



Reliable, Affordable, Predictable, Clean

Industry electricity needs for certainty and investment in Ontario

July 2024

 CLEAN ENERGY CANADA



Dialogue Participants and Interviewees

Dialogue Participants

The following individuals attended Clean Energy Canada's in-person dialogue event on May 23, 2024. However, participation in the dialogue does not necessarily mean interviewees endorse each individual statement or draft recommendation in this paper.

1. **Amy Geisberger**, Sustainability Manager—Siemens Canada
2. **Raseeka Rahumathulla**, Government and Regulatory Affairs Manager—Volkswagen Group Canada
3. **Vincent Caron**, Director, Ontario Government Relations and Policy—Canadian Manufacturers & Exporters
4. **Sarah Goldfeder**, Director, Government Relations & Corporate Affairs—General Motors Canada
5. **Duncan Rotherham**, Partner—Deloitte
6. **Katarina Savic**, Director, Advisory Services—Mokwateh
7. **Roy Hrab**, Senior Manager, Policy Research—Power Advisory

List of Interviewees

The following individuals and companies participated in Clean Energy Canada's supporting interviews. However, participation in an interview does not necessarily mean interviewees endorse each individual statement or draft recommendation included in this paper.

1. **Amy Geisberger**, Sustainability Manager—Siemens Canada
2. **Evan Wiseman**, Senior Manager, Climate Policy—The Atmospheric Fund
3. **Fabian Winklbauer**, Expert Renewable Energy and Strategic Development, and **Yasin Sunak**, Head of Energy Procurement—PowerCo
4. **Geoff Wright**, SVP, Head of Development and **Zachary Benoit**, Senior Analyst, Business Development—Brookfield Renewable
5. **Jennifer Woolfsmith**, VP Sustainability—NOVA Chemicals
6. **Jordan Penic**, Director, Energy Government Relations—Sussex Strategy Group
7. **Laura Devoni**, Director, Corporate Affairs and Sustainability—Algoma Steel Inc.
8. **Mayaz Alam**, Energy Transition Market Development Leader—GE Vernova
9. **Mike Andrade**, Chairman and CEO—Morgan Solar
10. **Nathan La Rocque**, Energy Manager—INEOS Styrolution
11. **Raseeka Rahumathulla**, Government and Regulatory Affairs Manager—Volkswagen Group Canada
12. **Richard Carleson**, Director, Energy Policy and Energy Exchange—Pollution Probe
13. **Rob Saunders**, Senior Manager—Deloitte
14. **Sarah Goldfeder**, Director, Government Relations and Strategic Policy Development—General Motors
15. **Sarah Griffiths Savolaine**, Vice President, Government and Regulatory Affairs—Hydrostor
16. **Shameem Jauffur**, Principal Sustainability Program Manager—Amazon
17. **Stephen Uwazota**, Director, Sustainable Finance, Business Development—Scotiabank
18. **Vincent Caron**, Director, Ontario Government Relations and Policy—Canadian Manufacturers and Exporters

CONTENTS

- 1** Executive Summary
- 3** Introduction
- 6** Outcomes for Ontario’s Energy Planning
- 7** Ontario’s actions to date
- 8** Key Stakeholder Challenges
- 11** Six Priorities for the Future of Ontario’s Electricity System
- 14** Conclusion
- 15** Endnotes



This project is made possible with the support of the Toronto Atmospheric Fund.

Reliable, Affordable, Predictable, Clean: Industry electricity needs for certainty and investment in Ontario

July 2024 | © 2024 Clean Energy Canada

Prepared by: Ollie Sheldrick-Moyle, Evan Pivnick, Rachel Doran, Jana Elbrecht

All rights reserved. Permission is granted to reproduce all or part of this publication for non-commercial purposes, as long as the source is cited as “Clean Energy Canada.” Clean Energy Canada is a program at the Morris J. Wosk Centre for Dialogue at Simon Fraser University in Vancouver, British Columbia, located on the unceded traditional territories of the Musqueam, Squamish, and Tsleil-Waututh peoples.





Executive Summary

Ontario industry supports an ambitious plan to deliver a fit for purpose electricity grid in a world increasingly relying on electricity as the low-carbon, backbone of a clean economy.

