so that it's easier for companies to stay and scale here is the big unlock, and so—

Mr. Chris Glover: How do we do that? How do we make it easier to scale and stay?

Mr. Matthew Klassen: I'll write a dissertation someday and you can read it; it's a long answer. But I think the first part I'd start with is contracts. I think that's the really big opportunity, is that Canadian companies can see buyers in this country. They often do in certain areas but, certainly, the experience that we've heard—and sometimes this is selling in the municipal sector or large enterprise—is that a company will kind of have to go to the United States to prove themselves and then will have to come back, rather than being able to say—and I was with the city of Kitchener last night. They run some fantastic programs to encourage partnerships with start-ups within their operations. I was commending them—some of the work that they do to not just run a pilot but to actually give a contract to local start-ups that the start-ups can then parlay into another contract across Ontario or into the United States. Having that kind of brand there but also understanding that a city like Kitchener has done the due diligence allows that sales cycle to be shrunk to de-risk that for that next buyer.

Mr. Chris Glover: Yes, I've heard that from a number of tech companies that I've visited in my area. They constantly say that one of the big challenges is that we need a government procurement policy that supports and favours local businesses, because if you can land a government contract here, then you've got the stability and the credibility to market outside of the country. Is that your experience as well in the companies you deal with?

Mr. Matthew Klassen: Yes, absolutely. If you go abroad and the question that you get is, "Okay, does your local government or local large employer support you?" and the answer is no, then you get the kind of, "Why not?" So, certainly, we were pleased to see that the Prime Minister announced a buy Canadian policy in the federal budget. We were pleased to see Bill 72 and some of the opportunity there announced last week. And then I think there's lots of low-hanging fruit as well at the municipal level.

So there's certainly a window and a moment here for all levels across the broader public sector to think about supporting domestic innovation. I used this last night: I would offer some tech speak and say that we probably need to 10x our creativity, 10x our speed if we're really going to do this well.

Mr. Chris Glover: Okay. Thank you.

I'll go back to Dr. Lachemi from TMU, and I'll give you the same question. You're developing an incredible talent pool of innovators at TMU. How do we keep them in Canada?

Dr. Mohamed Lachemi: Thank you so much for the question. I think it's important that we work hard to keep them in Canada, first of all by providing them opportunities and opening the market for them, and I would go in line with what Matthew has mentioned.

0950

The Chair (Mr. Aris Babikian): One minute.

Dr. Mohamed Lachemi: We should always encourage or adopt the approach of buying Canadian first. And I can tell you, at the beginning of what's happening to us because of the policies of the president of the US, we have actually at the DMZ implemented a new approach, encouraging people to buy Canadian first, and we are seeing some fundamental shifts in the mindsets of people.

The second thing I think is important: Matthew mentioned, of course, we have a lot of start-ups in our ecosystem, but I think it's fundamental to help them grow—so, scaling up is important—and provide them opportunities also to have access to funding. I think that's another aspect, because a lot of start-ups go to the US because they need to grow and they need funding. But I think we are seeing a big shift here—

The Chair (Mr. Aris Babikian): Thank you, Mr. Lachemi. The official opposition time is up.

We move to the third party. MPP Hsu.

Mr. Ted Hsu: I want to get back to the bill and the detailed examination of the bill that we do in committee stage. In schedule 1, which concerns the Electricity Act, and schedule 3, which concerns the Ontario Energy Board Act, there is language about support for economic growth. Let me just read out the phrase: "supports economic growth, consistent with the policies of the government of Ontario." My concern with this is that sometimes the policies of the government of Ontario are not explicit, and that causes uncertainty for investors, for business. It could change when the government changes, but sometimes it's just opaque. A famous example is the Premier got into some trouble because he said one thing in public about the greenbelt and then there's videotape saying something different in private. That caused all sorts of headaches for the Premier later on.

So, my question for all of you is: I think that the bill should require that the policies of the government of Ontario be written down. For example, instead of just "consistent with the policies of the government of Ontario," we have "consistent with the policies of the government of Ontario as specified in regulation," so it's written down somewhere so that businesses and investors can have a little more certainty and less risk, which is always goods for business. I just want to ask each of you in turn if you think that is needed or not. Because it's not just economic growth that's in the bill; it's "economic growth,

consistent with the policies of the government of Ontario," which can change or be unclear.

We'll start, just on screen, with Communitech, and then we'll go to TMU and then the Ontario Home Builders' Association.

Mr. Matthew Klassen: Thanks to the member for the question. I guess I would defer to the members around the committee and in the Legislature about where the province of Ontario should provide its economic priorities. I mean, I think that's often laid out in the budget or on the MEDJCT website.

Certainly we're a regional innovation centre of the province of Ontario, and so we're certainly aligned with the province's growth and approach to economic development through that framework. Whether it needs to be outlined in a specific bill or in regulation—I mean, I understand the intent. I think, similar to one of the other presenters today, I worry that if everything has to be an explicit list, you miss some of the fast-moving opportunities that exist, particularly in the areas of technology.

Mr. Ted Hsu: I guess what I'm saying is not that the government provides a list in the bill, but that it's told to write it down somewhere, and regulation is the place.

If I could go to TMU—Mr. Lachemi?

Dr. Mohamed Lachemi: As I said before, I leave the details of the bill to members of the committee. However, what I think is fundamental is that Bill 40 provides essential support for economic growth by, in my opinion, creating a more dynamic, competitive investment-friendly environment in Ontario.

Mr. Ted Hsu: Okay. All right. I hear what you're saying. I do worry a little bit about—we're writing legislation for this government and future governments, and you never know if a future government will just not get it and have a different view.

I will now go to the Ontario home builders. Mr. Andison.

Mr. Scott Andison: Sure. I'll come at this solely from a housing perspective. The statement in the bill about economic development, where it attracts industry, which means it attracts jobs, which means those people who are being brought in need a place to live. Consistent with the policies of the government of Ontario, our belief from the housing industry is if that statement had been in effect two years ago, we probably wouldn't have needed Bill 165, where the OEB was acting inconsistently with the intent of the government of the day and they had to legislate the OEB to make sure that natural gas continued to be an option for consumers.

So, from our perspective, when we look at statements consistent with the policies of the government of Ontario, we welcome that statement because, whether it applies to municipalities, to a regulator, to industry itself, it means that we all should be rowing in the same direction.

Mr. Ted Hsu: Okay. Looks like I have about a minute left.

There's already a competition, and I can see it in my riding of Kingston and the Islands in the city of Kingston—there's a competition between demand for electricity from industry and manufacturing, in particular; new concerns that come to Kingston looking to locate there; from housing, which we need to build a lot of; and the public sector. We need a new hospital, which will be an extremely large consumer, and Queen's University has a supercomputer proposal that will require some power. So there's already this conflict.

The Chair (Mr. Aris Babikian): One minute.

Mr. Ted Hsu: I guess what I wanted to ask you is it just seems to me like we could be writing down something to help decide which to prioritize, because housing might lose out.

Mr. Scott Andison: Respectfully, the difficulty government sometimes has is trying to have all the answers to be able to write it down in something that is explicit. When we look at the principles of Bill 40 and the potential for regulation—

The Chair (Mr. Aris Babikian): Thank you very much, Mr. Andison. The time allotted for this panel is up.

Thank you to Mr. Andison from the Ontario Home Builders' Association; thank you, Mr. Lachemi from the Toronto Metropolitan University; and thank you, Mr. Klassen from Communitech.

That concludes the panel for this morning. The committee will reconvene at 3 p.m. this afternoon. Thank you very much and have a nice day.

The committee recessed from 0958 to 1500.

ONTARIO TECH UNIVERSITY
ONTARIO CHAMBER OF COMMERCE
SCHNEIDER ELECTRIC CANADA

The Chair (Mr. Aris Babikian): Good afternoon, everyone. The interior committee will resume public hearings on Bill 40. The panel presenters will each have seven minutes for their presentations, with the remaining 39 minutes for questions from members of the committee. We're going to have two rounds of question and answer, and three parties will participate in a rotation system.

I would like to call upon Ontario Tech University to start their presentation. Please identify yourself and your title.

Mr. Matthew Mackenzie: Thank you, Mr. Chair. I'm Matthew Mackenzie, Ontario Tech University. Thank you to yourself and the members of the committee for the opportunity to participate in this important discussion today.

As I mentioned, I'm Matthew Mackenzie, director of government relations at Ontario Tech. I'll begin as I always do, by acknowledging that we're gathered on the traditional territory of the Mississaugas of the Credit First Nation. I came here from Oshawa, where I live with my family and where the university is located, which is situated on the lands of the Mississaugas of Scugog Island First Nation, covered under the Williams Treaties.

Mr. Chair, I am here today to speak in favour of Bill 40, the Protect Ontario by Securing Affordable Energy for Generations Act. Bill 40 tackles fundamental questions for Ontario's future: How do we support Ontario's economic

growth while securing the reliable and affordable clean energy our growing communities and industries will need in the decades ahead? This bill takes meaningful steps toward answering those questions.

At Ontario Tech University our researchers and students are working hard to develop and deploy clean energy solutions that accelerate progress toward a sustainable future. Knowing that we'll need up to 75% more power by 2050 to build a system that is clean, secure and affordable for generations to come requires strategic planning, long-term vision, and, of course, the workforce to make that happen.

As one of Ontario's leading STEM-focused universities and home to Canada's only accredited nuclear engineering program, Ontario Tech plays a critical role in building the skilled workforce that will help Ontario strengthen energy security and support the responsible growth of energy-intensive industries like data centres, as highlighted in Bill 40. Our graduates will be the engineers, they'll be the operators and they'll be the innovators who are powering these systems.

I believe Bill 40 fosters an important role in prioritizing responsible economic growth and keeping our energy secure by implementing limitations on foreign participation and creating space to set out clear criteria that not only guide decisions in the short term but will have a positive impact in the longer term.

Bill 40 considers how plans, usage and energy-intensive growth will benefit local communities for the next several decades. This matters to families, it matters to taxpayers and it matters to institutions like Ontario Tech that are training the workforce of tomorrow.

Long-term planning and energy usage, delivery and data centre growth is what will keep not just Ontario but Canada both sovereign and competitive. Located in Durham region, Canada's clean energy capital, Ontario Tech sits at the centre of one of the most advanced clean energy ecosystems in the country. Bill 40's focus on enabling long-term energy planning and sector growth directly benefits the companies, the utilities and research partners that we work with every day.

Our recent partnership with Humber Polytechnic to expand nuclear energy training is a direct response to the workforce needs Ontario will face as it builds out this new generation, strengthens transmission and accelerates clean energy projects. This is precisely the kind of long-term planning that we see Bill 40 is designed to support.

Bill 40 also signifies stability and commitment to supporting long-term economic growth in jobs, which are important to our students and to their parents. Knowing that there are reliable, well-paying jobs waiting for them after graduation and affordable energy for their homes is reassuring at a time when tariffs are challenging our economy.

For our part, we remain steadfastly committed to finding solutions to our energy needs, to ethical innovation and training the people that will lead this energy transition. We recently launched our new School of Ethical AI—which is the first in Canada, and we're very proud of it—as well as our recently launched Mindful Artificial Intelligence Research Institute. The incorporation of data centres and related considerations to their placement and their draws on the grid—the loads that they put on them—are very important in our estimation, and we are interested to see that reflected here.

From the point of view of a university that works closely with industry, it's important to also acknowledge the bill's focus on protecting Ontario's energy systems, supporting economic growth but also limiting foreign participation in key parts of the sector. Ontario is home to one of the strongest nuclear supply chains in the world. Canada is an energy superpower, and the world knows it. Protecting our domestic supply chains is what the moment calls for, and we believe the bill reflects that.

Our researchers are actively engaged in nuclear SMR development, AI-driven grid management, cyber security for critical infrastructure, battery storage and electrification, and our graduates are entering these critical sectors that are essential to meeting Ontario's long-term goals. In fact, we're proud to say more than 88% of our graduates are hired within six months of graduation. So it is our hope that, if passed, Bill 40 creates an environment where our students can flourish in the energy sector and continue to provide meaningful contributions to industry, thereby strengthening the talent pipeline Ontario will rely on as it builds out its clean energy economy.

To conclude, although I don't work directly in the energy sector, I see every day how policy decisions shape Ontario's future. I believe Bill 40 offers a practical, long-term approach to securing the affordable, reliable baseload power that families, businesses and institutions like ours depend on. It will strengthen Ontario's energy sovereignty, support economic growth and create the conditions for our graduates to thrive in the sectors that they are preparing to lead.

I encourage the committee to advance this legislation, and I thank you for the opportunity to be here today speaking in favour of Bill 40.

The Chair (Mr. Aris Babikian): Thank you.

Now I call upon the Ontario Chamber of Commerce to start their deputation. Please identify yourself, your title, and you have seven minutes. I will remind you at the six-minute mark that you have one minute left.

Mr. Vincent Caron: Good afternoon, members of the standing committee. It's good to see you again. My name is Vincent Caron. I am the vice-president of policy at the Ontario Chamber of Commerce. We represent businesses of every size, from every sector in every region of Ontario. Our mission is to convene, mobilize and empower businesses and local chambers to lead positive change, something no one can achieve alone.

Let me begin by acknowledging that Bill 40 addresses several priorities of our chamber of commerce on planning for the long-term, investing in modern infrastructure and low-carbon fuels like hydrogen, and maintaining affordability for Ontario businesses. But we are especially encouraged by the introduction of economic development mandates for the IESO and the OEB. The recognition is

more than symbolic. Ontario's economic success cannot be separated from its energy system. When both move in the same direction, our province grows stronger.

We support the direction of Bill 40. At the same time, as with any complex legislation, its impacts will depend on how it is implemented. Today I'll highlight two sectors—data centres and mining—that illustrate both the opportunities and practical considerations ahead. I will then outline one area where greater clarity would strengthen the bill.

First, let's talk about data centres. Much like electrification transformed the economy in the 1800s, AI and advanced computing is rapidly becoming the backbone of economic growth. Their application will improve productivity in every sector and for businesses of every size.

Recent analysis shows that Canada's data centre market is projected to exceed $9 billion by 2029, largely driven by AI, with hubs such as Toronto and Waterloo emerging as key attraction points. This shows Ontario is not just serving domestic digital demand but positioning itself as a global data centre player, capturing investment, jobs and advanced infrastructure.

