Legislative Assembly of Ontario

Assemblée législative de l'Ontario

Official Report of Debates (Hansard)

IN-13

Standing Committee on the Interior

Protect Ontario by Securing Affordable Energy for Generations Act, 2025

1st Session
44th Parliament

Tuesday 18 November 2025

Chair: Aris Babikian
Clerk: Stefan Uguen-Csenge

Journal des débats (Hansard)

IN-13

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 18 novembre 2025

Président : Aris Babikian
Greffier : Stefan Uguen-Csenge

Hansard on the Internet

Hansard and other documents of the Legislative Assembly can be on your personal computer within hours after each sitting. The address is:

Le Journal des débats sur Internet

L'adresse pour faire paraître sur votre ordinateur personnel le Journal et d'autres documents de l'Assemblée législative en quelques heures seulement après la séance est :

https://www.ola.org/

Index inquiries

Reference to a cumulative index of previous issues may be obtained by calling the Hansard Reporting Service indexing staff at 416-325-7400.

Renseignements sur l'index

Adressez vos questions portant sur des numéros précédents du Journal des débats au personnel de l'index, qui vous fourniront des références aux pages dans l'index cumulatif, en composant le 416-325-7400.

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

CONTENTS

Tuesday 18 November 2025

LEGISLATIVE ASSEMBLY OF ONTARIO

ASSEMBLÉE LÉGISLATIVE DE L'ONTARIO

STANDING COMMITTEE ON THE INTERIOR

COMITÉ PERMANENT DES AFFAIRES INTÉRIEURES

Tuesday 18 November 2025

Mardi 18 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, everyone. The Standing Committee on the Interior will now come to order. We are here today for public hearings on Bill 40, An Act to amend various statutes with respect to energy, the electrical sector and public utilities. Are there any questions before we begin?

Seeing none, I will now call on the Honourable Stephen Lecce, Minister of Energy and Mines, to make his opening statement. Minister, you will have 20 minutes to make an opening statement, followed by 39 minutes of questions from the members of the committee.

Minister Lecce, the floor is yours.

Hon. Stephen Lecce: Good morning, everyone. Thank you, colleagues, for being with us this morning. I want to thank the deputy minister and the ADMs who are with us today, all of whom play an important role in the implementation of securing affordable energy for generations.

This bill which is before the Legislature is really designed to support an expansion of the energy system with a focus on limiting the reliance on foreign jurisdictions, on enabling more economic growth in the province by buying more Canadian, and by explicitly and intentionally making economic growth a priority within our energy ecosystem.

Obviously, I think the problem we're trying to solve is, how do we create a more competitive economy in a world disrupted by President Trump? Part of the mission of the province—you see the same language with the federal government that deals with building the strongest economy in the G7. We want to go much further than that. We want to create the competitive advantage to attract investment. We recognize the threats by the US, by other countries. The FAO has estimated that these tariffs could result in significant job losses. We're talking upwards of 68,000—very serious, sobering statistics. I think we're all, across party lines, deeply distressed by this reality and determined to create an advantage and support Canadian businesses and workers who are maybe displaced by or exposed by tariffs. The manufacturing sector is, of course, the greatest area of vulnerability.

At the same time, we recognize the IESO is forecasting a continued surge in electricity demand over the next 25 years. Notwithstanding the economic headwinds, we still see net growth of demand, be it industrial demand growing—23 terawatt hours, 58%, for context, by 2035, largely driven by electric vehicles and other pressure points. We see new business investing in the province. We have the recovery of 300,000 manufacturing jobs. The population has grown. The federal government obviously manages this, but households are expected to grow in the province by 15% by 2035. That's a million more homes, which accounts for, again, 9% of total demand. We're seeing a shift towards electrification of key industries. This is a good thing. Electric vehicle adoptions were expected, but it does significantly reduce economy-wide emissions, so we see this as a value-add for Ontario. But it also represents the largest driver of increased electricity demand; roughly 31% of new demand is driven on that basis.

In the face of rising tariffs, we as a government are doubling down on nation-building projects, on Canadian projects that strengthen our economy and create thousands of jobs in the province. Last week, the Prime Minister released a second phase of nation-building projects. The first, of course, included the small modular reactor project that was well under way in Ontario. But the Crawford nickel mine alone will contribute $70 billion to GDP over the four-year lifespan of that asset, $16 billion in government revenue and, likewise, $16 billion in labour income over the 1,000 direct and 3,000 indirect jobs. My point, colleagues, is it's a case study where we can work together to advance the interests of Canada.

The SMR project was very important to all of us. Parliamentary Assistant Rudy Cuzzetto and I helped not just move this project forward, but secure export opportunities so that Ontario's supply chain benefits from the build-out: 18,000 jobs estimated for construction for the fleet of four; 3,700 permanent jobs; $38 billion to the

GDP of Canada over the next 65 years of the asset. I mean, we're talking significant investment, and, of course, supported now by the province and the feds. The objective is to protect our supply chain and build it out.

Bill 40 also very intentionally addresses one of the upcoming public policy challenges for government, which is the rise of data centres. What we try to do in this bill is to prioritize megawatts that power our industries and really focus on the net benefit of Ontario. We want to ensure competitiveness and system reliability.

Of course, we welcome data centre entrants in the province. We see it as important to a variety of drivers of the economy. And we see that global demand for AI, for cloud computing, data processing—this all really is helping increase pressure. It makes the points to prioritize electricity for data centres that support the province's economic interests, including those that may create jobs, that assist in domestic data hosting—I am talking data sovereignty, which is important to us—and, obviously, broadly strengthen our position in the digital economy.

Data centres are currently projected to account for 13% of new electricity demand and 4% of total electricity demand by 2035. That's a significant pressure point that's rising each decade. Aligning with similar regulatory efforts in other jurisdictions—you look at British Columbia, Texas, California, Belgium, Netherlands, literally east and west, north and south, and you can find case studies where they have brought forth some sort of regulation like this that give government the authority to say yes when it's in our interest.

The advancement in adoption of AI and cloud computing is resulting in the need for these new data centres, and these AI and cloud computing data centres tend to be larger and they obviously tend to be energy-intensive. Instead of only consuming 10 to 50 megawatts, these data centres tend to consume hundreds of megawatts, sometimes up to a gigawatt.

As of July 2025, the IESO has now been receiving connection requests of up to 750 megawatts on a single connection point with very quick implementation timelines, if you just put into scale what our transmitters, our system planners, our utilities—the challenges they're facing.

The initiative is part of the broader Energy for Generations, our integrated energy plan—this is our 25-year road map—which would really position us well in the country. It is a project or initiative that ends the satellization of government, the short-sighted planning, by bringing together electricity and natural gas and fuels into one cogent, coordinated, long-term plan for growth. And there are four pillars of this plan: keeping energy costs low, ensuring self-reliance and resilience in the grid, reliability to make sure power is 24/7 accessible and, of course, clean power to attract investment and reduce emissions.

Our bottom line in Ontario is that we need to maintain an affordable, secure, reliable and clean electricity system that can support new housing and new business and support economic expansion. Crucial to meeting domestic projected demand is ensuring we have power for future generations. It isn't to say we will not build large AI data centres. It's not the case at all. We will do so; we must do so strategically. But failing to properly manage these requests could have a negative impact on Ontario's electricity system, and many of us could look to the US and other jurisdictions where those regulations or public interest regs were not in place. I think of Virginia or other case studies where it's a bit of a Wild West. Families are disproportionately facing the burden for these large data centres.

We want to find a system that finds an element of balance and protection for families and residential ratepayers, among others. Today's legislation will develop a framework to evaluate electricity connection requests of data centres. It would also include any other prescribed industry as required, be it electric vehicle manufacturing. Under these proposed amendments, large-scale data centres will require government approval before they're able to connect. The application process could employ weighted criteria. Of course, as you know, the legislation explicitly requires or sets out reg-making authority based on consultation, so we welcome feedback on what that criteria should look like as we build out this legislation.

It really will place values on projects that meet strategic priorities. These parties would be developed in collaboration with all ministries, with any relevant agencies of government that attract investment, the energy sector—all stakeholders will have a say. For example, the IESO would provide relevant information concerning each request, including potential challenges in meeting connection requests or broader implications to system planning. It also will support the need to prioritize data centres that deliver measurable benefits to local communities in the province, and I've aligned some of those priorities there.

But one that I want to profile that is important to us—and we're hearing similar language at the federal government—is data sovereignty, making sure the data is stored in the province. I think that's an important consideration to maximize value for Canada if they're going to use so much of our power. As demand for AI and cloud computing and digital services increase, we need the right mechanism to support this growth. And that's really why we're here.

0910

How we treat the power needed by data centres sets the precedent for larger loads to come across all industry. To help offset and add more megawatts into the grid in the short term, we launched the largest energy-saving program in Canadian history, $10.9 billion, putting it back into people's pockets, into families' and small and medium-sized enterprises' pockets. The benefits of this—how we manage our electricity is really important, how we conserve electricity. This is a program that delivers a two-to-one savings for the ratepayer, and they are benefits that are—it benefits customers by enabling homes and businesses to reduce electricity and to save money. It's the ultimate win-win. That's roughly an estimated nominal $12 billion in expected ratepayer savings over 24 years and reduced peak demand by 3,000 megawatts by 2036

alone. That is like eliminating or removing three million homes from the grid of power saved.

Energy efficiency is obviously critical in this respect. When you consider the options, it's the cleanest. It's the lowest-cost resource. It offers customers tools they need to save money. This is something we're trying to do more of.

Energy efficiency programs—and the IESO has said that the provincial energy demand is 15% lower today than it otherwise would be, so this is meaning it's making a difference, and I think part of this bill is ensuring that Ontario's electricity system can support future growth, future investment based on those pressures. Notwithstanding that the government is creating tools and incentives to reduce energy demand, the reality is we are growing as a province. So we need to support, yes, our workforce and make sure reliability of the grid is reinforced.

Part of this bill, perhaps one of the key anchors of the bill, is an initiative that will allow Canadian businesses to benefit from the build-out. It's why we're doubling down on Canadian innovation, on our supply chains, on prioritizing Canadian companies in every major procurement. When our trading partners turn inward, we are turning to each other, buying Canadian and building Canadian and keeping our economic benefits in this province and country.

It's why we introduced Bill 40 in the first place. We didn't wait. We took initiative in the spring. Remember, this bill was first introduced in the spring at an important time in geopolitics and trade tension. We wanted to signal to Canadians we will intentionally buy more within this province. This bill enables Ontario utilities to buy Canadian, to build a more secure energy system. For example, it allows rate-regulated entities such as electricity or gas utilities to track and recover potential costs due to these procurements when they're buying Canadian. The Ontario Energy Board, which has a mandate to protect consumers, will review these costs and continue to only approve those that are reasonable, so there's still a prudency factor. But the bottom line is, the regs could be proposed as part of a broader initiative, a tariff response strategy to support our domestic supply chain.

And I know all of you—we could point to businesses in literally all regions of members in this room, north and south, where businesses and the supply chain are benefiting, be it on transmission or generation or storage. All of our communities are benefiting from this. But we want to see more of it.

I will just say, we do a lot of good. We already buy a lot of Canadian in energy. But I think it is prudent in this moment to be a challenge function of government, of agencies, of private enterprises to do better in this new world order.

To give context: 80 cents to the dollar for our SMR is going to Ontario businesses; $500 million already secured in supply chain benefits; 200 businesses are involved in the multi-billion-dollar project. At Bruce Power's life-extension program, to their credit, 98% stays in this country. We're talking about a $13-billion project; 98% of that spend will stay in the country. That's 22,000 direct and indirect jobs and billions in economic activity.

Now, Hydro One, of course, is a private company. Certainly, the province has a large stake in the business, but I will just note that of their publicly disclosed procurement spend of $2.9 billion that they expended last year, 93% supported made-in-Canada businesses, and it has exceeded its goal of directing 5% of sourceable spending to Indigenous-owned businesses.

At OPG—this is something more germane to us in the government and ministry, because, effectively, it's a crown corporation—90% of their annual expenditure went to made-in-Ontario-specific businesses, not just Canadian. So my point is that we already do a lot, but I know we can do more. And that's the spirit of Bill 40; it's a challenge function to all rate-regulated industries to intentionally buy more Canadian.

It also creates an opportunity with the Ministry of Economic Development, Job Creation and Trade to think about long-lead procurements. Obviously, the government is contemplating the Pickering life extension, Bruce C, Wesleyville. How do we work backwards and think strategically about what is that delta, that small percentage of product that is not made in Ontario or Canada, often because it just isn't and never has been? If we have massive purchase orders—and we're talking about the largest nuclear build-out on Earth—then I think it gives us the opportunity to work with manufacturers to domesticate investments if we can commit to large-scale procurement. I think this creates a real opportunity for Ontario to reverse engineer long leads and try to domesticate more business in the province.

Another element of this bill that's important to me is the codification of economic growth within two statutes that are important. The legislation includes amendments to the Electricity Act and the Ontario Energy Board Act to make economic growth a formal objective of both the IESO and the OEB, and I think this really matters. Currently, that is not an explicit requirement or mandate of those energy agencies. And I think we all agree that energy security is very much tied to economic security. There's a natural relationship between the two, and so we need to have both.

Energy really is the driver of economic growth—or the disabler, depending on if you have the megawatts or not. We have, and we're going to build more. But we see this as a natural relationship, and thus we need the IESO and the OEB to have that consideration that, when they're making decisions, they're trying to ultimately create an incentive for business to invest their capital, to create jobs, build revenue for the state, but ultimately to support growth in the province. We think this will help power new business, it will support jobs, it will attract the investment, it will enable electrification of key industries and it will drive innovation across the sectors.

With the threats we face, we believe the IESO and the OEB can play an even more crucial role in ensuring economic growth is taking hold across the province. The IESO and OEB would now be required, as proposed, to

consider the role of economic growth in their electricity planning and their regulatory decisions. Let's focus on enhancing the electricity transmission and distribution planning process. It ensures great expansion can keep pace with demand, and it contributes to a key government priority on housing, on innovation and on economic development. Greater alignment of the IESO planning process and OEB's policy and judicative proceedings, we think, is a good thing. This approach would better equip the province's energy system to unlock investment and capital and jobs.

We also speak about the importance of advancing hydrogen, which I know is something very important to the associate minister and many colleagues here. Energy for Generations recognizes low-carbon hydrogen as a strategic resource that can help meet growth and support industry, particularly heavy transportation, and provide reliable energy storage. It's why, under the associate minister's leadership, he has launched a $30-million stream. He has doubled that stream. The Hydrogen Innovation Fund, again, is part and parcel of that broader economic growth vision supported by our reforms in Bill 40. Really, the reality is that for the next 25 years, low-carbon hydrogen could have a more significant role in Ontario's energy sector. A modelling study commissioned by the province projects that hydrogen could make up 2% to 12% of final energy demand in Ontario by 2050. We know that there could be up to 70,000 jobs in Canada, thousands in Ontario in areas like production, infrastructure, storage, clean tech. It's an exciting time.

This legislation includes amendments to the Electricity Act to include the promotion of hydrogen markets and the economy in Ontario within the purpose of the act. It also enables the IESO to, among other things, support innovative projects that advance low-carbon hydrogen technology, which includes this new Hydrogen Innovation Fund.

Chair, can I get a check on time, please?

Interjection.

Hon. Stephen Lecce: Two more minutes?

Colleagues, the goal is really about securing power for generations, buying Canadian, leveraging the supply chain, and thinking medium and long-term and strategically about how we can attract more capital investment in manufacturing of Canadian components. The bill explicitly puts economic growth as a priority of government. I want to believe it's a priority of the Legislature. All of us could accept the premise that we now need to move with a greater sense of speed, a bias to action and a commitment to getting shovels in the ground on investments and on projects that create jobs.

0920

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

Hon. Stephen Lecce: Ultimately, this bill, I believe, is a common-sense measure. It has been widely supported by the Electricity Distributors Association, the Ontario Chamber of Commerce and the Canadian Manufacturers and Exporters. We've also got the CEO of the Ontario Centre of Innovation, the CEO of the Greater Kitchener Waterloo Chamber of Commerce, the CEO of the Ontario Energy Association, the CEO of Communitech, the president and vice-chancellor of the University of Waterloo, the regional chair of Waterloo, the Economic Developers Council of Ontario—I mean, the list goes on. They are all on the record supporting provisions of this bill or all of the bill, and I think it speaks to a consensus that we need to do more and work together to stand up for Canadian workers and resources.

With that, Chair, I'll turn it back to you.

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

Now we will go to the first round of questions and answers. We will start with the government side. MPP Cuzzetto: six and a half minutes.

Mr. Rudy Cuzzetto: Thank you, Chair, and thank you, Minister, for being here today.

As we all know, data centres will consume a lot of electricity. Being someone that has come out of the automotive industry here in Ontario, I know that, with our government, we were able to attract $45 billion of automotive investment to Ontario when the previous government had lost 300,000 manufacturing jobs in this province.

Our consumption of electricity is going to continue to grow, and at a rapid pace. How are we going to be able to manage this type of electricity consumption over the long term, and how will our nuclear expansion strengthen this as well?

Hon. Stephen Lecce: I think for many jurisdictions around us—Great Lakes states and provinces—the reality is that most jurisdictions don't have power. That is the current state, I think. If you have power, if you have access, if you have megawatts that are available, if you're a net exporter, you are in the minority. Ontario has embraced that virtue.

We have power. I appreciate it will become more scarce over time as industry and population and intensification build, but the truth is, we have a plan to secure power now, medium-term and long-term, and the integrated energy plan lays out that 25-year road map. We've very clearly come up with a cogent plan of integration but of also securing generation.

I think the most important decision point before government is making sure we have a baseload power source to drive industry. It cannot be intermittent. We need to have baseload, 24/7, reliable power.

How do we do that? Well, this is the government that has approved and authorized the refurbishment of our entire hydroelectric fleet of 5,000 megawatts.

We've expanded hydro in the north—the first government in a decade to do that—supported and led by Indigenous nations.

We have a plan to expand the largest public procurement in Canadian history, where non-emitting resources can compete on the market, which is an important comparator or comparison of what was done in the past, where the former Liberals did not procure based on lowest-cost options. They went with options 10 times above market. We still pay those 20-year contract liability costs today.

We also, of course, are embracing nuclear power: a plan, as proposed, to extend the life of Pickering; to finish off, as we will next year, the Darlington nuclear refurbishment; contemplating Bruce C, adding almost 5,000 megawatts of net new power, one of the largest generators on earth; and of course, in Wesleyville, a bit more medium-term, we're looking at the largest—up to 10,000 megawatts.

Short-term action through the public procurement, short-term interventions through energy savings and programs that are helping to reduce thousands of megawatts from the grid: All of this, I think, should build confidence for families, for businesses, for foreign investors, that we have power. We're going to keep the grid clean. Our plan will get us to 99% non-emitting by 2050.

But what we will not sacrifice is skyrocketing energy rates, which is a real challenge for families, which is why the energy efficiency program we launched this year is so important, so consequential and so significant—the largest of its kind in Canada, and it has a two-to-one return on investment for the ratepayers. I think what I can say is there's more to come on that and how we could expand that program to give even more savings back to families.

Mr. Rudy Cuzzetto: It sounds like we are prepared for the future here in Ontario. Thank you, Minister.

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

Mr. Steve Pinsonneault: Thank you, Minister, for being here. Changes to legislation would allow the minister to exercise some control on the types of data centres that can connect to the grid. Why does this benefit the province?

Hon. Stephen Lecce: In the absence of an authority of the government to say no—the current state is the Electricity Act has a non-discrimination clause which effectively means anyone, domestic or foreign, has a right to connect. I just think, "In what world does anyone have an automatic, innate right to access tens or hundreds of megawatts if there isn't a public-interest value add for Canada or Ontario?"

