

Enabling Canada's Future Electricity System

Pan-Canadian Summary of Fall 2023 - Winter 2024 Provincial Engagement Tables

About Electrifying Canada

Electrifying Canada is a multi-year initiative of the Transition Accelerator, a non-profit corporation and registered charity. Our mission is to accelerate Canada's transition to a future energy system where net-zero electricity meets a much higher percentage of Canada's total energy needs in 2050 than it does today. We pursue our mission through:

- **Sustained Collaboration.** Coordinating, convening, and facilitating pan-Canadian and regional dialogues over a multi-year initiative among a diverse group of power producers, regulators, system operators, industry, organized labour, Indigenous organizations, financial institutions, and civil society to share knowledge and perspectives on challenges and solutions.
- **Analysis & Insights.** Producing qualitative and quantitative analysis to advance net-zero electricity system pathways to meet the needs of end-use electrification.
- Policy Engagement. Developing policy frameworks informed by stakeholder input and research and
 analysis and sharing them with key policy and decisionmakers to provide them with potential
 solutions that can be considered to address key barriers to accelerated electrification and the
 buildout of the net-zero electricity system.

About The Transition Accelerator

The Transition Accelerator exists to support Canada's transition to a net-zero future while solving societal challenges. The Transition Accelerator works with innovative groups to create visions of what a socially and economically desirable net zero future will look like and build out transition pathways that will enable Canada to get there. The Accelerator's role is that of an enabler, facilitator, and force multiplier that forms coalitions to take steps down these pathways and get change moving on the ground.

Contents

| About Electrifying Canada | 2 |
|---|----|
| About The Transition Accelerator | |
| Introduction | |
| Priority Barriers and Solutions | |
| Priority Barrier # 1: Getting Things Done | 5 |
| Priority Barrier # 2: Costs and Affordability | 7 |
| Priority Barrier # 3: Net-Zero Policy Direction | 9 |
| Priority Barrier # 4: Indigenous Rightsholders | 10 |
| Other Barriers Identified at a Regional Level | 12 |
| Appendix | 15 |
| About Electrifying Canada's Engagement Tables | 15 |
| Recent Actions to Support the Future Electricity System | 16 |
| Identifying Priority Barriers | 16 |
| Defining the Highest Priority Barriers | 17 |

Introduction

The Transition Accelerator's **Electrifying Canada** initiative brought together more than 120 diverse interested parties at eight regional sessions held across Canada in the fall and winter of 2023/24 for Chatham House Rule discussions on **Enabling Canada's Future Electricity System**.

The objectives of these sessions were threefold:

- 1. Identify and articulate priority barriers that must be addressed to enable a transition to an affordable, reliable, and significantly expanded net-zero electricity grid within the jurisdiction.
- 2. Recognize and assess the progress that has been made where actions have been initiated to address these barriers.
- 3. Identify where work on solutions has not yet begun or no progress has been made with respect to these barriers.

To guide these discussions, participants were initially presented with a preliminary list of high-level barriers, derived from earlier engagement sessions. Their task was to refine this list and clarify each barrier's definition to reflect local contexts. Following this, participants evaluated these barriers using specific criteria to prioritize them and then engaged in identifying and debating potential solutions.

This report synthesizes the outcomes of these sessions, underscoring both shared themes and notable regional variances. For more information on the session formats and detailed discussions, refer to the appendix.

Priority Barriers and Solutions

It is a characteristic of Canada that every provincial electricity system is different and faces unique opportunities and challenges as we proceed to transform these systems. Indeed, despite being defined at a high-level, no single barrier was identified in the top three priority barriers in all eight sessions. There were, however, four barriers that were identified as a top three priority barrier in at least half of the sessions. Accordingly, these four barriers seem to have the most resonance from a pan-Canadian perspective and are presented below.

For each barrier, the following information is presented:

- First, a definition of the barrier is provided. Each definition represents an amalgam of the final
 definitions discussed in each of the sessions in order to capture refinements made in different
 sessions that reflect local circumstances. The sessions that identified the barrier as a top three
 priority barrier have also been identified.
- Second, a comprehensive list of the potential solutions brought forward by participants in the
 sessions to address the barrier is provided. While each of these potential solutions was brought
 forward by at least one individual participant and do not reflect a group perspective, they all were
 the focus of group discussion and deemed worthy of further consideration.
- Third, with the recent publication of the <u>Canada Electricity Advisory Council's (CEAC) Interim Report</u>, it has become clear that many of these barriers, and the discussion around them in the sessions, have also been a focus for the CEAC. As a result, we concluded there would be value in highlighting some of the similarities and differences between the outcomes of our sessions and the CEAC Interim Report and have done so throughout this summary report.

