

Electricity Canada's Response to Powering Canada Strong: A National Strategy for an Electrified Canadian Economy

Making Canada an energy superpower

Electricity Canada appreciates the opportunity to provide comment on *Powering Canada Strong: A National Strategy for an Electrified Canadian Economy*. **Electricity Canada strongly supports the objectives of the National Electricity Strategy which seeks to ensure Canada can build new infrastructure to double our electricity supply and accelerate electrification across the economy.**

To make Canada an energy superpower, Canada must translate *ambition* into *execution*. Growing and modernizing Canada's electricity system is a nation-building endeavour. The task ahead is to build big again, decisively and ambitiously, while providing the affordable, reliable and clean electricity that is at the heart of Canada's energy future.

To grow and modernize our electricity system there must be an aggressive build-out of power infrastructure over the next 25 years. Addressing these needs will require new generation capacity across all technologies, expanded transmission networks to connect communities, and significant modernization of distribution systems. Simultaneously, aging infrastructure must be replaced and the grid hardened against extreme weather events, wildfires, cyberattacks, and other risks. Electricity companies will need to compete globally for a limited supply of materials and equipment, creating opportunities for domestic manufacturers but adding complexity, time and costs to projects. The sector will need to train, hire and retain up to 130,000 skilled workers for in-demand jobs across the country. This will be an immense challenge.

With Canadians already concerned about their electricity bills, which are expected to rise faster than inflation over the near-term, Canadians cannot afford to finance the build-out through their bills alone. Electricity Canada's members are united in recognizing that achieving federal priorities, including attracting investment to Canada, building defense infrastructure, providing reliable and affordable



energy to remote communities, supporting electrification, and enabling new housing development, will require significant and sustained investment in electricity infrastructure.

Electricity companies across the country are already making those investments and will need to continue doing so. Under current frameworks, the cost of building will fall on ratepayers. We call on the Government of Canada to provide support as we build infrastructure that serves national goals. Especially given a substantial portion of this investment is required to meet federal policy objectives.

Canada's electricity sector stands ready to partner with the Government of Canada to deliver the infrastructure necessary to power economic growth, strengthen energy security, support national priorities, and improve Canadians' quality of life. A successful National Electricity Strategy must be accompanied by a long-term commitment to shared investment, regulatory certainty, and collaboration across governments, utilities, Indigenous communities, and industry. With the right policies and supports in place, Canada can build the electricity system that serves as the foundation of a more competitive, resilient, and prosperous future.

Building the electricity system

“Access to abundant, affordable, and reliable electricity is – more than ever – fundamental to competitiveness, energy security, and economic sovereignty... It also drives critical progress towards climate goals.”

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Building a bigger, better-connected, modern electricity system will require a coordinated, national approach that recognizes the central role of provinces and territories for delivering electricity to Canadians. The federal government can play a key role in supporting affordability for customers, facilitating enhanced inter-regional planning, and addressing bottlenecks and capacity challenges under federal jurisdiction.

Areas for Action: *In the near-term, optimizing federal-provincial-territorial support to double electricity infrastructure to realize the full potential of Canada's electricity system.*

To build an electricity system capable of meeting projected demand through 2050, the federal government will need to work closely with provinces and territories to accelerate the pace of



infrastructure development. While electricity planning and regulation have traditionally been provincial responsibilities, meeting the scale of investment and infrastructure development needed in the coming decades will require a coordinated national approach. This means stronger regional coordination, streamlined federal regulatory and permitting processes, and access to financing that supports large-scale generation and transmission investments. It will also require recognizing the critical role of distribution systems, the "last mile" of the grid, which serves as the foundation of Canada's economic productivity by enabling homes, businesses, and industries to connect to the broader electricity system.

***Areas for Action:** To support longer-term transformation of the energy system, advance technologies and efficiency improvements that lower the emissions impact of natural gas.*

Canada's diverse mix of generation technologies enables one of the most reliable, affordable and low-emission electricity systems in the world. It is a national competitive advantage and the foundation of our path to being an energy superpower. Resource availability and costs have driven the development of this technology mix, including available hydro resources and early investments in nuclear technology.