This is why we think we need to have some guardrails in place. We're going to go and consult on building out what are those criteria and what are those regulatory guardrails. I don't profess to have that answer. I want to listen to folks on the ground for perspective from utilities, security, agencies, ratepayers and families, Indigenous nations—everyone will have an important say on building this out. But our bottom line is, our future state is to have the capacity to say yes when it's in our interest and build out what that criteria would look like according to net benefit to Canada.

Not to suggest this is the inspiration for the bill, but there are other statutes that exist in Canada—the Investment Canada Act has a net-benefit clause. There's the ability of cabinet in that case—

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

Hon. Stephen Lecce: —to say yes or no, assuming it's in the national interest of Canada. While we're not scoping our bill after theirs, it's sort of using it as a bit of a jurisdictional precedent that this exists in Canada. We want to apply it to Ontario's data centres and protect our megawatts, protect our ratepayers, and really maximize benefits for our supply chain and, obviously, when it comes to the storage of data.

Mr. Steve Pinsonneault: Thank you for that.

The Chair (Mr. Aris Babikian): The government side still has 35 seconds.

Mr. Andrew Dowie: Pass.

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

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

MPP Jamie West: Just expanding on that, Minister: How will you, in the future, determine what are the proper data centres?

Hon. Stephen Lecce: The legislation sets out the ability of cabinet or government to create criteria in regulation. We're going to consult on that. I would welcome perspective from industry and experts on what that criteria looks like. This is sort of new for countries. We've never had this type of—we've had pressures on the grid, but the data centre specifically is, let's say, a new phenomenon, an emerging phenomenon, a pressure point in the last five years, and it will become more so over the next decade.

I don't have the answer today. By design, I don't. We need to consult with subject-matter experts, and then we'll set out the regulations. They'll be publicly available, and then we'll create a criteria that is defensible in the national interest.

MPP Jamie West: Are there any concerns? I have concerns with cabinet having that sort of control. The SDF has a couple of red flags on it. The greenbelt has a couple of red flags on it. You go back to the Liberal Party and there have been some scandals that led to their downfall.

Is there any concern of having a political party having the influence on it when people can make donations to the party or influence them? I'm not indicating you specifically, but in the future, at some point there'll be another party in power, and you're setting precedent for the future as well, so what guardrails are in place for that?

Hon. Stephen Lecce: I think part of this will be seeking advice from the Independent Electricity Systems Operator. The IESO will play a fundamental role. They're really the system planner that can speak to if capacity exists in the system, in transmission and generation. They'll play a fundamental role in giving advice to government.

Look, at the end of the day, if I use the Investment Canada example, it is cabinet, it is elected officials who are publicly accountable to the people of Ontario to say if it's in the national interest or not. I'm not sure I want—I think that accountability is important. We seek perspective, but ultimately, we need to be able to defend these decisions. If you're talking about 200 megawatts or 300 megawatts—like, one SMR of energy—you make a fair point, and we would agree with it: There needs to be transparent criteria laid out, and we are going to consult, and I would welcome the opposition critic's perspective, too, as we build out the regs.

We don't pretend to have all the answers, but I think we could agree on the public policy question we're trying to fix, which is how we protect megawatts from risk or from the potential abuse of foreign actors—who are not coming to Canada because they love our country and our values. They are coming because our climate is cool—beautiful for a data centre; lots of lakes and affordable power on a relative basis; among one of the most affordable in the Great Lakes region—and because of our STEM graduates, our intellectual capacity and property. They're coming for all the right reasons but they're not necessarily coming to add value to the country.

0930

So, my commitment to you, my commitment to the people of Ontario, is we will build out that public interest element through regulation and through consultation. I welcome the feedback of everyone here and beyond to make sure we get this right because there are some states, either provinces or subnational governments, that have not had this debate or discussion. They're now paying the price. What we need to commit to is to not be like some of these states that don't have anyone—a system planner, a utility, a government—saying yes or no; it's just a free-for-all. I think we agree that's not a good thing and we should not become or allow a Wild West in the province.

MPP Jamie West: One of the concerns I have—I'm the eastern rep for the Council of State Governments, and some of the plenary conferences have had discussions about large data centres and consumption of power and water, to the point where agricultural areas are concerned they won't have enough water to water their crops, or there are water limits in some of the towns. I can scroll through—maybe in the second round of questions—and show a couple of examples, but is that taken into consideration here?

We have a lot of water in Ontario. Greater Sudbury has 330 lakes. The Great Lakes are around. But there may be data centres in other areas. Is there anything in the bill in consideration of what that means for people in terms of just drinking water or being able to water crops?

Hon. Stephen Lecce: It could be informed in the consultation if there are concerns from either the scientific, environmental or municipal perspectives, or health. That would be taken into account for sure. I've not heard that concern, but it doesn't mean that we wouldn't be open to feedback on how to protect against that.

I think what I would just say is any energy project under our government—as a contrast with the former Liberals; they imposed energy projects on municipalities without consent, without support. In fact, some of them were hostile against the imposition of energy projects.

Our government put in, with the support of the Ontario Federation of Agriculture, a new requirement, a support resolution. So before I put in a storage project or a nuclear SMR or a windmill or anything, the municipality—in this case, the Sudbury council—would have to pass a support resolution, which then enables the IESO to contemplate building out. So there is some. We've democratized putting local communities in the driver's seat before some politician or public servant at Queen's Park imposes our will. That's some—

MPP Jamie West: I think I take that with a grain of salt. Your party has used the "notwithstanding" clause a couple of times.

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

MPP Jamie West: You did when you were the Minister of Education. As well, Bill 5 has that whole section on the Dresden landfill, which the community of Dresden is really not in favour of. So I appreciate what you're saying, but I'm just going to cross my fingers and hope it works, because it hasn't always followed through.

I'm going to get into hydrogen, but I think we'll wait for the next round because there won't be time to respond.

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

Now we move to the third party: MPP Hsu.

Mr. Ted Hsu: Thanks for being here, Minister. I want to ask about a couple of things.

One is the emphasis on economic growth consistent with the policies of the government of Ontario, which is language taken directly from the bill. Wouldn't it be better to use per capita economic growth or something that's similar but a little bit different—productivity growth? If we're going to put this important policy—I'll grant that—in statute, why not be careful and get it as right as possible and emphasize really important things that are challenges for all of Canada, like productivity growth or per capita economic growth?

Would you be willing to support an amendment to change the language to include that concept, since we're carving it in stone here in law?

Hon. Stephen Lecce: Certainly, the language under the proposed statute does not prohibit or does not negate the concept of enhancing productivity. That's the basis for the inclusion of the language. I think the spirit of what you're attempting to drive at is fulfilled in the language.

But it is promising that we would agree that energy planners should have an explicit requirement to consider economic growth as a criteria for their decision-making, which is not one today. What I mean by that is there may be industrial benefits of an energy project that will create a lot of jobs and add GDP gain to the country. That factoring, right now, is not really—in fact, legally it is not the consideration of the IESO. So I think—

Mr. Ted Hsu: I certainly agree with that—sorry, Minister; just because I'm under the clock here.

We do want to encourage things like innovation and competition. Those are the sort of things that contribute to the sorely needed productivity growth. I'm just worried that if we only focus on economic growth consistent with the policies of the government of Ontario, we may be accidentally picking winners and losers. We may be missing out on innovation. We may be stifling competition if the policies of the government of the day—sometimes governments make the wrong choice when they pick winners and losers. That's why we have a free market. We should be careful not to throw that away.

So what I'm suggesting is that if we add productivity growth to the goal, in the long term, that will give better guidance for this government or a future government.

Well, let me go on to my second question. I think I made my made my point. The second question is—we talked about data centres. I think right now, even without data centres, there's competition for connections. I can see that even in my own community in Kingston. We have a shortage of power. Kingston is a special place. It has a lot of innovative people. Companies want to locate there because we've got researchers and we've got industry that's already there. It's a source of innovation.

But they regularly get turned away, because we can't guarantee the megawatts that they need to locate in Kingston. I like the idea of telling the IESO that we don't want to throw away growth opportunities because we don't have the megawatts, the power on tap for companies that come.

What I'm worried about is the fact that there's really nothing specified in the legislation. It's just an open book. I know you say you're going to consult, and I know you're going to consult, but shouldn't we have some guidelines in the legislation? For example, you mentioned data sovereignty, which I think is something that we should be striving for, because if we want to use artificial intelligence for health care purposes or for defence purposes, we've got to have data sovereignty; we've got to have supercomputing sovereignty.

But why not put in the words "data sovereignty," which doesn't exist in the legislation right now, as one of the possible criteria that could be used to set the regulations, to set the criteria for connection? Anything you can do to put some guidelines around it and to give a little bit more certainty to businesses is good. That's good for business. It's good for productivity growth. It's good for encouraging investment. And I intend to introduce some amendments to just put in a few words, and "data sovereignty" could be one of them.

Another one could be making sure that a company that wants to connect is likely to use that power. Sometimes you have to ask for that connection before you know if you got full financing and everything falls into place. That's the way business works.

So I'm going to be putting forward some amendments—

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

Mr. Ted Hsu: —to do that, and I would like to ask for your support to be open to those amendments. Right now, I feel like it's just too open. We need to guide this government. We need to guide future governments without getting into the partisan reasons why we might want to do that. Would you be open to supporting such amendments?

Hon. Stephen Lecce: Look, I've not seen them, and you've not given me the benefit of seeing them before today in real time. But I can tell you the spirit of the amendment, which is to ensure data sovereignty is—for example, as one case study—really an anchor of the policy.

It is the stated position of the minister before parliamentary committee today. We're not going to bring forth a regulation that is not going to include that as a priority. In fact, the impetus for this was about data sovereignty. So while we may not amend the bill, you're going to achieve the same public policy outcome, and you have a guarantee from me to—

The Chair (Mr. Aris Babikian): Thank you, Minister. That concludes our first round of questions.

0940

We will move to the second round, and we will start with the government side. MPP Dowie.

Mr. Andrew Dowie: Thank you, Minister, for being here. I know, just a couple of weeks ago, if not a couple of months ago, you came to visit my area. We visited Southwestern Manufacturing, which supplies for the nuclear industry and many, many others. sReally, a lot of the work that they do is part of Ontario's role as a clean energy powerhouse. We're able to provide domestic supply, and that's thanks to Ontario's clean electricity grid—probably the cleanest in the world. We're powered by all kinds of technologies: nuclear, hydroelectric and really emerging technologies.

The legislation proposed—I'm very excited to see it. It strengthens that leadership that we have in this province by expanding the mandates of our energy agencies to advance hydrogen and nuclear innovation.

So my question to you, Minister: Given the opportunities that we have—and I know even the OEMs and the automotive sector are looking for what's the next generation of powering our vehicles—how do the measures in the bill position Ontario as a North American leader in clean energy development and ensure that we have the diverse, reliable and affordable power that we need to support our growing economy and our population?

Hon. Stephen Lecce: I think, first off, we believe in an all-of-the-above approach as a government. We do not discount any resource or commodity. I think the IESO has contemplated or was asked to look at public policy recommendations like the phase-out of natural gas, which would lead to reliability risks and, obviously, increase prices north of 60% for residential purposes.

Look, we're not going to take the position, at a time when affordability is top of mind for all Ontarians, to remove commodities that will increase prices. While that wasn't specifically the question, I just wanted to affirm our focus on the lowest-cost option through public procurement.

The former government, as a matter of fact, did a lot of sole-sourcing of products or resources 10 times above market. You hear of the infamous 80-plus cents a kilowatt hour for renewables. I think many ratepayers are deeply offended by this, and we accept we can never go back to that system, which is why we launched the largest public procurement in Canadian history. It's why we have initiated a series of energy efficiency expansions, and it's why, in part, when it comes to the clean economy, we've doubled the Hydrogen Innovation Fund which the associate minister has led, realizing it is a low-carbon option, particularly for heavy vehicle transportation.

I was present when Walmart launched their fleet of hydrogen vehicles. Many businesses, including Canadian, are actually leading and innovating in this space. We see this is a huge economic driver; a bit of an untapped opportunity for Ontario. And there's a bit of a first-mover's advantage. Hydrogen is not new, but it's emerging, and we really want to be at the forefront of this. So to the associate minister's credit, he has been leading a great deal of work on building out a plan, doubling the fund, expanding the criteria and really enhancing the return on investment for the tax dollar that is invested in this program.

So I would agree with the premise. There's a ton of opportunity. There's a way to reduce emissions, grow the economy and keep costs down, in this case, for business, and I think that's a very sound thing.

The IEP, the integrated energy plan, includes a specific provision or priority on hydrogen, and Bill 40, again, going back to the principle of buying Canadian and keeping it affordable, will be very much part of the build-out for the future.

Mr. Andrew Dowie: Excellent. Thank you.

Hon. Stephen Lecce: Thank you.

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

Mme Dawn Gallagher Murphy: Chair, through you to the minister: Thank you for being here, as well as the entire team. Thank you very much.

Around the world, we do know that data centres and AI are driving incredible economic transformation.

In the last round of questioning, you were talking about what's happening south of the border. I believe the members opposite talked a bit about not only focusing on economic development. Well, I'd like to think that we need to have a competitive edge, and I say that based on these comments.

This past September, I attended the Great Lakes-St. Lawrence Legislative Caucus meeting, where nine of the US states just south of our border are very much focused on bringing the data centres that are in the southern states up to the Great Lakes US states. And why? You nailed it on the head: It's because of the cooler temperatures closer to the Great Lakes. So the US is already thinking about this, so if we do not start thinking about our competitive edge, we could lose that, and I think we are very much in a position—we are well positioned—to lead in this digital revolution.

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

Mme Dawn Gallagher Murphy: That being said, Minister, how does this legislation empower Ontario to prioritize high-value data centre projects and strengthen our economy to support our workforce?

Hon. Stephen Lecce: Thank you. Well, very short, very brief: We've got about 6,500 megawatts of prospective demand in data centres. That could be 30%. That represents 30%, so we obviously need to triage and create some criteria that benefits Ontario ratepayers and taxpayers, creates value in the communities they're built in and ensures that there is a retention of the data sovereignty of Canada. We want to make sure that we benefit intellectually from that data and the R&D sectors and innovation sectors.

So I think the fact that we have got ahead of this, as opposed to waiting—for some jurisdictions who didn't take action, weren't proactive and are now realizing the massive, long-term cost to the people who pay the bills—it's very prudent that we got ahead of it. But the truth is, there's 6,000 megawatts of prospective—

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

We move to the official opposition. MPP West.

MPP Jamie West: I was going to give you a couple of examples of the water consumption issues, but I think we'll run out of time. I'll print them up and give them to you, just so you're aware.

Earlier, one of my colleagues asked you about hydrogen, and you kept saying that there is low-carbon hydrogen. Are you talking about natural gas, or did I mishear what you were saying?

Hon. Stephen Lecce: No, I started with a bit of a soliloquy on why natural gas is an important option in our energy mix as an insurance policy and then went to the question on hydrogen—so, distinct, but in the same answer.

MPP Jamie West: Okay. So when we talk about hydrogen for Ontario, are we talking about extracting it from water or from natural gas, or what are the sources that we're interested in?

Hon. Stephen Lecce: I would love to turn to the ADM, who could walk us through what we do and what we're about to do more of. Or the deputy may be well-positioned to maybe speak a bit about the HIF.

Ms. Kelly Brown: Hello. Thank you for the question. I'm Kelly Brown. I'm the assistant deputy minister of the distribution, conservation and innovation policy division at the Ministry of Energy and Mines. Thank you for your question.

I think right now, as the minister spoke to, we're sort of taking an all-of-the-above approach to our energy demand challenge here in Ontario, and part of that does entail low-carbon hydrogen as a potential source of filling that energy gap into the future. A couple of years ago, the government launched the low-carbon hydrogen strategy, and that paved the way for us to undertake a number of initiatives to support the development of hydrogen, to support both the potential generation—so, sources of energy generation—but also to use it in other industrial sources such as transportation and heavy industry.

So it's really an all-of-the-above approach. There are a number of hydrogen companies through the Hydrogen Innovation Fund that was also launched back in 2023, and we've now just since expanded it, as the minister just mentioned. A week ago or so, on November 5, we launched the second round of the Hydrogen Innovation Fund with two streams: one supporting the energy generation, or supporting the electricity side of hydrogen generation, but also industry and transportation uses—things like hydrogen hubs and that sort of thing.

So there's really an all-of-the-above kind of approach to our hydrogen strategy as well, I would say, though the support of $30 million through the Hydrogen Innovation Fund. Through that, you'll see companies applying for that fund to support hydrogen production and use in other sectors, like I said: industry and transportation.

0950

MPP Jamie West: The reason I'm asking is, during debate, the Associate Minister of Energy-Intensive Industries talked about hydrogen coming from natural gas lines—how he went on a tour and saw this outpour, and I guess it's an offshoot or whatever else. But I'm wondering: What is the criteria for a low-carbon hydrogen? Because when I hear of natural gas, there are a lot of people who are very concerned about the future of the planet and moving away from fossil fuels, and this feels like an opportunity to reinvigorate the connection with natural gas lines. I understand that there's a certain amount of the grid that requires natural gas. I live in northern Ontario, and natural gas is needed for heating homes and stuff, but I don't know if most people would agree that hydrogen made from natural gas is low-carbon. Am I missing something, or do I not understand the science?

Hon. Stephen Lecce: I'm not sure if what the associate minister said—if you're speaking to energy infrastructure or the pipelines that will move the product. But I would be happy to look at the transcript and provide clarity. But I think the bottom line is it is certainly a lower-emission option relative to some of the existing product like diesel etc., which is why it's been embraced by many big businesses who are looking to have a cleaner fuel source. So on a relative basis, it is better than what we've got.

On the infrastructure to move the product, I would have to circle back with the member on that. I just don't know.

MPP Jamie West: Okay. It seemed to be there were products from the processing plant of natural gas, and they were capturing hydrogen from it. Through the whole debate, while I was drinking water, I kept thinking, "There's a lot of hydrogen right here in this glass that seems a lot cleaner than natural gas." So maybe I don't understand the science on it. But that was one of the questions I had, because it didn't quite make sense to me. I'm in favour of looking at other energy sources, and hydrogen is a possibility; I just wasn't sure about how it worked.

Ms. Kelly Brown: If I could just add: As part of the hydrogen innovation fund, there are a number of criteria. One of those criteria is around low carbon. I don't have it at my fingertips in terms of how we define it in the rated criteria that the IESO will use in considering a hydrogen project, but we're certainly happy to look up those rated criteria and get back to you.

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

MPP Jamie West: Would you be able to send that to me just so I have an awareness if people are asking me questions? Because—

Ms. Kelly Brown: It's available on IESO's website. We can certainly send that to you, yes. It's in their guidelines.

MPP Jamie West: Can I get the Clerk to make sure I get a copy? Sometimes I don't receive things after I ask for them.

There's less than a minute. You know what? I'll just grab one of the examples for the water, Phoenix, Arizona: data centres using around 177 million gallons of water per day, raising alarms about the long-term sustainability of local water supplies—and there's a couple here; right? It's one of the things that I think has to be on our radar. It isn't just the energy they need. They need a ton of water for cooling. And then, as well, there's a promise of job creation, but the overall job creation—typically the largest swell is when they build. There's minimal maintenance that has to be done in terms of janitorial and a couple of IT people. But we need to take that into consideration when we're looking at job creation if we're funding this as opposed to a mine site where there's ongoing people working and stuff—

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

We move to the third party. MPP Hsu.

Mr. Ted Hsu: Thank you, Chair.

Minister, why does the CEO of the Ontario Energy Board need the power to set internal procedural rules? Why does that have to be in statutes? Why is that needed for the public good? And is this a reaction to what happened inside the OEB that led to Bill 165 in the last Parliament, the bill which overrode an OEB decision?

Hon. Stephen Lecce: I will turn to the officials about our perspective on the first question.