Priority Barrier # 1: Getting Things Done

The pace required for decisions, investment and deployment of the projects needed for the transition is unprecedented. Challenges getting this infrastructure built (e.g., labour and skills shortages, supply chain disruptions, lengthy regulatory approval processes, access to capital, NIMBYism) threaten to increase costs and inhibit proactive and timely investments in electrification and the electricity system.

Identified in: BC, MB, NB, NS, ON, SK, QC

In the seven regional engagement sessions that prioritized this barrier, individual participants brought forward several solutions to address it in the discussion. These are presented below:

Regulatory Approval Processes

- Mandate Reform for Net-Zero: Reforming regulator mandates to require a focus on net-zero and climate change and providing increased discretion to empower utilities to take on more risk (while ensuring high-risk investments remain entrusted with independent power producers).
- **Enhanced Regulatory Capacity**: Increasing resourcing for, and the capacity of, regulatory bodies to enable them to assess a rapidly growing number of projects.
- **Harmonized Approval Processes**: Harmonizing federal, provincial, and municipal regulatory approval processes through increased collaboration and partnership.

Power Procurement Processes

- Inclusive System Planning: Ensuring system planning processes that produce power procurement plans actively consider and involve a more comprehensive stakeholder landscape including skilled labour needs and engage and involve Indigenous rightsholders, key stakeholders, and all elements of the supply chain.
- Flexible Procurement Design: Designing power procurement plans to allow for increased flexibility
 and responsiveness in the face of changing circumstances like supply chain challenges (e.g.,
 procurement processes should identify additional projects beyond those contracted that could
 potentially be pursued in the event of challenges with contracted projects or an unexpected need
 for additional capacity)
- Consistent Project Deployment: Implementing power procurement plans to ensure that projects are deployed in an orderly and consistent manner that optimize the use of skilled labour and avoid boom/bust cycles that make worker retention more difficult.

Supply Chain

Transparency in Equipment Availability: Identifying and providing transparency on potential
challenges with equipment availability as this information would be beneficial in both ensuring power
procurement processes are designed to succeed and increasing the likelihood that projects that bid
into such processes will be deployed on time and on budget.

- Strategic Vendor Relationships: Developing closer relationships with strategic vendors of key equipment and forming relationships (e.g., groups of utilities banding together) to enhance purchasing power.
- **Domestic Manufacturing Support**: Taking action to facilitate and encourage increased domestic manufacturing of key components.

Labour Force Challenges

(a) Policy and Market Forecasting

- Policy Clarity for Labour Market: Providing enhanced clarity on future policy direction to increase certainty and confidence around future labour market needs.
- Quantifying Workforce Needs: Developing a clear and credible quantification of future workforce needs to serve as the foundation for a stronger narrative on emerging employment opportunities in the sector that demonstrates how such opportunities represent a viable career path.

(b) Training and Education Enhancement

- Employer-Union Collaboration: Increasing collaboration between employers and unions on workforce development.
- Defined Training Pathways: Increasing support for development of clearly defined training pathways that enable access to such opportunities (e.g., micro credentialing for work in renewables) and making them more accessible.
- Education System Awareness: Growing awareness of opportunities and training pathways throughout the education system – particularly targeting middle school and high school students.
- Apprenticeship Program Growth: Strengthening and growing apprenticeship programs in trades as companies have much higher retention rates of employees who participated in apprenticeship programs.

(c) Workforce Diversity and Mobility

- Diversity in Trades: Enhancing efforts to bring Indigenous people and women into trades and supporting those efforts through action to address sexual harassment and racial discrimination in the workplace.
- Interprovincial Mobility: Taking steps to enable greater interprovincial labour mobility.
- o **Immigration Process Reform**: Reforming immigration processes to recognize relevant foreign credentials and secure more skilled labour from outside Canada.

Priority Barrier #1: Canada Electricity Advisory Council Connection

This barrier is broadly defined and includes many elements. Regulatory approval processes are a focus of CEAC Working Group 2 and CEAC Working Group 5, and the outcomes of these regional engagement sessions are well reflected in the CEAC Interim Report. CEAC Working Group 1 has acknowledged the importance of net-zero energy roadmaps and is working to define their scope and key features. Participants in the regional engagement sessions indicated that one critical element of such a roadmap is the scheduling and design of power procurement processes and they have provided some valuable insights in this area for consideration by the CEAC as it undertakes this work.