This is also true for natural gas, which plays an important role in ensuring the reliability and affordability of the electricity system in many jurisdictions. It provides flexible capacity that responds quickly to system needs, supports demand increases, and balances variable resources. It has facilitated the retirement of coal generation, helping to dramatically reduce overall system emissions.

Electricity Canada supports the deployment of technologies and operational efficiencies that reduce its emissions footprint as part of a pragmatic and affordable energy transition, which includes improvements in plant efficiency, enhanced system operations, carbon capture and storage (CCS) technologies where economically and technically feasible, as well as greater integration with non-emitting electricity resources. This approach can help reduce emissions while maintaining the reliability and affordability Canadians depend on.

Electricity Canada recognizes that CCS technologies may provide an important pathway to reducing emissions from natural gas generation where they are technically and economically feasible. Given Canada's diverse regional circumstances, CCS deployment opportunities will vary across jurisdictions.



Where viable, CCS could help maintain reliable and flexible generation resources while lowering emissions, contributing to a pragmatic transition that balances environmental objectives with reliability and affordability considerations.

Ontario provides a practical example of how flexible natural gas generation can work alongside clean energy technologies. The province is investing heavily in battery energy storage, nuclear refurbishment, new nuclear generation, and other non-emitting resources while maintaining efficient natural gas facilities to support reliability during the transition. Ontario's electricity planning recognizes that battery storage can help manage short-duration fluctuations and integrate more renewable generation, while natural gas continues to provide flexibility, ramping capability, and reliability services during periods of peak demand and prolonged system stress. Together, these technologies can help reduce overall emissions while maintaining a reliable and affordable electricity system.

Recommendation: Recognize natural gas as an important energy source for ensuring the reliability of Canada's electricity system while seeking opportunities for it to work alongside clean energy technologies.

Financing the build

"Estimates indicate that emerging electricity demand will require at least a doubling – if not more - of electricity system infrastructure between now and 2050. This expansion and modernization of Canada's electricity systems is forecast to cost over \$1 trillion from now to 2050."

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Areas for Action: Supporting generational investments in electricity infrastructure by developing long-term, sustainable financing mechanisms that can help to protect ratepayers while considering the interests of federal government, provinces and territories, system operators, and utilities.



Clean Economy Investment Tax Credits

As Canada builds a cleaner and more resilient energy future, the Clean Economy Investment Tax Credits (ITCs) play a vital role in supporting nation-building projects across the country. These are essential tools for strengthening regional connections, diversifying the economy, creating hundreds of thousands of good jobs, and mitigating the costs of infrastructure expansion for Canadians. ITCs will accelerate investment in the clean energy projects that will build and modernize the electricity system while supporting electrification and emissions reductions.

Canada's clean energy build-out will span decades. Its investment framework should reflect this long-term horizon. The availability of the ITCs must align with project timelines for energy generation projects, and the transmission and distribution infrastructure required to bring clean electricity to Canadians. For example, timelines for the planning, permitting and construction of large hydro, nuclear, and transmission projects typically span more than a decade, making it unlikely these types of projects will be able to claim an ITC that expires in 2035. Extending the ITCs through to the end of 2040 at a minimum will give investors, developers, regulators, and utilities the confidence and framework needed to advance clean energy projects across the country.

Moreover, expeditiously addressing some of the outstanding issues that have added significant complexity to the ITC regime is critical to ensuring the ITCs deliver on their goal of accelerating investment in clean energy projects. These issues have resulted in lower-than-desired uptake among proponents and significant delays in receiving payments for those who do use the ITCs.

Streamlining and simplifying the ITCs to reduce the administrative burden of filing and establishing rules that allow proponents to count the full value of the ITCs for their clean energy projects is critical. Specifically:

- Improving clarity for proponents by having the government issue clear guidance as soon as possible that fully articulates which components are eligible for which ITC. Electricity Canada suggests aligning equipment eligibility rules with those used for the Clean Technology ITC. The government should consider the feasibility of establishing one Schedule for all eligible property.
- Avoid adding complexity to the process of making an ITC claim by implementing a domestic content requirement. Such a requirement would introduce significant tracking and verification challenges for proponents and may be misaligned with the timelines and practicalities of



increasing domestic procurement. A domestic content requirement should be introduced only as an optional incentive.