But we know that this new productivity-inducing utility is dependent on the other, more traditional utilities. Data centres need electricity to run, and lots of it. For that reason, we share the government of Ontario's goal of establishing a process to prioritize grid access based on expected benefits.

With regard to the criteria, we encourage the government to prioritize projects that are demonstrably mature and those with confirmed siting, permitting progress and committed financing. A readiness-based system ensures that every megawatt of capacity is supporting projects that can proceed to construction. This includes having evidence-based project viability assessments, an entry fee or financial deposit for connection application to deter speculative requests, and a regular queue audit to remove projects that are missing timelines or not showing progress. Electricity is a precious and rare resource which should be fully utilized across our economy to drive sustainable, inclusive growth, and as such, the main rule applied should be "use it or lose it."

In balancing the electricity needs of data centres with those of other energy-intensive industries, it's also important to remind everyone that data centres don't just compete with other sectors for electricity; they enable growth across the economy. They support manufacturers or miners in reducing downtime, optimizing equipment, improving quality control, removing defects in ways that the human eye cannot detect. This underscores the importance of efficient, integrated grid planning across all customer types rather than adopting a sector-versus-sector approach.

1510

Which brings me to mining: Ontario's mining sector is central to our nation's competitiveness. In the coming weeks, Ontario Chamber of Commerce will release a report called Mining 2030: Unearthing Ontario's Potential. It will detail the sector's contribution and how we can build on it. For example, just in 2023, mining contributed $23 billion—with a B—to provincial GDP, encoring 30 active mines and 30 more on the way.

Energy is one of the largest expenses for most Ontario mines, accounting for 15% to 30% of expenses, but the combination of growth demand and the loss of generation capacity during the refurbishment of key nuclear reactors creates a supply issue on the immediate horizon. If not mitigated, this could lead to unsustainable pressures on electricity costs. Some foresee prices could increase by double-digit numbers for large consumers like mines by 2030. In that context, we are happy to see Bill 40's addition of authorities to enable government to stabilize prices. This will help keep our business competitive against short-term pressures like supply shocks or volatile commodity prices.

Finally, while broadly supportive of Bill 40, we encourage the committee and the government to ensure that regulation-making powers, including those related to specified load facilities and foreign participation, are implemented with clarity and predictability. In particular, we recommend ensuring that provisions related to foreign influence do not inadvertently place Canadian subsidiaries of global companies at a disadvantage.

The Chair (Mr. Aris Babikian): One minute left.

Mr. Vincent Caron: Many of these firms are deeply embedded in Ontario's supply chain, employ thousands of workers and are subject to stringent Canadian laws.

As our CEO remarked at the recent Ontario Economic Summit, no single community, no single sector and no single nation can tackle today's challenges alone. Ontario succeeds when we remain open to investment, regardless of where ownership is headquartered, while maintaining strong security and oversight.

In short, to ensure Bill 40 achieves this objective, we have to consult with businesses, we have to have transparent criteria to allocate scarce resources, and we have to continue to focus on the electricity affordability to drive decarbonization across our economy. Thank you for your attention, and I'd be happy to take your questions.

The Chair (Mr. Aris Babikian): Thank you.

Our third presenter is Schneider Electric Canada. Please identify yourself, your title, and you have seven minutes.

Ms. Delphine Adenot-Owusu: Mr. Chair, honourable members of the committee, I'm Delphine Adenot-Owusu, director of government relations for Schneider Electric Canada. Thank you for the opportunity to present today on behalf of Schneider Electric, a global leader in energy management and automation. Our company has a proud and growing footprint across Canada and Ontario with our technology present in 40% of Canadian homes and half of commercial buildings. We are supported by nearly 2,600 employees nationwide, operating offices, R&D centres and manufacturing facilities. Our recent investment in expanded production capacity and new distribution in Ontario underscore our commitment to the province.

Schneider Electric is deeply engaged in Ontario's energy future. In addition to today's committee appearance, we actively participated in the province's consultation for the integrated energy plan and on Bill 40.

As Ontario considers Bill 40 and the proposed regulatory process to prioritize and approve data centre grid connection, Schneider Electric commends the province's commitment to supporting economic growth while ensuring a safe, reliable, clean and affordable energy supply for generations to come.

Ontario is at a pivotal moment. Data centres are highly energy-intensive and are projected to account for approximately 13% of new electricity demand in Ontario by 2035. Overall, electricity demand across the province is expected to increase by 75% by 2050.

This rapid growth in demand presents both a challenge and an opportunity. Data centres are not only major energy consumers but also significant economic engines capable of generating high-value jobs and supporting Ontario's digital economy.

With economic growth codified as a formal objective for the IESO and the OEB, it is clear that the framework actively supports Ontario's ambition to attract investment, foster innovation and secure long-term prosperity for its communities. However, the growth and economic ambition must be managed with a focus on energy efficiency, grid resilience and affordability.

At Schneider, we believe that the future of data centres lies in the evolution from being a passive energy consumer to intelligent, grid-integrated assets. Leveraging AI-driven energy optimization, advanced cooling technology and modular design, data centres can become active contributors to the grid's stability and decarbonization. These enhanced capabilities such as demand response, voltage support and real-time coordination with utilities, supported by digital twins and advanced microgrid solutions, directly align with the objective of Bill 40 to manage new large loads, ensure grid reliability and enable timely connection for Ontario's economic growth.

To illustrate the potential of grid-integrated data centres, I would like to share a brief example from our international experience. In Denmark, Schneider Electric partnered with Aeven to transform their data centres into active grid-supporting assets. By deploying advanced UPS and microgrid solutions, these facilities are able to deliver excess power to the national grid and stabilize electricity supply through programs like fast frequency reserve. This model demonstrates how data centres can move beyond being centres can move beyond being passive consumers to become valuable contributors to grid reliability and resilience, a vision we believe is entirely achievable here in Ontario under Bill 40.

To meet Ontario's economic ambitions as they relate to data centres while ensuring its projected and rapidly growing energy needs can also be met, AI data centres must be planned in alignment with grid capacity. With this in mind, Schneider Electric suggests that Ontario's framework prioritizes projects with certain beneficial elements.

Schneider Electric recommends that Ontario's framework should prioritize grid connection approval for data centre projects that make clear commitments to grid-integrated operations. This includes best-in-class energy efficiency, actively integrated renewable energy resources and energy storage solutions. By doing so, this project will support overall grid resilience and help Ontario's energy landscape.

Furthermore, the framework should encourage data centres that leverage AI-driven energy optimization for predictive load balancing and smart cooling technologies. These advance approaches will enhance the reliability and affordability of Ontario's electricity grid by more effectively managing demand and operational costs.

To further support Bill 40's objectives, Schneider Electric also put forward the following guiding principles for the committee's consideration.

First, Ontario must strike the right balance between protection and openness. This approach will foster domestic data hosting, create high-quality jobs and enhance our global competitiveness.

Next, we recommend initiating demonstration pilots, such as those focused on heat reuse, circularity and grid-aware siting.

Finally, collaboration is key. Ontario should work closely with the federal government to ensure our infrastructure and AI strategy goals are fully aligned.

Schneider Electric is pleased to present in front of this committee today, and we welcome the opportunity to help shape Ontario's requirement for data centre grid connection. Thank you, and I welcome your questions.

The Chair (Mr. Aris Babikian): Thank you very much to all three of you.

We will start the first round of questioning, and we will go to the government side. MPP Cuzzetto.

Mr. Rudy Cuzzetto: I want to thank all three presenters for being here in support of Bill 40.

My question is going to be for the Ontario Tech University. I know you mentioned something about how everybody is watching Ontario or Canada. To be honest, that is my tag line. The world is watching Ontario at this current time in the energy sector. As you know, the IESO has said we're going to need 75% more electricity by 2050.

How is Ontario Tech supporting emerging sectors such as clean energy, AI, cyber security and advanced manufacturing?

Mr. Matthew Mackenzie: I really appreciate the question.

We're working with industry partners from across the spectrum of the groups that you indicated—and we're really proud of that—through our ACE climatic wind tunnel, where we're helping businesses scale up from lower to higher TRLs in order to get into the supply chain here in Ontario.

The list that I could provide you—I'm happy to follow up with it; I promise it's extensive.

1520

Our vice-president of research and innovation, Dr. Les Jacobs, works extensively on building up more industry partners for us. One of the things we're really proud of at Ontario Tech is a lot of universities have what we call a push approach to research, where they develop things and try to push it out to industry. We have a pull approach

under Les's guidance, where we work with industry first and we hear from them what their needs are, and then we develop for them and alongside them what they need.

So working with industry, working with partners all across the spectrum in clean tech is something we're very proud of at Ontario Tech.

Mr. Rudy Cuzzetto: Thank you.

I'd just like to follow up with Schneider Electric Canada here. How have the US global politics climate and tariffs impacted your daily business today?

Ms. Delphine Adenot-Owusu: Well, I would say, as we like to say at Schneider, we are the most local of global companies. I work for Schneider Electric Canada, so really, what we are doing in Canada—we have expanded our production capacities in all our manufacturing sites, in Quebec, Alberta, BC. We actually integrated last week with Minister Oosterhoff a new facility with our partner Albesol. So we continue to grow our local presence, because that's what we do at Schneider.

Mr. Rudy Cuzzetto: Thank you.

The Chair (Mr. Aris Babikian): MPP Pinsonneault.

Mr. Steve Pinsonneault: Thank you to the three speakers for taking time to be here and be part of this process.

My question is for Delphine and Schneider Electric Canada. You spoke about economic growth and the importance of it. Generally speaking, do you believe that Bill 40 strikes the right balance when it comes to maintaining a resilient and clean energy grid while also taking into account the economic growth?

Ms. Delphine Adenot-Owusu: Our vision is that the integrated energy plan really addresses a lot of questions, and Bill 40 definitely puts together energy and economic growth, which is extremely important.

As an example, when we at Schneider look at opening a new facility or expanding production, one of the main questions that we have is on the energy and how we can get electricity for our business to grow. So it's definitely something that is important and that we value, to bridge the two.

Mr. Steve Pinsonneault: Thank you for that.

The Chair (Mr. Aris Babikian): MPP Gallagher Murphy.

M^me^ Dawn Gallagher Murphy: Thank you, everyone, for being here today.

My question will go to the Ontario Tech University, Matthew. Thank you for your comments. I'm quite impressed to hear about the ethical AI program at Tech U. I think that's amazing, so thank you for putting that program forward.

I like some of the things you were talking about, about protecting our supply chains. You talked about the graduates moving into the sector—88% are hired within six months. That's phenomenal. That's what we need, our young people coming off school and getting good-paying jobs.

So my question to you is, when we look at other jurisdictions in North America like Texas, BC and California, they have introduced measures to manage growth and the impact of data centres. In the cases of Texas and California, I know through my alliance through my ministry that they're also looking at moving northbound so that their data centres aren't in the heat. They need cooler temperatures. They need to be by water resources, which means our Great Lakes. So when I think about all of these things, my question to you: What are your thoughts on Ontario taking similar steps?

Mr. Matthew Mackenzie: I think, ultimately, this legislation that's proposed gives flexibility, I would believe, to place those data centres where it makes the most sense.

I'm learning a lot more about it myself, even just chatting with my colleague here from Schneider Electric before we came into the committee room about some of the notions that I had about data centres and their requirements versus the new technology that allows them to be more neutral in terms of energy usage.

The Chair (Mr. Aris Babikian): One minute.

Mr. Matthew Mackenzie: So I'm not familiar with the other jurisdictions and what they've done that you reference, but I do think that this legislation allows for a thoughtful evaluation of where it makes the most sense to locate those high-usage infrastructure pieces.

M^me^ Dawn Gallagher Murphy: That's great. I think, as you've noted here, this is all about long-term planning. Those were your comments: Long-term planning is what Bill 40 does. Maybe if you want to make one last comment on that for our students of the future.

Mr. Matthew Mackenzie: Absolutely. Thank you so much. Yes. We couldn't be more proud of our graduates at Ontario Tech. We know that we're training the labour-market-aligned STEM students who will support this energy build-out that the province of Ontario is undertaking, and we're very proud to be a part of it. Thank you for your question.

M^me^ Dawn Gallagher Murphy: Absolutely. Thank you.

The Chair (Mr. Aris Babikian): Thank you. Eleven seconds—10 seconds.

Interjections.

The Chair (Mr. Aris Babikian): It's up. Thank you very much for your interest.

Next round: We move to the official opposition. MPP Glover, the floor is yours.

Mr. Chris Glover: I want to thank the deputants for being here today. I apologize that I was not able to be here for your presentations, but hopefully I can glean some information from some questions here.

I'll start with Matthew Mackenzie from Ontario Tech. You talked about an ethical AI program. This is something that's near and dear to me—I'm the tech and innovation critic for the NDP. I reintroduced a motion in the House just a couple of weeks ago to create a research grant for AI policy and governance. If Ontario Tech was to receive a research grant on AI policy and governance, how could you use it?

Mr. Matthew Mackenzie: Well, what I would love to do is put you in touch with our vice-president of research

and innovation, Dr. Les Jacobs, to talk about how that could support some of the great work that our faculty and staff are doing. We have both the School of Ethical AI and our Mindful Artificial Intelligence Research Institute, both of which we're incredibly proud of. One of the things that I love about it and I know we're especially proud of is we take a multidisciplinary approach at Ontario Tech, so it's not just our computer scientists, it's also our faculty of social sciences and humanities. Everyone participates in it to look at all the intersectionalities that can be involved in AI and cyber security.

I would be very interested to discuss that with you in greater detail. I can't give you a substantive answer right now, though.

Mr. Chris Glover: You know what? I would really look forward to that kind of conversation.

What you're talking about, that integrated approach, when I tour tech companies in Ontario, almost all of them, especially start-ups and accelerators, they say, "We're not just looking for programmers; we're looking for everybody. We need marketers. We need end users. We need somebody who"—I'll just sidetrack for a second here. Decades ago, I was at a party and there was a guy hiring for IBM—this is how many decades ago it was—and he said, "We're looking for B students from the arts, because you can get a programmer to design a program that will do anything, but nobody other than another programmer will be able to use it." You need a variety of people, so I really do appreciate that multidisciplinary approach. It makes sense and it's what's reflected in, certainly, the tech industry, the tech start-ups and accelerators that I tour in my riding and across the province.

Tell me a little bit about this Canadian Artificial Intelligence Safety Institute. What is the mandate of that institute?