While skilled labour and supply chain challenges were a major focus of discussion in the regional engagement sessions, this issue is not within the mandate of the CEAC – though the CEAC did acknowledge its importance and made an interim recommendation to the federal government to act immediately to create a dedicated initiative focused on addressing electricity sector labour and supply chain challenges. Given the significant amount of time spent on these issues in the regional engagement sessions, it is likely that participants would be strongly supportive of such an initiative.

Priority Barrier # 2: Costs and Affordability

The real and perceived costs and allocation of costs associated with the transition and their subsequent impact on electricity rates, affordability for consumers and perceptions of fairness, threatens social acceptance for net-zero and the clear policy direction and investments required for success.

Identified in: NB, NL, NS, ON, SK

In the five regional engagement sessions that prioritized this barrier, discussions centered on both the actual and perceived costs of the transition. All sessions acknowledged that there were real costs associated with this transition and emphasized the need to carefully consider cost allocation and minimizing impacts on society's most vulnerable. Additionally, there was significant dialogue on clarifying "perceived" costs and enhancing public awareness of the transition's potential savings. Individual participants brought forward several solutions to address each of these issues in the discussion. These are presented below:

Real Costs of the Transition

(a) Cost Redistribution Strategies

- Shifting Costs to Taxpayers: Transferring an increasing portion of the costs of transitioning the electricity sector from ratepayers to taxpayers given the societal benefits associated with such action.
- Government Support for Investments: Increasing government support to reduce the upfront costs and payback periods of investments that support the energy transition given the

fact that high up-front costs are clearly a significant barrier even when there are longer-term savings.

(b) Efficiency and Competition Enhancement

- Promoting Competition in Generation: Enabling increased competition in the provision of electricity generation.
- Maximizing Renewable Energy: Deploying maximum amounts of low-cost renewable energy generation while ensuring system reliability.
- Utilizing Distributed Resources: Increasing utilization of distributed energy resources and demand side measures.
- Inter-Provincial Collaboration: Pursuing increased inter-provincial collaboration and planning to enable the identification and pursuit of opportunities for increased operating efficiency and inter-provincial electricity trade that could lower the overall costs of the electricity system.

(c) Regulatory and Programmatic Reforms

- Coordinated Program Delivery: Pursuing more effective coordination between federal and provincial governments on the delivery of programs (e.g., energy efficiency) to interested parties to reduce confusion, improve efficiency and effectiveness, and build confidence and trust among those parties.
- Flexible Regulatory Mandates: Reforming regulator mandates to allow them to provide more flexibility to encourage and enable increased investment in innovation and pilot projects, support more investments that represent calculated risks, and attach more importance to environmental considerations.
- Support for Low-Income Households: Taking action to mitigate the impact of the transition
 on low-income households and adapting regulator mandates to provide greater flexibility to
 adjust rate structures to support low-income Canadians is extremely important given
 concerns related to energy poverty. (e.g., means-tested electricity rates that lower fixed
 charges for low-income households)
- Just Transition for Communities: Ensuring a just transition for communities requires the
 engagement of all interested parties to work together to create new economic opportunities
 for those communities. The creation of such opportunities will require increased financial
 support and an economic development focus.

Perceived Costs of the Transition

(a) Public Awareness and Transparency

- Informing Public and Stakeholders: Ensuring that the public and interested parties are well
 informed about the importance of the transition and the need for rapid implementation.
 Transparency is essential.
- Affordability Framing: Framing discussions around affordability to ensure that such discussion considers both: (a) the costs and benefits of action as well as the societal costs of inaction (including adaptation costs), and (b) total energy costs and not just electricity costs.

(b) Communication and Engagement Strategies

Alternative Dissemination Strategies: Exploring alternative information dissemination strategies that encourage active participation and focus on reaching a wider audience – particularly youth and underrepresented communities.

- Relatable Success Stories: Developing and delivering simple and clear messages that
 provide personal and relatable information on success stories (e.g., communications
 highlighting the difference in operating costs between an electric vehicle and a vehicle with
 an internal combustion engine).
- Fact-Based Public Campaigns: Designing and implementing a fact-based marketing and public relations campaign that utilizes a broad range of trusted spokespersons from interested parties (e.g., governments, utilities, environmental groups, labour) to deliver a set of common and consistent messages about the transition.