- Allowing the market to determine labour rates. In a period of sector growth and a known limited labour supply, labour rates will increase due to market forces and align with local and regional markets. A prevailing wage requirement adds unnecessary regulatory complexity, especially the requirement to provide salary documentation for all workers, including subcontractors.

Recommendation: Extend the Clean Economy Investment Tax Credits to at least 2040 to align with major project timelines.

Recommendation: Streamline and clarify the Clean Economy Investment Tax Credits to reduce administrative burden and preserve the value of the ITCs for catalyzing investment into clean energy projects.

Excessive Interest and Financing Expenses Limitation (EIFEL)

Applying the EIFEL rules to Canadian energy and public-benefit infrastructure companies reduces their ability to invest competitively in the critical infrastructure Canadians rely on.

Regulated utilities and energy infrastructure providers operate under capital structures that are established or approved by independent regulators to minimize customer costs and ensure reliable service. These businesses are capital-intensive, rely on long-term debt financing to spread-out the cost of multi-decade infrastructure investments, and have limited ability to alter leverage or pricing without regulatory approval. Any increases in tax costs caused by denied interest deductions are ultimately borne by Canadian customers, resulting in higher consumer energy costs. Moreover, increasing the costs of capital undermines the government's objective of attracting large-scale private capital into electricity infrastructure investments, particularly from Canadian companies.

The sector requires an immediate set of necessary relief measures, including transitional measures and carve-outs for critical energy providers, including large infrastructure projects and regulated utilities.

Recommendation: Revise the EIFEL rules to remove competitiveness barriers for attracting investment into capital-intensive energy infrastructure.



Low-cost loans

Electricity Canada supports the government's efforts to provide low-cost financing through the Canada Infrastructure Bank and the Indigenous Loan Guarantee Program to bridge financing gaps and facilitate Indigenous economic participation in energy infrastructure projects. The recently announced Canada Strong Fund represents a potentially valuable new financing stream that should support the build-out of Canada's electricity system. We look forward to working with the government to optimize the Canada Strong Fund and other financing tools in support of the objectives of doubling Canada's electricity supply by 2050.

Recommendation: Continue to deploy federal financing tools, including low-cost loans, repayable equity, and Indigenous financing supports, to accelerate timelines and de-risk projects.

Support for grid modernization

There are critical funding gaps for grid modernization and distribution infrastructure due to customer affordability challenges. Systemic underinvestment in distribution infrastructure will hinder electricity companies' ability to manage load growth and electrify the Canadian economy.

The Strategic Renewables Electrification Pathways Program (SREPs) is the only federal funding stream available to support grid modernization. The funding available through SREPs helps bridge the funding gap and enables investments that support reliability and affordability, though the maximum amount of funding available for individual projects limits its effectiveness for larger projects. SREPs, particularly the Utility Support Stream, should be recapitalized at scale to help meet the challenge of building a "last mile" capable of supporting growth. The government should look for opportunities to ensure that the program is efficient, accessible and aligned with the sector's needs.

Recommendation: Provide targeted funding for distribution and grid modernization infrastructure to support electrification goals.

Areas for Action: Extending the Clean Electricity ITC to support certain major high-voltage intra-provincial transmissions projects, complementing existing support for inter-provincial interties.



Electricity Canada supports extending the Clean Electricity ITC to high-voltage intra-provincial transmission projects. Intra-provincial transmission is an essential component of Canada's clean electricity build-out. Intra-provincial transmission lines connect generation to communities, support economic development, facilitate regional integration by supporting interties, enable electrification and renewable integration, and help maintain system reliability.

When considering the criteria for extending eligibility the government should prioritize simplicity and urgency. Given the time horizon to deliver a transmission line is roughly eight to ten years, and the Clean Electricity ITC is set to expire in nine years, implementing the amendments quickly is imperative to success.

The extension should not be limited to new greenfield transmission lines. In many cases, the most cost-effective and system-effective investments into intra-provincial transmission lines in the near-term will be major reinforcements, restorations of existing transfer capability, voltage upgrades, substation work, and other grid-modernization measures that expand system capability and support long-term planning objectives. An expanded ITC should also be able to support key customer connections that align with national and provincial economic and security public policy priorities.