On the second element, I think what I would just simply say is we want to ensure that there is an overwhelming focus on keeping energy rates low. While we're not here to discuss or debate that bill, if we didn't take action, it would have led to an increase of thousands of dollars per home. And I want to believe, and I know—I'm aware of the voting record of the parties opposite, but the effect of not supporting that bill, which would have meant every single home would pay more—and I think that was an unacceptable reality for government at a time when people are struggling to pay the bills.

But on the first question, I would like to turn to the deputy minister.

Ms. Susanna Laaksonen-Craig: Susanna Laaksonen-Craig, Deputy Minister at the Ministry of Energy and Mines.

That change is not changing the OEB's governance structure in any way. As a matter of fact, it's about further enhancing the independence of the agency.

The change is really related to making sure that the CEO can deal with internal matters that are procedural, such as timing associated with the conduct of hearings, the timing for determinations made via delegated authority or to require that certain information be considered in conducting a hearing. So these are more technical things.

There is a historic background to this, because as the OEB modernization moved forward, as these new roles were created, there was a little bit of unfinished work in defining the roles between the chief operating officer,

CEO and so on. You could consider it more as housekeeping than changing their structure.

Mr. Ted Hsu: I guess I'm a little bit surprised that this has to be in the statutes and it isn't something that the board can set for themselves. The board appoints the CEO. Why couldn't the board also say, "Okay, CEO, we're appointing you. You make the internal procedure rules"? Why does it have to be in statute?

Ms. Susanna Laaksonen-Craig: Well, because how the statute was written, it created that—whether you want to call it a gap or unclarity—and we just wanted to make sure that there is an absolute clarity related to that factor.

Mr. Ted Hsu: So without that clarity, somebody else was making the internal procedural rules?

Ms. Susanna Laaksonen-Craig: I would say that the board and the CEO have worked really well together.

Mr. Ted Hsu: So why do you need more rules if they worked well together?

Ms. Susanna Laaksonen-Craig: I would say that I think the government wants to be precise and crisp, and we want our legislation to reflect the—

Mr. Ted Hsu: Okay, that's great. I'm going to bring some amendments to make the legislation more precise and crisp, so I'm glad to hear that.

I want to switch, just because I don't have that much time. I want to bring something forward to the minister that I mentioned a little bit in debate at second reading, but I want to just say this in person because I think it's important. One of the things that we're doing is we're moving costs from energy bills to the government debt. As you know, your budget, Minister, is mostly money that goes to reduce the cost of energy on the energy bill, but it goes into the government debt.

The thing I want to bring to your attention, Minister, is something in the long term. What I'm worried about is that every commodity goes through cycles. Every commodity goes through price cycles. These days we're short of energy, but we hear announcements all over the world: Governments and big private companies are all getting into energy. Whether it's renewable energy or nuclear energy, everybody is throwing a lot of money into energy.

What happens 10 to 20 years from now, after everybody and their brother and sister have built nuclear plants or renewable energy projects? I worry that 20 years from now we'll be on the other side of the commodity cycle. Given that we're subsidizing so much of the cost of energy and putting it onto the public debt, what are you going to do to be careful that we don't get caught with our pants down at the other end of the energy commodity cycle, whenever that is?

Hon. Stephen Lecce: As a first principle, the reason why the province—

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

Hon. Stephen Lecce: —invests in the Ontario energy rebate is because we inherited a system where energy costs were increasing by $1,000 a year. They were 300%, almost 400% higher than when we started. That was a preposterous, offensive public policy legacy of the former government.

I'm open to an alternative to a taxpayer rebate in the immediate term; otherwise, energy costs would skyrocket. So we've used the taxpayer rebate to draw it down, to stabilize it for families and seniors. I appreciate intellectually the sustainability of it. I've said it at estimates: I'd agree that over time it should come down. How we get there is through public procurements. We've recontracted the exact same project that the former Liberals did, 30% below, because we use public procurement as a competitive tension in the system.

We're going to get there. We're going to get to the promised land of not having to do this. I agree with the problem and I don't like it, but in the abstract, bills would skyrocket. We campaigned in 2018 on a subsidy program to stabilize bills. We've added the largest energy savings program in Canadian history. We've used low-cost—

The Chair (Mr. Aris Babikian): Thank you, Minister. That concludes our morning hearing session. Thank you to the minister, to the staff and members of the committee.

Now, this committee will take a recess until 3 p.m., when we are going to hear witnesses.

Thank you very much for your patience and valuable input. We will see you at 3 o'clock.

The committee recessed from 1000 to 1500.

THE ONTARIO GREENHOUSE ALLIANCE
ENVIRONMENTAL DEFENCE
CANADIAN RENEWABLE ENERGY ASSOCIATION

The Chair (Mr. Aris Babikian): Good afternoon. The committee will resume public hearings on Bill 40. The panel presenters will each have seven minutes for their presentation, with the remaining 39 minutes of questions from members of the committee.

We have two representatives in the room from the same organization. As both representatives can be accommodated at the witness table, do we have an agreement to allow both representatives to participate in person? Committee members, agreed? Okay.

Welcome. We will start with the Ontario Greenhouse Alliance. Please state your name and your title.

Mr. Jan VanderHout: My name is Jan VanderHout. I am chair of the Ontario Greenhouse Alliance, and I am also a greenhouse cucumber farmer from Hamilton, Ontario.

The Chair (Mr. Aris Babikian): Go ahead.

Mr. Jan VanderHout: Good afternoon, Chair and members of the committee. Thank you for the opportunity to speak today about Ontario's greenhouse sector and how Bill 40 can help us grow together.

First, a little bit about us: The Ontario Greenhouse Alliance represents Ontario greenhouse vegetable and flower growers. We are regional powerhouses, with a significant presence in Niagara, Hamilton and the southwest regions. Greenhouse development doesn't just create jobs on farms; it drives energy demand, construction activity and logistics growth. In short, it's a strategic economic engine

and it depends on energy availability and cost competitiveness.

Let me put the scale of our sector into perspective. We have 1,672 greenhouse farms, over 5,000 acres of indoor production, $9 billion in capital investment, a 5% to 6% average annual capital growth rate, 42,000-plus jobs, $2.5 billion in annual export value and 9% average annual growth. Ontario farms cashed receipts of nearly $2.5 billion in 2022, second only to dairy in the ag sector. This makes the greenhouse sector comparable to major provincial industries such as auto manufacturing and forestry. For instance, the sector's current and anticipated investments, $2.5 to $5 billion, are on par with now-defunct commitments like Stellantis' $5-billion battery plant in Windsor and Magna's $471-million assembly plant in Brampton.

Our sector has an enviable record of growth, averaging over 5% in capital growth over the past 20 years, and notwithstanding the myriad of challenges we face, we are continuing to expand. In this time of uncertainty, Ontario's greenhouse sector offers stability and resilience. It provides steady jobs, drives innovation and strengthens local communities. But growth depends on modern, reliable energy infrastructure and a competitive investment climate. Bill 40 provides an important progress to help make that possible.

Bill 40 contains provisions that are positive for our sector. It empowers the Ontario Energy Board to explicitly consider economic development and regional growth when evaluating new energy infrastructure. It encourages coordination between energy planning and local development priorities. This aligns electricity, natural gas and emerging energy solutions with agri-food investment needs. It promotes proactive infrastructure investment, so that growth is not delayed because the necessary energy connections aren't in place. These reforms recognize that energy access is not just a technical issue; it's a strategic enabler of competitiveness.

Energy is one of the foundations of greenhouse growth and investment. Our operations require reliable, affordable and scalable electricity, natural gas and emerging low-carbon fuels. Bill 40 means that the OEB can weigh economic and regional impacts, not just narrow technical criteria, when making decisions.

We've seen this work before. In 2019, natural gas infrastructure reforms by the province enabled new natural gas investments in Chatham-Kent and Huron county enabling new greenhouse and agri-food projects, unlocking new investment and creating hundreds of local jobs. Bill 40 has the potential to replicate that success for electricity and hybrid energy systems.

To make the most of Bill 40, I would also offer the following future considerations:

(1) Provide the OEB clear guidance to weigh regional agri-food investment and economic competitiveness in infrastructure decisions.

(2) Prioritize transmission, generation and distribution in regions like Leamington, Kingsville, Hamilton and Niagara to unlock immediate economic growth in the sector.

(3) Consider on-farm generation opportunities in future programming and policy directions, to help with farm businesses and current regional generation and distribution constraints.

(4) Maintain open channels with the sector and continue dialogue with industry to identify shovel-ready projects that need enabling infrastructure to proceed.

Ontario's greenhouse sector is ready to partner in building prosperity. By aligning infrastructure investment with regional opportunity, we can create jobs, we can strengthen exports, we can secure agriculture production and supply, and we can advance sustainable growth together.

Thank you for this opportunity to speak today.

The Chair (Mr. Aris Babikian): Thank you very much. Now, I will call upon Environmental Defence Canada to start their presentation.

Ms. Emily Hunter: Good afternoon, Chair and members of the committee. Thank you so much for this opportunity to speak.

My name is Emily Hunter, senior program manager at Environmental Defence Canada. We are a 40-year-old national environmental organization with deep roots here in Ontario. We work with economists, lawyers, physicians, industry and community partners to advance evidence-based energy solutions.

Recently, we've heard new language from the provincial government about energy patriotism and energy for generations. We too believe in economic sovereignty and in building an energy system for future generations—one that is affordable, reliable and aligns with Ontario's leadership in clean energy. Within that context, today I want to speak to you about Bill 40 and how, without amendments, it will impact affordability, competitiveness and Ontario's dependence on American fracked gas, as well as the economic risks from the foreign-actors provision that this bill will enable.

First, on affordability: Bill 40's economic-growth framing is not aligned with real system costs or energy sovereignty. Environmental Defence supports growth, but growth must reflect real systems costs, health impacts and global market realities.

Electricity costs are already rising sharply. On November 1, energy supply costs for households and small businesses rose by 29%. To mask these increases, the Ontario Electricity Rebate climbed from 13.1% to 23.5%, drawing billions from general revenues. The Ontario Energy Board identified nuclear refurbishment and expanding gas generation as the major cost drivers of this.

Ontario now spends $6 billion to $8 billion annually subsidizing electricity bills, an unstable approach that hides the true cost of our supply mix. This is equivalent to the funding provided to the Ontario growth fund. And costs are continuing upwards. The IESO forecasts total system costs reaching $34.5 billion by 2030 and nearly $43 billion by 2035.

Now, speaking about energy sovereignty: Bill 40 is framed as protecting energy sovereignty, yet Ontario imports more than 70% of its natural gas from the United

States, most of which is fracked gas and none of which is restricted under this bill. Rather than strengthening sovereignty, Bill 40 risks deepening reliance on US fossil fuels, when distributed wind, solar and storage can produce power locally, more resiliently and at lower cost.

On energy economics: According to the IESO's cost data, wind would cost $48 a megawatt per hour. Solar is $69 a megawatt hour and nuclear is $140 a megawatt hour, while gas is $185 to $262. Regardless of any incentives for any of these energy sources, it is wind, solar and storage that remain the lowest cost of these resources. New gas is among the costliest and most polluting option. That's not our data; that's the IESO.

1510

Meanwhile, Ontario risks missing a $40-billion clean energy opportunity. I'll leave this to CanREA to share, but there is a $40-billion opportunity in private investment, along with tens of thousands of jobs here in Ontario. Bill 40 neither prioritizes these lowest-cost resources nor ensures they can compete.

When we talk about gas expansion, Bill 40 reinforces a costly, high-pollution pathway and a high-risk pathway. Across the LTEP, the Long-Term 2 and new large load rules, a clear pattern has emerged: Ontario is moving towards deeper reliance on gas-fired electricity. Ontario's planning shows rising gas use.

The IESO's 2025 annual planning outlook, or APO, shows gas generation, including the Portlands gas plant here in Toronto, rising 23% by 2044. Yet, at the same time, demand is actually softening. The 2026 APO released today has lower long-term-demand growth, from the 75% number that we've been regularly hearing to 65% now today—or projected into 2026—because of the slower industrial electrification, because of slower EV uptake and because of reassessed data centre demands. This means demand is softening while gas expansion continues, raising overbuild risk.

Gas also brings health, emissions and reliability risks. Gas plants emit PM2.5, methane and nitrous oxide. Methane is 80 times more potent than carbon monoxide and CO_2 over 20 years. Life cycle emissions make gas comparable to coal.

During extreme weather, gas plants fail. When a pipeline freezes, nuclear plants cannot ramp for peaks. Renewables, paired with storage, improve reliability. We've seen this in many other jurisdictions.

New gas is no longer affordable. New gas in Ontario is the most expensive major electricity source, as mentioned, and there is a seven-year backlog on new gas turbines globally. Hence, without guardrails, Bill 40 risks locking Ontario into a high-cost, high-risk, high-emissions future.

Finally, on the foreign actors regulation that would be enabled under Bill 40: There's a direct risk to renewables and supply chain here in Ontario. We're concerned about the foreign participation regulations. Because Ontario does not yet have a domestic chain that is fully developed here, Bill 40's broad powers, combined with this proposed regulation, will reduce eligible renewable proponents in the long-term to procurement that's occurring right now. It will slow or eliminate wind, solar and storage bids. It will raise project costs—

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

Ms. Emily Hunter: Thank you—it will delay grid-ready clean capacity and undermine municipal-Indigenous partnerships already formed.

I will skip our recommendations, as they've already been submitted. I will just say that by terminating who can compete, Bill 40 determines what gets built. Without clear safeguards, Ontario risks shutting out what is already an accelerating global clean energy market.

I will just close here to say: Ontario has the wind, the sun, the storage and the skilled workforce to build a clean, affordable and reliable electricity system. We respectfully urge this committee to amend Bill 40 so Ontario's electricity system truly serves people, community and the economy.

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

We move to the Canadian Renewable Energy Association. Please state your name and your title. And go ahead; the floor is yours.

Mr. Eric Muller: Thank you, Chair. Good afternoon, everyone. My name is Eric Muller, and I'm the director of policy for Ontario at the Canadian Renewable Energy Association, or CanREA for short. I'm joined by Imran Noorani, vice-president of policy at CanREA, and we're very pleased to be here with you all today.

CanREA is the national industry association advocating for wind energy, solar energy and energy storage solutions, supporting Canada's energy transition and economic growth. Our network of about 350 companies represents all portions of the value chain that develop and operate clean energy facilities across Canada.

Ontario has a very reliable and clean power system. The foundation is a diverse-resource fleet that provides electrical energy where and when needed. This includes about 8,000 megawatts of wind and solar generation that have been successfully operating for up to 20 years in this province.

In addition to this wind and solar, 3,000 megawatts of energy storage facilities are currently being built out across Ontario in support of electricity system reliability, affordability and clean growth.

As probably many of you know, Ontario's electricity system is facing a monumental challenge right now. Over the next 25 years, demand for electricity in Ontario is projected to grow significantly, presenting a substantial challenge to replacing retiring generation with new and refurbished clean energy facilities.

The electricity sector, including wind, solar, energy storage and enabling transmission, can support many provincial objectives as part of this big build, including energy security, infrastructure jobs and investment, diversifying Ontario's economy and, of course, providing energy to support strategic initiatives such as mining and data centres.

The province's integrated energy plan, titled Energy for Generations—it was released this summer—outlines a coordinated long-term approach to ensure Ontario has the

energy it needs to power homes, businesses and industry with abundant, reliable, clean and affordable energy.

The IEP reaffirms the government's commitment to competitive, transparent and predictable procurements, such as the Long-Term 2 procurements. This series of competitive procurements is the largest clean energy procurement program in Canada and is also one of the largest in North America. These consistent procurements maintain investor confidence in this province and will drive low-cost renewable energy investments that benefit all Ontario ratepayers.

We're also encouraged that the integrated energy plan identifies the critical actions needed to leverage the significant potential of distributed energy resources, DERs, such as rooftop solar and battery storage. DERs foster customer choice and resilience for customers all over the province.

We strongly support the LT2 procurements, and we anticipate that they will result in more than 6,000 megawatts of new, clean electricity generation and storage to serve Ontario's growing needs. This represents approximately $10 billion to $12 billion of private sector investment in Ontario in the next 10 years alone.

Our members—CanREA members—are leading this build-out alongside their Indigenous partners, creating thousands of jobs and benefiting communities all across the province, including in northern Ontario.

Having set this context, CanREA has a few specific comments regarding Bill 40. We support the government's objectives to prioritize strategic, job-creating electricity customers while maintaining system reliability and affordability. And as I mentioned, the province's integrated energy plan and LT2 procurement mark a historic commitment to new non-emitting generation and storage capacity.

Bill 40 extends this planning vision by ensuring emerging digital loads, like data centres, are recognized as strategic and high-priority infrastructure, and are integrated with Ontario's clean energy build-out. Data centre electricity load growth presents a unique chance to turn digital growth into clean power investment and grid modernization. By linking new data centres with renewables and storage, Ontario can ensure its digital backbone is powered by a clean and reliable energy backbone.

Corporate and virtual power purchase agreements enable large energy users to contract directly with renewable projects, adding clean supply without adding ratepayer cost. Ontario's June 2025 corporate PPA regulation rightly includes wind, solar, biogas, hydro and geothermal as eligible sources. Having said this, more work needs to be done to fully unlock the ability for large electricity consumers, such as data centres, to procure their own power from renewable energy and storage suppliers. We see these types of buyer-and-supplier arrangements in many other jurisdictions around the world, and they result in successful outcomes for ratepayers and community economic development.

Ontario's clean energy credit framework also gives corporate buyers—

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

Mr. Eric Muller: —a transparent and credible way to verify their clean energy use while returning revenue back into Ontario's electricity system. I would encourage and support growth of the corporate PPA and clean energy credit framework system in this province and how they support large loads.

1520

In conclusion, CanREA is encouraged by the government's early and bold actions to secure Ontario's future power supply, including a diverse portfolio which includes renewables, storage and hybrid systems, meaning renewables paired with energy storage. CanREA members, working with our Indigenous partners, are eager to help meet Ontario's electricity challenges and support Ontario's prosperity, security and economic growth.

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

We will move to the first round of questioning. We will start with the government side. You have six and a half minutes. MPP Pinsonneault.

Mr. Steve Pinsonneault: Thanks to all the presenters for taking time out of your day to come down here and be part of our process.

My question is going to be for Jan and the Ontario Greenhouse Alliance. You mentioned Chatham-Kent in your speech there; actually, my riding covers half of Chatham-Kent. I spent 17 years as a municipal councillor in Chatham-Kent, and I've seen the growth of the greenhouse industry down there.

My question is: The Ontario greenhouse vegetable sector has grown an average of 5% annually over the last decade. How do the proposed changes to the Municipal Franchises Act support the members that you represent?

Mr. Jan VanderHout: Facilitating the continued growth and putting the growth where it can best service the greenhouse growers of Ontario, and viewing the upcoming expansion of systems generation and transmission to the areas where the future of economic growth is residing, is where it is going to be an advantage for all of our members, in your area as well as in Niagara and in Hamilton. This should enable the IESO to recognize where the opportunities lie and strategically place those assets.

Mr. Steve Pinsonneault: The province understands the importance of the greenhouse industry as part of our economic growth. We've run water up now; water seems to be an issue as well, so that part is taken care of. I think now this is the next step.

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

MPP Paul Vickers: My question is also to Mr. VanderHout. I don't think there's any more noble a profession, really, than growing food for everybody. It's important with the farmland being taken up by a lot of different things, whether it's energy needs or housing or industrial needs—I think it's important—to make sure we protect our food production areas.

My question is: How important is long-term energy certainty to Ontario's greenhouse growers, and do you feel the bill adequately addresses these needs?

Mr. Jan VanderHout: It is very important, especially to achieve the continued growth in the greenhouse sector. The bill does go a long way to supporting those needs. To invest in an expansion of a greenhouse or increase production requires that confidence that the power and the energy will be there to support that growth.