Priority Barrier #2: Canada Electricity Advisory Council Connection

The issues that make up this barrier are being addressed in CEAC Working Group 3. Significant work is underway to identify potential actions that would reduce the real costs of the transition and their impact on low-income Canadians. The discussions in the regional engagement sessions have identified several options that could be considered by the CEAC in this regard.

While the CEAC has also acknowledged the potential benefits and savings associated with the transition, the Interim Report does not highlight the apparent disconnect between the perceived costs of the transition and these benefits and savings. Participants in the regional engagement sessions would likely be very supportive of the CEAC examining potential actions that could change perceptions of costs so that they better reflect the full range of costs and benefits associated with the transition. Several such actions were suggested by session participants.

Priority Barrier # 3: Net-Zero Policy Direction

Inconsistent and unclear policies, along with misaligned regulations impede proactive and timely investments in electrification and our electricity systems.

Identified in: BC, MB, ON, SK

In the four regional engagement sessions that prioritized this barrier, the barrier was seen as foundational in the sense that addressing it would make it easier to address many of the other key barriers to the transition by providing clarity and direction for decision making. Individual participants brought forward several solutions to address these issues in their discussions. These are presented below:

(a) Policy Alignment, Clarity, and Engagement

- Unified Policy Framework: Increasing clarity and alignment around policy targets and objectives both within and among federal, provincial, and municipal governments. This requires increased communication, co-ordination, and collaboration.
- Electricity and Gas Grid Role Clarity: Providing increased clarity on the future role and relationship of the electricity and natural gas grids in the transition to a net-zero economy.
- o **Inclusive Policy Development**: Engaging interested parties in the process of establishing policy targets and objectives to build a broader base of public support for action.

(b) Regulatory Direction and Flexibility

- Mandate Integration: Incorporating policy objectives directly into the mandates of relevant organizations (e.g., utilities, system operators, regulators) where there is a lack of clarity and alignment around such objectives. Increased communication around such objectives between governments and such organizations would also be beneficial.
- Mandate Reform: Reforming the mandates of utility regulators to enable more flexibility and innovation given the likely need for both electric and natural gas utilities to develop new business models and the desire of potential new energy providers (e.g., Indigenous communities) to enter the marketplace.

Priority Barrier #3: Canada Electricity Advisory Council Connection

This barrier is the focus of CEAC Working Groups 1 and 5. Many of the proposed solutions in the regional engagement sessions are reflected in the CEAC's Interim Report. While the CEAC report is focused primarily on the role of the federal government in facilitating the transition, participants in the regional engagement sessions consistently spoke to the need to have increased communication, coordination, collaboration, and alignment around policy targets and objectives both within and among federal, provincial, and municipal governments.

Priority Barrier # 4: Indigenous Rightsholders

The challenges to building effective relationships with Indigenous rightsholders and other communities (e.g., poor proponent engagement processes that are not respectful, limits on the human and fiscal capacity of rightsholders, nations, and communities to engage, the time required to meaningfully consider economic, social and environmental impacts) as well as the need to address historical / ongoing harms to Indigenous rightsholders threatens legal/regulatory approval and social acceptance for the timely deployment of new infrastructure.

Identified in: BC, MB, NL, NS

While framed in the form of a "barrier" to conform to the sessions' discussion framework, participants in almost every session also stressed that **Indigenous partnerships and leadership are significant opportunities and are key to the success of net zero projects**. In other words, participants frequently emphasized that Indigenous nations are not barriers to the net-zero transition – but are key components of success where we must focus on addressing barriers that can inhibit their partnership and leadership.

In the four regional engagement sessions that prioritized this barrier (although it generated in-depth discussion in most sessions), participants focused on both the process of building effective relationships

with Indigenous rightsholders, nations, and other communities and the mechanisms through which Indigenous rightsholders and other communities could receive benefits from the transition.