Rapidly growing demand for electricity, the decreasing price of technologies like battery storage and solar power, as well as the integration of new technologies for generating, storing, managing, and distributing our electricity are together driving significant changes in our electricity system.

Even as our system evolves, the outcomes for end-users of our energy system need to remain constant. For industrial energy users there are four principles

that must underpin this period of transition. Users require an electricity system—from generation to the customer—that is **reliable, affordable, predictable, and clean**.

Through dialogue with many of Ontario's largest energy users and key energy stakeholders, this report identifies some of the key challenges that need to be confronted to ensure the province's electricity grid can support ongoing economic growth.

There are solutions to these challenges, and this report presents six consensus recommendations that Ontario should adopt in future integrated energy planning:

- 1 Complex change requires a goal and interim steps:** Ontario must develop an integrated, long-term energy strategy that aligns with best practices. This strategy should be transparent around expected costs, and should prioritize a clean and prosperous economy by 2050—one that provides clarity on the province’s decarbonization objectives and timeline.
- 2 Proactive buildout of the electricity grid is required in anticipation of growing demand:** Anticipatory investments into the electricity system can provide an economic advantage to the province. The buildout should focus on non-emitting resources (alongside transmission and distribution), proactively identifying and servicing projects that could be deployed on shorter timelines.
- 3 A customer-centric and modernized electricity grid must be deliberately incentivized:** As the electricity system becomes increasingly decentralized, industrial actors (among other energy users) will benefit from a system that increasingly treats them as participants in the electricity system—not simply recipients of energy services. This will require new incentives and frameworks that properly value distributed energy resources and their energy services.
- 4 Transparency and predictability should be prioritized in structural reforms:** In the buildout of new resources and planning for a net-zero energy system, government, regulators, and system operators should provide clear, public information including the size and timing of anticipated demand, the availability of energy and capacity, and long-term procurement planning for different resources.
- 5 De-risking projects has intrinsic value:** Undertaking pro-active regional assessments, pre-approving sites and prioritizing anticipatory community engagement can make processes more efficient, and help bring down costs.
- 6 Trust, respect and reciprocity with Indigenous must be centred:** The electrification of the Ontario economy must be based on a commitment to reconciliation and pursuing true partnerships that ensure Indigenous peoples are able to own, partner on, and benefit from projects.





Introduction

Ontario is working to become a North American leader in clean industry and manufacturing, in large part due to strategic investments that the province has made in building a clean electricity grid. However, maintaining this competitive advantage will take continued focus and effort.

Over the past two decades, the province has driven a significant shift in its electricity mix by phasing out coal and relying more heavily on renewables, natural gas, nuclear, and hydroelectric power.¹

Despite the province's clean electricity headstart, Ontario still faces emerging challenges to ensure it can meet its energy needs of the future. As different economic sectors electrify, there will be a greater need for affordable electricity. At the same time, Ontario's grid is expected to see an increase in its emissions intensity over the coming years—although the scale of this increase, whether it is only temporary, and the degree to which the electricity grid is leveraged to decarbonize other sectors remains to be seen.

The next decade will be critical for Ontario's long-term competitiveness in a world transitioning to net-zero. Clean, reliable, and affordable energy will not just be an environmental imperative, it will also be a key driver of economic growth and prosperity. In this report we outline the key challenges facing the province's electricity system as defined by some of the province's largest electricity users, system stakeholders, and energy experts, as well as priorities and recommendations to help ensure a successful transition.



The Process

Through the spring of 2024, Clean Energy Canada interviewed a wide range of industry stakeholders and energy experts seeking to understand their views on the electricity system in Ontario: their primary needs, challenges, and priorities for a future electricity grid that will support their longer-term business needs.

These interviews fed into a discussion paper and in-person dialogue with a core group of industrial electricity users and experts in May 2024. The discussion event provided a platform for these industry leaders and specialists to share insights, discuss challenges raised, and explore solutions that support industry priorities and can drive the transition toward a more sustainable and effective electricity system in Ontario as we make the shift to a net-zero 2050 economy.