Eligibility should also be sufficiently flexible to reflect the circumstances of northern, remote, and otherwise unique provincial systems, and avoid technical or structural restrictions that would exclude strategically important projects or limit the transfer of benefits to ratepayers. Specifically:

- Establishing a clear technical eligibility threshold, with a floor of 30 kV to avoid excluding smaller but strategically important systems, while also capturing major bulk transmission assets. Within that framework, federal guidance should expressly recognize higher-voltage assets such as 138 kV and above, 200 kV and above, 500 kV and above, and High Voltage Direct Current lines and converter stations where those assets serve bulk system functions.
- Expanding eligible property to include not only transmission lines, but also associated towers, lattices, substations, terminal stations, step-down transformers, control systems, telecommunications equipment, power-flow control devices, phase shifters, and other grid-enhancing technologies integral to the operation or expansion of eligible transmission projects.
- Including projects that restore existing transfer capability, expand capacity on existing corridors, or upgrade/reinforce existing transmission assets, particularly where such



investments are more cost-effective than new greenfield builds and can support new generation, industrial load growth, or electrification.

- Allowing intra-provincial projects to qualify where they connect to, enable, or support generation projects eligible for the Clean Economy ITCs and/or are Projects of National Interest as defined in the *Building Canada Act*.
- Ensuring eligibility criteria also capture projects that support industrial development, critical minerals, data centres, advanced manufacturing, transportation electrification, and remote community electrification, where the transmission investment is a necessary enabler of those outcomes.
- Making the credit available to projects involving municipalities, non-taxable entities, utilities, Indigenous groups, and independent power producers, including where the eligible line and connected generation asset are not owned by the same taxpayer, so long as the project meets the technical and public-interest criteria.
- Removing or clarifying restrictions tied to the origin or type of electricity transmitted, so that eligibility is based on the function and system value of the asset rather than whether the electricity originated in the same province or flows in a particular direction.

Recommendation: Implement the extension to the Clean Electricity ITC to certain intra-provincial transmission projects quickly and inclusively of all strategically important projects

Areas for Action: Taking additional action on energy-saving retrofits for up to one million households across Canada, for example, enabling households to electrify home heating and cooling through transition from propane, oil and electric baseboard heating to heat pumps.

Electricity Canada and its members support federal actions to improve energy efficiency. Energy efficiency helps support system growth, as the most affordable megawatt is the one that is not needed.

As the government develops programs and policies that will support households to adopt technologies like heat pumps, rooftop solar, and electric vehicles, it is important that electricity providers are



engaged throughout the process to ensure optimal outcomes. Energy efficiency and demand-side management programs already exist in many provinces and territories, be they administered by individual electricity companies or through provincial delivery organizations. Leveraging these structures can help amplify the impact of federal efforts.

Many of the efficiency measures discussed in the electricity strategy focus primarily on residential customers. While this is important, there may be an opportunity to place greater emphasis on the commercial, industrial, and institutional sectors, where significant and often highly cost-effective electricity savings can be achieved.

Areas for Action: *The Government will refer the development of a new comprehensive Transmission InterConnect Investment Strategy to the Major Projects Office.*

Electricity Canada is broadly supportive of the efforts of the Major Projects Office to help accelerate the delivery of large-scale electricity infrastructure projects. We look forward to working closely with the government on the development of the proposed Transmission InterConnect Investment Strategy.

Transmission infrastructure represents roughly 40% of the expected capital expenditures needed to double Canada's electricity supply by 2050. Most of that expenditure will be for intra-provincial transmission lines. Therefore, a new Transmission InterConnect Investment Strategy should be inclusive of both inter-provincial and intra-provincial transmission investments.

Recommendation: **The proposed Transmission InterConnect Investment Strategy should be inclusive of both inter-provincial and intra-provincial transmission investments.**

Increasing regional integration

“Inter-provincial electricity interties are complicated by differing ownership, market, and regulatory models throughout Canada, ranging from government-owned Crown monopolies to competitive, investor-owned systems. This creates potential misalignment in incentives for interconnection and trade, and with this a market integration challenge.”