While some sessions did not identify this barrier as a top three barrier because they felt that some important progress had been made on this issue, **all sessions made it clear that much work remains to be done** – particularly because the transition requires us to dramatically accelerate the deployment of new projects and we are therefore likely to see new project developers with limited experience working with Indigenous and other communities pursuing these opportunities. Individual participants brought forward several solutions to address each of these issues in the discussion. These are presented below:

Building Effective Relationships with Indigenous Rightsholders, Nations, and Other Communities

Historical Context and Community Dynamics

- Addressing Historical Issues: Acknowledging and resolving historical issues is critical for creating the ability to move forward with new and strengthened partnerships and relationships.
- Community Consent: Understanding that projects must be invited into communities and not imposed on them.
- Recognizing Community Uniqueness: Recognizing that every community is unique and will
 have a different perspective on the challenges and opportunities associated with proposed
 projects.

Engagement Practices and Communication

- Prioritized Two-Way Engagement: Prioritizing early, frequent, and transparent two-way engagement.
- Clear Engagement Guidelines: Developing clear guidelines for community and Indigenous engagement that are consistent with, but build upon, regulatory requirements.
- Intermediary Organization Role: Establishing and designating an independent organization to serve as an intermediary and guide for project proponents – particularly proponents that are not well acquainted with investing in the province.
- Knowledge and Capacity Building: Building knowledge and capacity within both project proponents and Indigenous and other communities to facilitate effective interaction around the process and issues.
- Effective Communication Channels: Ensuring clear points of contact and mutually understood communications channels for all interested parties related to the initiative (this may on occasion involve engagement of an intermediary organization that can provide support through education that recognizes the uniqueness of each Indigenous community and the fact that "standardized" approaches are inappropriate).
- Effective Communication Mediums: Enabling effective communications by ensuring materials are simplified and digestible summaries of complex topics that can be easily understood by the general population.

Partnership Approach

- Co-Created Partnerships: Shifting from a mindset of "Indigenous benefit agreements" to a mindset of co-created partnerships that include Indigenous equity ownership and decisionmaking authority.
- Net-Zero Strategy Alignment: Ensuring that net-zero strategies and pathways are defined well enough to allow the procurement of new power (e.g., through Calls for Power) to be

scheduled in a manner that allows enough time for project developers to build the trust-based relationships that must form the foundation of any successful partnership.

Enabling Benefits for Indigenous Rightsholders and Other Communities

• Procurement and Partnership Models

- Incentivized Indigenous Ownership: Designing procurement processes to provide strong incentives / requirements for Indigenous equity ownership in projects.
- o **Highlighting Unique Partnerships**: Profiling successful partnerships, but recognizing that every Indigenous community (and, as a result, every Indigenous partnership) is unique.

Financial and Economic Support

- Accessible Low-Cost Financing: Creating initiatives to provide low-cost financing (e.g., loan guarantees) to Indigenous communities that can be efficiently accessed.
- Sustained Economic Benefits: Ensuring that the economic benefits accruing from partnerships are sustained over time (e.g., permanent jobs, new business enterprises).

Priority Barrier #4: Canada Electricity Advisory Council Connection

This barrier is a focus of CEAC Working Group 2. In its Interim Report, the CEAC recognizes the importance of building effective trust-based relationships with Indigenous Rightsholders as a foundational step to the formation of true partnerships that can deliver economic and other benefits to Indigenous communities. Most of the discussions in the regional engagement sessions focused on building trust-based relationships because it was seen as a "prerequisite" to delivering meaningful and sustainable benefits to communities and a broad range of potential solutions were outlined that the CEAC may wish to consider in its work.

Other Barriers Identified at a Regional Level

Two of the eight regional engagement sessions identified a barrier as a top three priority barrier although no other sessions did so. Those barriers are presented below.

The insufficient role played by demand management and energy efficiency strategies increases the cost and complexity of upgrading infrastructure.

Identified in: QC

While this issue was not identified as a top three priority barrier in other sessions, the need to increase reliance on demand management and energy efficiency strategies was an important element of the discussion in many of the sessions listed above that prioritized issues around cost and affordability. In Quebec, however, this potential set of solutions to affordability concerns was considered important enough to stand alone. In the session, individual participants brought forward several solutions to address this issue. These are presented below:

- Increasing consideration of energy efficiency, demand side management, and smart grid technologies in utility planning to maximize the system benefits of greater reliance on demand side solutions.
- Implementing a strong regulatory foundation of energy efficiency standards and strengthened energy efficiency programming.
- Reforming regulator mandates to enable consumer rate structures and investment cost recovery
 provisions that provide incentives to innovate and prioritize energy efficiency and demand side
 management.
- Supporting initiatives to incent the capture and utilization of waste heat in the industrial sector.