This report and the principles within reflect a broad consensus from our in-person dialogue. However, not every participant has formally endorsed each specific recommendation or assertion.

Jurisdictions across North America are in a race to secure the investments that will drive economic growth for future decades: electric vehicle supply chains, decarbonized industry, clean manufacturing, and data centres to support the explosion of AI computing. In the U.S., the Inflation Reduction Act is leveraging billions of dollars of government spending to draw in clean investment. As Canadian provinces are continuing to explore ways to respond and remain competitive, doubling down on non-emitting electricity will be a key part of that response.

Around the world, energy systems are changing at a scale and speed never seen before. Global conflict, supply chain challenges, and the growing need to decarbonize are accelerating the integration of new technologies and necessitating new approaches to governing and regulating energy systems.

As natural gas and other fossil fuels are replaced by electricity in many end uses and renewables start to play a larger role in the electricity mix, integrated energy planning and a purposeful buildout of resources will be more important than ever before. In a net-zero energy system, there will no longer be a straight line from electricity generation to consumers. Instead, an increasing reliance on cheap, renewable energy sources will be balanced out by a growing role for energy storage—especially battery technology. At both the distribution and customer levels, new technologies will play a significant role in generating, storing, and managing the demand for electricity (see Figure 1).

The structure of our energy system is poised for dramatic changes due to rapidly increasing electricity demand, decreasing costs of renewable energy generation, and the integration of new technologies that generate, store, manage, and distribute electricity. Jurisdictions are shifting from a system of electricity scarcity to one of abundance, from centralized generation to a more distributed network, and from a system dominated by fossil fuels to one dominated by clean electricity. In a future energy system, the challenge will not be a scarcity of electrons, but ensuring the right quantities are available at the right times and in the right places (see Figure 2).