Mr. Matthew Mackenzie: Just to be clear, the institute is not specific to safety; it is about mindful—our mantra at Ontario Tech, something our president has really been pushing and we're all very proud of, is "Tech with a Conscience." As I'm sure you would be aware, technology is advancing and developing so fast, and what's important to us at Ontario Tech is that we don't develop technology for the sake of technology; we develop it with an ethical lens to the use and the implications of that technology. Really, that's more of the focus.

On the security side, we do have a centre for cyber security and resilient systems, which you may also find interesting. But specifically on the AI, it's all about the ethical development of AI. How does it support humanity and not just be developed for the sake of developing?

Mr. Chris Glover: Okay. Let's see. None of this happens cheap. It all requires investment. One of the things that we've been pushing for in the NDP is greater investment in our public colleges and universities across the province. We've got 24 universities and 20 colleges in the province, and all of them are struggling right now with funding.

How could Ontario Tech invest if they were to have an increase in funding? For example, right now in Ontario, our average per-student university funding is $10,000; the provincial average across the country is $17,000. We're at—what is that—60% of the provincial average. If you were to get more funding per student, how could you invest that and how would that benefit both the students and our economy in Ontario?

Mr. Matthew Mackenzie: Well, I'm sure it wouldn't surprise you to know that we're currently undergoing a funding formula review with the province of Ontario. We've got a great relationship with our line minister, Nolan Quinn, for colleges, universities, research excellence and security. We also have a great relationship with the staff at MCURES as we undertake this process. I wouldn't want to presuppose anything, but we're having really positive conversations about the funding formula review and we're very optimistic about the outcomes of that funding formula review, especially for a STEM-focused institution like us to be able to increase our impact and the STEM graduates that we can produce.

1530

Mr. Chris Glover: Thank you for that response.

Let me go over to Schneider Electric. One of the big challenges in Ontario is our grid: the capacity to expand our grid and the ability to create data centres and blockchain. One of the challenges with new technology is that the technology will eat up whatever electricity is available.

I've got a friend who works with Hydro-Québec. Five, six years ago, he was talking about blockchain wanting to move into Quebec because it's five cents a kilowatt hour for electricity, and he said they actually had to regulate it.

The Chair (Mr. Aris Babikian): One minute.

Mr. Chris Glover: So, what are your energy needs for your company?

Ms. Delphine Adenot-Owusu: For our company?

Mr. Chris Glover: Yes.

Ms. Delphine Adenot-Owusu: We are expanding our production now in our different production facilities. I think for us, it's more how we can support businesses to actually have the right equipment to be energy efficient so it can also be beneficial for the province. That's what drives us every day, whether it's data-centre manufacturing, or houses or buildings being more energy efficient.

Mr. Chris Glover: Thank you. I'll get a second round.

The Chair (Mr. Aris Babikian): We move to the third-party representative. MPP Tsao.

Mr. Jonathan Tsao: I want to thank our deputants for being here today. I appreciate it.

I wanted to ask a few questions of Monsieur Caron. You mentioned here that there could be a need for some greater clarity in the bill to strengthen it. Can you elaborate a bit on what you would like to see clarified?

Mr. Vincent Caron: First of all, it is a good thing to go and set criteria to discriminate between data centres that are high economic benefit and maybe less economic benefit.

When we started talking about specified load centres and restriction against foreign entities, I think we want to remain very mindful that a very large proportion of businesses operating in Ontario have a foreign ownership.

Those are companies that have a deep presence often in Ontario—would have offices, staff and sometimes thousands of employees.

So, what we want to make sure is that we keep a balance here, that we can continue to attract investment into Ontario with criteria that are not overly restrictive, and the criteria are transparent so that people can know them ahead of time and comply with them.

Mr. Jonathan Tsao: I think that's a very good point, because we want to be able to meet the moment, but we also want to be able to build for the future and not restrict ourselves.

Do you have anything specifically in this bill, though, that you believe should be changed, or if you had a chance to put your pen to it, to make sure we have that ability to not discriminate too much to ensure business has what it can do or needs to do?

Mr. Vincent Caron: There's a lot of regulation-making authority here. I think we want to give ourselves the ability to see those regulations, and I think next year would be an opportunity to see what the criteria are for data centres. I think that's something that will ultimately guide our positioning on it. Here today, we're flagging those considerations; it's not a blank cheque. Obviously, we want to see what those provisions are before we cast final judgment on if the framework is working for businesses.

Mr. Jonathan Tsao: Absolutely.

One of the great, I'd say, benefits and strengths of the OCC that I've always seen is its membership. You have a wide membership representing a number of great Ontario businesses. So, I'm wondering if you feel that the government has adequately consulted through the OCC, through its chambers, in order to get substantial feedback on this bill.

Mr. Vincent Caron: Today is a great opportunity, and I think today we were able to give you a few building blocks that actually come from the input of our members. Again too, you mentioned that very well. I think that the breadth of that membership requires us to keep an open mind, right? You look at data centres, which enable growth across the economy. You look at manufacturers, miners, retailers—they have different needs, but they also pull from those data centres to become more productive. So this is all interrelated. One of the things in the run-up to this committee hearing is hearing comments about manufacturing jobs or data centre jobs; they're all interrelated at the end of the day. They all draw from each other, so we have to keep that in mind and make sure it's not a sector-against-sector approach.

We're willing to give the government the benefit of the doubt here because, again, a lot of those criteria are not really fleshed out in their specifics, and there is time for that. Committee hearings are certainly a very good venue for that. We, frankly, are very happy that we have this opportunity today and that we see industry representatives as well feeding in.

Mr. Jonathan Tsao: Wonderful. Thank you so much.

I'd like to move to Schneider Electric. You mentioned in your deputation about the need for energy efficiency and grid resilience. Do you feel Bill 40 meets that and actually helps to strengthen grid resilience and energy efficiency?

Ms. Delphine Adenot-Owusu: The fact of bridging energy and economic growth is definitely something interesting. The government overall is going toward that energy efficiency with the integrated energy plan as well. I think Bill 40 is also an addition that comes and strengthens the whole process.

Mr. Jonathan Tsao: Wonderful. Thank you, Chair.

The Chair (Mr. Aris Babikian): Thank you.

We move to our second round of questioning. MPP Vickers.

MPP Paul Vickers: I would like to thank the presenters for coming in and giving us your knowledge and helping us to understand what's needed in the future.

My question is for Mr. Caron. How important is long-term energy certainty to the members you represent, and do you feel that the bill adequately addresses those needs?

Mr. Vincent Caron: It's everything, right, to know that when you come to a jurisdiction, you will have the ability to use energy for the long term and that that energy supply is going to be reliable. The price is also a really big component.

To me, the direction of this bill is really good, I want to say. There are a lot of things in there to be really cautiously optimistic about. When you think about giving IESO and OEB an economic mandate, it's a bit of an insurance policy to say to companies willing to invest in the province that the government actually always keeps that as a consideration—like how competitive the framework is for companies. That is a very positive thing. I think, in terms of the economic regulators that, every day, have the opportunity to bring regulations that create costs for businesses, to have a mandate that requires them to keep in mind the impact of those regulations is a really, really positive thing.

Again, I think at the end of the day, it's really about the outcomes. The test is the next few years as you see reactors come offline. Again, I think there's really positive signals from this government to say there's refurbishments on the way; there's also, in the interim as well, natural gas that can come in as backup generation. We're not in a position like some of the US states where you see brownouts regularly. Again, I think you can look at Ontario as a very stable jurisdiction to invest in, and I think the bill adds certainty by giving the IESO and OEB an economic mandate.

MPP Paul Vickers: So, in a way, having the backup—maybe not backup, but having the generation from gas plants that can come on very quickly is obviously more attractive than if we didn't have any gas backup then.

Mr. Vincent Caron: It's an all-of-the-above energy strategy. At OCC, certainly, we recognize the essential role that conventional energy plays for reliability. At the same time, it's also really good to see in this bill recognition of hydrogen as part of an energy mix. Again, it's using

all the tools for what you can use them for, and so that is positive.

I think it's really important throughout the development of an integrated energy plan to keep in mind, how do we keep reducing emissions over the long term? But while you do that, you need to always check those boxes for investment: Is the power coming on? Do we have the reliability of power? Can we access it at a competitive price? Can we have that balance of things that investors look for when they come and put their money in Ontario for the long term—for decades—and create jobs here?

1540

MPP Paul Vickers: Yes, balance—balance is a good word for it.

Mr. Vincent Caron: Balance is the key.

MPP Paul Vickers: Okay. Thank you.

The Chair (Mr. Aris Babikian): MPP Dowie.

Mr. Andrew Dowie: Thank you to all the presenters for being here. My question will be for Delphine. In reading up on Schneider Electric, you've got a hundred different countries that you're operating in and a whole host of regulatory environments, so hopefully your organization will have seen it all worldwide.

I was hoping to gauge what your organization's overall impression is of Bill 40, and whether the government's direction that we've put forward here—how it compares versus some of the other regulatory environments that you've seen in your career.

Ms. Delphine Adenot-Owusu: Thank you for the question. Really, at Schneider, the core of our daily job is about energy efficiency and to make sure that we save as much energy so there is energy available for something else. In Canada, we say that we waste 50% of the energy that we produce. There is a huge amount of energy here that we can save. Again, energy efficiency is at the core of what we do.

And Bill 40—really, putting economic growth under the IESO, for example, when they implement their energy efficiency programs. At the end of the day, it's not just program implementation. It has the mindset of, first of all, reducing the bill for all the consumers, but also making sure that the excess of electricity we save through those energy efficiency programs can actually be used for other things like data centres, manufacturing, and then attracting investment. So definitely, this is something that we value.

Mr. Andrew Dowie: Thank you.

The Chair (Mr. Aris Babikian): MPP Gallagher Murphy.

M^me^ Dawn Gallagher Murphy: My question here is to Vincent Caron of the Ontario Chamber of Commerce. So it's interesting, the number you noted there—to exceed $9 billion for data centres.

The Chair (Mr. Aris Babikian): One minute.

M^me^ Dawn Gallagher Murphy: That makes us, truly, a global player—absolutely.

Quick question then, because we are short on time: What opportunities do you see for local companies because of Bill 40's commitment to buy-Canadian procurement?

Mr. Vincent Caron: I think using the $30 billion that we spend every year on goods in Ontario is an attractive thing. We've been talking about the Building Ontario Businesses Initiative for a few years now. It's always exciting to hear the prospect of that. But the devil is always in the details—

The Chair (Mr. Aris Babikian): Thank you very much. The time is up.

We'll move to MPP Glover.

Mr. Chris Glover: Thank you again, everybody, for being here.

I'll address my first question to Mr. Caron—actually, I want you to continue with what you were talking about, the $30 billion. You're talking about government procurement supporting Canadian businesses, or Ontario businesses. Can you go on a little bit about that?

Mr. Vincent Caron: Right. I think when we create divisions between the types of procuring sources, certainly, that's where we want to know which companies are excluded. Again, I made a comment during my remarks about foreign-owned companies that often employ thousands of people in Ontario, making PPE, for example, and making all sorts of products. I think the criteria really do matter here.

In the long-term, we believe, at the Ontario Chamber of Commerce, that value-based procurement is the way to go and actually will give a leg-up to our domestic suppliers who produce high-value products, as opposed to going to the cheapest source in procurement. I think in the long-run it provides an advantage to our homegrown companies, but also by procuring goods that are of really high value for our medical sector and for our hospitals.

But with the situation that we have right now, where the United States has implemented very restrictive policies, we absolutely understand the direction that this new bill is taking. Again, I think value-based procurement in the long run is what we should be aiming for.

Mr. Chris Glover: Thank you. Certainly, everything has changed over the last year with the tariff threats, with sovereignty threats. One of the things that we're looking at in Canada now is data sovereignty: creating our own apps, creating our own data centres, having our data stored here and used in Canada. Where does the chamber of commerce stand as far as protecting data sovereignty and encouraging data sovereignty?

Mr. Vincent Caron: Again, the principle is good but, really, does it deter from opportunities in the details, right? Certainly, when we engage our members on AI, the overwhelming interest, the overwhelming thing that we hear is the need to catch up on adoption, the need for businesses to better educate themselves on how you pursue more productivity, better revenue, better commercialization strategies, better product strategies with AI. So, how do we use AI for business outcomes?

I hear that a lot from our companies. So, should we create resilience in our data infrastructure? Absolutely, but we should also be very mindful about trying not to cut our companies from critical tools and resources, and often that's not always the companies that are homegrown.

Mr. Chris Glover: Okay. Let me just pitch this out. I tour a lot of tech companies, and one of the things they say they need, especially at the start-up stage, is a government contract, because if they get a government contract, then they've got credibility, they've got stability and they can go and start to market outside. How should the government be balancing that need to support our start-ups with government procurement?

Mr. Vincent Caron: I think consulting with businesses is a no-regret action because we've talked about the BOBI framework for a long time. Actually, I still hear companies who say, "Yes, but I don't know where to begin. I don't know how to really plug into government," or I hear companies who say, "Well, there's this procurement over here. I have something, and I really don't know how to connect."

I think the more tools there are to create meaningful contacts between SMEs, between homegrown companies, homegrown innovators and connect them with the procurement officials and create, really, that two-way conversation—product specifications are also informed by what we know is around in Ontario. I think everyone wins. I think it's just creating more opportunities for businesses to have their voice. Local chambers know their local businesses, too, so I think going through them as well is a really good thing.

Mr. Chris Glover: Okay. Thank you very much. Actually, it's a really good answer. I was scribbling down notes as you were speaking.

Let me go back to Mr. Mackenzie. How should the government be supporting our SMEs, particularly our tech start-ups? I guess the other part of this question would be, what sort of partnerships does your university have with local small businesses in Durham or other places where you're located?

Mr. Matthew Mackenzie: Excellent question. One thing that we're very proud of is, we have our brilliant incubator, which is our on-campus incubator where they work specifically with local businesses in order to help them grow and develop technology into their businesses. We also have an investment fund that they manage as well so that they can actually take an investment stake in some of the small businesses that they are supporting in terms of equity in the business in order to help them grow and provide some of that seed money that these amazing Durham region and Ontario businesses need to grow and get started in tech here in Ontario.

Mr. Chris Glover: Thank you very much. When I've toured their colleges and universities, because I used to be the critic, the innovation centres were just amazing and the work they were doing to promote local economies and local small businesses was wonderful. Thank you for the work that you're doing.

Mr. Matthew Mackenzie: Thank you.