I know on my own farm's level, it's a concern if I want to increase production through the use of lighting in the winter months, to increase winter production. That is a bit of a challenge right now, because in the Hamilton area, there's a lacking of infrastructure as well. But that's not exclusive to Hamilton; that's in Niagara and in the southwest as well.

All around, I think it's some steps very much in the right direction. Is it enough? I guess the proof will be in the pudding in that respect. I think it's really important that we continue to support the greenhouse sector and create some more food sovereignty in Ontario, as well as more opportunity for export.

MPP Paul Vickers: Thank you.

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

M^me^ Dawn Gallagher Murphy: My question is to Ms. Hunter. Thank you very much for being here. Thank you to everyone for being here today. Ms. Hunter, I appreciate your comments today. I wanted to note that I understand your organization has framed Bill 40 as a threat to climate action. I'm wondering if you could please explain why protecting Ontario's energy system from basically hostile foreign actors would undermine environmental progress.

Ms. Emily Hunter: Yes, and I might also ask my colleague to help answer this question as best as we can to reflect Environmental Defence's position here. But I will state, for the record, that we support economic growth. We support economic sovereignty, as I stated.

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

Ms. Emily Hunter: Thank you.

Security risks of those sorts—we do understand those need to be identified in terms of energy and security risks to the country. But that being said, blanket bans across entire countries would undermine our ability to undertake a clean energy transition, as well as have diverse energy sources to be a resilient, reliable grid system, and this would not be in our favour. So as we and others have said, a phased approach that can allow us to build a manufacturing base and build our own renewable energy sector here strongly is encouraged. But that will take time to do so, so identifying, again, state-owned and security risk entities would be much more encouraged than blanket bans.

As well, we need to stress that this bill does not identify any of the actors in the gas sector, with 70% of our gas coming—

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

We will move to the official opposition. MPP West.

MPP Jamie West: Emily. I don't know if you want to finish your thought that you were just expanding on with natural gas.

Ms. Emily Hunter: Yes, thank you. I'm just stressing that it does not seem to be a fairly distributed bill across energy sources, and that we are not relaying this bill to our tenuous relationship with the US; 70% of our gas is coming from US imports, and with relations getting more and more tense as time goes on, we feel that that is a very much missed analysis in the bill.

Mr. Keith Brooks: Can I add just one thing too?

MPP Jamie West: Sure.

Mr. Keith Brooks: Keith Brooks with Environmental Defence, just really quickly, just to say that state-owned enterprises is one thing, but banning all components from, let's say, China would be problematic, because China produces 98% of the silicon wafers. If you want solar power, you need to allow components in from China. And the same thing goes for wind turbines, for batteries, for electric cars, for a bunch of technologies.

Yes, we should build up a critical mineral supply here in Canada. Yes, we should build up domestic supply chains. But if we shut out all products from a country like China, that will effectively ban renewable energy, electric vehicles and a bunch of clean technologies that are really taking the world by storm.

MPP Jamie West: Okay, fair enough. Emily or Keith—I don't know—when you were giving your beginning speech, you had about a minute left and you said, "I'll skip over the recommendations." Did you want to go through those? I know we have them in the package, but did you want to go through the recommendations.

Ms. Emily Hunter: Yes, thank you. I appreciate the time to do so. Our recommendations on Bill 40 are to:

—either amend or withdraw Bill 40, to ensure renewable energy and stored projects are not excluded, as right now the conditions would make it so, especially with the forthcoming foreign participation regulations;

—guarantee non-retroactivity for LT1 and LT2 procurements. This would significantly hinder investments, Indigenous municipal equity partnerships and Ontario's credibility as a stable market;

—also define foreign control narrowly and focus on state-owned entities of genuine security concern, as I was trying to answer before;

1530

—use a phased incentive-based approach to domestic and North American supply chain developments;

—establish a structured consultation process with Indigenous nations, municipalities, industry and civil society, rather than shutting out local democracy; and

—prioritize cost-effective wind, solar and storage in future procurement windows.

I'll finally just add here—and this will be forthcoming—that my final recommendation is to prioritize affordability with reliability by requiring the IESO and the OEB to favour low-cost renewables and low-cost energy sources. This includes restoring clear affordability and emissions reduction mandates, requiring full-life-cycle cost analysis and publishing a plan to reduce cross-subsidies that currently mask the high cost of gas and nuclear contracts.

MPP Jamie West: I appreciate that. Thank you.

I was thinking about what you were saying about natural gas and the percentage coming from the States, and you mentioned nuclear as well. Right now, the province is tied into an SMR project that relies on American supply chain for a lot of it. They'll talk about the Canadian jobs being produced by it, but I know that recently President Trump talked about support for a similar project in the States.

My concern is that if we're betting that if we build this SMR, and we do the heavy lifting, and we pay—I think the cost has ballooned by four times the original estimate. We pay all these up-front costs because we're going to build to sell this around the world and be world leaders, but knowing President Trump and the support he has for our country, he more than likely is going to back the American project around the world. I know you're not going to promote one nuclear over the other from your stance, but it doesn't make sense that we become so invested in natural gas, which is heavily—I forget the percentage you told me—

Ms. Emily Hunter: It's 70%.

MPP Jamie West: It's 70% from the States, and then we're putting all our eggs for SMRs into an American nuclear project at a tim,e where Donald Trump is actively talking about high tariffs and Canada being the 51st state. It doesn't match with the rhetoric of "Elbows Up" and "Protect Ontario" that I hear from the provincial government.

Just because I don't know how much time I have, I'll bounce around and try to get back. For the greenhouse alliance: I was surprised—I shouldn't be, because I see receptions, but the 1,672 farms—I think it was the annual capital growth rate that caught me off guard. I'm happy to hear that, because food is very important.

So, Jan, one of the things in this is it gives certain powers to cabinet in order to choose what projects get energy. One of the questions I had written down was, what happens if there's a Canadian Donald Trump who decides he wants to mine Canadian Donald Trump Bitcoins, and that's competing against greenhouse growers for getting electricity? Are there any safeguards in place you want here to ensure that data centre projects are seen through the same lens of importance as putting food on our tables? Does that make sense to you, what I'm asking?

Mr. Jan VanderHout: I understand what you're saying is, "How can we ensure that the electricity continues to be available?" Right?

MPP Jamie West: Absolutely, yes.

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

Mr. Jan VanderHout: I think that would be an important aspect, because we want confidence that we're not building a greenhouse and the associated equipment for use next year. We're talking about for decades. So, yes, we need to have a secure supply of energy to run that greenhouse, as well.

MPP Jamie West: Okay. And just with the 20 seconds I have left: I owe you a tour. I was supposed to come down for a tour, and we keep rescheduling. I'll make it happen.

That's all.

The Chair (Mr. Aris Babikian): Thank you, MPP West.

We move now to the third party. MPP Tsao.

Mr. Jonathan Tsao: Thank you very much, Chair, and thank you to all of our deputants for coming today. It's appreciated that you make the time to come and chat with us. We always rely on the expertise of folks like you from outside the Queen's Park bubble to give us a fresh perspective and understanding of what's actually happening on the ground.

I wanted to start with our friends here from Environmental Defence. Emily, you just mentioned, regarding Bill 40, a concern around shutting out local democracy. So on that, I'm wondering: What do you think in terms of what transparency measures are needed to ensure that we keep that local democracy through decisions made under Bill 40?

Ms. Emily Hunter: Certainly we thought a lot about this, so I want to say this exactly how we've worked on it.

In terms of enabling local democracy, we feel that a formal advisory process is needed to review draft regulations, assess market impacts and avoid unintended procurement delays. That ongoing dialogue will support better regulatory design and protect reliability and planning. This needs to include—not centralize in the decision-making, but include, in terms of our local democracy—Indigenous nations, municipalities, industry, but also civil society, as collectively, we're representing the people on the ground who are most impacted by these decisions.

Mr. Jonathan Tsao: Absolutely.

I'm new to the Legislature, but I've been through a number of committee meetings now. It seems a common theme here when we have deputants is a concern about the centralization of power under this government, and the—not necessarily the consequences under this specific bill always are, but unintended consequences.

From your perspective, with the environment, can you speak a little bit about when we lack a certain level of consultation—input from experts, input from people outside of our government bubble—specifically with Bill 40, what could be the consequences upon our environment that we may not be thinking about right now?

Ms. Emily Hunter: Absolutely. In fact, we're seeing it right now. We're working with municipalities already in Thunder Bay and Shuniah. I can say already what's happening is new gas peaker plants are being proposed, as we speak, in those councils.

The councils that we're hearing repeatedly, that we're working with—we hear time and time again from the councillors, but also the community members on the ground, that there just wasn't enough time; that by the time that the council got proposed the project, by the time there was a council decision being made, sometimes it's just one meeting by a committee to make that decision and a small handful of votes.

Meanwhile, most of the community members didn't even get to hear about it, didn't even know that a new peaker plant was being proposed, and they were the ones on the ground facing the impacts. So again, they're facing the volatile compounds that are in the air. They're facing

the air pollution. This is including premature births, health consequences, asthma—a number of health impacts that are happening to people on the ground by decisions that are being made quickly and with a council that doesn't have all the information or tools about the Long-Term 2 process.

Now, we're talking about Bill 40, which may change some of those procurement decisions, centralize it more and confuse councils even further, and confuse communities on how they can even engage in these processes.

Mr. Keith Brooks: Can I add something?

Mr. Jonathan Tsao: Absolutely. Please.

Mr. Keith Brooks: I would say it's not just that aspect of things with communities, but also some of the bodies, institutions like the Ontario Energy Board and the IESO. I think their independence has been reduced. Decision-making is being centralized within the ministry, with the government actually legislating against the OEB and explicitly saying to the IESO—the Independent Electricity System Operator—that they're no longer in charge of developing the integrated energy plan.

We're seeing not just the broader scale of democracy, but also institutions that were set up to facilitate discourse and to bring stakeholders in—to build robust plans that were shielded from political interference—also being undermined.

Mr. Jonathan Tsao: It's interesting, too, because—I think I'm going to sound like a broken record at this committee, because often what we hear from the government side in defence of any bills that come here is that in the name of protecting Canada against an economic threat, basically carte blanche is needed: We need to focus only on an economic threat, and we should throw everything out the window, like our concerns around environment, our concerns around local democracy.

So I want to ask you your perspective on Bill 40 with this in mind. How do you think we should balance, in Ontario and the Ontario government, Bill 40's new economic growth mandate with climate conservation goals? What is the balance that Environmental Defence and you would be looking for through this bill?

Ms. Emily Hunter: I think the balance for us is quite clear. We need the least-cost mix—so that's wind, solar and storage—to meet these new demands; efficiency and demand response to reduce peak; optimized hydro; and yes, some existing nuclear—not new builds, but existing, and then existing gas as a declining backstop.

So the combination is the lowest-cost, fastest to build and best aligned with reliability and federal 2035 requirements. That, we feel, is going to get us more to the clean energy transition and faster. That meets health, meets our environment and meets our economic and political circumstances.

Mr. Keith Brooks: And it's not so much about balance. Like, if we go for the lowest-cost form of electricity, which has been a competitive advantage for Ontario, that is a clean energy system. That's what's emerging globally, and it should be the case here in Ontario, too.

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

Mr. Keith Brooks: Wind and solar are the cheapest source of electricity. Battery energy storage costs 40% the price of a gas plant. Meanwhile, we're making decisions that are very costly, and that's going to hurt our overall economic competitiveness. Energy is a service, and it should be provided cheaply.

Mr. Jonathan Tsao: So it's fair to say that from your perspective, it is possible to balance both; that we can look at our economic sovereignty and we can look at our energy sovereignty, but also be aware of the environment, about conservation and protect our environment. That's a fair statement?

Ms. Emily Hunter: I'll say that's a very fair statement. It's not 10, 20 years ago. It's not the economics versus the environment anymore. They very much are well-aligned. The economic choice is the environmental choice. The political choice is also the environmental choice. These don't need to be pitted against each other.

1540

Mr. Jonathan Tsao: Thank you very much.

Thank you, Chair.

The Chair (Mr. Aris Babikian): Thank you, MPP Tsao.

We move to the government side. MPP Vickers.

MPP Paul Vickers: My question is to Ms. Hunter and Mr. Brooks.

I live in the Meaford area, and I drive through the Dundalk area to get down to Queen's Park here, and there have been large wind farms built in that area. I never know why the windmills aren't working—sometimes they are; sometimes they aren't. It's not like all of them aren't working or are working, but there's always a percentage of them that are down. I really don't know why, but it's always a concern of mine.

The other part of that is the land that it takes to build the windmills on. It's not just always the land for the windmill pedestal itself, but it's the access roads; because these windmills aren't close to the road, they also build these lanes all the way back in.

You talk about how the cheapest power to build is wind, solar and battery storage, but do you factor in the use of land? We have such a limited amount of land here. I think my MPP across from me quite often talks about how much land is being used up. And we struggle—I think we really do struggle—as a province to try and limit that amount of land, just through the building of houses, highways and industrial uses. Now, all of a sudden, we have some people saying—and Mr. Schreiner also talks about how much more wind and solar panels we need to serve the purpose of energy development.

My question is, where are we going to get all this land? And do you think, really, you're considering the full cost when you don't consider land in the equation? And land, we cannot form any more of. Our friends with the greenhouses are trying to increase production of the land, but I wonder what your idea is about all this land being taken out for the generation of power.

Mr. Keith Brooks: I mean, we take it very seriously and we work very much on stopping sprawl and protecting green spaces and protecting the greenbelt, absolutely. We

want to see projects sited properly; we don't want impacts on endangered species. We want to make sure that the people that live there are consenting and benefiting from renewable energy projects.

But wind power and agriculture are complementary. In fact, from the Ontario greenhouses, he's talking about on-farm revenue that comes from wind generation. And the farmers—all of the farmers in Dundalk, in Meaford, in Shelburne or wherever—all signed agreements to take wind farms onto their property. They get lease payments from those facilities, and that allows them to continue to farm and actually adds another revenue stream to their activity.

We don't want to see a trade-off here. We've got to find the right balance. We're okay with the requirements in the LT2 that proponents develop an agricultural impact assessment and things like that. We've got to find a balance here, but the reality is that these clean energy sources are the cheapest source of electricity supply, and we do have to fight climate change. Climate change threatens all of our agricultural productivity. It threatens us with fires, with droughts, with floods, with all kinds of things that are going to cause much greater impact than putting some wind turbines on a field.

MPP Paul Vickers: I don't disagree with you that there is a farmer on the other side that is agreeing to sell you the land or to lease the land to those turbine owners. But I'm just wondering: Is that really the good use of farmland? We can do without a lot of things, but we cannot stop eating, and I really question whether you take in the amount of land that it takes to try and put all the solar and wind turbines out there. I'll be honest with you: I'm quite concerned whether it really is as easy-peasy as what you sometimes make out when you're giving your depositions.

Ms. Emily Hunter: Could I comment on that?

MPP Paul Vickers: It's up to the Chair.

The Chair (Mr. Aris Babikian): Yes, go ahead.

Ms. Emily Hunter: Okay. I would just say that we definitely don't meant to reflect it as easy-peasy whatsoever. We understand these are big energy decisions being made right now. But I also stress that it takes a much more integrated approach than one or the other, black and white, and I mean that with all respect.

What's happening today with solar, wind and storage is a more integrated method. We're seeing everything from rooftop solar and balcony solar to vehicle-to-grid—V2G. We're seeing a lot more innovations happening. We're seeing northern cities—communities with bigger populations than ours—who are taking on these same technologies. They're hardly innovative. They're hardly new. They're happening and they are meeting electricity needs. And they're not doing it in a way that is taking away from some other aspect of society, such as food. They're integrating it within existing societal needs, whether that be, as I say, within our buildings or whether that be side by side, such as with farmers and wind turbines there.

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

Mr. Andrew Dowie: My question will be for Eric Muller. Thank you so much for being here.

I know that striking a balance is often tough, and I'll use the example back in the city of Windsor, where a councillor, Kieran McKenzie, voted in favour of a climate emergency, but he also voted in favour of a gas plant. He says, "It's about making tough choices that do have environmental implications, while at the same time are there to help facilitate the incredible opportunity that we have in front of us with the NextStar battery plant."

My question to you is related to Bill 40. Does Bill 40 strike the right balance when it comes to maintaining a resilient and clean energy grid, while also taking into account economic growth?

Mr. Eric Muller: Thank you for the question.

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

Mr. Eric Muller: CanREA is supportive of and understands that the province needs a diversity of electricity resources to meet that affordability, reliability and sustainable and secure grid. We support the all-of-the-above competitive approach in these procurements where our members—wind, solar and storage companies—that do multi-billion-dollar projects all over the world and in Canada compete with other technologies to provide that reliable, affordable supply and to support Ontario's economic growth.

I'll leave it at that.

Mr. Andrew Dowie: How much time is left, Chair?

The Chair (Mr. Aris Babikian): Twenty-two seconds.

Mr. Andrew Dowie: I'll pass.

The Chair (Mr. Aris Babikian): We move to the official opposition: MPP West.

MPP Jamie West: I'm going to start with CanREA, just because you were talking about wind and solar storage solutions, and relate it to my colleague MPP Vickers's questions about how we manage wind and solar—because you hear the feedback, right? When it's not sunny, when it's not windy, you need the storage. What kind of footprint are we looking at when it comes to setting up the infrastructure for this? Because there's a component of this that's part of our grid and it needs to be more and more in the future, but I think it's hard to visualize if you're not as involved as you are as experts.

Mr. Eric Muller: Definitely. Thanks for that question.

When we talk about wind and landowners and farmers, there are a lot of very positive stories that we can see where farmers—first of all, the land use is less than 3% of that entire land that is leased. It's actually for the turbine towers.

The positive stories I was referring to are all of the revenues and benefits that those landowners and farmers receive from these renewable energy systems. We've heard plenty of stories and examples where they were able to continue to farm and do the family farm activities and live that family farm life because of this additional revenue stream. As an example, the average landowner in Ontario receives $54,000 per turbine per year. So it doesn't stop the critically important agricultural activity that needs to happen—and food is critically important, as I think we've heard many times today. That's a little bit on the footprint piece.

I think—tying it back, as well, to that diversity of resources on the electricity side—no electricity generation

resource is perfect. They all have their pros and cons. Whether it's nuclear, water power, gas, wind, solar storage, they all have their pros and cons and they all contribute to that diversity of resources to that broader reliability.

Yes, the sun doesn't always shine, or the wind doesn't always blow, but we've been operating 8,000 megawatts of wind and solar for almost 20 years and the grid operator has done a good job of taking that energy and it has contributed significantly to reliability.

MPP Jamie West: A lot of this bill—and I might also ask Environmental Defence the same question—has to do with how we know that data centres are going to want to come to Ontario. Can we supplement data centres using renewables? Can we set up wind farms or solar panels?

I know in the States—or at least I've read that in the States—Grok and Microsoft and Amazon are looking at setting up small reactors, actually, to power them. Is this something that we can do? Is it feasible? Is there enough power generated, that sort of thing?

Mr. Eric Muller: I'll start, and then I'll pass it over to my colleague Imran just to say that, yes, it is feasible. We see all over the world wind, solar and battery paired with data centres or other large loads through those corporate and virtual power purchase agreements where large companies like the ones you referenced pay for that infrastructure. There's no cost to ratepayers and it takes and reduces some of the strain on the broader grid when there's so much demand growth.

1550

Anything you'd like to add, Imran?

Mr. Imran Noorani: Yes. I'll mention it from two perspectives. From the corporate power purchase agreement, we're actually saving infrastructure that exists right now that is coming off contract. All of the renewable generation that we have right now compare themselves really well with the data centres, and so this is why we're in support of this.