Figure 1: The shifting structure of electricity systems

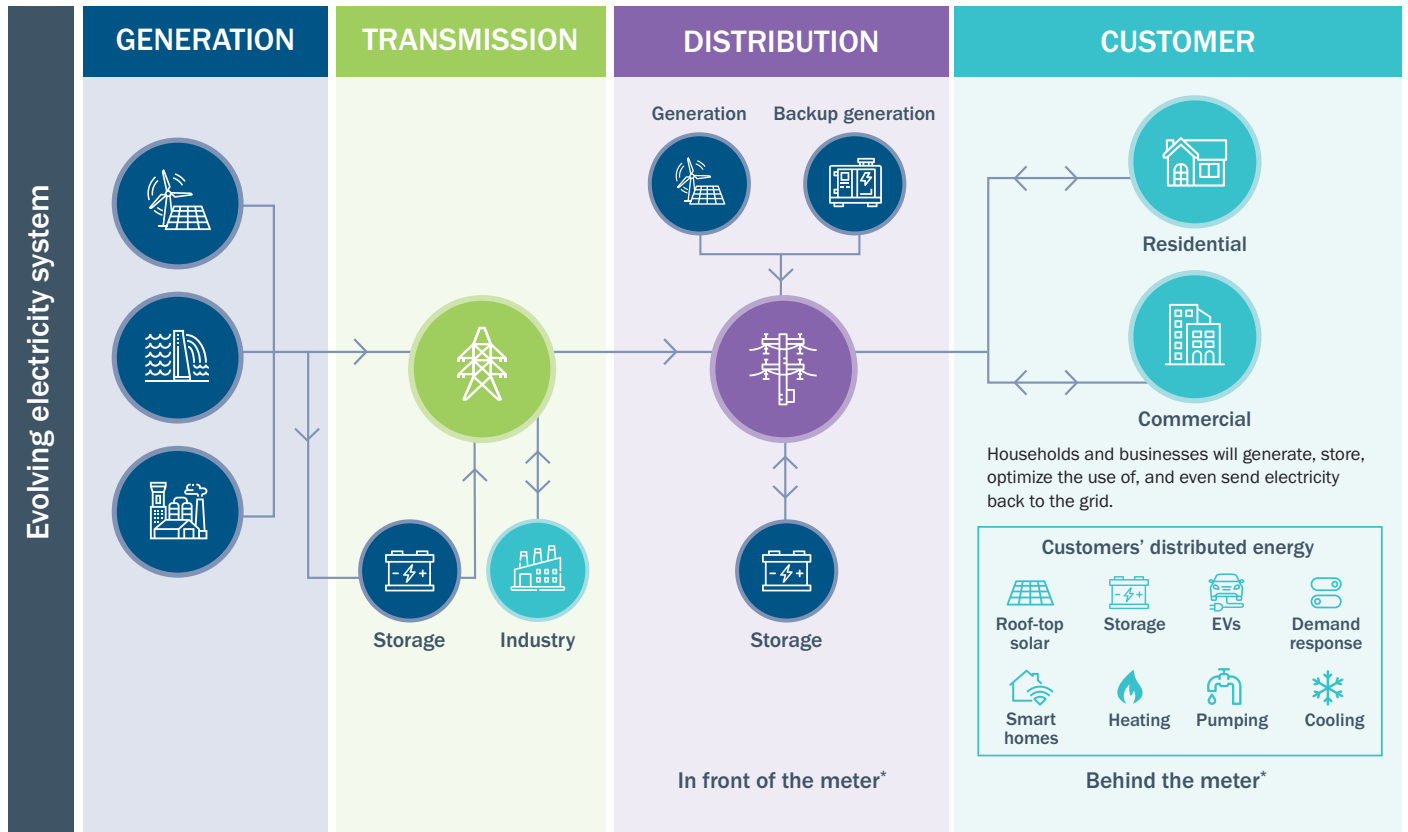
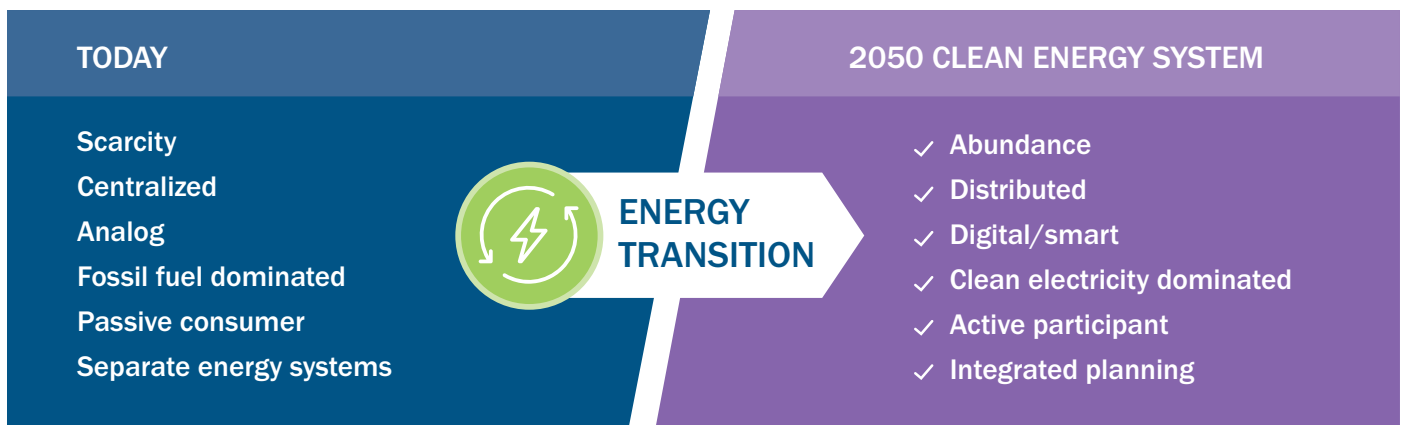


Figure 2: Shifting from traditional energy systems to a 2050 Clean Energy System



This shift represents general trends seen around the world, though they do not map perfectly in every jurisdiction. Ontario, for example, has an overall energy system (inclusive of all energy types and uses across the economy) which remains dominated by fossil fuels—though these play a smaller role in the generation of electricity. The province has also already started to move to a system that is more distributed and more digital, with further changes underway.



Outcomes for Ontario's Energy Planning

Ontario industry needs and ambitious plan to deliver a fit for purpose electricity grid in a world increasingly relying on electricity as the low-carbon, backbone of a clean economy.