Mr. Chris Glover: I'll pass. Whatever 15 seconds I've got, I'll pass it on.

The Chair (Mr. Aris Babikian): Thank you. We move to the third party: MPP Tsao.

Mr. Jonathan Tsao: No further questions, Chair.

The Chair (Mr. Aris Babikian): Okay. Thank you. That concludes our time allotted for this panel.

Thank you to Ontario Tech University, Ontario Chamber of Commerce and Schneider Electric Canada for your valuable input and for your contribution to this discussion. Have a nice day.

We are recessed until 4 o'clock.

The committee recessed from 1550 to 1600.

CANADIAN MANUFACTURERS AND EXPORTERS

NUCLEAR INNOVATION INSTITUTE

GROUNDHEAT ENERGY SOLAR WIND CORP.

The Chair (Mr. Aris Babikian): Welcome back. Did you miss us?

We'll start the next panel, the second panel. I believe we have one presenter through virtual presentation. We'll start with the Canadian Manufacturers and Exporters. Pratik Bhalerao, you have seven minutes. Please state your name and your title. At the six-minute mark, I will remind you that you have one minute left.

Thank you. Go ahead.

Mr. Pratik Bhalerao: Thank you, Mr. Chair and members of the committee. My name is Pratik Bhalerao. I'm manager of policy and outreach at Canadian Manufacturers and Exporters, CME. We are a national business association that has advocated for the economic health of all manufacturers in all provinces and subsectors since 1871. Thank you for the opportunity to speak today about Bill 40, the Protect Ontario by Securing Affordable Energy for Generations Act.

My message today is simple: Ontario needs an energy system that is affordable, predictable and capable of supporting long-term industrial investment. Manufacturers support the goals of Bill 40, but we believe targeted refinements are essential to ensure that the bill truly delivers affordability and competitiveness of industry.

Ontario's manufacturing sector competes globally. We already face significant cost pressures, and energy is one of the largest. Bill 40's ambition to guarantee clean, reliable and long-term energy is aligned with what many of our members need. But how the government enacts this ambition will materially affect whether we can invest in electrification, expansion and innovation here in Ontario.

Bill 40 explicitly elevates economic growth as a statutory objective in both the Electricity Act and the OEB Act. That's an important recognition. The electricity system is not just a utility; it's a foundation for job creation, capital investment and long-term industrial competitiveness. Manufacturers can now more credibly advocate for system planning that aligns with clean industrial expansion, including green hydrogen production. However, without strong, transparent metrics defining economic growth, this mandate could be weak. We need assurance that growth does not override ratepayer interests.

Bill 40 also introduces a regime for specified load facilities such as data centres. This could be used strategically to align very large electricity users with provincial priorities—for example, requiring commitments on jobs or regional investment. But this power also has the potential to deter major industrial users if burdens or conditions are unclear or onerous. There's a real concern of politicizing grid access to a certain extent, especially if criteria are not transparent.

Bill 40 also includes restrictions on hostile foreign participants in Ontario's energy sector, explicitly prioritizing Canadian entities in procurement. This supports domestic energy supply chains, potentially driving investment in Canadian clean energy manufacturing. But we must also retain the ability to source competitively internationally when domestic capacity cannot deliver on price or timelines. This will grow local supply chains while also protecting rate affordability.

In terms of what manufacturers want to see to truly ensure that Bill 40 supports industrial competitiveness and long-term growth, I urge the committee to consider the following recommendations:

(1) Define economic growth more precisely:

—require that the IESO and the OEB publish a 10- to 20-year economic growth plan with quantifiable metrics such as jobs created, clean energy investments and industrial load forecasts; and

—mandate public reporting on progress so that the economic growth objective does not become an empty phrase;

(2) Narrow and clarify the specified load facility regime:

—limit the definition and regulation to clear, high-megawatt thresholds and to explicit classes such as hyperscale data centres;

—exclude traditional manufacturing facilities and electrification projects from SLF capture;

—require published and objective connection criteria and a formal, appealable administrative process if connection is denied or conditioned;

—add a statutory five-year sunset and mandatory review of SLF impacts on investment and rates. This preserves government's discretion when needed but also prevents ad hoc denial of access;

(3) Mitigate investment risk:

—require binding long-term contracts, like power purchase agreements or capacity contracts, or a clear cost-sharing framework, so that large industrial uses can plan with predictability;

—create, also, a mechanism for rate stabilization during the ramp-up of new generation or transmission, especially for industries making investment decisions now; and finally

(4) Support the Ontario industrial supply chain:

—in procurement rules governing publicly funded generation or grid infrastructure, prioritize Canadian manufacturing capacity first, but maintain open, competitive processes to potentially include foreign entities under strict criteria. This supports local supply chains without sacrificing value.

These amendments matter for Ontario's energy future for a number of reasons. With global competition to attract clean industrial investment, Ontario needs to offer not just clean energy but affordable, predictable and stable energy.

Manufacturers are ready to electrify operations, produce green hydrogen and scale advanced technology, but they need clarity and certainty from the energy system.

By also aligning specified load-facility criteria with jobs and capital, and by ensuring transparency, Ontario can channel major project energy into long-term economic development.

Finally, prioritizing domestic energy supply chains strengthens Ontario's resilience, but not at the cost of competitiveness or cost effectiveness.

Chair and members of the committee, let me end by saying Ontario stands at a pivotal moment. Bill 40 has the ambition to reshape our energy future for the next generation. Manufacturers are deeply invested in Ontario's clean energy future. We support the direction of Bill 40, but to seize its full opportunity, we need clarity, protection and accountability. The amendments I've outlined are not barriers—they're guardrails that will let this bill drive real economic growth, clean innovation and long-term stability

The Chair (Mr. Aris Babikian): One minute.

Mr. Pratik Bhalerao: I urge the committee to consider these recommendations so that Bill 40 becomes not just a vision but a foundation for a stronger, more competitive Ontario. Thank you.

The Chair (Mr. Aris Babikian): Thank you very much.

We move to the Nuclear Innovation Institute. Please identify yourself and your title. You have seven minutes.

Ms. Jessica Linthorne: Thank you, Mr. Chair. Good afternoon. Thank you for the opportunity to speak today. My name is Jessica Linthorne. I'm the president and CEO of the Nuclear Innovation Institute, an independent non-profit organization based in the Clean Energy Frontier region of Bruce, Grey and Huron counties.

Our work focuses on providing clear, evidence-based analysis to support Ontario's long-term energy planning, economic development and workforce needs. We appreciate the opportunity to appear before the committee as you review Bill 40, particularly the new framework for connecting large electricity users to the grid.

Demand for electricity from data centres, AI computing and cloud services is increasing rapidly. Bill 40 recognizes this by introducing a structured process through the new section 28.1 to ensure that specific load facilities, including data centres, can be connected in ways that support economic growth and maintain system reliability. Our research strongly supports the need for clarity and alignment.

Today, Canada's data centre sector uses roughly 12 terawatt hours of electricity annually. If this load were met by natural gas or coal, emissions would be significantly higher. By contrast, nuclear power produces zero operational emissions while offering the constant, around-the-clock supply required for data infrastructure. Just as importantly, data centres require continuous 24/7 power, making supply reliability a foundational requirement.

The Clean Energy Frontier region is uniquely positioned to help Ontario meet these needs:

(1) Reliable power and the right land to support growth: Nuclear generation and the Clean Energy Frontier provide steady, always-on electricity that matches the needs of large, continuous data centre operations. This reliability aligns directly with the expectations set out in section 28.1. The region also offers something data centre developers increasingly struggle to find: large, suitable parcels of industrial lands. Hyper-scale facilities often require 50 to 200 acres, and the Clean Energy Frontier has the space to support responsible, long-term digital infrastructure growth.

(2) Existing transmission capacity: Proximity to one of the province's largest nuclear generating stations means proximity to high-capacity transmission infrastructure already in place. This reduces the cost, complexity and timelines associated with connecting large, new loads.

(3) Secure sites and infrastructure: Data centres require elevated physical and cyber security. Locating them near new nuclear facilities provides access to established security systems, trained personnel and emergency response capabilities—an advantage highlighted in our ERO submission.

(4) Meaningful economic impact for rural Ontario: NII's early analysis shows that constructing a 48-megawatt hyperscale data centre in the Clean Energy Frontier region would generate $484 million in provincial GDP, $331 million in labour income, 3,785 jobs during construction and $162 million in tax revenue. These benefits align directly with the bill's emphasis on supporting economic growth in Ontario.

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At the federal level, Canada is prioritizing data sovereignty and investing in domestic AI computing capacity, but this infrastructure must be powered by clean, reliable energy, and it is to be located in Canada and not in jurisdictions with higher emissions or different privacy frameworks. Nuclear energy, particularly in the Clean Energy Frontier region, provides a stable foundation for securing domestic data infrastructure.

Bill 40's intent is clear: to ensure that large, new loads support economic priorities, align with system requirements and can be integrated into the grid responsibly. Continued life extension of existing nuclear facilities paired with future projects such as the proposed Bruce C will be essential to meeting the long-term electricity needs of AI, cloud computing and other energy-intensive sectors.

In summary, the growth of data centres presents both opportunity and challenge. Clean, reliable power, particularly nuclear, is essential to meet that demand. The Clean Energy Frontier region is uniquely positioned to support responsible data centre development with the reliability, land infrastructure and economic potential to drive long-term growth. Bill 40 provides a clear framework to ensure that this growth aligns with Ontario's economic and energy priorities.

Thank you for the opportunity to speak today.

The Chair (Mr. Aris Babikian): Thank you very much.

Our third witness will join us virtually. I call upon the Groundheat Energy Solar Wind Corp. representative to join us.

Mr. Gino Di Rezze: That's me. Hello.

The Chair (Mr. Aris Babikian): Hi. Welcome. Please identify yourself and your title. You have seven minutes. The floor is yours.

Mr. Gino Di Rezze: My name is Gino Di Rezze. My company name is Groundheat Energy Solar Wind. I'm a professional engineer in Ontario. I'm considered the pioneer in geothermal. My first installation of geothermal was in 1979.

Thank you to the committee for allowing me to speak. I'll be sharing some benefits and solutions for geothermal storage capacity to contribute to the Bill 40 strategy.

My understanding of Bill 40 is that it's at the province's discretion to approve grid connections for large, energy-intensive facilities of over 50 megawatts, prioritizing those that promote economic growth, like data centres and hydrogen plants. It also promotes hydrogen development and faster utility approvals. Geothermal technology directly supports the same by cutting electricity demand and lowering emissions. It makes Ontario more competitive in big projects.

The Bill 40 objectives are, from my understanding: strategic gatekeeping for major economic benefits; local-value Canadian jobs; and getting grid access, especially data centres, hydro plants, manufacturers and crypto mining.

Mandate for the economic growth: Energy planning regulations must now consider job creation and industrial competitiveness.

Support of hydrogen: Bill 40 helps build the provincial hydrogen sector, grid and regulation integration. The faster utility approvals remove referendums for energy infrastructure right away. New funding options allow the government to subsidize infrastructure at lower rates.

Geothermal matters because the geothermal cuts peak demand and can reduce facility grid demand for heating and cooling by 30% to 40%, freeing up capacity for growth and new projects, especially in some cases where we can actually store thermal cooling and store thermal heating underneath existing high-tower buildings in downtown Toronto or any other place.

We support the hydrogen economic uses for process heating and cooling in hydrogen plants, integrating with renewable resources and cutting electrical demands. It enables economic growth, lower energy bills and more grid headroom, allowing some space for grid reusables and local job creation in drilling, construction and manufacturing. With proven technology used by Microsoft data centres in Sweden and with deep cooling in Toronto at the industrial scale, we can actually reproduce the end result with deep cooling in downtown Toronto on Front Street many times over under the existing lowest parking garages.

So the economic impact, potential jobs, general section—we can increase jobs: 5,000-plus jobs in the installation supply chain, depending on how quickly you can allow us to accelerate this installation of thermal storage. Investments in large facilities, $20 million to $80 million in capex, could total $300 million to $500 million throughout the province, and operations savings $3 million to $5

million annually in electricity avoidance for large facilities.

The key message is that geothermal is a practical, shovel-ready solution for Bill 40. The big challenge: enabling economic growth without great overloads. Key studies show the impacts, in many cases, of electricity savings: real, private investment and job creation. In addition, there are studies done by the US Department of Energy that in some cases we need only anywhere from 20 hours to 100 hours a year for data centres to totally get off the grid and they can basically—most of their needs are during the peak times. This morning, I was part of a group, a European district energy group in Europe and Ireland—a group presentation. It showed concerns that in Dublin, data centres will be needing 50% of Dublin's available power.

Thank you for the opportunity to talk.

The Chair (Mr. Aris Babikian): Thank you very much for the deputations.

Now we will start the first round of questioning. MPP Cuzzetto.

Mr. Rudy Cuzzetto: I want to thank the three presenters here today. My question is going to be for Jessica here. By 2050, we're going to have one of the cleanest grids in the world—99% clean. What role do you believe that the emerging technologies such as SMRs and advanced nuclear systems should play in Ontario's energy planning under Bill 40?

Ms. Jessica Linthorne: Through you, Mr. Chair: Thank you for the question. I certainly recognize that today we see 60% of Ontario's grid is coming from nuclear and it's reliable, affordable, stable power that is being generated. So certainly, the economic opportunity with nuclear—and we did hear from a previous speaker today about the domestic supply chain, and that's not something to be understated. Bruce Power has a commitment of spending 95% here in Canada, and so that's a tremendous opportunity economically when we think about technology advancements such as data centres. There's a tremendous opportunity for the province to align technology such as data centres and that growth with nuclear power.

Mr. Rudy Cuzzetto: Thank you very much for that.

I would like to ask Gino a question here. What is your organization's overall impression of Bill 40 and the government's direction on securing affordable energy for the future, Gino?

Mr. Gino Di Rezze: We're absolutely for it. We think it's a good idea. In fact, there's a responsibility that goes along with trying to grab power from citizens with data centres without any implications. We were asked to do a presentation in Waterloo for a 64-megawatt data centre, and this says it can't give you power until seven years from now—the data centre wouldn't go ahead unless you bring your own power.

Basically, you have Google and Meta and all these big companies that are basically trying to give the incentives for demand-side management and force—the same way as Ontario Hydro used to give benefits to those who shut off the power at peak times, now, some of the data centres in the US are forced to pay industrial usage, locally, to basically shut down power at the peak times so they can use it.