But Emily pointed to distributed energy resources as a huge potential. So think of this as some of the data centres are going to be that mid-snack bracket. We're not talking about the large Amazons doing nuclear deals. We're talking about mid-snack bracket that needs to build in Markham and build in Aurora, and needs to figure out what their renewable energy goals are going to be and how they're going to achieve that.

In these locations, we're talking about a peanut butter and jelly sandwich—solar on the rooftop; battery in the parking lot—which is going to take a footprint of two and a half to three parking spots, in theory. So you are really talking about optimizing space where it is needed, and you're talking about distributed generation that's providing grid reliability and optimizing the space in a very specific way.

We don't need to think about it taking away from others from an agricultural perspective, because now you're actually in a local-generation mode and you're actually able to save on other things like infrastructure related to wires from an affordability perspective.

MPP Jamie West: Would they need additional resources from the grid, or could they do it all with the renewables for that snack size or whatever you called it before?

Mr. Imran Noorani: Renewables—that's the beauty of it now. From a cost perspective, renewables will win on the procurement side. From a project developer perspective and returns that they're expecting, they'll get it through the current electricity grid. So it's economic as well now.

MPP Jamie West: Okay. Emily or Keith, is there anything you want to comment on this?

Ms. Emily Hunter: Yes. I might add a bit of a different angle to this question just to say, when it comes to these data centres and who is winning and who is losing, we have to think about the transmission lines that are needing to be built and the new energy plants that need to be built.

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

Ms. Emily Hunter: Again, if we go more of a gas-heavy pathway, the most expensive pathway, as I've alluded to already with our data, then the cost of transmission, the cost of new gas—who is paying for all this, to get these data centres? The true cost, when you look at all of that combined, all the new-build infrastructure—it's the ratepayers. Are we benefiting, or are the Amazons of the world or the big tech CEOs benefiting? So let's go with the cheaper options that are paired with data centres that are going to have less of an impact or little impact on the ratepayers and us in Ontario.

Mr. Keith Brooks: Nothing more to add other than, yes, it can do it.

MPP Jamie West: I don't think I have much time.

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

We move to the third party. MPP Hsu.

Mr. Ted Hsu: I have some questions for CanREA. One of my concerns is that there are a lot of big energy builds planned over the next 10 or 20 years. My colleague from Sudbury mentioned that: a lot of big corporates and governments restarting nuclear plants and building a lot of renewable energy installations, as well. Over the next 10 or 20 years, when all of these generators come online, the supply-demand balance is going to be less certain than it is now. Right now, there's not enough supply and too much demand in the next few years.

It just seems to me—and I'd like to ask if you can confirm this—that renewable energy plus storage can adjust faster to changes in the balance between supply and demand. So given that every commodity has cycles, and the balance between supply and demand, we know where it tilts right now, but it will be more and more uncertain as we go out, especially with all sorts of supply coming online over the next 20 years. It's great that we're building nuclear plants, but other people are building them too. Could you please comment on that?

Mr. Eric Muller: Yes. I can agree that wind, solar and battery energy storage can be built in a three-year to five-year time frame. So as you said, the flexibility of building that out in a near-term time frame from an electricity planning perspective—and you can adjust accordingly,

but it's the fastest three types of technologies that you can deploy, and they're the lowest-cost, as we've heard several times.

Mr. Ted Hsu: If we're talking about building an energy system that is efficient—that's economically efficient, that can pivot with different conditions like an election in the United States—you would agree that renewable energy and storage should be a good part of the mix, in order to give us that economic flexibility so that we can have the most productive economy possible?

Mr. Eric Muller: Absolutely.

Mr. Ted Hsu: Okay. Thank you very much. I wanted to ask another question about the land that was brought up. I wanted to ask anybody here: There's a new technology, agrivoltaics, that that people are ready to pilot, which combines solar with greens that grow particularly well outside of direct sunlight—so, for example, leafy greens where you eat the leaves. Where's the place of that, do you think, in the future energy plans of Ontario? This kind of addresses my colleague who asked about the space that solar and wind installations take up.

Ms. Emily Hunter: Yes, I can comment. I was actually just sitting beside one of the men who is leading agrivoltaics yesterday at the CanREA conference. I will just say it's an industry with a lot of promise. We've seen it getting pushed forward in big ways—big energy projects elsewhere and even in northern climates. It's a great way of engaging with sheep farming as well.

I will say that in Ontario there is already a lot of strict regulation when it comes to solar and when it comes to farming. Class 1 to 7, I want to say, is already quite prohibitive for solar. A number of solar projects can't find a means to do agrivoltaics and, again, this more integrated approach, that there are solutions to have renewables along with societal needs such as farming—but when we have such rules in place that are already quite heavy-handed, then we're not able to merge those. Even if we got to classes 1 to 3 or 1 to 4, we would support that fully as Environmental Defence, as we do need to protect prime agricultural lands. But when we do all the classes, or most of the classes, we're really just being quite prohibitive to having these more integrated solutions.

Mr. Ted Hsu: It's too much. The regulation is too heavy-handed.

Ms. Emily Hunter: It's already too heavy-handed, and Bill 40 would quite likely make it more heavy-handed.

Mr. Ted Hsu: Any comments from the others? No?

There was something I wanted to ask about that escapes me right now. Let me just ask a general question, and this is about grid connections. I feel that Bill 40 is too vague when it comes to specifying what criteria—what general criteria—would be used to write the regulation. I feel like businesses would benefit from a little more certainty. Do you feel that we would benefit by making some of the criteria that would be evaluated, taken into account when writing regulations?

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

Mr. Ted Hsu: Should they be more specified in the bill? This is open to anybody.

Ms. Emily Hunter: Yes, I can jump in. Absolutely. We also found that there was a vagueness to Bill 40, which, again, opens itself to, I'll just say, a more politicized route when it comes to electricity and energy needs. We need more strict definition, transparency and accountability when it comes to our electricity system as to ensure that it doesn't become politicized. One of those ways is having a more narrow definition of what a foreign actor would mean. It's just one of the means by which we would argue we need more definition and transparency.

Mr. Keith Brooks: Also, we've talked to real energy developers who said that they're kind of betting blind into the system, because they don't know what criteria are being used to assess the projects. They don't have the details from Hydro One; they don't have all kinds of things. They're at a structural disadvantage, and I don't think this bill helps with that.

Mr. Ted Hsu: I remember what I wanted to ask. I understand that many family farms who sign agreements for wind turbines have to sign agreements where they also—

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

Thank you to all three organizations for your presentations. We will take a few seconds to set up the next panel.

ONTARIO ENERGY ASSOCIATION
ASSOCIATION OF MUNICIPALITIES OF ONTARIO
ENERGY STORAGE CANADA

The Chair (Mr. Aris Babikian): Committee members, please take your seats.

1600

We will move to our next panel. Each presenter will have seven minutes to conclude their deputation. After that, we will have 39 minutes for questions and answers.

We will start with the Ontario Energy Association. Please introduce yourself and your title.

Mr. Nameer Rahman: Ladies and gentlemen, my name is Nameer Rahman. I am the director of policy for the Ontario Energy Association. It gives me great pleasure to talk about Bill 40, the Protect Ontarians by Securing Affordable Energy for Generations Act. The OEA is supportive of Bill 40, and our suggestions align with the government's overall goal of promoting economic growth in Ontario.

We are facing an unprecedented economic challenge, and the only path forward is co-operation and hard work. Our members, who are tasked with keeping the lights on, homes warmed and the engines of industry running, understand this better than anyone. In a province the size of France and Spain combined—people forget how big Ontario is—but with a tenth of the population, our members provide gas, electricity and thermal resources, on a continental scale, that are both affordable and reliable. We understand Bill 40 in that context: of a government seeking to grow our economy, maintain our quality of life

and create future opportunity. It is in that spirit that we offer our comments today.

We are focused on three things: (1) enabling low-carbon resources, (2) approaching infrastructure holistically, and (3) targeted funding to unlock deeper savings.

Some of the most affordable energy resources on the electricity side right now are distributed energy resources, DERs. Many excellent steps have been taken by this government so far to enable them, the largest of which is the $11-billion commitment for demand-side management programs. That will offset, by our measure, $22 billion worth of capital expenditure that we would have had to have done if DSM wasn't available.

In addition, privately-owned companies like Enwave, through initiatives like district heating, are providing partners with efficient electrification. Their partners include LDCs like Toronto Hydro.

The one thing that we want to say is that the system as we know it right now isn't fully optimized to extract the full value of current and future DERs. We have DERs on the megawatt scale sitting idle due to contractual, structural and market access issues, that could provide whole-system efficiencies. The inability to value-stack, the IESO's exclusivity provisions and bulk system programs, and the lack of secondary and local markets mean that there are no avenues to leverage these resources or deploy new ones.

We recommend that the government support quick, voluntary deployment of utility-led, local flexibility markets to create and unlock this latent potential. We also recommend the modification of IESO's contractual provisions, such as the exclusivity clause, to ensure DERs can value-stack their services.

On the infrastructure side, we wanted to use this opportunity to talk about the importance of energy assets in supporting economic growth. In particular, we want to talk about the special economic zones referenced in Bill 6, which is cross-referenced in Bill 40.

As the government pushes forward to enable regional planning and economic development, the enabling infrastructure needed includes energy assets. If a remote region is to be declared an SEZ, then the government and lead agencies both need to talk to both gas and electricity system providers as soon as possible about service delivery needed to support that growth. This is particularly important if the project requires long-lead-time assets such as transformer stations. I think many of you know that it's a three- to five-year wait to get transformers right now.

Furthermore, if the assets require build-out from connection points outside the SEZ, then normal planning processes will hinder the build-out to support the SEZ. As such, we recommend that the SEZ designation be applied to the entirety of the dependent energy assets to expedite service delivery, though thought needs to be given to the funding and cost-recovery mechanisms, especially if the asset build-outs exceed the economic-valuation test for the project.

We would also recommend taking a holistic approach to infrastructure planning, such as the creation of a master plan to bundle gas, electricity, fibre and other assets necessary to support economic growth. For example, as highways are being planned, parallel rights-of-way should be automatically secured to safely situate these assets. These measures would be in line with the one-window approach that the government has taken for large and high-value projects right now.

On the funding side, we'd like to say that as the government progresses with its plan to enable economic growth, we would like to make a case for very targeted funding either from the province or by supporting federal engagement. We have three clear examples where targeted funding now by the government can unlock billions of dollars of benefits.

Example 1: Our members are currently working on developing local flexibility markets and the next step in LDC operations, called the distribution system operator. This will unlock access to latent DERs within the grid by offering new market capabilities and functionalities. Relatively modest investments would help establish foundational infrastructure that would enable the proliferation of affordable DERs, benefiting customers and the overall energy system.

Example 2: Capital markets currently cannot price small-scale, commercial DER projects or accurately assess the risk. Enabling funding in the low tens of millions of dollars can have a disproportionately large impact in stabilizing commercial-scale DER projects by moving them from the pilot state to whole-of-system-benefit type projects.

We ask that the government support targeted Canadian-infrastructure bank funding, higher upfront capital eligibility and ITC eligibility for these projects. Ontario One Call's underground infrastructure mapping initiative is a very good example of how targeted funding can bring about benefits for asset owners.

In conclusion, the OEA is supportive of Bill 40, and our suggestions align with the government's goals of enabling Ontario's economy. We hope it is received by all in the co-operative spirit in which is it intended, and I look forward to answering all of your questions. Thank you.

The Chair (Mr. Aris Babikian): Our next presenter is the Association of Municipalities of Ontario. We have with us Karen Nesbitt in person, and we have Spencer Sandor virtually.

Go ahead, Karen. Please state your name, and the floor is yours.

Ms. Karen Nesbitt: Thank you so much, Mr. Chair. My name is Karen Nesbitt. I'm the policy and GR director at the Association of Municipalities of Ontario, which I'll be referring to as AMO. I'm joined by my colleague Spencer Sandor, who is AMO's senior adviser on land use planning, energy and economic development. Thank you so much for the opportunity to address the committee today.

Just by way of context, I'd like to start out by sharing that the municipal sector is committed to working with the province, as well as energy partners, to deliver clean, reliable and affordable energy. AMO advocates for an

electricity system that supports economic growth, energy sovereignty and the national interest. We are pleased the province has been responsive to our calls for advocacy, working with municipal and energy sectors to find coordinated solutions to grow Ontario's energy supply, while also protecting municipal interests.

1610

I'll now move into AMO's feedback on the legislation under discussion today, Bill 40. AMO supports the changes Bill 40 proposes for the Electricity Act and the Ontario Energy Board Act that would embed economic growth as a consideration for the IESO and the Ontario Energy Board's decision-making processes. This is an important step to ensure the agencies coordinating our electricity system are working to align their planning with the ambitious economic growth that municipalities, Ontario and Canada are all working to deliver. Our shared economic success relies on being able to deliver electricity when and where it's needed for projects to proceed.

Building on the theme of protecting our shared economic success, I'll focus my remarks today on Bill 40's proposed framework for prioritizing the connection of large-load facilities to the electric grid. First, a point of clarification: The bill uses the term "specified load facilities." My comments today will primarily reference data centres. We understand this term currently applies to data centres, but could be expanded later to include any high-electrical-demand facility. Our feedback applies equally if that definition expands.

Municipal governments are experiencing an increase in data centre proposals. This coincides with historic growth in housing and economic development, all placing immense pressure on our electrical distribution and transmission systems. Modern data centres, especially those powering AI, can require as much as a small city in electricity. Now is the time for the provincial government to provide leadership, as it's doing with this bill, to set a clear framework to protect the ability of municipalities to balance competing priorities, to access electricity in our grid and as we grow.

In this context, we welcome this legislation and the new data centre prioritization framework. This mechanism enables necessary strategic decisions about competing electricity demands. The goal is to safeguard top priorities like new housing and economic growth from being unduly constrained by data centre development. AMO's support for this bill is based on the understanding that this framework does not prioritize data centre connections over growth projects. Instead, it seeks to coordinate and rationalize electrical connections for all growth and trade-enabling priorities that municipalities are working hard to deliver, in partnership with provincial and federal governments. This includes new housing, hospitals, manufacturing centres, critical mineral extraction and processing, among others, and including future projects of provincial and national importance.

This brings me to AMO's advice on large-load framework design. Protecting utility capacity for growth is the most important consideration. We also recognize that domestic data centres can offer strategic opportunities to improve Canada's data sovereignty, cyber security and employment opportunities, especially in the high-tech sector. Data centres that bring these benefits forward should be prioritized.

Competing draws and electricity isn't the only issue either. Many proposed data centres rely on local water or waste water services for cooling, creating similar capacity impacts on key local utilities. For these reasons, we support the bill's creation of a reg-making authority to set criteria for conditions for proposed data centres before connecting to the grid. Municipalities support restricting or prohibiting data centre connections where doing so would adversely limit the ability for utility capacity needed to support and empower existing residents, businesses and enable growth.

Finally, the preamble to Bill 40 includes a commitment to "supporting the responsible growth of energy-intensive industries like data centres that align with Ontario's economic priorities and benefit local communities." However, the bill itself doesn't have any authorities to ensure local approvals or local benefits are accrued. While we recognize that increasing the use of digital and AI-based solutions presents strategic federal and provincial opportunities, local benefits like job creation are limited compared to traditional economic projects. Simply put, the benefits of data centres are more likely to be provincial or federal, while potential costs and trade-offs mainly fall to the host municipalities.

Given this, we strongly recommend the government implement the bill in a way that achieves the three following outcomes:

(1) Maintains local approvals for data centres, for example land use planning, infrastructure service connections or other development approvals;

(2) Prioritizes local benefit, giving extra points to projects that can demonstrate economic benefits will accrue directly to the host community; and

(3) Features a collaborative process for determining whether the connection requirements authorized by the bill are met, what local approvals are needed and what benefits host communities can expect. This process should include the province, project proponents, municipalities and utility partners together.

Overall, AMO supports the bill and the principles that the proposed framework for data centre connections present. This framework provides a critical mechanism to make sure we can advance Ontario's digital advantage without sacrificing other important priority growth opportunities.

Importantly, we are also encouraging the Ministry of Energy and Mines to take note of our comments in today's meeting to inform the enabling regulations should this bill receive royal assent. AMO municipalities look forward to continuing to work with the government, coordinate Ontario's growth, and ensure residents and businesses continue to have access to clean, reliable and affordable energy for decades to come. Thanks very much.

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

Our third presenter is Energy Storage Canada. Please identify yourself. You have the floor.

Mr. Andrew Thiele: Good afternoon, Chair and members of the committee, and thank you for the opportunity to appear today. My name is Andrew Thiele, vice president of policy and government affairs at Energy Storage Canada. At Energy Storage Canada, we represent over 115 members from across the energy storage value chain. This includes developers, technology providers, utilities and investors, all of which are committed to delivering clean, reliable and affordable power to Ontario's electricity system.

Demand for electricity is growing, driven not just by electrification and industry, but increasingly by the digital economy. Data centre demand alone could potentially represent about 13% of Ontario's electricity needs by 2035, representing a structural shift in our load profile. This is both a major economic opportunity and a potential system challenge. As we all know, data centres can bring high-value jobs, spur innovation and strengthen Ontario's competitiveness, but they also introduce new characteristics to the grid: large continuous baseload demand, high sensitivity to power quality, and significant local capacity impacts.

ESC was very pleased to see the government's decision to address these potential new grid characteristics proactively through Bill 40, and the creation of a clear and predictable framework for connecting these new digital loads. ESC fundamentally believes that the successful connection of large loads like data centres require three things:

—prioritizing projects that deliver economic, strategic and local benefits;

—ensuring responsible, sustainable and reliable growth; and

—focusing on Ontario's energy security and our leadership in the digital economy.

To do this effectively, a framework that manages connection requests transparently and ensures the highest value projects moves forward is essential. Ultimately, the success of this framework will depend on a few things, most namely flexibility. Data centres need it, the grid needs it and Ontario's energy system will require more of it as demand grows. That is why energy storage is both an essential tool in the province's approach to data centres and its energy future.

All energy storage systems, including both battery energy storage systems, long-duration storage and others, offer practical and immediate solutions to the many challenges associated with large digital loads like data centres:

(1) They offer operational reliability and power quality.

(2) They allow for load management and cost control through peak shaving and load shifting.

(3) They offer resilience and grid support.

What this means is that storage enables data centres to operate during larger outages, providing ancillary services and reduce strain on the broader system. Lastly, storage also supports sustainability and emissions reduction. These benefits make storage not only an operational asset for data system operators, but a system asset for Ontario and its data centre planning.

That is why when it comes to Bill 40, ESC is largely supportive of the goals of government. As data centres scale up in Ontario, the key is making sure that we have the right policy levers in place so that the system that we all use can adapt effectively. This includes taking a fresh look at how we work with corporate PPAs, how we integrate and leverage behind-the-meter resources and, most importantly, making sure that moving forward we implement transparent, predictable and understandable approval criteria.

A clear scoring framework that rewards projects with storage that offer load flexibility and that deliver real regional benefits, especially in northern and rural communities, would give everyone a fair and consistent process to access the system. This would also signal to developers what's expected up front and help Ontario attract the kind of projects that would strengthen the grid while contributing to its broader economic goals.

1620

From a policy framework level, ESC is particularly supportive of the bill's focus on northern and rural regional development. Pairing data centres, especially with storage, can create regional energy hubs. This, from our perspective, is critical to attracting new investment, enhancing reliability and anchoring distributed energy generation and storage infrastructure further within the Ontario energy system.

Another piece of this is making sure that storage is fully integrated into how we assess and connect these new large loads. For example, for large data centres—potentially those over 50 megawatts—it may be reasonable to ask proponents to show that they have on-site or contracted storage that aligns with their expected demands. This kind of requirement would help new growth fit within the system's capacity limits and ensure that the broader system does not suffer reliability constraints under this new unexpected strain.

Together, these types of updated measures can ensure that when data centres arrive, we're set up with modern, flexible tools that keep the cost down, keep reliability up and make sure that clean energy is and continues to be accessible to everyone across the province.