Throughout these changes, and as intermittent renewable electricity in particular becomes a greater share of the energy mix, the outcomes for end-users of our energy system need to remain constant. Industrial energy users are clear that through this period of growth, modernization, and adaptation, four principles must lead.

- ✓ **Reliable:** An electricity system that can generate, transmit, and distribute the necessary power to facilities operating in the province now and in the future. A system that is resilient to the impacts of climate, variable generation, and that leverages technology and innovation to ensure energy security.
- ✓ **Affordable:** An electricity system that can provide electricity that is cost-competitive with jurisdictions across in North America, and provide predictable pricing systems. This necessitates a system that is built on cost transparency of electricity generation, storage, transmission, and distribution to ensure value to consumers.
- ✓ **Predictable:** An electricity system guided by a predictable, transparent, and consultative policy approach that balances the differing needs of its users and is centered around providing a quality service to consumers. A system that can deliver the electricity necessary for a decarbonizing economy with a 2050 net-zero target.
- ✓ **Clean:** An electricity system that maintains and prioritizes its low-carbon advantage, recognizing that it provides a competitive edge in siting decisions for industry. A system that provides a level playing field for non-emitting energy generation and capacity, and uses every tool available to rapidly build out generation, and is aligned with clean economy targets.

Ontario's actions to date

The Government of Ontario has been actively exploring future electricity needs of the province, highlighted through initiatives such as the Electrification and Energy Transition Panel (EETP),² reports like *Powering Ontario's Growth*,³ and a public commitment to undertake long-term energy planning efforts.

Ontario has been actively exploring different approaches to growing clean energy capacity and reducing emissions and costs for energy users, for example with the Clean Home Heating Pilot which provides grants to homeowners in order to switch to hybrid heating systems,⁴ and recently completing the largest clean energy storage procurement in Canada's history.⁵

Ontario has also been actively procuring non-emitting baseload power: the province is hoping to expand on nuclear capacity by adding Small Modular Reactors (SMRs). Four SMRs are under development which would add 1,200 MW of capacity to the Darlington nuclear plant.⁶ In addition to building out capacity with SMRs, the province is refurbishing its legacy nuclear plants. In January 2024, the provincial government announced its support for Ontario Power Generation's plan to refurbish the Pickering Nuclear Generating Station,⁷ and planning has just started for a new Bruce C plant.⁸

In its *Pathways to Decarbonization* report, Ontario's Independent Electricity System Operator (IESO) highlighted that addressing the "uncertainty around the future of carbon and emission targets" was critical in order to guide grid investments, effectively integrate new technologies, and support the decarbonization of other stakeholders.⁹ The EETP's final report, *Developing a Clean Energy Economy*, also referred to a prosperous, clean economy as energy planning's "north star."¹⁰

The Ministry of Energy and Electrification has commissioned Dunsky and ESMIA Consultants to work together on a pathways assessment. A pathway assessment is a comprehensive study of all credible energy pathways to achieve net-zero objectives at a given point in time. It sits at the center of an orderly and affordable energy transition, helping to evaluate choices and tradeoffs, understand costs, identify no- and low-regret options, and bring key stakeholders together for an evidence-based discussion about a jurisdiction's future energy mix.¹¹





Key Stakeholder Challenges

The private sector and industrial users are increasingly looking to fuel-switch from other sources of energy to electricity. Reliable, clean, affordable electricity will underpin the next phase of economic growth.

This means jurisdictions like Ontario, which currently have a low-emissions grid and the geography, skills, and resources to grow our clean electricity system to meet this demand, have a competitive advantage. However, this advantage can be lost.

Many of these challenges are not unique to Ontario or to industrial energy users. Comparable jurisdictions across North America, Europe, and Australia are undertaking long-term planning exercises and reforming their electricity system to address these same pressures. These challenges are not the result of decisions made by any one government, agency, or private actor, but arise from the fact that we are facing the most rapid disruption of our energy systems we've ever seen.