Canada Electricity Advisory Council Connection

CEAC Working Group 3 has acknowledged the potential role of demand management and energy efficiency in addressing affordability concerns and CEAC Working Group 5 is focused on addressing some of the barriers that stand in the way of increased deployment of these innovative technologies. This regional engagement session made it clear that addressing these barriers will require a comprehensive (i.e., planning, regulatory, and fiscal) set of measures to ensure success.

The demographics of the province, their expectations, and their distribution (i.e., low density) present challenges for building and maintaining the electric system.

Identified in: NL

While this issue was not identified as a top three priority in other sessions, many sessions noted the increased costs associated with deploying electricity generation, transmission, and other infrastructure in rural areas with low population densities when discussing the challenges of getting things built. In Newfoundland and Labrador, participants noted that it was necessary to explore potential synergies with solutions for the delivery of other essential services like education, childcare and health care with a view to managing costs.

Canada Electricity Advisory Council Connection

Virtually all of the barriers identified as top three priorities in more than one regional engagement session are being examined, in whole or in part, by various working groups of the CEAC. This high degree of overlap lends credence to the fact that these are indeed the critical barriers to be addressed in the pursuit of a decarbonized and expanded Canadian electricity system. It is hoped that the proposed solutions brought forward at these regional engagement sessions will help inform the CEAC's work as it develops its recommendations.

There is, however, one key focus of the CEAC that was not identified as a top three priority barrier by any of the regional engagement sessions. That is the subject of CEAC Working Group 4 – Regional Cooperation. While barriers to inter-regional planning, coordination and trade were discussed in virtually all regional engagement sessions, those sessions concluded that, while important, other barriers represented a more pressing priority. Nonetheless, it was acknowledged that the removal of barriers to regional cooperation could play an important role in reducing the cost of the transition and participants would likely be pleased to see the CEAC active in this area.

Appendix

About Electrifying Canada's Engagement Tables

The Transition Accelerator's **Electrifying Canada** initiative brought together more than 120 diverse interested parties at eight regional sessions held across Canada for Chatham House Rule discussions on **Enabling Canada's Future Electricity System**. These sessions were held between October 30, 2023, and January 16, 2024, in British Columbia, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, and Newfoundland and Labrador. Interested parties from Prince Edward Island participated in the New Brunswick session. While there are plans to hold a similar session in Alberta, a decision was taken to delay the session to avoid competing with, and to consider the outcomes from, consultation processes on related themes led by the Alberta Electricity System Operator and the Alberta Energy Regulator.

- 1. British Columbia (Vancouver)
- 2. Saskatchewan (Regina)
- 3. Manitoba (Winnipeg)
- 4. Ontario (Toronto)
- 5. Quebec (Montréal)
- 6. New Brunswick & PEI (Fredericton)
- 7. Nova Scotia (Halifax)
- 8. Newfoundland and Labrador (St. John's)



Each of the regional sessions had between 10 and 22 participants. A broad range of organizations were represented in the discussions, including academics, crown utilities (provincial and municipal), electricity system operators, energy industry associations, energy policy consultants, energy regulators, financial institutions, independent power producers, indigenous organizations, industrial energy consumers, labour unions, non-government organizations, provincial governments, and research institutes.

The sessions had three objectives:

- 1. Identify and articulate priority barriers that must be addressed to enable a transition to an affordable, reliable, and significantly expanded net-zero electricity grid within the jurisdiction.
- 2. Recognize and assess the progress that has been made where actions have been initiated to address these barriers.
- 3. Identify where work on solutions has not yet begun or no progress has been made with respect to these barriers.

The discussion also provided an opportunity to pressure test a new tool being developed by the Transition Accelerator called the Real-World Overlay Framework (RWOF). This tool is designed to: (a) identify and prioritize barriers to action, (b) identify and prioritize solutions to address barriers, (c) identify the key interested parties required to implement such solutions, and (d) monitor and track progress on solutions

implementation. It is meant to aid in creating the focus and alignment necessary among interested parties to develop actionable roadmaps and advance solutions.

Recent Actions to Support the Future Electricity System

In each session, participants were asked to identify key actions that had been taken over the preceding year to support a transition to an affordable, reliable, and significantly expanded net-zero electricity grid within their jurisdiction. While all sessions acknowledged that much work remains to be done to prepare for this transition, participants in all sessions were able to identify several actions taken in the preceding year that demonstrated meaningful progress and represented significant steps forward in pursuit of this objective.