There is no doubt that Ontario is entering a potentially new era of economic growth fuelled by digital infrastructure, electrification and clean energy investment. We believe at ESC that Bill 40 is an important step to ensuring that this growth not only strengthens our reliability, affordability and competitiveness, but also strengthens the broader system as a whole.

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

Mr. Andrew Thiele: From our perspective, energy storage provides the flexibility, resilience and operational certainty that data centres will require and enable the grid to accommodate this new growth in load. Energy Storage, through my presence here today, appreciates the opportunity to participate in this process. We look forward to working with you and others moving forward.

Thank you for the time. I welcome any questions.

The Chair (Mr. Aris Babikian): We will start the first round of questioning. We will start with the government side. MPP Cuzzetto.

Mr. Rudy Cuzzetto: Thank you, Chair, and I want to thank all three presenters for being here. But I'd like to ask Karen this question here: Being the director at AMO, you've heard pretty well a lot about energy needs, energy affordability. Overall impressions on Bill 40 and the government's direction in securing affordable energy for the future?

Ms. Karen Nesbitt: Through you, Mr. Chair, I'll be pleased to answer that question.

Certainly, affordability is a top priority for our members, same as working towards a clean and reliable energy grid. We would see this legislation as fitting into a series of provincial legislation that's come forward across the last year, including the integrated energy plan, that certainly upholds the objective of affordability and puts plans around it to achieve that.

There are three elements: reliable, affordable, clean. AMO continues to advocate on all three fronts.

Mr. Rudy Cuzzetto: I'll pass it on, then.

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

M^me^ Dawn Gallagher Murphy: Thank you, Chair, and, through you: Thank you very much, everyone, for being here this afternoon and all of your comments. My question will go to Nameer of the OEA.

We heard some numbers. I think it was Andrew who mentioned some numbers. Data centres are projected to account for 13% of new electricity demand and 4% of Ontario's total electricity demand by 2035. So when we think about that and we think about other jurisdictions, specifically like those in Texas, BC and California that have already introduced measures to manage the growth of these data centres and the specific impact on them—when I think about that, I also think about what could happen in the future as well, because I know the northern US states are talking about how they can move those data centres north into the cooler weather next to our Great Lakes—obviously, for important reasons. My question to you is, what are your thoughts on Ontario taking similar regulatory steps that these other jurisdictions have already taken?

Mr. Nameer Rahman: I think when you do jurisdictional research, you're going to find a lot of examples of a lot of other jurisdictions doing their own thing. I think what we need, really, is a little bit of a made-in-Ontario solution that fits our economic needs and our economic aspirations.

I can give you a very simple example: An AI-driven economy, a digital-first economy, will rely on data centres. I think when you take a look at data centres, you have to really look at them as foundational investments in that space. The real question is, how are we situating ourselves in that broader economic context? That's a question I don't think we have grappled with fully yet. If you have DND data centre needs, for example, or if you have your AI researchers that have data centre needs, how are we layering in that thinking with our data centre strategy?

The other element that we need to think about isn't just the electricity component, but it's also the fibre access component and the water component. When we talk about northern or rural communities, fibre access is going to be the big question. Can we situate them there?

I would say that we've got a broader question in terms of how data centres support our future digital-first economy, and then how do we build out our assets—whether it's water, fibre, electricity—to support that goal? I think we need to do a bit more work on that. We do have eStruxture, which is one of Canada's largest data centre providers, as one of our members, so we're engaged in active conversations with them as to how we can do that.

I wouldn't necessarily look at other jurisdictions. I would say, what do we need, where do we want to go, and then how can we best achieve that? A chunk of that is going to be an infrastructure-driven question.

I would argue that there are municipal concerns that have to be addressed in terms of whether you're going to have a hospital—the MUSH sector: municipalities, universities, schools, hospitals or housing. How does a planning framework take into that—at least the electricity planning framework—can you confirm capacity? Do we need capacity confirmed above a certain load level? Approvals?

There are a number of steps that could be taken that could really bring about a made-in-Ontario solution.

M^me^ Dawn Gallagher Murphy: I'd like that. Thank you, Nameer. Thinking strictly Ontario and what we can do—I love that, because really that's what our government's message is: Ontario, Ontario-made, Ontario jobs. How can we be focused? Thank you very much. I appreciate those comments.

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

Mr. Steve Pinsonneault: Thanks, Chair, and thanks to the presenters for taking time out of your busy days to be part of this process.

This question is for Karen or Spencer. Would you consider streamlining municipal franchise agreements a good thing for rural municipalities who look to expand natural gas in their communities?

Ms. Karen Nesbitt: Through you, Mr. Chair: I'd be pleased to answer that question. I think a good starting point is to acknowledge that AMO represents all 444 municipalities across the province, and I'll just use that as the framework for my response.

As you know, the Municipal Franchises Act relates to natural gas utilities. The needs and impacts of natural gas really differ from community to community across the province. While some communities are seeking expansion and investment, others are seeking moratoriums for increase in that infrastructure. Where we are seeing desire for expansion, a lot of the drive is around looking for cleaner alternatives for energy, for affordability, and to support growth in a financially economical way.

AMO's position, as an organization and from our members, is that it's essential that any changes to expand the natural gas network—

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

We will move to the official opposition. MPP West.

MPP Jamie West: Karen, if you would like to finish, go ahead.

Ms. Karen Nesbitt: Thank you. I was just going to offer that we would want transparency on pricing for energy, whether it's natural gas, but also against alternatives, to inform choices by the consumer on the ground. In short, AMO is agnostic on energy type.

MPP Jamie West: I'll stick with AMO. I'll probably say "you," but I know that you're speaking for your members, so don't take it as your specific opinion.

You partially answered this, but I just wanted clarity on it: You were talking about trying to balance data centres versus housing needs and water supply for data centres. Bill 40 does give a lot of power to cabinet to make certain decisions. Do you feel like there are sufficient guardrails to ensure that municipalities are being listened to if decisions are being made about large power centres or anything like that?

1630

Ms. Karen Nesbitt: Thank you. Through you, Mr. Chair, I'm pleased to answer. This is why AMO is providing advice to the province around the enabling regulations that really bring the framework into effect and make it real.

Then, we're seeking a formal role for municipalities as part of these large-load projects, to ensure that we can have comprehensive, integrated decision-making around what projects make sense where, including factoring in the capacity of local utilities to support both the community and these proposing projects.

MPP Jamie West: Is that something that would make sense as a recommendation we would bring forward as an amendment, or—

Ms. Karen Nesbitt: AMO was pleased to see the legislation provide a framework for prioritizing these projects. We are comfortable to have that feedback addressed through regulation.

MPP Jamie West: Okay. In my head, I think decisions are easy to make at a provincial level, but it's municipal—mayors, reeves, council—where if the power goes out, they don't care. The people at the municipal level are the ones who are most visible in the community, so I want to ensure that there's as much feedback as possible, because you know your communities better than I do. With 440 members, I'm sure most of us couldn't list all of your members. I'm not trying to insult anyone; I'm just saying you know your business better than we do, like everyone who comes to speak with us.

You have three recommendations. Are they in the package, or can you—I wrote down the first one, but I type really slowly. All I have is "maintain local approvals," and then I ran out and just made a note to ask you to repeat them.

Ms. Karen Nesbitt: Absolutely. We're seeking three things:

(1) Maintain local municipal approvals. To your point, it takes a village, and the municipality needs to play a key role in that village around project proposals.

(2) Prioritizes local benefits. Some projects are apples and oranges. Some employ people at the construction stage, and then really nobody else. That doesn't create much spin-off economic benefit for the communities around there. Others create a lot of high-value, high-tech jobs. So it's important to evaluate proposals around their merits. We would suggest giving extra points to those projects that provide extra value to the local community that hosts them.

(3) Really, it's all about that collaboration. We're looking for a formal role around the province, project proponents, municipalities and utility partners to come together around these very high-impact proposals to make the right informed decisions together.

MPP Jamie West: Thank you for that.

I'm going to go to Andrew at Energy Storage Canada. It's going to jump around a little bit, just because our time is so short.

I don't know if you were here for the earlier people who were speaking, but I was trying to learn more about the energy storage side. Some of the conversation we had was these large data centres—could it be renewables?—and part of that was about the need for storage.

I did a quick Google search. I don't know how accurate this is, but they're talking about data centres taking between one and 10 megawatts. I don't know if that's yearly, monthly or what. In terms of data storage, what area are we looking at for batteries if there was, I don't know, a week of darkness and no wind or something like that? You probably know how to measure it better than I do.

Mr. Andrew Thiele: I think the clear distinction or key point that I would want to emphasize is that storage is like bacon: It goes with every type of electricity resource, whether that be nuclear, wind, solar or what have you. We store electrons. Whether those electrons are generated through renewable resources or nuclear assets, we move load around.

What storage offers, fundamentally, is flexibility. So in periods where there is a potential shortage of renewable energy on the grid, we do have the ability to store other resources.

If I take a project example, specifically, that was built here in Ontario in the last year. the Oneida Energy Storage project that was connected to the grid in June, it was charged and discharged four times within one day, providing reliability services, and that stored charge came from all types of resources. Obviously, we tend to program it to prioritize lower-cost resources or renewable resources, but the fact of the matter is that we are able to move load around, and that is the fundamental principle that allows storage to be so successful.

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

Mr. Andrew Thiele: Regardless of the connection load required by these data centres, storage is an essential asset as that required backup for reliability services and pairs well with renewables but also other types of resources.

MPP Jamie West: Okay. I won't have time, but I'll come back to it. I'm trying to figure out how much space does a megawatt take?

Mr. Andrew Thiele: Do you mean in terms of land density?

MPP Jamie West: Yes.

Mr. Andrew Thiele: In terms of an energy density principle, the two most efficient types of resources that exist are nuclear and storage from an actual acreage percentage—that ability to store upwards of 250 megawatts on less than two acres of land per se, roughly speaking. Nuclear, I won't comment on; that's my previous life. The fundamental principle is that these storage resources actually don't take up a lot of land use assets, and I think the comment that I heard from CanREA is that it can fit in a parking spot—

The Chair (Mr. Aris Babikian): Thank you. The time is up for this round for the official opposition.

Now we move to the third party. MPP Hsu.

Mr. Ted Hsu: I'm just going to start with a question for Energy Storage Canada. First of all, thanks to all the witnesses for being here today.

You spoke a lot about valuing storage properly on the grid. You spoke about having clear scoring criteria, if I got that wording right, for deciding what kinds of projects get connected. I'm wondering if there are amendments to Bill 40 that you might propose to make sure that there's some explicit language so that when the regulations are made, storage assets are valued properly; or, if a consumer comes along and wants to connect but they come with a storage backup, that that's taken into account in whatever score they're given when they're competing against another project for connection.

Mr. Andrew Thiele: I would go back to the comments that I made. I think that when we look at prioritizing the connection of large data centres, making sure that projects deliver economic, strategic and local benefits needs to be integrated into that process, and ensuring that the growth is responsible, sustainable and reliable to the broader system is critical.

I think when it comes to developing rated criteria for something like this, there is an extensive process through which that regulation could be developed. I think commenting further on that at this particular point in time might be too ambitious.

Mr. Ted Hsu: But in the bill, you could just take into account the flexibility of somebody who wants to connect to the grid, because maybe they have flexibility to load shift or maybe they have flexibility to add in a larger storage component. We could put that in the bill because the bill mentions some other criteria. Why not add in this notion of flexibility?

Mr. Andrew Thiele: My comments on that—I would echo again: I think that those types of strict additions to the regulation can be made through the process of further defining the bill.

Mr. Ted Hsu: Okay. So you don't see a legislative role in that; you want to you want to do it in in regulation. Do I understand correctly?

Mr. Andrew Thiele: That is what I'm proposing, yes.

Mr. Ted Hsu: Okay.

I wanted to go to the Ontario Energy Association. Mr. Rahman, you talked about distributed energy resources and that our current system is not optimized to take advantage of all the potential distributed energy resources. You talked about—I believe it was "unlocking" them. I think that is a good thing. Are there any amendments to Bill 40 that you would like, to prod the government to move in that direction, like maybe just mentioning it somewhere in the bill?

Mr. Nameer Rahman: I'm not certain it needs to be in in the legislation proper, because I do think the overall objective of "affordable" is handled in the legislation as it is right now. What we are adding is additional commentary in terms of where you could find additional affordability and additional flexibility via distributed energy resources, and offering that path forward as to how that could be achieved. That may not require specificity within the legislation as of right now.

Mr. Ted Hsu: I guess I'm just trying to find some relevance for the work that we're doing here today, because we're going to be going through the bill line by line and I'm just wondering if there's anything—because you're talking to the people who will go through the bill line by line. You're talking separately to the government. Why don't you just go and talk to the government and not come here? I'm trying to find out why I'm getting paid to do this job.

Mr. Nameer Rahman: We do talk to the government as much as we can. We try to talk to whoever is going to listen. If we thought that a legislative amendment had a role to play here, we would happily forward that as a proposal. That's just not something that we have right now. We have in the past. For other pieces of legislation, we've put our recommendations forward. That's just not the case right now. If my members come back to me in the next couple of days or in the next 24 hours and say, "Hey, by the way, we think this should be changed or that should be changed," then I'm more than happy to put something forward, but I haven't anticipated that as part of the process.

1640

Mr. Ted Hsu: Okay. All right. Thank you. It's just that it's a bit of a concern of mine, and I'm putting you a bit on the spot to try to answer this sort of very general concern that I have that you write a vague piece of legislation and then everything else goes into regulation, in which case you need to send your lobbyist to go and talk to the government. I worry about relying too much on that process.

I'm not asking you to answer that question, but I just wanted to put it on the record why I'm asking this question.

Mr. Nameer Rahman: I understand. Thank you.

Mr. Ted Hsu: I'm not asking you to answer that question. But another question I want to ask is about the need to—

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

Mr. Ted Hsu: I think it's important to prioritize connections to the grid, the projects that have the highest value. But the legislation contains a term: "economic growth in a manner consistent with the policies of the government of Ontario." Why not just have something that's more specific and doesn't depend on the government of the day, like "productivity growth"? Do you think it's a bad idea to change that and just say "productivity growth" or "per capita economic growth" instead of "consistent with the policies of the government of Ontario"? Because we don't know what that is. Wouldn't a business be uncertain about what that means?

Mr. Nameer Rahman: I think productivity growth is a very difficult subject to link to energy policy in general because now you're asking—for example, you've got residential connections. Thousands of the homes need—

The Chair (Mr. Aris Babikian): Thank you very much. That concludes the first round.

We will move to the second round. MPP Vickers, from the government side.

MPP Paul Vickers: Thank you, Chair.

My first quick question to you, Andrew: I wrote down, "250 megawatts on two and a half acres or hectares?"

Mr. Andrew Thiele: I'd have to double-check the exact, but it is a small land footprint. Don't quote me on—I'm not quoting exact numbers. I'm not pulling from a reference in front of me for that, but it is a small percentage of land. The Oneida project specifically—again, this is why Google is great. You can just look things up and double check. But in this particular context, what I'm saying is, from an energy density perspective, it is a very small land footprint.

MPP Paul Vickers: The person before talked about one and a half parking spots, and I don't know how big the parking spots are where he is, but two and a half acres—I don't know how many people know what two and a half acres looks like, but that's a big parking spot.

But my question actually is about energy storage. We talked about battery storage a lot. We've never really talked about pump storage. I don't know whether you have an opinion on that, between the two, but my question is, whether it's battery storage or pump water storage, how does that contribute to the goals outlined in Bill 40, particularly around the grid stability and long-term energy affordability?

Mr. Andrew Thiele: At Energy Storage Canada, we represent all types of storage resources, those including BESS, which are your lithium ion, which most people are most commonly familiar with; pumped gas; pumped air, like compressed air; as well as pumped hydro. There are fundamentally different types of storage technologies that offer longer-duration services based on the needs of the system, and what Ontario and the IESO particularly have determined is that they need both types moving forward.

In Ontario, we've procured roughly 3,000 megawatts of largely BESS, so short-duration battery storage, four hours in length, but moving forward what they're looking to deploy is longer-lead-time assets like your pumped hydro, like your compressed air and pumped air, as well. The fundamental difference between the two is how long those resources are able to shift the demand profile. Some things like BESS can do four to eight hours. Long-duration resources like pumped hydro or compressed gas can do 12 hours plus. What that allows for, again, is best to meet some of those peak afternoon loads, so that peak shaving opportunity, whereas long-duration storages like the Meaford pumped storage project would be able to inject that energy over a longer time period, 12 hours plus, into the system—again, providing an energy arbitrage ability, but just over a longer time frame.

There are fundamental differences in, obviously, the construction of these projects and makeup of the supply chains and things like that, which are also important. But the key identifier is that in order to support grid reliability and flexibility, you need both types of resources.

MPP Paul Vickers: Okay. Thank you.

The Chair (Mr. Aris Babikian): Next?

Mr. Rudy Cuzzetto: How much time do we have?

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

Mr. Rudy Cuzzetto: Okay. The Ontario Energy Association: I noticed you were asked the question from my colleague across the floor there about any amendments to the bill, and you said you're very happy with Bill 40 and there would not be any amendments coming from you.

Mr. Nameer Rahman: There are no amendments coming from us, not to date. If I receive instructions otherwise from my members, we'll have a conversation about that and then we will submit whatever we feel is appropriate within the time frame.

Mr. Rudy Cuzzetto: So you're supportive of the bill, you're saying?

Mr. Nameer Rahman: Yes.

Mr. Rudy Cuzzetto: Okay.

Go ahead.

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

Mr. Andrew Dowie: I'd like to ask a question of the Association of Municipalities of Ontario. Part of the bill has the streamlining of municipal franchise agreements. I know, from my experience as a councillor, that certainly sometimes the right-of-way congestion became an issue, so I wanted to see what your perspective was. Is this a good thing for rural municipalities who are looking to expand natural gas in their communities?

Ms. Karen Nesbitt: I might redirect this question to my colleague Spencer.

Mr. Spencer Sandor: I think what I would say is that the agreements under the Municipal Franchises Act are negotiated between the utilities and the municipalities, and they're overseen by the Ontario Energy Board.

Where Karen spoke earlier about some communities seeking expansion and others seeking moratoriums, the changes give that flexibility for the municipalities to negotiate with the utilities for what best fits those local

needs, and maintaining that OEB oversight keeps that oversight and structure in place. We also know that the OEB is planning to review the Model Franchise Agreement that is used for this in 2026. We will be working with our sector and the OEB to make sure that those municipal needs continue to be met through the franchise process.

Mr. Andrew Dowie: Thank you.

Chair, how much time is left?

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

Mr. Andrew Dowie: One minute? Okay, maybe I'll take one more. Just a question for the Ontario Energy Association: I don't want to say that we're new to the game for data centres, but we've seen the proliferation in the United States. What are your thoughts on adopting some of the practices that they have taken on? Or are there better ways of introducing the data centres to our mix?

Mr. Nameer Rahman: We had a half-day event on energy and data centres earlier this year and we had people from the States come down, and what we discovered was that they're grappling with exactly the same problems as we are. Not only are they grappling with that, they're also facing forms of public resistance that's rising to the surface right now, but the data centre energy consumption is just off the charts at that end. There's something like $2 trillion worth between Meta and OpenAI right now planned by 2035. That's just dollars spent, and that's two companies.

When I say a made-in-Ontario approach, yes, we could take a look at what's going on there, but I think it's more relevant to take a look at things like planning frameworks. One of the things that we put forward in our suggestion—

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

We move to the official opposition. MPP West.

MPP Jamie West: Nameer, I'm interested in your answer if you want to continue.