In order to ensure Ontario fully seizes the opportunity presented, we need to address the following seven Ontario-specific challenges that were identified by our interviewees and attendees of our dialogue:

1 Uncertainty regarding the long-term reliability of the electricity system

“Having reliable electricity is very important. Downtime much longer than a few seconds would require a total reset.”

Reliability is the primary concern for many industrial users. Lack of certainty on long-term energy planning while entering a period of significant demand growth is reducing confidence in the ability to connect facilities in the future. Any uncertainty presents a challenge to companies looking to make long-term decisions regarding future investments or expansions of operations. As one stakeholder put it, “there should be no promises of power supply to big investments without certainty”.

2 A lack of transparency regarding decision making

“There needs to be more transparency in planning, but this goes both ways.”

Industrial users point to a lack of transparency about how the system is changing, the scale of supply needed, and the analysis and assumptions that underpin existing assessments. There is also a lack of clarity about the approach to procuring new electricity generation and other energy services (including connection capacity). It is critical that all cost-effective, zero-emission technologies are considered. More clarity and transparency about the government’s approach to a technology-agnostic selection process that considers cost certainty, technology development, and timelines will be key. Enhanced transparency will also be required from industry with greater clarity about the potential scale and timing of electricity demand. Failing to address this challenge will lead to a “disconnect” between political and technical decision makers, investment decision making, and energy planning.

3 The increasing emissions intensity of the electricity grid

“At the end of the day, we need to grow emissions-free power. Whatever they can do to build it way faster than before.”

Ontario is a leader in North America with our low-emissions electricity system, underpinned by non-emitting nuclear, hydroelectric resources, and growing renewable generation. However, we can’t take this leadership for granted and as demand increases, we still need to prioritize emissions intensity. Industry users highlighted that Ontario may risk losing a competitive advantage as other jurisdictions in North America produce increasingly low-emissions electricity. This will have an impact on long-term competitiveness, affecting siting decisions and potentially pushing more energy users to behind-the-meter generation to meet their climate goals.

4 A lack of stakeholder engagement creating avoidable risks

“Developing partnership will take more time initially, but will reduce cost, risk, and timelines in the end.”

Building out the generation, transmission, storage, and distribution resources required to meet the growing electricity demands of the future will require engaging



with a wide range of stakeholders. Participants raised that current stakeholder engagement does not always happen early enough in the process, and the depth of engagement is not always consistent. Linked to this is the fact that current energy systems are designed to manage system-level needs of the grid, rather than focusing on user-specific needs. As the way our grid operates and continues to shift, centering stakeholder needs will be key to success.

5 Uncompetitive energy pricing structures

“Costs are local, but our market is global.”

The current structure of the electricity system results in prices that are not as competitive as they could be relative to other North American jurisdictions. While the reasons for this are complex and based on long-standing structural challenges in our electricity system that cannot be resolved with a single government action, Ontario must remain cognizant of this concern. At the same time, industry is clear that price, while highly important, is not the only factor under consideration when making investment decisions. Siting decisions consider cost, availability, and emissions-intensity of electricity, in addition to other factors.

6 Lack of policy certainty and direction for the economy

“There is no certainty out to 2050. There isn’t certainty over the next 10 years.”

A lack of formal policy targets for a net-zero economy by 2050 and a lack of clarity on the long-term plan for the electricity system are making planning difficult for industry, and play into concerns around reliability and costs over the long-term. Without this kind of strategic planning, it may be difficult to target fuel switching efforts that maximize efficiencies and have the greatest return on investment.

7 Indigenous rights holders need to be effective participants and collaborators in the energy transition

“Strong, meaningful relationships with Indigenous peoples based on trust and reciprocity are a good foundation.”

Indigenous participation and consent is critical to the clean energy transition in Ontario, and will ensure projects get built in a way that delivers equitable economic and social outcomes for Indigenous peoples.

Failing to ensure early engagement or pathways to partnership can create additional barriers to the siting and completion of energy projects as challenges or concerns are raised later in the process, adding avoidable costs and delays.





Six Priorities for the Future of Ontario's Electricity System

A well-planned, reliable, and affordable clean electricity system is an opportunity for existing industry and for new industrial investment into the province, but we need to start taking steps now for Ontario to have a real shot at achieving these outcomes.