1620

So instead of going from Ontario Hydro to the individuals, now it's going directly from the data centres. They're being forced to do this in order to put the data centres in. They're putting regulations in place, similar to Bill 40. So this is a very good bill—as an example of what should be done.

Mr. Rudy Cuzzetto: Thank you very much, Gino. I'll pass it on.

The Chair (Mr. Aris Babikian): MPP Dowie.

Mr. Andrew Dowie: Thank you to all the presenters for being here.

My question is for the Canadian Manufacturers and Exporters. As you saw, Bill 40 adds an economic growth approach to the objectives of the Ontario Energy Board and to the Independent Electricity System Operator. I was hoping to understand how your membership feels about this slight change in focus.

Mr. Pratik Bhalerao: I think they're very happy about this. I think it's a good recognition by the government that economic growth be embedded in the OEB Act and the IESO act—very important steps.

What we would like to see is it being defined more clearly. I think at this point, we don't really understand how the metrics are going to be laid out. I think once we have a better understanding of that, we'll think about it. But on the face of it, we were delighted that the government recognized the need for economic growth and elevated that as its statutory objective in those two acts.

Mr. Andrew Dowie: Okay. Thank you.

The Chair (Mr. Aris Babikian): MPP Pinsonneault.

Mr. Steve Pinsonneault: Thanks to the presenters for being here and taking time on your day to be part of this process.

My question is for Jessica and the Nuclear Innovation Institute. In your comments, you said there's a need for a long-term energy plan. Nuclear gives you power all the time. It's clean and it's reliable. I think we agree with that.

How might Bill 40 influence economic development in areas like Bruce county, as you mentioned, where nuclear energy plants play a major role in the local economy?

Ms. Jessica Linthorne: Thank you. Through you, Mr. Chair: When we think about the local economy in rural Ontario, I'll go back to, in my remarks, referencing the opportunity to be close to a nuclear facility. We have transmission lines; there's a proposed Bruce C project—certainly bringing more power online to power this future technology that we're seeing; and then, certainly, allowing that across the province.

We think about, again, the domestic supply chain, the jobs that will be created, recognizing, again, the role that nuclear will play to power that reliable, affordable technology into the next economy.

Mr. Steve Pinsonneault: Yes, and it's clean energy. I had a friend who retired out of the Bruce nuclear plant. He

went there like 35 years ago. It's safe, it's reliable, and I think it is the new future of energy. Thank you.

The Chair (Mr. Aris Babikian): Thirty-two seconds. Okay. Thank you.

We move to the official opposition. MPP Glover.

Mr. Chris Glover: Thank you very much, Mr. Chair. Let's see. Thank you all for being here and you, sir, for being online, Mr. Di Rezze.

I'm going to start with Mr. Bhalerao. Am I pronouncing your name correctly?

Mr. Pratik Bhalerao: It's pretty close.

Mr. Chris Glover: Would you say it, please.

Mr. Pratik Bhalerao: It's Bhalerao.

Mr. Chris Glover: Bhalerao. Okay. I put the emphasis on the wrong syllable. Anyway, thank you for being here.

You were talking about how electricity is not just a utility. I was trying to take notes as you were speaking. I'd appreciate getting—actually, from all three of you—your written deputations in the future, just via email. It's much more; it's the foundation for our economic success. A hundred and fifteen years ago, Adam Beck was a member of this Parliament. He was arguing for public utility because he owned a cigar box factory in Kitchener and he wanted to have cheap electricity for his business, but also for developing a manufacturing base. So what you're saying 115 years later is still relevant.

How do we actually do this? And now, with the pressures of blockchain data centres coming, how do he we balance that? You had some suggestions about how we balance the needs of manufacturers versus these other agencies that are coming in.

Mr. Pratik Bhalerao: Well, data centres, it appears as though are going to be the future, but I think we also have to recognize the importance of traditional manufacturing facilities. Some of these are intensive industries that require a lot of electricity. So I think we have to find a way to balance claiming some of the energy from things like hyper-scale data centres that, as Jessica mentioned, require a lot of energy, versus traditional manufacturing facilities that I still think are the backbone of the economy in Ontario.

Manufacturers need a lot of electricity to produce things; to generate and to power the economy. But my job is to advocate for clean and reliable energy for manufacturers, so I think it's up to how the bill is implemented and then finding the balance. As the previous presenter said, the devil is in the details, so I think we'll still need to see a bit more clarity on how we can make that distinction between traditional facilities and data centres.

Mr. Chris Glover: Thank you. It speaks, really, to vertical integration. This is one of our greatest competitive advantages in Ontario, that we've got vertical integration.

I'm from Oshawa, and the beauty of manufacturing in Ontario is we had the iron mine in northern Ontario, we had the steel being processed in Hamilton and then we had the cars being made in Oshawa and Oakville and other places as well. Now we're in the 21st century and we're looking for rare earth minerals, and we've got them in the Ontario. We've got the ability to process them here as well.

What is the role of manufacturing, and how do we transition to or open up our economy to high-tech manufacturing here in Ontario?

Mr. Pratik Bhalerao: Well, manufacturing is changing. Manufacturing is not the same, where you think people work in a factory. AI is becoming a big part of manufacturing. A lot of our members are now introducing AI into their operations. It's called "advanced manufacturing" for a reason, right? It's different from previous manufacturing. So I think there will be more of a role for AI and those technologies to be integrated into traditional manufacturing. I just think it's going to be a longer process.

Certainly, we have a lot of retirements in the sector—about 18,000 retirements every single year for the next several years—and we are finding it difficult to bring those people in. So I think, out of necessity in some ways, people are relying on AI and automation tools. That's going to continue changing how we see manufacturing.

Mr. Chris Glover: Do you know what? I'm just going to let you complete that: so, 18,000 retirements of workers in manufacturing in the last few years.

Mr. Pratik Bhalerao: Correct.

Mr. Chris Glover: So what are you recommending, what is your agency recommending for replacing those workers and training new workers?

Mr. Pratik Bhalerao: I think apprenticeships are always going to be the gold standard, but we know that the average age of an apprentice in Ontario is 28, which is too old. I think the government has taken good initiatives in bringing more people in. We have more funding for things like the Level Up! skilled trades fairs. We see a lot of our member companies trying to recruit people, and they're having difficulty.

So I think there's always going to be a role—some things AI cannot replace. We need our folks, core people who are doing stuff on the factory floor, but also a role for robotics and more advanced AI technologies.

Mr. Chris Glover: Thank you very much. I will just say my father is a tool-and-die maker, my uncle is an electrician and other uncles are in the construction industry, and they are all very old. I'm getting up there; they're all very old.

Let me go to Mr. Di Rezze. You were talking about helping to build the hydrogen system. What was the link between your solar/wind corporation and the hydrogen system?

Mr. Gino Di Rezze: It's only about storage.

The Chair (Mr. Aris Babikian): One minute.

Mr. Gino Di Rezze: Geothermal, for the last 47 years that I've been involved in it, is basically—you take the heat out of the ground in the winter, and in the summer, you put the heat back in the ground. What we're doing now is we're separating the geothermal loops. We're making a hot area and a cold area, and we're making this hot area and cold area a heater in a parking lot near the building in the grass area or underneath the existing lowest part of the—

Mr. Chris Glover: Do you know what? I think we're going to be out of time. I'm going to come back and let you complete this, because I'm going to have another round of questions, and I do want to ask you this about as well, Ms. Linthorne, about hydrogen and the role of nuclear energy in creating generated hydrogen.

1630

The Chair (Mr. Aris Babikian): Thank you very much. The time is up.

We will move to the third party. MPP Tsao.

Mr. Jonathan Tsao: Gino, please go ahead and finish your thought.

Mr. Gino Di Rezze: Basically there's two things: Power in Ontario, at least 50% of the time it's hardly used—nights, weekends, long weekends, holidays. Most of the time it's the peak times. We're building all of these generators primarily for peak times more than any other time. So basically, if we're able to store electricity like we do with batteries, we can also store heat in the ground and chilled water in the ground for major buildings downtown and cool and displace the compressor bearing units in air conditioning; we're able to reduce the amount of compressor power by 25% to 35%.

There has to be a combination of bringing in new power from nuclear reactors and all the other things, but we can also save power downtown and reduce the amount of draw from the grid, and this could be scalable. Over the last three years, we devised a drilling machine that can go underneath the lowest parking garage in a building. Seven feet high, it can drill 600 feet, semi-automatic, five to eight times faster than anything else. We can scale that up, same way as The Well downtown. Using for storage for district heating—we can do this, exactly. It's just a different form of geothermal, except it's just an advanced form. We have to do both demand-side management and also increase power. Otherwise, with increased power by itself, I don't think we can do it.

Bill 40 is a good example of this going ahead. Now, it doesn't matter what heat we store. We could store heat that's coming out of the sewers. We could store heat that's coming out of the process of generating hydrogen or cleaning bottles for bottling plants. We could store heat and store cooling in the ground.

The Chair (Mr. Aris Babikian): You're done? Okay.

We'll move to our second round of questioning. MPP Jordan.

Mr. John Jordan: I'll direct my question to Mr. Bhalerao. You mentioned in your talk the tremendous amount of energy that manufacturing requires. This bill prioritizes the megawatts to go to manufacturing and to other high job-creating sectors, to meet our projected growth in those areas. I was wondering if you could share your association's thoughts on that strategy.

Mr. Pratik Bhalerao: I think that is the way to go, because what we care about really is jobs. Jobs created are very important, and we know that manufacturing is very important to the economy. We have 800,000 jobs just in Ontario. In Canada, we have about 1.76 million jobs, and I think the government has done a good job in attracting tens of billions of dollars in manufacturing investment that has resulted in good-paying jobs across the province.

Just codifying the economic growth as a statutory objective, we think, if defined correctly—and if there are metrics on job creation—will help in attracting more investment to the province, when there is certainty for investors, along with some other components in this act. And we totally support that job creation is one of the more important components of what we think this act will result in.

The Chair (Mr. Aris Babikian): MPP Pinsonneault.

Mr. Steve Pinsonneault: Thank you, Chair. Through you to Pratik, do you believe Bill 40 provides certainty to support long-term capital investment by companies?

Mr. Pratik Bhalerao: Yes. I think if some of the metrics are clarified, such as the specified load facility ranging—like I said, traditional manufacturing facilities should be excluded from that. I don't have a megawatt number for you—but I would think if there's a clear determination of if a facility requiring over 100 megawatts will be subject to capture, if at all, and a facility requiring less than that will not be or a facility that is deemed traditionally manufacturing will not be. I think manufacturers operate on a 10- to 20-year timeline, so I think having that long-term certainty before a final investment decision is made is very important.

Like I said, if the act is able to define those metrics more clearly, I think that will certainly provide more investment certainty. But as it stands, we still think that the act has the potential to create more jobs and advanced manufacturing in the province.

Mr. Steve Pinsonneault: Thank you for that.

The Chair (Mr. Aris Babikian): MPP Ciriello.

MPP Monica Ciriello: Thank you all for being here today. I really appreciate it. My question is for Jessica. What is your organization's overall impression of Bill 40 and the government's direction on securing affordable energy for the future?

Ms. Jessica Linthorne: Through you, Mr. Chair, thanks for the question. When I think about economic development and the opportunity—my colleague here shared the examples very specific to manufacturing—in the nuclear sector across the province, there are jobs created, we know, that support nuclear and the production of that power. In particular, with the conversation from Canadian Manufacturers and Exporters—manufacturers such as BWXT, who is a founding member of the Nuclear Innovation Institute and is a major manufacturer creating jobs in various cities across our province.

We recognize the economic development and the certainty to ensure that we can step into the new economy with data centres and AI cloud computing services but also needing to be responsible in powering that and taking a strategic approach. That means creating jobs for Ontarians and assessment growth for our municipalities and continued prosperity for our province.

MPP Monica Ciriello: Beautiful. Thank you.

Mr. Rudy Cuzzetto: How much time?

The Chair (Mr. Aris Babikian): Two minutes and 30 seconds.

Mr. Rudy Cuzzetto: Okay, I'll take it.

The Chair (Mr. Aris Babikian): Okay. Go ahead, MPP Cuzzetto.

Mr. Rudy Cuzzetto: To the Canadian manufacturers, could you please tell me a little about the members you represent?

Mr. Pratik Bhalerao: We represent members in every subsector, from auto, chemicals, cosmetics, even members in the nuclear space, members in the oil and gas space and the mining space. We have members that are mom-and-pop-run shops to the largest producers in the country, so it's really a wide spectrum of members that we represent.

Mr. Rudy Cuzzetto: And in the automotive sector, how would Bill 40 help them? I come out of the automotive sector; I used to work for Ford Motor Company for 30 years. Now I work for another Ford, Premier Ford, so I've never left Ford. How do you think this bill will help the auto sector as well?

Mr. Pratik Bhalerao: Well, I don't have a specific answer for that for you right now, but I can submit a written answer for the record at a later time.

Mr. Rudy Cuzzetto: Okay. Thank you.

The Chair (Mr. Aris Babikian): One minute. That's it?

Mr. Rudy Cuzzetto: That's it.

The Chair (Mr. Aris Babikian): You still have one minute. No?

Mr. Rudy Cuzzetto: No.

The Chair (Mr. Aris Babikian): Okay. It's your choice. MPP Glover.

Mr. Chris Glover: Let me go back to Mr. Di Rezze. You were talking about Enwave: Actually, Enwave is in my riding. It provides deep-water cooling throughout the downtown core, all the way up to this building here. I was told that the building we're in, the Legislative Assembly of Ontario, is actually cooled by deep-water cooling from Enwave. They built a 150-foot well underneath the building called The Well—because it's on Wellington—and they're providing deepwater cooling from that.

The systems you're talking about are similar, but they're retrofitted systems. When they were building The Well—for people who don't know it, it's down at the corner of Spadina and Wellington—it was the biggest man-made hole I had ever seen when they built it. It was six storeys or more underground of parking and then, beneath that, they built a giant tube for providing deep-water cooling.

What's the cost for this deep-water cooling and the geothermal heating that you're providing? What does it come up to cost? How does it compare with other sources?

Mr. Gino Di Rezze: Our partners built The Well. Actually, they constructed The Well using the concrete block. So this well is a big tank; it's 1.8 million gallons of water. And this will basically allow them to heat and cool the hundreds of buildings—I think it's 150 buildings—that they are doing right now.