The actions brought forward in the sessions fall into two broad groups: (a) actions to decarbonize and expand electricity supply, and (b) actions to electrify energy end uses. Each of the actions listed below was identified by multiple participants within a jurisdiction in more than one jurisdiction.

Recent Actions to Decarbonize and Expand Electricity Supply:

- The publication of roadmaps / strategic plans by governments / crown utilities to support the transition to a decarbonized and expanded electricity grid. (BC, NB, NS, ON, QC)
- New commitments to clean electricity supply procurement processes. (BC, NB, NS, ON, SK)
- New support mechanisms to enable Indigenous participation / equity ownership in new clean electricity projects. (BC, ON)
- Development of new policy frameworks to facilitate deployment of new technologies like hydrogen and SMRs. (NL, ON, SK)
- New initiatives to increase interconnections with neighbouring jurisdictions. (NS, SK)
- Federal financial support through investment tax credits. (ON, QC)

Recent Actions to Electrify Energy End Uses:

- Initiatives to encourage electric vehicle purchases and the building of charging infrastructure and supply chains. (BC, MB, NL, QC)
- Incentives to support the installation of heat pumps. (NL, NS)
- Reforms to reflect climate change considerations in building codes. (BC, QC)

It was clear that participants in jurisdictions where roadmaps and strategic plans have been produced by governments and/or crown utilities to support the transition to a decarbonized and expanded electricity grid saw such action as the most important step taken to enable that transition. In general, participants in these jurisdictions felt that more progress had been made than participants in those jurisdictions where roadmaps and strategic plans had not yet been developed.

Identifying Priority Barriers

While the discussions referenced above make it clear that several recent actions have started the process of transitioning to an affordable, reliable, and significantly expanded net-zero electricity grid in jurisdictions across Canada, all sessions acknowledged that many significant and important barriers need to be addressed to enable the future electricity system.

To initiate a discussion on such barriers, participants in each session were presented with a draft list of five high-level barriers (the content of the list varied somewhat from jurisdiction to jurisdiction) and were asked to do three things:

- refine and enhance the definition of each of the barriers to reflect their jurisdictional context,
- identify any additional barriers that they believed were more important than some of the barriers on the initial list and should be considered a top priority instead, and
- assess the final list of barriers against several criteria to help inform discussions about their relative priority.

The fact that only five barriers were presented should not imply that there are only five significant and important barriers to be addressed in enabling the future electricity system. Instead, participants were asked to focus on only five priority barriers to facilitate deeper and more detailed discussions on those barriers and potential solutions.

Defining the Highest Priority Barriers

Across the eight regional sessions, there were minimal examples of participants removing one of the five proposed priority high-level barriers and replacing it with another one. That said, every one of the regional sessions proposed amendments and/or wording changes to some of the five proposed priority high-level barriers to ensure that they adequately reflected the local context. As a result, while there is a lot of similarity in the themes covered by the final proposed high-priority barriers across all sessions, the detailed wording of each barrier often varied from jurisdiction to jurisdiction to reflect local circumstances.

Once the definition of the five proposed high-priority barriers in each session had been finalized, participants were asked to rank the five barriers across four metrics: (a) the **significance** of the barrier to the achievement of an affordable, reliable, and expanded net-zero grid, (b) the **urgency** of acting now to remove the barrier, (c) the **difficulty** of removing the barrier, and (d) the level of **progress** achieved to date in addressing the barrier. All four metrics listed above can inform discussions about the relative priority of different barriers and will be components of the Transition Accelerator's Real-World Overlay Framework.

After this exercise was completed, it was clear that participants in each session had identified 2-3 of the 5 barriers as being a higher priority than the others. The discussion then focused on potential solutions to address the barriers. Most of this discussion was focused on the 2-3 barriers that had been identified as the highest priority.



This document was prepared by <u>The Transition Accelerator</u> on behalf of <u>Electrifying Canada</u>. The content in this document reflects the authors' interpretation of the discussions held at each engagement table. The content does not necessarily reflect the views of the Transition Accelerator. Furthermore, it does not reflect all views expressed in the engagement table sessions, but rather those views that were consistently identified by a majority of, or a significant number of, participants in all sessions or most sessions. Views expressed at sessions that did not garner significant support among participants in those sessions are not reflected here. Finally, the opinions, conclusions, and recommendations expressed in this document do not necessarily reflect the views or positions of all Electrifying Canada partners.