To address the challenges, we've developed a list of six priorities drawn from our interviews and dialogue with industry, energy experts, and system stakeholders, and which integrate best practices from comparable jurisdictions. These priorities are intended to put the province on track to achieve a clean energy system that is reliable, affordable, predictable, and clean.

1

Complex change requires a goal and interim steps

In order to meet the moment and ensure that Ontario businesses have as much certainty as possible in the electricity system, the Government of Ontario must:

- 1. Develop and regularly update an integrated, long-term energy strategy that aligns with best practices.** This strategy, also recommended by the EETP, should incorporate an integrated approach to planning the province's energy needs, combining electricity and natural gas, assessing and planning for the interconnections between various forms of energy production, transmission, distribution, and consumption. Any long-term energy strategy should also be transparent around expected costs, and the underlying data and assumptions driving decisions. The strategy should be updated periodically to reflect the latest technological advances, economic shifts, and regulatory changes.

- 2. Set a public goal for a prosperous clean energy economy by 2050 as recommended by the EETP**—one that provides clarity on the province’s decarbonization objectives and timeline—and outline interim targets that will help ensure the system stays data-driven and learns as the transition occurs. A net-zero economy target will allow flexibility within the system, acknowledging that fuel switching to electricity can have significant emissions reductions even when coming from sources that are not entirely non-emitting.

2 Proactive buildout of the clean electricity grid is required in anticipation of growing demand

Building out electricity generation, transmission, and distribution is a no-regret decision at this moment in time. There is consensus that our electricity needs will be growing dramatically in the coming years, and acting in anticipation of demand will provide an economic advantage to the province. In order to deliver this, we must:

- 1. Accelerate the planned buildout of non-emitting electricity resources**, using processes that are technology agnostic (including nuclear, storage, renewables, etc.) evaluating their potential based on cost certainty, state of technology development and timelines to bring online. In order to maximize economic investment opportunities and manage costs, it will also be necessary to enable the build out of electricity resources in advance of demand.
- 2. Ensure system actors have the necessary mandates and regulatory tools** to enable a proactive buildout of electricity resources based on likely demand (as determined by planning and forum feedback). This would include utilities, system operators, and regulatory bodies.
- 3. Prioritize digitization and data for future energy assets and grid planning** to further enhance the ability to forecast demand. Digitalizing the electricity system is essential to address the increasing complexities and demands of modern energy infrastructures. This includes collecting data for actionable insights to enable more proactive management of the grid, thereby improving operational efficiency.

3 A customer-centric and modernized electricity grid must be deliberately incentivized:

As the electricity system becomes increasingly decentralized, industrial actors (among other stakeholders) will require a system that treats them as participants in the electricity system—not simply recipients of energy services. This shift will require deliberate and clear incentives and structures to ensure overall system reliability while keeping costs to consumers in check. The forthcoming integrated long-term energy strategy must:

- 1. Evaluate the current mandates of system actors to enable new tools and technology options**, including the Ontario Energy Board, IESO, Ministry for Energy and Electrification, and local distribution companies to ensure a collaborative and coordinated governance framework that can manage the cost effective deployment of resources and modernization of the grid. This will clarify responsibilities regarding the deployment and management of distributed energy resources and the facilitation of regional planning.
- 2. Support the deployment of new energy technologies through the valuation of diverse energy services.** Services such as reliability and storage will become increasingly important as our electricity system evolves. It will be essential to ensure that these energy services are properly incentivized, valued, and have appropriate regulatory frameworks to support the scaling of these resources.

4

Transparency and predictability should be prioritized in structural reforms

In order for the electricity system in Ontario to modernize and expand as efficiently and cost-effectively as possible, greater transparency and predictability need to be prioritized in all aspects of the buildout of new resources. Industry needs more certainty in order to plan for long-term investments, including anticipated, system-wide electricity demands, the availability of energy resources, and long-term procurement planning for different resources.