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Areas for Action: *Establishing innovative mechanisms to tackle common barriers to – and enable the advancement of – interprovincial interties, including through the development of new federal-provincial-territorial collaboration. This would entrench long-term regional planning, project development, and dispute resolution. This could also include consideration of the role the Canada Energy Regulator might play in regional coordination and intertie development.*

Because the benefits of interregional transmission often extend well beyond the province or utility making the investment, the federal government is uniquely positioned to act as a convenor, bringing jurisdictions together around a common methodology for assessing benefits, resolving cost-allocation challenges, and advancing projects that serve broader national interests.

Federal leadership can help ensure that transmission investments are evaluated through a pan-Canadian lens, enabling projects that might otherwise not proceed despite delivering significant economic and energy security benefits to Canadians.

Electricity Canada's recent [Interties Study](#) highlights the opportunity to pursue near-term interprovincial transmission connections before constructing new ones. While new interties will be necessary in many regions to support long-term growth and electrification, significant benefits can often be achieved more quickly and at lower cost through enhanced coordination, planning, market arrangements, operating practices, and targeted upgrades that improve utilization of existing infrastructure.

Recommendation: Partner with provinces, system operators, and electricity companies to advance interregional electricity planning that prioritizes optimization of existing transmission infrastructure.

Areas for Action: *Developing a standard cost allocation mechanism to guide and arbitrate costs among project participants, including the federal government (e.g., drawing on models such as the European Union's Projects of Common Interest frame).*

The primary barrier to expanded East-West-North electricity trade is the lack of clearly defined shared benefits for participating jurisdictions. Interprovincial transmission projects are capital-intensive, and in



practice, their costs and benefits do not naturally accrue in a way that is fair or sufficiently attractive to both parties.

To address this challenge, Electricity Canada developed a [Benefits Accrual Framework](#) to clarify how the costs and benefits of interprovincial transmission projects can be transparently identified and equitably allocated, and how the federal government can play a role in bridging gaps during project development. The federal government should apply the Benefits Accrual Framework to the regions with strong potential for increased interprovincial transmission to support pre-development activities and help advance new interprovincial transmission projects.

Given the significant cost of expanding transmission infrastructure, the government should look for opportunities to unlock private capital.

Recommendation: Apply Electricity Canada's Benefit Accrual Framework to jurisdictions with opportunities to expand interprovincial transmission.

Areas for Action: Implementing data sharing and regional grid modelling and planning to identify, generate consensus on, and better support key intertie project advancement.

Electricity companies collect data on economics, standards, regulatory, cost, growth and extreme events. This data feeds into models that provide operational scenarios to effectively and efficiently manage the transmission needs of the system to ensure a reliable and resilient grid.

Shared data and collaborative efforts need to be established between jurisdictions amongst industry, provincial and federal partners. This increase in transparency between partners will allow for improved communication and comprehension of the capital investment needs of each jurisdiction, ultimately, providing the ability to implement an improved integrated system through intertie projects.

Recommendation: Ensure regional flexibility for jurisdictions facing unique cost or reliability challenges by improving transparency in data and modelling assumptions and aligning mandates across federal institutions.

Recommendation: Invest in robust, transparent, and standardized national electricity datasets to support planning, modeling and regulatory decision-making.



Improving regulatory certainty and speed

“A predictable and durable approach to regulations affecting the electricity sector is critical to unlocking needed investment decisions.”

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Areas for Action: *Amending the Clean Electricity Regulations to enable the electricity sector to play a stronger role in supporting growth and economy-wide, cost-effective emissions reductions.*

The *Clean Electricity Regulations* (CERs), as currently drafted, do not work for every province in Canada, creating unnecessary barriers to building the electricity infrastructure needed to grow and decarbonize the economy. The CERs must be amended to ensure they work in every jurisdiction and, until they are, they will be a barrier to investment in new generation.

As the Strategy acknowledges, Canada already benefits from an electricity grid that is more than 80% non-emitting and that greater electrification can drive deeper emissions reductions across the broader economy. Ensuring that power is available and affordable is essential to achieving mass electrification. The CERs hinder this.