Mr. Nameer Rahman: Yes. The challenge that we face really is who's going to get priority in a constrained area, and that's a problem we haven't solved fully. I think that's something that the ministry is grappling with right now. It would be appropriate to come up with a ranking mechanism where you've got schools and hospitals at play or houses at play and say that these need to be prioritized. But I see that as a planning framework conversation that needs to happen within that space rather than something that happens within the legislation or the regulation.

If municipalities need, for example, confirmed capacity in a spot vis-à-vis a data centre coming up, how do we ensure that confirmed capacity takes priority? That's a planning question. And what are the mechanisms that we can enable municipalities to do that? That's a planning question too. Then we can take a look at even load size; one of our members said anything above 50 megawatts in terms of energy consumption from a data centre. We'd like to see an enhanced process. We'd be supportive of something like that.

But the one thing I don't want to frame this as is as an all or nothing; it's only municipalities, only schools, only houses or only data centres. I think we need a measured approach, and I think we've got the opportunity to do a measured approach that fits Ontario's economic needs.

1650

MPP Jamie West: In terms of data centres, is the Ontario Energy Association looking at—similar to my colleague MPP Dowie's comments, there are some stresses that are happening south of the border, where water consumption is going up and farmers are having a hard time watering their plants because so much water is needed for cooling. The amount of electricity that's going around—I don't know if they're experiencing brownouts, but there are concerns about brownouts and lack of electricity for homeowners who just want to watch Netflix and put something in the microwave. So are you working on best practices so that we're moving in the right direction?

Mr. Nameer Rahman: We're working on that space in terms of what that looks like. I think when a project proponent comes to an energy LDC, and they say, "Hey, we want to put this project up," the first thing that they look at is what the state of the system is. And then they take a look at what the system needs to be to support that project, and then what are the timelines that you're looking at over there. Let's say you've got a constrained area and the data centre comes by and says, "Hey, we need a hundred megawatts." Well, that's not going to happen in three to five years.

Then there's also the question of water access and fibre access. If you don't have fibre access, you're just not going to have a data centre. The water access question is interesting because that really comes down to water rates, because data centres oftentimes soak up a lot of water in the cooling process, but they pay a very discounted rate. So I view that as much more of a rate question than anything else. Are they free-riding on the broader infrastructure base? And I do think that could be handled discretely.

MPP Jamie West: Okay. I appreciate that.

You talked about fibre infrastructure, and initially when you were speaking, you were talking about bundling. There are lots of conversations lately about nation-building projects. Does it make sense to bundle this infrastructure? I represent Sudbury, but all around me in Greater Sudbury, they don't have access to all the different utilities; they're still on slightly better than dial-up—some areas, just dial-up. Do you think it makes sense that we work towards creating this infrastructure?

Mr. Nameer Rahman: Absolutely. I think it's a fantastic thing for us to do. If we're taking a look at energy corridors, it makes sense to take a look at infrastructure corridors in general.

The proposal that I specifically said is that if you're building a highway, 40 to 70 meters on the side, appropriate the right of way and put that aside for future transmission for gas, for fibre etc., or figure out how much you need to safely bundle all of these together and think about that holistically. That saves you a lot of headaches down the road, rather than thinking of electricity now, gas later, and fibre and all of that. Let's do that one-window approach.

MPP Jamie West: You said as a tunnel? I don't know what the infrastructure looks like.

Mr. Nameer Rahman: No. On the transmission side, for example, you need 40 metres on one side of land just for a transmission corridor, right? But if you've got another 20 meters—I'm throwing out a number; I don't know what the appropriate number is.

MPP Jamie West: No, no; that's okay.

Mr. Nameer Rahman: But if you've got another 20 meters on that side which you've designated for, let's say, gas and fibre, then you've you're within the same planning framework, integrating the thinking for the full range of assets. I think that kind of integrated thinking is going to be very important for that connectivity and that productivity growth.

MPP Jamie West: Okay. And this is not related to Bill 40, but just when you were speaking—you said it very casually—as we all know, there's a three-to-five-year wait for transformers. What is that? Is it just that they're complicated to build or the parts are hard to resource?

Mr. Nameer Rahman: Yes, it's the supply chain. It's been like that since COVID. Long-lead items right now like transformers are three to five years. If we've got a large project developer that requires a significant—what we call a system expansion—and assets like transformer stations need to be put in place, the first thing they say is, "We need a deposit right now, to guarantee that the assets are going to be in play by the time you're ready to energize."

MPP Jamie West: Wow.

Mr. Nameer Rahman: And it is three to five years, and it's not something that we control.

MPP Jamie West: How much time do I have?

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

MPP Jamie West: Oh, one minute. I wanted to ask Andrew a couple of questions about—do you know what? I won't have time to even get through the question before I'll get cut off in the response, so I'll just concede my time.

The Chair (Mr. Aris Babikian): Okay. MPP Hsu.

Mr. Ted Hsu: Thank you, Chair.

One of the things that Bill 40 does is it enables the government to make payments to generators, transmitters and distributors from monies that are appropriated by the Legislature. In other words, it goes on to the government, the government balance sheet; the government debt. So the net effect of this is to continue something that's been happening, which is to move the cost of energy from the energy bill to the tax bill.

But my question is: How do we know if a new payment to one of those three classes of organizations is too much? At some point, there has to be some guidelines as to what extent we're going to subsidize the consumer's energy bill. Because then, you do it too much and you start to get economic distortions.

So my question really is, should the minister tell the Legislature why a new payment is made? I'll give you one example of that, where the minister didn't do that, and it has to do with the pumped hydro storage in Meaford, where the government is providing $285 million to do some studies to de-risk the project.

Now, I'm a big believer in the importance of energy storage, so I want to see energy storage projects succeed. But my question is: In Bill 40, we have the opportunity to put in a little bit of language to say that the minister shall inform the elected people, the MPPs who represent the people of Ontario, of what's the rationale behind such payments. This is a non-competitive part of the energy procurement process. Would you agree that the minister should inform the Legislature and that we could put this in a little line in Bill 40 to get the ministers to do that? This is a question for all of you.

Mr. Nameer Rahman: The energy sector is built on openness and transparency. We're regulated right down to the last $100, so transparency is something that we would always argue. And for the sake of, I guess, public—I don't want to say "comfort," but public oversight, if it is public dollars—I would say that transparency is a good thing.

But this is a fundamentally new space for us, because the energy sector often has been entirely cost recovery in the past, or largely cost recovery. So as to what that process looks like, what money is there, looking to allocate for which types of projects, I have no idea what the transparency elements would be in that. I would have to ask, in terms of regular parliamentary processes, what that looks like. If you think your budgetary processes are not transparent enough, that's a broader question around your budgetary processes. But in general, I don't have any amendments to the legislation that we're proposing to add for the time being.

Mr. Ted Hsu: All right.

My second question is—I'll direct it towards AMO. There is currently already a competition to connect to the grid where there's not enough supply. In Kingston, we regularly—we keep getting manufacturing companies coming and saying, "We are interested in locating in Kingston because you have resources in research and existing industry, but we need some number of megawatts." And we can never answer that question. We can never say yes right away in Kingston. That is a problem.

We are expecting demand. We have a housing shortage, so if we build more housing, we have more demand for electricity from that. We're expecting a new hospital. And there are existing uses, industries that want to expand in Kingston.

So my question is whether AMO would support, in this new world, the IESO being directed by the minister to have extra capacity on hand in places where it's known that we regularly have to turn down manufacturing concerns that are that are thinking of locating.

Ms. Karen Nesbitt: Through you, Mr. Chair: I'm pleased to answer that question.

Certainly, AMO advocates for that very thing, which is a higher degree of coordination in planning around electricity between the municipality and the electricity system providers and utilities. This is just because we've come through a luxurious period of having very adequate capacity, into now this squeeze on that capacity.

In some of our communities, we know there's insufficient electricity available to meet new demands, whether they're for more housing or economic development opportunities. This is why AMO has been advocating for faster cycles of planning between communities—municipal planning, as well as the energy sector—to bring together the assumptions and expectations and need for where growth is going to happen and what electricity is needed to meet that need. We were so pleased to see the province bring forward an integrated energy plan earlier this year that included more robust regional planning to do that very thing.

Mr. Ted Hsu: Okay, thank you.

1700

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

Mr. Ted Hsu: That's all I have, Chair.

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

That is the time allotted for the second panel. Thank you very much to all four of you for coming and sharing your valuable input with the committee. You are free to leave.

It will take us a few seconds to prepare to invite the third and final panel to take their place.

THE ATMOSPHERIC FUND
MANTLE CLIMATE
ENWAVE ENERGY CORP.

The Chair (Mr. Aris Babikian): Due to the time-allocation motion, we have a very sharp timeline, so that's why I am going to continue with the final panel. Welcome, all of you.

We will start with Mantle Climate. Kathleen is joining us via virtual means. You have seven minutes. The time is yours now. Go ahead. Identify yourself and make your deputation.

Interjection.

The Chair (Mr. Aris Babikian): You are on mute. Can you hear me? You are on mute from your side. Okay, we will come back to you.

We will go to another deputant. The Atmospheric Fund: Please go ahead and state your name.

Mr. Evan Wiseman: My name is Evan Wiseman. I'm the senior climate policy manager at the Atmospheric Fund. We appreciate the opportunity to appear before you today.

TAF is a regional environmental agency that advises, grants and invests in low-carbon solutions in the greater Toronto-Hamilton area. We work with municipalities, the province and the federal government to advance affordable climate equity outcomes. The grid is what we are here to talk to you today about. At TAF, we participate in all major electricity planning and regulatory processes to make our grid more affordable and lower-carbon, and advance the lowest-cost option for consumers.

Bill 40 proposes adding the wording of "economic growth" to the mandates of the OEB and the IESO. To be clear, we support this effort. Our recommendations are simple and use the government's own language from elsewhere in this legislation, with a goal to drive closer alignment between the OEB and IESO, to put consumers at the centre of energy planning.

In our experience, customers are often not the key priority of many system planning processes, which brings me to our first recommendation and the second recommendation, which work in tandem by updating both the Electricity Act and the Ontario Energy Board Act with language that mirror and reflect each other in the two sections below. As you can see in our first recommendation—it's 2.1—we recommend adding the language, which you will see in our next recommendation as well, "in a manner that protects the interest of consumers" to the OEB act. I will just pause here to say, as well, to please remember "consistent with the policies of the government," because it shows up again later.

TAF supports clarifying the OEB's role in supporting economic growth, but this must not weaken its core mandate to protect ratepayers. Industrial competitiveness depends on affordable energy. Adding explicit consumer protection ensures decisions support growth without unnecessary cost increases; prioritize the lowest-cost effective resources, like energy efficiency and demand management; and compare new infrastructure and generation with lowest-cost alternatives to avoid locking ratepayers into expensive options. Without this clarification, the economic growth clause could legitimize high-cost electricity choices, undermining affordability and competitiveness. The proposed amendment aligns the government's objectives while protecting consumers.

This brings me to our next recommendation in the Electricity Act, which is under (l.1), to support economic growth in a manner that protects the interest of consumers, as you saw above, and is consistent with the policies of the government. So you can see how these recommendations mirror each other in both acts, aligning both the OEB and the IESO.

TAF supports adding economic growth to the IESO's mandate, given electricity's role in industrial development. However, growth and consumer protection must be rooted in cost-effective planning. Clarifying alignment within government policy ensures affordability, competitiveness and reliability while remaining a priority. It also reinforces prioritizing lowest-cost resources such as demand response, energy efficiency, distributed energy and emerging technologies before committing to long-lead supply options.

TAF's amendment aligns the IESO decisions with economic affordability priorities while safeguarding consumers. This refinement preserves the legislative intent of the government and provides greater guidance to the IESO's integrated economic considerations in planning and operations. Together with amendments 1 and 2, which align the OEB and the IESO, it helps put the two together to share a common goal. Without this alignment, Bill 40 risks creating unclear and conflicting direction.

TAF participates in a number of processes, whether it's the IEP or IRRP, and this is why we bring these amend-

ments up: We have seen this not necessarily be the case in the processes over the last 18 months.

This brings me to our third recommendation, which is separate from recommendations 1 and 2, and has to deal with the hydrogen section. This is the only amendment where we recommend just removing language, as it scopes this provision too narrowly. We recommend removing "including for purposes directly or indirectly connected to the electricity system or electricity sector" while introducing language which would allow the minister to broaden the scope of the hydrogen fund.

The reason for this is simple: Not all hydrogen is equal. Most hydrogen in Ontario is grey, made from natural gas without carbon capture. We should be replacing it with low-carbon hydrogen that is cost-effective, which is a cost-effective way to cut emissions. Green hydrogen's role can be produced from surplus renewable power, which is valuable, but it is limited and must be used strategically. Its highest impact cases are in steel and aluminum manufacturing, which are major job employers in Ontario and are hard-to-decarbonize sectors. Other sectors, like aviation and marine shipping, could also be included.

The absolute lowest use of hydrogen is electricity storage, power generation, home heating and personal vehicles. These have cheaper, more efficient alternatives. We recommend removing the restrictive lines in the section and broadening it, allowing the minister to scope it more broadly and to introduce more nimbleness in the use of this fund.

We make this recommendation with a strategic focus to prioritize heavy industry that strengthens Ontario's competitiveness, particularly against US markets, where grey hydrogen is tied to American natural gas. Directing limited green hydrogen to priority sectors ensures the highest economic and emissions impact per dollar invested.

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

Mr. Evan Wiseman: I'm done. Thank you.

The Chair (Mr. Aris Babikian): That's great.

Now, Kathleen, you're ready? Can you hear me?

Ms. Kathleen Kauth: I am. I apologize. Can you hear me?

The Chair (Mr. Aris Babikian): Go ahead. The floor is yours.

Ms. Kathleen Kauth: Great. Hi. I wanted to thank the committee for the time today, and also just show appreciation for this government's leadership in linking energy policy with economic development under this bill.

I am here specifically to speak about the data centres, the digital infrastructure aspects of this bill. We at Mantle Climate are an Ontario-based climate sustainability firm with a deep focus on the built environment. We work very closely with developers of all stripes and, in particular, data centre developers and operators. We work with several across North America. I, leading our data centre practice for our company, am also involved in several working groups that have a certainly North American but kind of global focus, and have for years, on decarbonizing digital infrastructure, making it more resilient and sustainable, and making sure that the digital infrastructure industry is driving innovation in this space.

1710

I should also note that Mantle—in partnership with MaRS, the IESO, Ontario Power Generation, Hydro One, Toronto Hydro and Enbridge—are in the midst of a year-long project in which we are looking at what the impacts of a 1.5-gigawatt and a three-gigawatt build-out of data centres over the next 10 years are, and how that could impact the energy system. We are in the midst of that project, which has been very enlightening.

Really, our goal here—we're not for or against data centres. We just want to make sure that every megawatt connected contributes to Ontario's prosperity and grid stability and would also like to support TAF's—the Atmospheric Fund's—statement of affordability as well. We think there are lots of great ways that that can be done through Bill 40.

This is really about making sure that Ontario tracks the right kinds of data centres—those that use electricity and water efficiently, support grid reliability, create local value and strengthen our digital and economic resilience.

We think that the government's integrated energy plan's pillars of affordability, reliability, security and clean competitiveness, which should guide this implementation—and the digital infrastructure space, and data centres in particular—can support these goals if we encourage efficient, flexible and resilient infrastructure, not just fast-growing load.

It should be noted that we work across real estate, and the folks in the data centre space tend to be some of the most progressive when it comes to achieving better climate and resilience outcomes, and have been for years, as is evidenced by examples of low-carbon design and construction, as well as renewable energy procurement, and the list goes on.

Our recommendations are really centred around the two key pieces of efficiency and flexibility, so really rewarding projects that are designed for both energy and water efficiency to begin with—flexibility, so that during times that the grid is most stressed, they can reduce their burden on the grid, thereby getting more for every megawatt that this grid has available. Also, those that prioritize low-carbon design and construction, preferably with low-carbon materials from Ontario supply chains, whether that be green steel, low-carbon concrete—there are many options and many reasons that we think that this is very achievable.

We just want to make sure that—we think that Bill 40 offers the opportunity for Ontario to communicate to its communities that the province will hold data centre developers and operators responsible for their impact on our communities and on our grid. We think it aligns with Ontario's industrial strategy and builds Ontario vision, and we hope that, if done well, it will provide predictable, transparent timelines that encourage investment.

In closing, we think Bill 40 can enable Ontario, if done well, to become a global leader in efficient digital infrastructure. We think that there is a wonderful opportunity

to combine the motivation that data centres have with their history of energy and climate innovation to deliver good projects that catalyze energy innovation that we need for our growing energy needs across the sector, beyond just digital infrastructure.

Bill 40's success will depend on clear, evidence-based standards that direct scarce capacity to the highest value projects. We are here and ready to contribute technical expertise, data, collaboration and results from our partnership—the project we're doing with MaRS etc.—to support the ministry, the IESO and this committee as it moves forward.

That's what we were here to talk about, so thank you very much for your time.

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

Now we move to our third panellist, Enwave Energy Corporation. Please state your name and title.

Ms. Katherine Sparkes: Hello. My name is Katherine Sparkes, and I'm the vice-president of grid solutions with Enwave Energy Corp. Thank you for the opportunity to speak today about Bill 40.

Bill 40 is fundamentally about ensuring Ontario can connect new homes, businesses and large loads like data centres quickly and reliably. District energy is already enabling these outcomes today by reducing demand on Ontario's electricity grid and providing a more efficient approach to electrification.

I want to thank the government of Ontario for recognizing in the integrated energy plan released in June the role that Ontario's district energy systems can play in supporting the reliability, affordability and sustainability of Ontario's electricity supply.

Bill 40 lays the foundation to realize the value of expanded district energy in Ontario, per the goal set by the government with the integrated energy plan. Enwave and our shareholders, the Ontario Teachers' Pension Plan and IFM Investors, are proud to be one of North America's largest and most innovative operators of community-based district energy.

For those unfamiliar with district energy, conventional heating and cooling typically involve stand-alone, in-building electric chillers and natural gas boilers, while district energy uses centralized plants to deliver thermal energy to connected buildings through underground pipes.

District energy provides many benefits. It frees up space in connected buildings for more housing or employment uses. It frees up the capital of building owners otherwise needed for traditional in-building systems to be invested in core businesses and economic development. It results in the easier integration of new technologies in a central plant versus retrofitting individual buildings. The ability to operate district energy systems to respond to electricity system needs benefits electricity ratepayers and thermal energy customers.

In alignment with Bill 40, Enwave is working with local distribution companies to realize district energy as a more efficient approach to electrification, freeing up room on our grid to connect more housing and job-creating loads and creating value for all Ontario electricity ratepayers and thermal energy customers.

Enwave leverages clean heating, cooling and power technologies, including the world's largest deep-lake water-cooling system, large-scale ground source systems, biomass and energy from waste, and our first-of-its-kind large-scale thermal battery under the Well development here in Toronto. Enwave owns and operates district energy systems in downtown Toronto, with over 200 connected customers, and in Etobicoke, Mississauga, Windsor, Markham, London and Charlottetown, PEI.

Ontario's many district energy systems have diverse owners: municipalities like Markham, Hamilton and Oshawa; universities; hospitals; and investor-owned utilities like Enwave.

Enwave and Ontario's other district energy owners, together with our customers, are ready to support a more efficient approach to electrification, one that leverages existing district energy infrastructure and new large-scale investments by our owners to support the reliability, cost-effectiveness and sustainability of Ontario's electricity system.

There are three key points I want to make for the committee today, critical to unlocking the full value of district energy to support a reliable, cost-effective and sustainable electricity system and energy supply for all Ontarians.

Firstly, for Bill 40 to fully achieve its objectives, we need appropriate long-term electricity system contracts that recognize the electricity system benefits of the large-scale investments district energy owners are seeking to make in electrifying and decarbonizing Ontario's district energy systems. We welcomed the Minister of Energy and Mines' direction to the IESO in June to identify opportunities in policies, programs and procurements to expand district energy in Ontario. We look forward to working with the government, the IESO, the district energy community and our customers—including Cadillac Fairview, Oxford, Brookfield and KingSett, who have all provided letters of support to develop long-term electricity system contracts that fairly share costs and benefits between electricity and thermal energy ratepayers.