1. **Build transparency into every area of energy planning, procurement, and system management**, including modeling assumptions. Provide industry and relevant stakeholder early insight into planned procurements.
2. **Create a predictable framework for siting new electricity resources** that recognizes the locational value of electricity production, ensuring generation can be built close to major power users. This process should be linked into the forums for information exchange and early engagement with Indigenous rights holders and local communities.
3. **Facilitate the creation of new forums, or utilize existing ones** such as the Regional Energy and Resource Tables or Ontario Ministry of Economic Development, Job Creation and Trade, to bring together key stakeholders to align electricity systems planning and economic strategy. This must include industry, government, and system stakeholders such as the IESO, OEB, and relevant LDCs.

5

De-risking projects has intrinsic value

Strong, meaningful relationships with local communities and energy users based on trust and reciprocity are a good foundation for investment. Undertaking this work will ultimately de-risk projects and reduce costs in the long-term. It is therefore critical that we:

1. **Undertake pro-active regional assessments and pre-approvals for sites** in strategically important regions of the province—an approach that has proved successful in comparative jurisdictions.
2. **Prioritize anticipatory community engagement** in order to increase buy-in, communication, and transparency, which will increase speed and certainty.
3. **Ensure predictability and efficiency of timelines for consultation and permitting** to provide additional clarity to businesses looking to make investment decisions.

6

Trust, respect and reciprocity with Indigenous must be centred

This must be the backbone of any approach to working with Indigenous peoples, and taking this approach will improve outcomes for all parties. The electrification of the Ontario economy must be based on a commitment to reconciliation and pursuing true partnerships that ensure Indigenous peoples are able to own, partner on, and benefit from projects. In order to achieve this, Ontario must:

1. **Promote early engagement of Indigenous rights holders** to build relationships and trust before any formal project, proposal, or consultation.
2. **Ensure both industry and government understand their role in working with Indigenous peoples** in their procurement processes and consider the value of Indigenous-owned and Indigenous-led projects.
3. **Facilitate economic partnerships** through loan guarantees, bidding practices, etc., to help ensure equitable outcomes across all energy projects including generation, storage, and transmission.



Conclusion

As Ontario stands at the threshold of a transformative era in energy, the insights and consensus drawn from this industry dialogue and extensive stakeholder engagements underscore the critical need for proactive and strategic energy planning and buildout.

The principles raised by industry offer guidance for an electricity system that not only meets current demands, but also anticipates future needs. Ontario needs a system that provides reliable, affordable, predictable, and clean electricity.

A commitment to building a clean, efficient, and equitable energy system is imperative for securing Ontario's economic resilience and sustainability. The challenges and opportunities outlined in this report will require continuous collaboration and commitment from all stakeholders. By embracing these principles and pushing for strategic implementations, Ontario can ensure that its energy system remains a cornerstone of industrial growth and long-term prosperity.

Endnotes

1. <https://www.ieso.ca/Power-Data/Supply-Overview/Transmission-Connected-Generation>
2. <https://www.ontario.ca/page/electrification-and-energy-transition-panel>
3. <https://www.ontario.ca/page/powering-ontarios-growth>
4. <https://news.ontario.ca/en/release/1002324/ontario-launches-clean-home-heating-initiative>
5. <https://news.ontario.ca/en/release/1004567/ontario-completes-largest-battery-storage-procurement-in-canada-to-meet-growing-electricity-demand>
6. <https://ieso.ca/Sector-Participants/IESO-News/2024/02/Connection-Approach-for-Ontarios-First-Small-Modular-Nuclear-Reactors>
7. https://read.oecd-ilibrary.org/energy/the-nea-small-modular-reactor-dashboard_e586e483-en
8. <https://www.brucepower.com/future-of-the-bruce-site/>
9. <https://www.ieso.ca/en/Learn/The-Evolving-Grid/Pathways-to-Decarbonization>
10. <https://www.ontario.ca/document/ontarios-clean-energy-opportunity-report-electrification-and-energy-transition-panel>
11. <https://climateinstitute.ca/wp-content/uploads/2022/05/Electric-Federalism-May-4-2022.pdf>



This project is made possible with the support of the Toronto Atmospheric Fund.



Clean Energy Canada
Morris J. Wosk Centre for Dialogue
Simon Fraser University | Harbour Centre
3311-515 West Hastings Street
Vancouver, B.C., V6B 5K3