1640

We can reproduce that well underneath existing lowest parking levels—drilling holes, putting these pipes in the ground, the same way as you do for a geothermal, except we're putting them closer together—at one tenth of the cost and one tenth of the time. And if we have enough equipment and capacity and scaling up—you can expect some investors to come in, like trusts, REITs, whatever, to help, to basically take us through to other parts of Canada—we can do this anywhere, at the lowest parking level, where there's no cars, or hardly any cars. We can do this at one tenth of the cost and one tenth of the time.

Mr. Chris Glover: Okay. You know what, I'd love—

Mr. Gino Di Rezze: And we use the existing space that's there now.

Mr. Chris Glover: Okay. I'd love to see some more, if you have some more details. You can email my office. My name is Chris Glover, and I'm sure you can find me online. But I'd like to see more of a breakdown of that and how that works. Enwave is phenomenal in the riding that I serve—

Mr. Gino Di Rezze: We're in the Star this week, and we're going to be at the MaRS conference, a two-day conference, in the next week as well.

Mr. Chris Glover: Okay.

Mr. Gino Di Rezze: And we've been all over North America right now in promoting this, but now it seems like it's catching on.

Mr. Chris Glover: Okay, thank you, yes. Please send the information to my office. Let's see, I'll go to—

Mr. Gino Di Rezze: Just imagine: If we were to reduce the existing building load by 25% to 35%—and there's no grid involved, you just reduce the grid necessary—we can use that 25% to 35% at some other place, right? So this is a proven technology. It's a Canadian technology.

Mr. Chris Glover: You're increasing the capacity to do other things, which is really important.

Let me ask a question of Ms. Linthorne. What is the role of nuclear—I sort of set this up before—in generating hydrogen? And I'll just preface this a little bit. One of the things that I've heard is that you can't just turn on and turn off nuclear, and so you're generating. Some of the people who have come in here are actually dairy farmers and they complain about electricity being dumped into the ground because it affects the animals. So can you use the extra electricity to generate hydrogen at a plant like Bruce?

Ms. Jessica Linthorne: Through you, Mr. Chair, a non-technical answer for you today: Back to Gino's comments around taking the opportunity for us to power the grid together, we recognize that this needs to be a very collaborative approach. Is there space for hydrogen in the future? Yes, I believe there is. I think there's space for all technologies—Canadian technology; Candu certainly making nuclear power for us—but then the wind, solar and all the tools in the tool box are going to be required to have a clean grid.

With respect to hydrogen specifically and the role nuclear will play, to create hydrogen, to be true, clean, hydrogen, it needs to be a clean grid—again, bringing us

back to why we need base-load nuclear. If we have that base-load nuclear power, that will allow us to make that clean hydrogen and further power the economy.

The Chair (Mr. Aris Babikian): One minute.

Mr. Chris Glover: Are there any pilot projects using nuclear to generate hydrogen? Because hydrogen is basically a storage; it's not actually a power source.

Ms. Jessica Linthorne: Through you, Mr. Chair: I can certainly follow up with you with regards to your question.

Mr. Chris Glover: Okay, thank you.

I'll give up my 30 seconds. I'll pass it over—

The Chair (Mr. Aris Babikian): Okay, thank you.

MPP Tsao.

Mr. Jonathan Tsao: For CME, I'm wondering. In your deputation, I heard you speak about the need for clarity, protection and accountability. I'm wondering if you would like to expand on that bit for us.

Mr. Pratik Bhalerao: I think there were two points; the first was the SLF regime. What I meant by that is we need to exclude manufacturing facilities. We need clarity on what that regime is going to look like.

The first point was with regards to the economic growth statutory objective as well. What I meant there is also having clear guidelines as to what the economic growth part of it will mean. Just having metrics about job creation, capital investment or load prediction forecasts—anything like that will provide clarity to manufacturers before they make a final investment decision.

Mr. Jonathan Tsao: Why would you say it's important for manufacturers to have that clarity?

Mr. Pratik Bhalerao: Because manufacturers operate on a long horizon, 10- and 20-year horizons, so before they make the decision, they need to know if—because Ontario is competing with other jurisdictions, especially in the US. We've heard from manufacturers now that US states have been calling them to move their operations down south.

So I think Ontario has to be competitive. We have a good, stable regulatory jurisdiction. This bill serves to attract investment, but I think just having that clarity on what those metrics are going to look like in practice will allow manufacturers to make that investment decision.

Mr. Jonathan Tsao: Thank you very much.

Chair, I yield back the rest of my time.

The Chair (Mr. Aris Babikian): Okay. Thank you very much. That concludes the time allotted for our second panel. Thank you very much, all of you, for coming and sharing your valuable input and expertise with us.

Now we're going to take another recess until 5 o'clock so that our final panel is ready.

The committee recessed from 1647 to 1655.

ONTARIO CENTRE OF INNOVATION
NUVATION ENERGY
TRYLON TSF

The Chair (Mr. Aris Babikian): Welcome back, everyone. We have our final panel. We have the Ontario Centre of Innovation, Nuvation Energy and Trylon TSF.

We will start with the Ontario Centre of Innovation and Mr. Raed Kadri.

If not, we can go to one of the—

Mr. Raed Kadri: I'm here—sorry. Raed Kadri is here.

The Chair (Mr. Aris Babikian): Okay. Ontario Centre of Innovation, please go ahead. Identify yourself and your title. You have seven minutes. At the six-minute mark, I will remind you that there is one minute left.

The floor is yours.

Mr. Raed Kadri: My name is Raed Kadri and I'm the vice-president of strategic initiatives, business development and head of OVIN at the Ontario Centre of Innovation.

Good afternoon, Chair, and members of the committee. Thank you for the opportunity to speak today about the Protect Ontario by Securing Affordable Energy for Generations Act, otherwise known as Bill 40.

Bill 40 represents an important step for Ontario, one that links energy security directly to our economy, paving the way for a future that is sustainable and prosperous. For the first time, economic growth is now a formal objective for Ontario's energy agencies. This means they must now consider how their decisions can support job creation and economic growth. In doing so, not only does Bill 40 reinforce the government's commitment to building an energy system that is affordable, secure, clean and reliable, but it makes energy a core part of growing our economy.

At the Ontario Centre of Innovation, or OCI, we recognize that building the future of industry goes hand in hand with meeting the growing demand for energy. For this reason, we are pleased to see the government identifying and prioritizing energy security as a pillar of economic prosperity. This approach fuels the many industries we support and the homegrown Ontario businesses we champion, many of which operate in energy-intensive industries.

From mining and advanced manufacturing, to automotive and mobility, construction, agri-food, technology and more, the future of industry should be powered by secure, affordable and reliable access to clean energy and Bill 40 reflects that. By taking on a balanced approach towards energy security and economic growth, it's clear that Ontario's energy policy isn't just about keeping our lights on, it's about creating strategies that drive new investment, economic growth and jobs across Ontario.

Bill 40 is legislation we need today to set up our economy for greater productivity and success for generations to come. At OCI, we view energy security as a driver and an enabler of our mission. It empowers Ontario companies to build the future of industry, from nurturing the seeds of innovation to embarking on R&D with industry partners, piloting new technologies in real world environments and

bringing these to market here at home and all over the world.

We see this in the journey of the companies we support, whether they are leading the adoption of critical technologies like AI, quantum and robotics to advance enhanced manufacturing and mining operations; building the cars of the future with the next generation of connected, autonomous, electric vehicle and charging technologies; or developing digital health solutions and more. All these companies rely on large-scale data infrastructure and require increased grid capacity to power their solutions, which in turn contribute to growing energy demand.

Bill 40's focus on meeting the energy demands of data centres, for example, along with expanding our energy capacity more broadly, will ensure that Ontario companies will have access to the energy they need to bring their innovations from manufacturing floors to supply chains. This links energy security directly to increased economic output, long-term productivity, job creation and prosperity.

Beyond keeping up with the energy needs of today, Ontario is fostering energy security for tomorrow by investing in future energy sources like hydrogen. Bill 40 prioritizes this by fuelling hydrogen development and supporting initiatives like the Hydrogen Innovation Fund to ensure the growth of hydrogen storage and generation solutions, along with broader applications in transportation, manufacturing and heavy industries. For Ontario companies, this means access to a diverse and resilient energy system that will power their productivity for decades to come.

1700

With strategic investments into the future of energy security in Ontario as outlined in Bill 40, organizations like OCI and the companies we support will deliver even greater economic impact. In the past year alone, OCI has supported nearly 700 companies in Ontario and helped to create and retain over 6,500 jobs. In addition, the companies we support generate over $680 million in incremental sales revenue, and over the past six years we have catalyzed nearly $4.3 billion in follow-on private sector investments. These numbers demonstrate not only our ability to deliver on Ontario's economic development priorities but, more importantly, showcase balanced potential for growth as energy security plays a growing role in fostering a productive and resilient economy. Most of all, these numbers prove that economic growth does not happen by accident; it's a product of government making conscious decisions that enable jobs to be creative and industries to thrive.

To conclude, Bill 40 sends a strong message that Ontario's committed to supporting resilient energy systems and the growth of energy-intensive industries that are critical to the province's long-term competitiveness. By creating conditions that encourage increased productivity, job creation and investment, the bill supports Ontario companies as they grow, scale and bring new solutions to market, while creating jobs and strengthening our communities.

For the people of Ontario, Bill 40 means that energy infrastructure is built and maintained with trusted partners, that critical decisions are made in Ontario's best interests and that the growth in the electricity system contributes directly to local prosperity. It means that our economy continues to expand and, as electricity demands rise, Ontarians can rely on a system that is secure, resilient and aligned with long-term provincial priorities. Thank you.

The Chair (Mr. Aris Babikian): Thank you very much.

Our next panellist is Nuvation Energy. Please go ahead, identify yourself and title, and you have seven minutes.

Mr. Alex Ramji: My name is Alex Ramji. I'm at Nuvation Energy, where I am the director of product management. Thank you, Chair, and thank you to the committee for having me here today.

I'm an electrical engineer, having graduated from the University of Waterloo. As mentioned, I'm employed at Nuvation Energy, where I serve as the director of product management. Nuvation Energy is a technology provider based in Waterloo that designs and sells battery management systems with our manufacturing occurring in Markham.

Back in May, our CEO came before this committee to provide our thoughts on Bill 5 with a specific focus on why it is important to safeguard Ontario's critical infrastructure against foreign adversaries from being able to participate in Ontario's energy and critical infrastructure procurement.

Today, I want to highlight the opportunity Ontario has through Bill 40 to further protect our energy systems by supporting Ontario- and Canadian-owned and operated businesses in this sector.

As this committee knows well, the threat of foreign adversaries purchasing access to our critical infrastructure is a real and present threat to our national security. These adversaries undercut our domestic manufacturers, offering products well below our costs, and with procurement often selecting the lowest-cost option, this leads adversaries gaining access to our electrical grids.

Battery-management systems in particular make a perfect point of remote access. They're highly technical components that regulate voltage, temperature and current to ensure system stability and protection of utility-scale battery energy storage systems. Failure to adequately safeguard components like this could result in exploitable weaknesses within our critical infrastructure.

We have already seen real examples of this sort of behaviour this year. Recently, CBS reported that US intelligence services were aware of foreign adversaries having access to electricity, water treatment and telecommunication plants for years before they were uncovered, all the way down to small municipal utilities, who lack national security expertise and resources.

This issue not only compromises our infrastructure but compromises our economy. Domestic suppliers and manufacturers cannot compete with the artificially deflated prices that our adversaries can produce. Many foreign companies can offer their products at a loss, knowing their government will provide a grant or subsidy to make up for any loss of revenue.

We are concerned that this is a strategic and coordinated effort to gain access, not just an economic advantage. In order to survive, we are seeing other domestic companies resort to passing off foreign products as their own, a practice known as white labelling. This practice is conceding to the foreign competition, putting our security at risk to keep their doors open.

Companies like Powin, formerly North America's third-largest battery-storage manufacturer, filed for bankruptcy earlier this year because of their inability to compete due to this sort of practice. If a company like Powin cannot withstand this practice, think about the smaller domestic companies across Ontario and Canada having to shut their doors. This leaves our adversaries as the only remaining source for these products. We would not just be selling out our sovereignty to our adversaries but the Canadian jobs and livelihoods as well.

Ontario, through Bill 40, has the opportunity to break this cycle. We have already seen support through tariff relief programs, which will allow Ontario manufacturers to withstand the uncertainty with the United States, but by prioritizing economic growth and job creation as objectives of Ontario's energy system through a buy-Ontario process, we can not only save countless jobs across the province but create more jobs and strengthen Ontario's economy and supply chain capabilities in the face of uncertainty.

This legislation is a great and necessary step, and I want to thank the minister for his leadership in making it happen, but it is what comes next that will make the difference for Ontario.

It is our recommendation that Ontario take immediate steps to limit the procurement of high-risk control electronics to only using domestic options. This approach should be targeted rather than broad-based, as indiscriminate restrictions could unintentionally hinder industry growth and negatively affect the economy.

Not all components within an energy storage system present the same level of risk. Control electronics, including energy management systems, battery management systems and inverters, pose the greatest vulnerability to foreign interference and should therefore be prioritized for risk mitigation measures. Notably, domestic- and allied-nation alternatives are already available to meet Ontario's needs in these areas. By applying focused restrictions, Ontario can take a precise and deliberate approach to safeguarding critical infrastructure while avoiding unnecessary disruption to the industry and minimizing impacts on consumer costs.

Whether this is something to be added to the legislation or part of a future regulation or directive is for the committee to decide. What matters most is we follow up on our words with concrete action.

Ensuring vulnerable components like control electronics for energy storage are manufactured by and purchased from domestic suppliers cannot just be an idea; it needs to be the standard. The cost difference to do so is only a couple per cent more on the total project value, and that's a small price to pay for security, reliability and sovereignty—not to mention the untold benefits to Ontario's economy. Nuvation and its industry partners stand ready to partner in helping make this happen.

I want to thank you all for your time today and consideration of this legislation and welcome any questions you may have.

The Chair (Mr. Aris Babikian): Thank you.

Our final panelist's deputation is from Trylon TSF. Go ahead. You have seven minutes. Please state your name and title.

Mr. Paul Royal: Good afternoon, Chair and members of the committee. My name is Paul Royal, and I'm the CEO of Trylon TSF Inc. I appreciate the opportunity to appear before you today.