My second point: District energy can make more efficient use of existing and new electricity system infrastructure to enable more new loads to connect, including more housing and job-creating loads. Through Bill 40 and the integrated energy plan, the government is putting in place planning and connection rules to manage rapid load growth.

District energy can be a practical tool to achieve those objectives at the ground level. For example, where a data centre connects to Enwave's system in downtown Toronto, we capture its waste heat and reuse it to heat other buildings, offsetting electricity and natural gas those buildings would otherwise need and reducing grid impacts.

Enwave recommends that if the government establishes connection requirements for data centres under Bill 40, exemptions apply for those connected to district energy with waste heat reuse, and that these projects receive

expedited connections to recognize the electricity system value of their district energy connections.

My final point: District energy can provide certainty regarding the pace and location of electrification. While electricity demand will grow significantly in Ontario over the next decades, in large part due to building heat electrification, we do not know when or where individual buildings will electrify. In addition to reducing overall electricity demand associated with building heat electrification, electrification of district energy systems can provide certainty on where and when building heat electrification will happen, enabling more efficient electricity infrastructure planning and greater reliability and cost-effectiveness for all ratepayers.

In summary, Ontario's existing district energy systems currently serve a building heating load equivalent to about 2,500 megawatts of peak electricity demand, similar to the capacity of the Pickering nuclear station. If all connected buildings electrify by traditional stand-alone approaches, they would be unlikely to reduce demand in response to electricity system needs, requiring significant additional electricity infrastructure.

Alternatively, Ontario's district energy systems can electrify in a way that significantly reduces peak electricity demand and overall consumption, compared to stand-alone electrification.

1720

Bill 40 provides an opportunity for Ontario to realize the value of district energy to provide a more reliable, cost-effective approach to electrification, make more efficient use of electricity infrastructure to connect more housing and job-creating loads, and unlock investment in secure local energy solutions and associated jobs.

Enwave looks forward to working with the government, our customers, other district energy owners and communities to realize the potential of district energy that Bill 40 can help to unlock. Thank you.

The Chair (Mr. Aris Babikian): We move to the first round of questioning. We will start with the government side. MPP Gallagher Murphy.

M^me^ Dawn Gallagher Murphy: Thank you, Chair, and thank you to Kathleen, Evan and Katherine for being here this afternoon.

My question is going to be for Evan. I'm not familiar with the Atmospheric Fund. It's the first I'm learning about you, so my apologies. A couple of questions for you: As you know—or maybe this is my question to you—nuclear energy is really a source that powers our grid with clean energy and supports approximately 80,000 really good Ontario jobs. I'm curious, not knowing much about the Atmospheric Fund: Do you support emissions-free nuclear energy? That's my first question.

Mr. Evan Wiseman: Thank you, and through the Chair: TAF is a regional environmental agency. The quick version of us is we operate off of an endowment model. We used to be part of the city of Toronto; we became an arm's-length organization off of a one-time endowment from the city. We then received an endowment from the province circa 2016, I believe it was, and then the federal government. We have about $90 million in our endowment. We receive no ongoing funding. We have a grants team, as well as a policy team, which I'm a part of, but we also operate an investment team which operates in the market that helps to de-risk investments—not dissimilar from the Building Ontario Fund, actually. In fact, I learned more about them the other day. It turns out we're very similar—cousins, actually—both made by provincial statute.

What we do is we try to invest in and scale solutions, and then exit once they are up and running and private capital is more willing to take the place. So we try to bring in and crowd in the funding from TD and whatnot. We work with developers—Mantle, Tridel, Minto and whatnot—to create financial assets that help to move our economy forward and grow Ontarian jobs, but also promote efficiency, cleaner air and lower carbon emissions.

M^me^ Dawn Gallagher Murphy: So does that mean yes or no?

Mr. Evan Wiseman: That's who we are. We do support the lowest cost to consumers that is also the lowest-carbon, so we do support, to an extent, nuclear energy. I grew up in Ajax. I grew up down the street from Pickering. I have friends and family who worked at Pickering and Darlington.

The key, though, where we are in 2025—the key point is that there are new technologies that are incredibly low-cost, that can be deployed quickly, that can displace American natural gas systems, which would be a net benefit to both ratepayers and, strategically, to Ontario's energy needs.

M^me^ Dawn Gallagher Murphy: Okay. That's great. Now, I've got a follow-up question for you. Thank you very much for those details.

You're probably aware of this: Ontario is responsible for two thirds of Canada's total emissions reductions. We actually continue to lead the world today in nuclear, which is our largest source of clean, emissions-free electricity. We are on track for a grid that is more than 99% emissions-free by 2050. Now, this is all without raising taxes—we're very happy about that—or jeopardizing the reliability, which we're very proud of. We keep investing in refurbishing our entire nuclear fleet. I'm sure you see that.

Your organization, I've come to learn, released a report that supports the contrary to that. So I'm wondering if maybe you could just elaborate on that.

Mr. Evan Wiseman: Certainly. Today, we released our carbon emissions inventory. We had that scheduled before the session today, so it's coincidental. There has been an emissions increase in our electricity grid. Emissions have gone up, despite great efforts by people buying electric vehicles, committing to retrofits, adopting heat pumps and moving off of natural gas systems, and also moving off of heavy-duty heating oil and propane in more rural areas especially.

But the key point is, due to the refurbishment and procurement of SMRs which are coming online, the emissions

profile in Ontario is now worse than it was prior to the coal phase-out. We are continuing to drop. There's been a 28% increase in the use of natural gas for the purposes of electricity. The majority of that gas comes from the US, from Ohio and Pennsylvania. We don't really have a lot of domestic natural gas in Ontario.

Our chief concern around the emissions profile increases is that it's really stealing the thunder of a lot of the really great, hard work that is being done through programs like Peak Perks at the IESO or the government's contribution to the demand-side management budget, totalling around $10 billion. We have notes on how to spend some of that.

But the key point there is we really want to emphasize the importance of energy efficiency and the use of that to help lower the use of natural gas, which is slated to continue to increase. And then, in a worst-case scenario, if the SMRs or refurbishments are delayed, right now the IESO generally is just planning to make up that difference through the use of natural gas, which we are very concerned about, because that is very expensive.

M^me^ Dawn Gallagher Murphy: Okay. Well, I appreciate that elaboration—

Interruption.

M^me^ Dawn Gallagher Murphy: Sorry there's a lot of movement; there's a bell going on right now. Anyway, thank you very much.

The Chair (Mr. Aris Babikian): The government side has only 26 seconds.

What we are going to do: We are going to finish the first round of questioning, and after that we will take a recess for the vote.

So, MPP West, go ahead.

MPP Jamie West: Thank you, Chair. I was going to ask what the process was for the bells going off.

I want to thank all of you for coming. It's late in the day, there's a lot of noise in the background and I think they're setting something up upstairs—you can hear them rolling around—so thank you as well.

Evan, I'm going to start with TAF. I haven't heard of the organization as well, so I learned a lot. You were talking about the reliance on natural gas and how we've increased that sort of reliance coming on, and I have similar concerns with that. I've been promised by the minister this is because of the refurbishments. But also, during the debate on this bill, I heard a little bit about hydrogen storage from natural gas as well, so it gives me concern that we're finding new reasons to invest in natural gas. I believe what you said is that overall use is dropping and people are switching to other forms. I may be confusing different people who spoke today.

Mr. Evan Wiseman: Yes. Use of natural gas for the purposes of home heating has decreased due to the good work and retrofits and efficiency related to that.

Just quickly, I would say if you're using natural gas to create hydrogen, it's like charging a battery with a battery. Just use the battery.

MPP Jamie West: Okay. I appreciate that.

And you talked about creating low-carbon solutions. I think the Toronto and Hamilton area is your footprint?

Mr. Evan Wiseman: Yes.

MPP Jamie West: What are some of the recommendations—or maybe a different way of saying it is, what are we doing well in Ontario? What things would you recommend that we do in terms of bringing down the prices of electricity? Because we're subsidizing the price. The price went up just shy of 30% two and a half weeks ago.

Mr. Evan Wiseman: The key point I think is—we always say the cheapest kilowatt hour is the one you don't use, and that's where efficiency really comes into play—not to steal the thunder from Enwave or Mantle, because they do a lot of incredible work and we were really glad to partner with them in the past. The key point is the energy efficiency component.

Again, we say that we have concerns around the IESO, which is the root of our recommendations to centre more consumer-oriented services—because there are great programs that the IESO runs, such as Peak Perks. It's a demand-side management program that works with smart thermostats in residential homes where you sign up, you get a gift card and then an ongoing one every four months, I believe. Basically, the IESO uses that to turn your temperature down, if there's a peak that's being created, by two degrees maximum. And you can always turn it back up. You can also stop the program at any time. This has had an incredible effect of reducing hundreds of megawatts of usage with an incredibly inexpensive way of going about it.

So part of our concern is, definitely, ongoing procurements and just trying to meet demand with supply ,and then not focusing enough on efficiency. The government has done a great job on the DSM budget, but there's a lot more work that could be done.

1730

MPP Jamie West: Okay. And then some of your recommendations were about adding language that protects the consumers. I don't think anyone's brought this up before. A lot of the focus has been on—data centres are going to want to come to Ontario. We have a cool climate. We have water supplies. We need to get the energy for them.

But I think that one of the reasons that the previous government fell, for example, was the high cost of hydro, right? "Heat and eat" was one of the refrains when I was elected in 2018. If we don't take care of the cost for the consumer, (1) it's not the right thing to do, but (2) it could lead to the fall of the government. What recommendations would you have to ensure that the consumer is prioritized in this bill?

Mr. Evan Wiseman: I think the key point is—procuring the lowest-cost-option electricity is the main priority we have.

Right now, the IESO doesn't have new non-emitting resources coming onto the grid after 2035, which is a concern for us. They are in the midst of procurement rounds right now, but that leads into 2035, and so their

system planning needs to then extend beyond that. So that is partially our concern: You have solar developers trying to make their own capital plans; they're having a hard time with that. But it really does come down to both efficiency and demand-side management, as well as procuring the lowest-cost option—again, to displace the more expensive fossil fuel options such as natural gas.

And then, also to the point that was made earlier for the question to AMO, around having additional capacity in case of new developments coming online: Similarly, with the refurbishments and the coming online of the SMRs, we are assuming that they will be finished on time. And so there is a bit of a lack of a backup plan beyond natural gas, which will hike rates.

MPP Jamie West: I'm new on the energy file, so what I've heard from different stakeholders and different groups is that the mix is a variety of different sources, right? You know, nuclear can do a baseload, but it can't do peaks and all these different things. But my experience, I think, over the last seven or eight years that I've been here is that the only thing we've invested in is nuclear and gas. Am I accurate in that?

Mr. Evan Wiseman: The IESO is procuring solar and non-emitting and battery electric storage systems as they've come online. The technology has evolved quickly—

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

Mr. Evan Wiseman: —so it's been great to see. But we have not seen, in that procurement, a fairness to systems, I would say. The point systems are definitely weighted towards gas compared to solar and storage, which is a cheaper option, even when you have to combine both together. And again, this gas is sourced primarily from the United States.

MPP Jamie West: Okay, thank you. I think I've got 15 seconds or something.

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

We'll move to the third party. MPP McMahon.

Ms. Mary-Margaret McMahon: Thanks for having me back here at your committee, and thank you to our speakers for taking the time and coming in today and sharing your wisdom and experience with us.

Evan at TAF—I know him very well from back in city hall days. I loved what you said: The cheapest kilowatt hour is the one you do not use. And so, do you think we should be promoting, investing and educating people on conservation? And what would that look like to you? What would your advice be to the government and us?

Mr. Evan Wiseman: We've made this recommendation in the past. The government's stated goal of 1.5 million new homes—we absolutely support that.

We would also recommend having each of those homes installed with a smart thermostat that's enrolled in Peak Perks just off the bat. It's a great program. The IESO has really done a great job in designing it, and that program should be in every single home possible in Ontario, because it will absolutely reduce the demand on the system and hopefully create enough supply access that we can also meet some of our emerging electrification needs. So that would be—if I had to make one recommendation that you could do going forward, it would be that.

Ms. Mary-Margaret McMahon: All right. And do you think that we're doing a good enough job with communication to Ontarians on the need to conserve and the benefits of conservation?

Mr. Evan Wiseman: I think I have had this conversation with federal counterparts, where they have thought of efficiency as wearing a sweater in winter and turning your thermostat down. And that's just not the case anymore.

I think the technology that is out there now, whether it's Enwave and the smart thermostats into the system through demand response—that can be integrated through the IESO and utilities. These are incredible space-age technological leaps that have been created in last few years, and it doesn't reflect what we thought of as efficiency in the past. It was, "Oh, just change your light bulbs." That's not the case anymore. It's the equivalent of a horse to a car. Yes, they're both modes of transportation, but it's incredibly different technology.

Ms. Mary-Margaret McMahon: Awesome. Thank you.

I'll ask—let's see—sorry, I didn't get your name, from Enwave. What was your name?

Ms. Katherine Sparkes: Katherine Sparkes.

Ms. Mary-Margaret McMahon: Okay,. Katherine, I'll ask you the same question about conservation. What can we be doing more on that? Do you have any ideas?

Ms. Katherine Sparkes: We do. One of the things that we put forward as an opportunity is with regard to Bill 40 and the development of rules around connections to the electricity system. We know from our commercial experience connecting buildings to our system that district energy systems across Ontario—and there are dozens and dozens of systems all across Ontario who are planning to electrify, and we can electrify in a way that is more electricity-efficient than if the customer is connected to those buildings which were electrified through stand-alone in building solutions.

So if district energy owners across Ontario electrify, we can do so in a way that's peak-shaving ,so we can shift our existing backup systems. We can shift to new large-scale thermal storage, like the thermal storage that Enwave has at the Well, just down the street from here. We can also use heat-recovery heat pumps like the new ones we commissioned just a few weeks ago at our Pearl Street Green Heat Plant, here in Toronto, to take waste heat from data centres and other buildings, and use that waste heat to offset electricity or natural gas otherwise needed by other buildings, so providing a renewable source of heat. And we can do this cost-effectively. And so, that's really a significant, very large-scale electricity efficiency opportunity that we see.

Ms. Mary-Margaret McMahon: Awesome. I feel like there should be maybe field trips for members of provincial Parliament to come down and see those sites. I'm sure my colleagues across would be keen to do that, and we would as well.

Ms. Katherine Sparkes: We were very pleased to have Associate Minister Oosterhoff at our Pearl Street Green Heat Plant commissioning, and we would welcome the opportunity to bring anyone down to our plant. So please—

Ms. Mary-Margaret McMahon: Okay. We will take you up on that. Thank you so much.

And then over to Mantle energy: same question.

Ms. Kathleen Kauth: I think it's very difficult to improve on those two answers, but at the end of the day, it's really about getting more use out of the assets that have already been built through things like flexibility and just general conservation. From a data centre perspective, that very much looks like building from the beginning to make use, cooling use—so, the way you measure efficiency in data centres is called power usage effectiveness, and that's a measure of how much of the energy that's going to a data centre is actually being used by the computers themselves, not by the overhead uses of cooling these servers. Ontario does have—

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

Ms. Kathleen Kauth:—compared to much of the rest of the world, a cooler climate, and so basically, designing to be able to use that cool air when necessary, and then for some of these new advanced data centres that are being built—they're very, very high-density in power needs, so a small space; a lot of power. A lot of folks are turning to using water to cool that, so it's making sure you're that using a closed liquid system, so that you're not wasting Ontario water to cool these systems, but getting a high degree of cooling for low power usage. And the benefit of that then, of course, too, is—as Katherine would attest to—you then have open yourself up for being able to do more district heating, more waste heat recovery, which is wonderful—but really making sure that you get more out of what's already been built.

Ms. Mary-Margaret McMahon: All right. Thank you very much—music to my ears all around.

Interruption.

The Chair (Mr. Aris Babikian): Thank you very much. Dear colleagues and our witnesses, due to the emergency vote situation, we have to go back to the chamber for the vote. But due to the time allocation motion in regard to this session, this session must end by 6 o'clock sharp. So I am not sure if we will be able to be back on time to continue the second round of questions and answers. Therefore, if we finish before 6 o'clock, we will come back to finish whatever we can. If the vote doesn't finish at 6, in that case, the Clerk will adjourn the meeting.

Once again, my apologies to the witnesses for the unforeseen circumstances, and hopefully we will see you at 6 o'clock or in another opportunity. Thank you.

The committee recessed from 1741 to 1758.

The Chair (Mr. Aris Babikian): Ladies and gentlemen, we have two minutes left for the government side, so it is your turn, MPP Cuzzetto.

Mr. Rudy Cuzzetto: I want to thank all the presenters that are here today.

I want to ask Katherine from Enwave: As you know, there's a big project happening in my riding of Mississauga–Lakeshore at the Lakeview development there. It's probably the largest Enwave project in the province or in the country. Have the current US global and political climate and tariffs had an impact on your daily operations?

Ms. Katherine Sparkes: Thank you for the question. Our supply chain team has been closely following developments with the tariff situation. We work to ensure that we have contingencies put in place for any potential impacts on our infrastructure development. To date, I am not aware of any implications for the development of the Lakeview site, but that's something I can take back and confirm.

Mr. Rudy Cuzzetto: Do you believe that Bill 40 aligns with your company, Enwave?

Ms. Katherine Sparkes: We believe that Bill 40 provides opportunities to expand district energy in Ontario and to fully recognize the electricity system's value. The things that I talked about earlier in terms of a more efficient approach to electrification—recognizing that we can leverage waste heat from data centres to offset electricity demand and natural gas use by other customers—those are great opportunities that can be enabled by Bill 40.

The Chair (Mr. Aris Babikian): Thank you very much. The time is up. It's 6 o'clock and that's it for this session, this panel, and the rest of the hearings today.

Thank you very much all of you for coming and, once again, my apologies for the circumstances. You have experienced our democracy in action, so thank you very much to all of you. Thank you to all of the presenters also.

This concludes the public hearings on Bill 40. The committee is now adjourned until 9 a.m. on Monday, November 24.

The committee adjourned at 1801.

STANDING COMMITTEE ON THE INTERIOR

Chair / Président
Mr. Aris Babikian (Scarborough–Agincourt PC)

First Vice-Chair / Premier Vice-Président
Mr. Sol Mamakwa (Kiiwetinoong ND)

Second Vice-Chair / Deuxième Vice-Président
Mr. Jonathan Tsao (Don Valley North / Don Valley-Nord L)

Mr. Aris Babikian (Scarborough–Agincourt PC)
Mr. Guy Bourgouin (Mushkegowuk–James Bay / Mushkegowuk–Baie James ND)
Mr. Rudy Cuzzetto (Mississauga–Lakeshore PC)
Mr. Andrew Dowie (Windsor–Tecumseh PC)
M^{me} Dawn Gallagher Murphy (Newmarket–Aurora PC)
Mr. Sol Mamakwa (Kiiwetinoong ND)
Mr. Steve Pinsonneault (Lambton–Kent–Middlesex PC)
Mr. Jonathan Tsao (Don Valley North / Don Valley-Nord L)
MPP Paul Vickers (Bruce–Grey–Owen Sound PC)

Substitutions / Membres remplaçants
Mr. Ted Hsu (Kingston and the Islands / Kingston et les Îles L)
Ms. Mary-Margaret McMahon (Beaches–East York L)
MPP Jamie West (Sudbury ND)

Clerk / Greffier
Mr. Stefan Uguen-Csenge

Staff / Personnel
Ms. Pia Anthony Muttu, research officer,
Research Services
Mr. Michael Vidoni, research officer,
Research Services