We are pleased to see the government’s commitment to addressing the CERs included in the National Electricity Strategy. It is important that changes happen with appropriate engagement with industry and as expeditiously as possible. The electricity industry has already provided substantial data on the impact of regulations, which allows for an efficient and focused regulatory process.

Recommendation: Ensure that the amended *Clean Electricity Regulations* support the rapid, large-scale build-out required to double Canada’s grid.

Areas for Action: *Simplifying and accelerating federal regulatory and permitting processes for major projects, including completing federal reviews and decisions within one year, moving to a “single federal decision” model for major projects, and creating a Crown Consultation Hub to coordinate federal Indigenous consultation.*



Electricity Canada supports the objectives outlined in the *Getting Projects Built in Canada Discussion Paper on Proposed Legislative, Regulatory and Policy Reforms*. The proposal has the potential to increase collaboration, simplify processes and speed up approvals. However, it is essential that permitting and approvals become more efficient and predictable for all projects, not just major projects.

Doubling the grid will not be achieved through major new generation and transmission projects alone. Canada's energy superpower ambitions depend not only on major projects but also on smaller infrastructure investments. Community-level connections, modernization projects, and upgrades to existing infrastructure are not secondary considerations. They are essential. Moreover, streamlining permits and approvals for the operation and maintenance of existing infrastructure is a crucial component of delivering regulatory certainty for the sector.

Simplifying and accelerating federal regulatory and permitting processes for major new projects will not, on its own, be sufficient to achieve the degree of regulatory certainty that is needed to unlock the volume of investment needed. In addition to addressing the CERs, further legislative, regulatory and policy reform is required.

Recommendation: Targeted amendments to the *Fisheries Act* are needed to restore the purpose of the Act to the protection of fisheries and ensure a sensible path to compliance for existing infrastructure, particularly the hydroelectric facilities that are the backbone of Canada's renewable energy supply. Additionally, a hydro specific regulation should be developed to specify which projects, works, undertakings, or activities require a *Fisheries Act* authorization.

Recommendation: Amend the *Physical Activities Regulations* to ensure that provincial assessments are used when appropriate, the right projects are covered under the *Impact Assessment Act*, assessments move with the necessary speed, and consultations are conducted appropriately and in a timely manner.

Recommendation: Amend the *Migratory Bird Regulations* in a manner that is practical, supports electricity companies' ability to conduct vegetation management activities at the pace and scale required to keep Canadians safe, and permits a broad range of emergency response activities.

Areas for Action: Working to more fully secure priority and defence-related critical electricity assets, develop technical solutions, and advance strategic partnerships with utilities and regulators, in acknowledgment that Canada's electricity grid is a prime and growing target for cyber threat actors.



Electricity Canada welcomes the government's acknowledgement of the need to more fully secure priority and defence-related critical electricity assets. The sector is already actively engaged in this work and stands ready to do more. Meeting this challenge will require deeper collaboration with defence and intelligence agencies and a clear plan for directing new defence investment, including NATO spending commitments, toward protecting critical electricity infrastructure.

The sector already invests significantly in protecting its infrastructure and maintains positive, productive relationships with federal security partners. But the threat landscape is evolving quickly, with recent international events showing that electricity infrastructure is increasingly targeted, through conventional and hybrid warfare as well as criminal activity. This risk is compounded by the sector's expanding footprint. Electrification is driving the sector to supply a growing share of Canada's energy needs, raising both its profile and its attractiveness as a target. A larger, more complex sector also means a larger attack surface, with new vulnerabilities across the supply chain and from emerging technologies like frontier AI and quantum computing.

Some of these threats, including nation-state activity, go well beyond what the sector has traditionally had to defend against. Intelligence agencies will need to deepen engagement with critical infrastructure operators so the sector stays well-informed. As Canada considers how to direct increased defence investment, we encourage government to consider how these investments could support the protection of critical electricity infrastructure.

Managing demand and modernizing the system

"Canada needs a modern and efficient electricity system. Energy efficiency, demand response, distributed energy resources, and grid modernization and digitalization help to curb peak loads, defer expensive new generation, and keep bills affordable while preserving reliability amid projected demand doubling."

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Areas for Action: Exploring targeted demand-side measures to help reduce energy bills, including incentivizing accelerated retrofits of large buildings; and encouraging large industrial end-users to adopt active energy management practices.