Trylon is a Canadian manufacturer headquartered in Elmira, Ontario, which is just north of Waterloo. I'm here to speak in support of the government's proposed legislative amendments under Bill 40, which align foreign content restrictions for the Ontario Energy Board with those already applied to the Independent Electricity System Operator under Bill 5.

This alignment is more than a technical change; it's a strategic step to protect Ontario's critical energy infrastructure, strengthen supply chain security and ensure that the province's ambitious electricity expansion can proceed on time and on budget. By closing gaps between planning and regulatory oversight, Ontario is creating a consistent framework that prioritizes resilience and economic development.

Ontario is at a pivotal moment. The government's Energy for Generations integrated energy plan forecasts a significant increase in electricity demand over the next 25 years. To meet our growing needs and to enhance our clean-energy industrial competitive advantage, Ontario will need to mobilize the most significant expansion of transmission and distribution infrastructure in a generation. New transmission towers and substations will be needed to support this growth, and the choices we make now will shape Ontario's energy future for decades to come.

Trylon is a proud Ontario company in continuous operation since 1932. We employ over 500 people across Canada, the United States and Europe, with our main manufacturing facility and engineering headquarters in Elmira, Ontario.

Our products—steel transmission towers, substations and related equipment—are made using 100% Canadian steel. We're proud to be a trusted vendor to Hydro One and to other utilities, and we're deeply invested in the communities where we operate.

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Why is it important that we're aligned with the direction that the government is taking with Bill 40? First, grid security is paramount. The COVID-19 pandemic and recent geopolitical events have exposed the risks of relying on offshore suppliers for essential components. By ensuring consistent foreign content restrictions across our electricity system, Ontario can reduce execution risk and protect critical infrastructure from global disruptions.

Second, economic growth and resilience depend on strong local supply chains. Every job at our Elmira facility supports three to four additional jobs in the region. We work with over 100 local suppliers and invest more than $4 million monthly in the provincial economy. Our commitment to Ontario-based procurement ensures that the benefits of our growth are shared across communities, strengthening both the manufacturing base and long-term supply chain security.

Third, this alignment creates a level playing field for Ontario suppliers. In the United States, our products face millions of dollars in annual tariffs, yet we continue to compete and succeed. All we are seeking is fairness here at home—consistent rules that recognize the strategic value of domestic suppliers, just as other jurisdictions do for their own industries.

Trylon has invested over $8 million in new equipment and plant expansion in Elmira to increase our capacity and efficiency, with new equipment arriving just this past week. With the right policy framework, we're ready to create 40 new jobs immediately and many more as Ontario's grid grows. We're also planning further expansion in 2026 to increase production capacity and employment.

In closing, Bill 40 is a critical step to secure resilient and prosperous energy for Ontario. By providing the means to enable foreign content restrictions across resources procured by the IESO and regulated by the OEB, the government is sending a clear message that Ontario values security, reliability and economic development. Trylon stands ready to support that vision and deliver the infrastructure that Ontario needs.

Thanks for your attention, and I look forward to your questions.

The Chair (Mr. Aris Babikian): Thank you very much.

We will start the first round of questioning with the government side. MPP Pinsonneault.

Mr. Steve Pinsonneault: Thank you to the speakers for taking time out of your busy day to be here and be part of our process.

My question is for Nuvation Energy and Alex. In your comments, you said we need to protect our energy systems, and we agree with that. Our government intends to implement initiatives, including imposing certain procurement-related restrictions on foreign antagonists. Could you speak more towards if you believe this is a good thing for Ontario, given today's geopolitical dynamic? Now, I know you touched on this, but I would like you to go right into detail on it.

Mr. Alex Ramji: Sure. Thank you for the question.

Absolutely, I think it is important for Ontario to be focused on this. We have seen other foreign entities putting a lot of focus and energy into certain industries. Energy storage is one that we've seen, in particular, China having a big focus on. They've gotten to a point where they really do dominate the industry.

If everyone was friends and we had no issues of foreign concerns, it would be okay; we could have happily trade. But the reality is they're really taking over the industry, and there are certainly concerns that we should have with them having that level of global dominance in an industry that touches so close to everyone's home—electricity, our critical infrastructure.

So it is absolutely important that we are protecting our domestic and allied sources of components that go into these systems, because if we see them disappear, we're only going to have one option. Energy storage and solar and other renewables—it's a phenomenal energy source now. We see it continuing to grow and grow in adoption, and it's because it's a really effective and economic way to continue to sustain the growth that we need in energy.

If we put all of our eggs into one basket, in particular a basket that we see lots of concerning things coming out of, it's certainly going to impact our sovereignty and our security.

Mr. Steve Pinsonneault: I agree with that. I think you're right on the money. Thank you.

The Chair (Mr. Aris Babikian): Any further questions? MPP Dowie.

Mr. Andrew Dowie: Thank you to all the presenters today.

I think I'd just like to ask Mr. Kadri a question. I know you're involved with a lot of—I'll call them start-ups—and working in manufacturing. What we know from Bill 40 and from what we're seeing in the market is specified load facilities are coming on board. That includes energy-intensive industries and data centres. I know from the technological side, we need that. I'm hoping to ask of you what you foresee these new requirements will be to scale up in the province of Ontario.

Mr. Raed Kadri: It's a really good question. Thank you for the question.

I think we see across the world that AI has become the centre focus of a lot of industries. It's no longer an area of technology but rather it's become commonplace. It will fuel a lot of technology as we go forward.

The more that companies look to AI, whether it be the movement of people and goods, whether that be within health care—and the list goes on—I think it's going to require a lot more energy. It's going to become an intensive industry. As a result of that, this bill supports making sure that there's sovereignty in those data centres, that we have the energy to support them and that we can ensure that Ontario is a leader in AI and in technology in the future.

Artificial intelligence will be a part of every industry. As we look and as we hear from others, everybody is looking towards us as a jurisdiction for leadership in artificial intelligence. Through this bill, we'll be able to fuel that and provide the infrastructure that will support our leadership in that space.

The Chair (Mr. Aris Babikian): MPP Jordan.

Mr. John Jordan: Thank you, Chair. I'm going to direct my question as well to the Ontario Centre of Innovation. As you know, this government is focused on economic growth and business development. I think we probably have that in common, so thanks for that.

Now more than ever, with the threat of tariffs, I wonder if you could tell us a little bit about what new opportunities you think Bill 40 could create for business and communities or the province in general.

Mr. Raed Kadri: Thank you for the question. I think there's a lot of new opportunities that it can create. I think as we look at our position and our opportunities, we have to be a little bit more specific about what we have to offer, how we're different than other jurisdictions and, I guess, what assets that we have that the world needs—certainly energy. We heard this not only in Ontario but across the globe. That's a unique value proposition that we have as a province. So making sure we approach it with an outlook on economic development and job creation is very important.

The Chair (Mr. Aris Babikian): One minute.

Mr. Raed Kadri: Hydrogen is something that we're seeing quite a bit, and a lot of companies are looking at Ontario as a leader in hydrogen. That also in itself will create a lot of opportunities for jobs and for economic growth.

I don't have to tell you the automotive sector is very important. It's striving towards electrification. With that, we're going to need the power charging infrastructure across this province. We're going to need to power manufacturing across this province.

All of that is front and centre with Bill 40, making sure we have what we need in order to support those industries, create those good-paying jobs and, of course, continue to be an economic powerhouse in this province.

Mr. John Jordan: Thank you.

The Chair (Mr. Aris Babikian): Thank you.

We move to the official opposition. MPP Glover.

Mr. Chris Glover: Let's see. I'll start with Mr. Kadri from the centre for innovation. I don't know whether you are related to the hockey player. No? Okay.

You were just talking about Ontario's unique value proposition because we've got vertical integration. We had it in the 20th century. I'm from Oshawa. Everybody in my family worked at General Motors. The iron was mined in northern Ontario, it was processed into steel in Hamilton and then it was made into cars in Oshawa, Oakville and other places as well.

Now we've got a similar value proposition because we've got rare earth minerals that can be mined here. We can process them here, and we need to get the technology manufacturing happening here too. How should the government be encouraging that high-tech manufacturing to be taking place here?

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Mr. Raed Kadri: To answer your first question—I was muted—yes, a distant relative.

I myself am from Windsor, Ontario, so I grew up in a manufacturing community. My father worked at the Windsor assembly plant for many years, so as you can imagine—I'm like you: Manufacturing is at the heart of what raised me, fed me and also educated me, so it's very important to this province and to this country and to communities across this province.

We, as Ontario, have become the centre of the world when it comes to manufacturing not just vehicles, but the components that go into vehicles and the high-tech components that go into vehicles.

As you know, being from a manufacturing automotive town, the automotive sector is usually a leader in new technologies because of the high volume, and people are looking for new components that are high-tech and that. And so as a result of our strengths in automotive, as a result of all the investments that are being are being committed to this province and continue to be committed to this province—those are also high-tech components like semiconductor-related components, hardware, power electronics and the list goes on.

I think that we are doing a fantastic job in this province, promoting ourselves, promoting our skill sets. There's nowhere in the world that we go where people don't recognize the talent and the workforce that we have in Ontario, don't recognize the strengths that we have in Ontario, don't recognize the growth in our automotive sector, do not recognize the investments that are coming to our province. I think that we have a great position globally, and if we continue to push—and I think that this bill is a big piece of that puzzle as we drive forward to continue to be that leader.

I don't think we have any shortage of opportunity that's coming to us, and as long as we continue down that path, which we will—and like I said, everywhere I go, I hear quite frequently that they want to be more involved with Ontario and, I like to say, they want to buy more Ontario technology. I think that's a testament to where we've come and where we continue to go in this province when it comes to advanced manufacturing.

Mr. Chris Glover: Okay, thank you. I'm going to ask a question about hydrogen. Hydrogen has got such great potential. Billy Bishop airport is in my area, and I've talked to a number of people there about how we are going to green the aviation industry. They say, "Batteries are just too heavy. If we're ever going to get off fossil fuels, we're going to have to go to hydrogen."

But the challenge with hydrogen is that you need an entire system built simultaneously in order to make that kind of transition. What's the government's role or what should the government's role be in creating a hydrogen industry with a market here as well?

Mr. Raed Kadri: Thank you for the question. That's a very good point—not only the aviation industry but the heavy-duty industry, where we talk to a lot of companies. They very much—with cars, the future is battery powered. But the heavy-duty industries are likely to be powered by hydrogen, which is still electrification, but it's a different kind of fuel that fuels that. And you're right: It does require infrastructure.

Actually, more recently, I talked to an aviation company that is looking at utilizing hydrogen as part of their new technologies, which I think is a great step forward. It does take some time. Just like anything, hydrogen requires careful handling, storage and safety protocols, like any energy source. So it's great that this bill supports regulated

development and strict standards to ensure safe integration into Ontario's energy system and proper oversight to help mitigate operational and environmental risks.

Also, when we talk to companies, we point to the Hydrogen Innovation Fund, which is a program that's available right now. That usually attracts companies' attention to look at Ontario as a place to build, develop new hydrogen technologies and test new hydrogen technologies. It does help that some of the companies that we talk to are doing some work in the United States. But with all of these things that are in place that support hydrogen development and hydrogen as an industry, we are getting a lot of attention from companies that do want to look to Ontario, considering everything that's going on, as a place to continue to grow and build.

So I think we've got a great step forward here, and the right environment is in place to continue to push in that direction.

Mr. Chris Glover: That's great. Thank you very much. And to the other gentleman: I've got another round so I'll be asking questions in the next, but 60 seconds isn't quite enough to get too far into anything, so I'll pass to my colleague.

The Chair (Mr. Aris Babikian): MPP Cerjanec.

Mr. Rob Cerjanec: Thanks to the three of you. Mr. Kadri, I just want to pick up a little bit about hydrogen and, specifically in this bill, if you think it should explicitly state that uses of hydrogen which might most impact GHG reductions, greenhouse-gas-emission reductions, should be prioritized—for example, using it in electric arc furnaces to make steel instead of coke. Should we be looking at that a little bit more specifically to ensure that we get the biggest bang for our buck to clean our air and our environment while also moving to more energy productive uses?

Mr. Raed Kadri: Thank you for the question. I'm a big believer that we should draw industry in and work with industry to better understand what the opportunities are as we look at economic development and job creation. I think the point that you make is very important. I think that it will likely be an opportunity for that. Closing off and specifying specific areas, I think, limits the opportunity for engagement and bringing companies into our province.

Like I said, we're in a great position in Ontario. We're well known for our leadership in many areas, including the movement of people and goods, as well as our manufacturing industry, and I use that very broadly. Allowing companies to engage with us more broadly, to come into our province and work with us to shape how we proceed, I think, is the best path forward. I think that, as a result, we'll see leadership in so many areas, including the ones that you identified.

Mr. Rob Cerjanec: Perfect, thank you. We were just talking a little bit about artificial intelligence and where we're going as a world, as the country, as a province, and I think there are some really important points being made to ensure that we have the energy needed for data centres.

The energy piece is, I think, only one part of artificial intelligence and what we need to do. Canada is not even top 20 in the world, for example, in supercomputing capacity, so I think we have a long way to go here in Canada and in Ontario so that we can really be a leader in there. Would you like to see something that ties in all of the different pieces around AI from the government?

Mr. Raed Kadri: I think, like I said, artificial intelligence is coming very rapidly at us. Part of it, and I'll just be honest, is I lived in the world of connected autonomous vehicles, where everybody said that they were working on connected autonomous vehicles before they really understood what their role was in that. I think we're in that area with artificial intelligence, and we hear about that more broadly globally, that there's probably a buzz going on.

I think that we're doing incredible work in this province. There's no misunderstanding of our leadership in artificial intelligence. There's no misunderstanding of our ability to commercialize AI solutions. I think we're getting into a place where artificial intelligence is not a topic area. Rather, it becomes infused in different industries like vehicle technology, like health care and so on and so forth.

I think all the pieces are there. What we're seeing and where it really sits is how it is part of each industry and the strategy in each industry. Talking more about the automotive sector and companies that we speak with, they already know that we are leaders in AI. There's no shortage of that.

Having the ability to power it from a sovereign perspective and having control over our data centres and having the ability to power it, I think, is an important step as we proceed. We're at the forefront of this in a more tangible way here in Ontario. I'm not going to name all the companies, but we have companies that already know that if they want to do artificial intelligence, they should be in Ontario, and we are talking to them about that.

We've got the leadership position on that. It's really about the infrastructure. We hear this from everybody in terms of being able to power the sovereign data within our province. I think what this bill will do is make sure that we're doing that but also make sure that the energy infrastructure is sovereign as well.

Mr. Rob Cerjanec: Perfect. How much time do we have left?

The Chair (Mr. Aris Babikian): Two minutes.

Mr. Rob Cerjanec: I want to switch gears a little bit and talk about productivity. It's missing right now from the bill, productivity. It does talk about economic growth, but growing the economy doesn't necessarily mean we're making a more productive economy.

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Looking at this bill, looking at energy platforms, where do we see that going? Maybe I'll speak to some of the folks that are a little bit more in the energy space.

Mr. Paul Royal: I would be happy to take that question. We're supporting Bill 40, and in particular the ability to then drive a buy-Ontario framework to allow electrical distribution authorities like Hydro One to buy Ontario and have a runway ahead of them, which would allow things like long-term contracts, which then allow businesses like mine to invest substantially.

The Chair (Mr. Aris Babikian): One minute.

Mr. Paul Royal: As I mentioned when I was speaking, we put $8 million into our plant in new equipment, which drove up our efficiency for certain lines of the products we manufacture by 600%. It's with a runway of understanding that these authorities have the ability to buy Ontario, and are even mandated to buy Ontario, that we can continue to invest.

We face, as I also mentioned when I was speaking, millions of dollars in tariffs annually on all the product we're shipping to the US. That's a big impact. That's millions of dollars that could go to investing in expansions in our plant and new equipment that isn't available for that. For my mind, in answer to your question—

The Chair (Mr. Aris Babikian): Thank you very much. The time is up for the first round.

We will go to the second round. MPP Cuzzetto, you have the floor.

Mr. Rudy Cuzzetto: I want to thank all three presenters for being here today.

My question is for Nuvation Energy. You had mentioned in your remarks that a battery-management system could serve as a point of remote access to manufacturing. Can you explain how that could be the case?

Mr. Alex Ramji: Absolutely. Thank you for that question.

I would say the first direct way, as far as remote access, would be if a system, for example, supports remote updates, if it supports configuring things like this that can be done over the air. But in many installations, we hope that's actually not the case. We want these systems to be locked down. If we have sufficient firewalls or other network securities in place, then you protect the local asset without that external communication.

The example I like to give—I'm not wearing one today, but if I were having my Apple Watch on—I'm sure everyone here is familiar with smart watches. This is a device that sits on our wrist that has WiFi connectivity, it has cellular connectivity, it has satellite connectivity, all on the footprint of our wrist.

We are working with highly complicated, very large electronic systems that very easily can incorporate the ability to communicate with satellites. So even if you take away this mainstream connectivity method through firewalls and network security at a site, there is still that vulnerability of—is there the ability to communicate externally via satellite?

That's concerning. We want to make sure that these systems are built and designed by companies that are trusted and that are, again, domestic or allied nations so we don't have to worry about these potential back doors that could be in place.

Mr. Rudy Cuzzetto: I would like to ask the Ontario Centre of Innovation—I noticed you were speaking about your family being in the automotive industry. I come out of the automotive industry as well. I was there for 31 years at Ford Motor Co., and I joke around I still work for Ford—another Ford.

We've been able to attract $45 billion of automotive investment to Ontario. I remember when the previous government was in power, under Kathleen Wynne, the CEO of Chrysler Canada had said that this was not a jurisdiction to invest in anymore. It was a service industry here; it wasn't a manufacturing industry. How will Bill 40 help change that as well as we're moving forward?

Mr. Raed Kadri: Thank you for the question. My dad worked at Stellantis, now Chrysler. As you can imagine, I've only ever driven those vehicles—sorry, I shouldn't say that. I drive other cars too.

Laughter.

Mr. Raed Kadri: This bill—like I said, there are many things, but what's most important is we are becoming a jurisdiction. As you can see with all those investments, it's a testament to our ability to make things and make things very well in this province. We will continue to do that through this bill. By prioritizing energy agencies, prioritizing economic growth, job creation and their decisions, it will allow them to support these investments, to get these plans up and running very quickly, to make sure that they have the energy they need to produce the vehicles and keep those good-paying jobs in the province. It will also send a signal to others that they should come and invest in Ontario because we have not only the energy to support them, but also our energy agencies are looking at economic growth and job creation as a priority when they make decisions. I think that signal is very important to industry, to say that we will have the energy that you need and we will make sure that, as we make decisions, we will consider your industries and consider your businesses as part of our decisions. That is a very important position to be in. You mentioned it: We are in a rally and we will continue to be a rally in this province, and making sure that we have that in place is important.

The other thing that's important, as we talk about artificial intelligence, is the infusion of artificial intelligence not only in products but also in the manufacturing process. Having the energy to support that and to power that, especially here at home, and the data centres here at home, will be ever so important as we continue to grow our manufacturing cluster in this province or industry in this province. It is very important to industry to know they have these things in place and that government and government agencies are making decisions with them in mind.

Mr. Rudy Cuzzetto: Chair, I just want to correct my record. I said CEO of Chrysler Canada. He was the CEO of Chrysler, and it's Sergio Marchionne.

The Chair (Mr. Aris Babikian): Okay. Thank you.

Next, MPP Pinsonneault.

Mr. Steve Pinsonneault: This question is for Paul and Trylon TSF. Generally speaking, do you believe Bill 40 strikes the right balance when it comes to maintaining a resilient and clean energy grid while taking into account economic growth?

Mr. Paul Royal: I'm afraid I'm not really a legislative expert, so I can't really answer that probably as effectively as you deserve. I will say, from our perspective, that Bill 40 strikes the right balance to allow regulations to then

flow from that. The OEB can then require transmission companies and others to focus on Ontario industries, drive economic development and drive grid security. So from our perspective—that's our focus—absolutely. I think anything that strengthens the companies that support that transmission and intersection of all of these—I'm not doing a very effective job of this; apologies.

The Chair (Mr. Aris Babikian): The time is up.

We move to the official opposition. MPP Glover.

Mr. Chris Glover: First of all, I will just conclude the last—Mr. Kadri, your relative is one of the greats in the NHL. He was a perfect Leaf, and they should never have traded him. He was tough, and he could score. We could have used his skills there. Anyway, this is a long-time suffering Maple Leafs player, and I just needed to get that out.

Mr. Royal, you were talking about the impact of tariffs. First of all, thank you for being here. Thank you for what you are doing. It's wonderful to see a Canadian-dedicated manufacturer here today, utilizing Canadian steel and the total-vertical-integration system within your own company. But you were talking about tariffs. Are the tariffs new, or is this something you've been battling with for a while?

Mr. Paul Royal: Absolutely. On March 12, President Trump enacted regulations under schedule 99 of the HTS codes that effectively drove 25% tariffs on all products that we ship to the US. So that was 25%, and then on June 4, he upped that to 50%, and then he subsequently threatened an additional 10% that he was going to implement on or around August 1. These tariffs are now sitting at 50% on steel content of all products we ship across the border.

Despite that fact, we've worked closely with our customers. We've driven a ton of efficiency, investment in robotics to drive productive manufacturing and everything else to compete within that environment. So it is absolutely new.

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Obviously, geopolitical events, maybe starting over the last eight years or so in particular, have driven a tremendous amount more of protectionism across borders, and we're feeling a big impact of that. So what we're looking for is to drive—and Bill 40, we believe, allows the framework to drive a level playing field for companies like mine that are based here in Ontario, have all of their manufacturing in Ontario and don't want to move across the border.

Mr. Chris Glover: Right. You're talking about procurement in particular. That's how we level the playing field, by favouring Canadian industries that are hit by these American tariffs, like your own.

Mr. Paul Royal: Yes, 100%. As I mentioned, we deal with about 100 local companies that support us, month in, month out, allowing us to do our jobs. That creates a whole framework of companies that are relying upon us for that investment monthly.

Mr. Chris Glover: So if the government supports industries like yours or companies like yours, they're also supporting that entire supply chain within Ontario.

Mr. Paul Royal: Yes, 100%. And we buy 100% Canadian steel. Without that investment in companies like mine, you lose that side of it as well.

Mr. Chris Glover: How are the conversations going with the government on supporting procurement for companies like yours?

Mr. Paul Royal: It's been excellent. We've been at this now for about three months. We've met with Minister Lecce's office. We had Minister Harris at our plant just on Friday. We've had a tremendous amount of support and buy-in for what we're trying to accomplish as a supplier in this area of business. I've found it to be a tremendous and positive experience.

Mr. Chris Glover: Well, look, I wish you every success in both those negotiations but also in achieving this kind of procurement.

I'm the tech and innovation critic, and I've been talking to tech industries across the province for the last number of years. And one of the things they say is, we need a stronger government procurement policy, because for yours as a manufacturing industry but particularly for startups, if they get a government contract, then they can go to other countries, they can start to export and they've got the credibility and the stability to actually get into other markets.

Mr. Paul Royal: Yes, 100%. I agree with that.

Mr. Chris Glover: Okay.

I'll go to Mr. Ramji. You were talking about procurement, and you're suggesting that provincial procurement should take into account whether foreign products are being subsidized to undermine Canadian competition and whether there is a threat to national security. How should the government be measuring that when they're looking at a developing procurement policy?

Mr. Alex Ramji: I think, in general, we're seeing energy storage as a whole become much further adopted. We see programs like Oneida or LT1 and LT2 where, in Ontario, we are starting to see a lot of the economic benefits from renewables and energy storage. As we see it growing, there are certain components that do pose greater risk in these systems than others. If we were to say we have to put restrictions around all energy storage coming out of foreign entities, that would actually harm the growth that we are seeing through this industry.

The Chair (Mr. Aris Babikian): One minute.

Mr. Alex Ramji: So we are advocating that it be a more targeted approach specifically to components that are higher risk. For example, anything that's controlling, that has the ability or the smarts to actually manipulate the operation of a system, we would say that's a higher risk component and we should have higher protections around those components.

When it comes to passive components or materials and such, it would be great to have more manufacturing in Canada or more domestic sources in Canada or in Ontario, but the reality is, that takes time, and I think we would

harm the industry if we put blanket, sweeping restrictions on there. So we are very much advocating for focused, targeted ones around the devices that pose the greatest threat.

Mr. Chris Glover: Okay. Thank you very much, and thank you, all three, for being here.

The Chair (Mr. Aris Babikian): Thank you.

We move to MPP Cerjanec. The floor is yours.

Mr. Rob Cerjanec: Through you, Chair, I wanted to touch a little bit on Buy Ontario—I guess maybe for both of you—and more in the energy space—what's in the bill, and I guess there's a new bill coming forward in the Legislature right now.

What do you need to be able to compete with international competitors. In Nuvation's case, it's a Canada and a US company, so how does buy Ontario work for you folks?

Mr. Alex Ramji: Thanks for the question. Nuvation does have Canadian-US entities. However, all of our design and manufacturing is actually here in Ontario. So one of the challenges we have seen—and I mentioned some of the Ontario projects before—is we have companies that are our customers, they might be a Canadian company, and they're bidding on these projects, they're competing for these projects, but unfortunately, they're not winning them. It's going to the lowest-cost options, and those options are coming out of China.

We have the companies that exist now. We have the technology that we've developed in Ontario, but the challenge is we aren't able to compete with artificially deflated pricing from competitors. So by enacting a buy Ontario or having incentives in order to buy Ontario, and focusing on the Ontario economy there, it does allow us to have a bit more of a level playing field and have companies like ours be able to win these projects and maintain sovereignty in Ontario.

Mr. Rob Cerjanec: Now, I definitely hear all of it around national security. We need sovereign data centres. We need to be able to control, frankly, our own destiny and our own future. The unfortunate situation with the United States I think has made us wake up to that fact, to that reality.

If a firm is internationally owned, for example, but they're operating in Ontario, and I think if they've got more than 250 employees, I believe they would qualify for buy Ontario as well. Is that okay? Does that work?

Mr. Alex Ramji: I think from job creation and looking at the economy, it's great. We want to see jobs in Ontario. I think when we look at it from a national security standpoint, there are still loopholes or things that need to be further investigated. Maybe a company is doing manufacturing in Ontario but we actually see this a lot in procurements as a whole. There's usually layers of companies, from the company that's actually doing the bidding versus the technology that goes into that.

So we are certainly advocates for looking in further and understanding the actual supply chain that's leading to the technology that gets deployed, because certainly, we see there are security concerns when we just look at it at face value.

Mr. Rob Cerjanec: Perfect. I think that speaks to Mr. Royal's point earlier around investing in manufacturing to drive your own innovation there so you're able to produce more with less. Do you want to expand a little bit on what you folks are doing?

Mr. Paul Royal: Absolutely. So as we invest in the grid over the next 25 years—and there's a massive expansion happening there—with a commitment for buy Ontario in this, it allows companies like ours to make big bets on the future. It allows us to invest, to reduce the cost of all throughputs of our products just as we have been doing over the last few years, but it allows us to do that in a more substantive way.

That productive capacity and capability ensures that Ontario has execution security to ensure that projects can be executed on time and on budget. But it also ensures—particularly in a company like ours where we buy 100% Canadian-made steel—that that security won't be disrupted by whatever global event.

So having that in place and having that investment in Ontario is important for Ontario's future.

Mr. Rob Cerjanec: In terms of different technologies—and maybe this is for you, Mr. Ramji—we're talking battery storage—energy storage, essentially, through batteries.

In your products, what type of energy—whether it's wind, solar, natural gas, nuclear, hydroelectric—makes up a larger part of the energy that you folks are storing in your projects that you're building for consumers?

Mr. Alex Ramji: Thank you for the question. The nice part about energy storage is it plays well with essentially any other form of generation. We often do see energy storage coupled to renewables like wind and solar, because of, naturally, the fluctuation that you see in generation there. But that's certainly not the only advantageous market that it can serve.

Certainly, we see it in grid stability—being able to have remote areas where energy storage is able to stabilize the grid and improve the power quality. We see it for AI data centres a lot, especially as we look at large loads that naturally have a lot of fluctuations. That's really hard on the grid; that creates a lot of harmonics, and so tying that with energy storage as well is a really good way to alleviate that stress on the grid. We see, really across the board, energy storage can serve all different types of generation really well.

Mr. Rob Cerjanec: Perfect. Thanks, Chair.

The Chair (Mr. Aris Babikian): Thank you very much. Thank you to all presenters.

That concludes our public hearing on Bill 40.

The committee will adjourn, and we will meet at 9:00 a.m. on Tuesday, December 2. Thank you very much.

The committee adjourned at 1751.

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