Electricity Canada supports the government's intention to advance demand-side measures that help customers manage energy costs while optimizing the use of the electricity system. As electrification increases demand from buildings, transportation, and industry, energy efficiency will remain important, but greater attention must also be paid to when and how electricity is used.

Distribution companies will play a critical role in enabling this flexibility. Advanced metering infrastructure, grid modernization technologies and customer-facing energy management tools can provide utilities and customers with better visibility into electricity use and create opportunities to shift demand away from peak periods. Used effectively, these technologies can help reduce customer costs, improve utilization of existing grid infrastructure, and potentially defer or optimize future distribution system investments.

The federal government can accelerate adoption by reducing financial barriers for electricity companies and customers, including residential, commercial and industrial users, and by ensuring that demand-side programs recognize the enabling investments required on the distribution system. Federal programs supporting building retrofits, industrial energy management and electrification should also encourage coordination with local electricity companies so that new and changing end uses can be integrated efficiently into the grid.

Areas for Action: *Considering supports for Integrated Resource Planning to address silos for infrastructure planning across gas, electric, and thermal energy networks.*

Electricity Canada and its members are supportive of efforts to improve planning and coordination for the benefit of customers and the system. We look forward to continued conversations with the federal government, provinces and utilities on potential supports for Integrated Resource Planning.

Building capacity across the value chain

"The federal government's approach will go beyond traditional manufacturing to prioritize higher-value activities across design, engineering, software, and system integration. Recognizing that not all components should be produced domestically, Canada will be targeted in its approach, while actively diversifying and strengthening trusted trade relationships to ensure resilient, secure, and cost-effective supply chains."

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Areas for Action: Developing a more comprehensive understanding of Canada's electricity component supply chain and publishing a federal analysis that industry can leverage.

The Canadian government estimates that between 2026 and 2050 the electricity grid will require approximately \$1 trillion in investment to grow and modernize. Much of that investment will be in the form of physical assets, from wind farms and nuclear power plants, transmission lines and substations to battery storage systems and smart grid technologies. All these projects will use steel, meaning investment in the grid will provide opportunities for domestic steel producers and fabricators.

Global shortages of key electricity equipment (e.g., large power transformers) are causing multi-year delays and higher costs for major electricity infrastructure projects. These delays can hamper investment across the economy – for example, the global shortage of power transformers is a key bottleneck that is slowing the build-out of advanced manufacturing facilities and data centres.

The supply chain for electrical equipment is global. Each step involves trade, from extracting raw materials, manufacturing subcomponents to assembling final products. Within each equipment category, there can be dozens or even hundreds of different models and variations for different grid applications. It is uneconomical and impractical for each country to try to manufacture the full range of necessary grid equipment.

However, some of the components that will form the foundation of this historic capital investment into our electricity grids are already produced in Canada. Many more could be produced here, with the right demand signals, supports and strategic investments. While Canada can and should bolster its domestic supply chain, it will not be possible for Canada, or any other country, to “go it alone”.

This is both a challenge and an opportunity and requires two steps. First, making strategic investments in domestic manufacturing capacity for grid technologies where Canada has a competitive advantage, or where those technologies are so critical that local production is a matter of economic or national security. One of these areas is nuclear technologies, where the parallel nuclear strategy has recognized the need to expand supply chains to support Canada's position in the global nuclear markets. Secondly, Canada must partner with countries that make complementary technologies, ensuring sufficient collective production of equipment, including priority access for critical applications.



Electricity Canada strongly supports the government's intent to develop a more comprehensive understanding of Canada's electricity component supply chain and to publish a federal analysis for industry. Such an analysis should help clarify future demand and connect suppliers to existing federal tools. It should identify opportunities for trade-impacted industries to support growth. The analysis should outline strategies for mitigating trade risks, cost and timeline risks, and for building resilient, value-added supply chains that support Canada's critical electricity infrastructure. It should recognize that electricity infrastructure depends on global supply chains.

Electricity Canada is working with members, vendors and other stakeholders to identify the equipment, timelines, geographies and methods needed to build a more collaborative, resilient supply chain that leverages the diverse strengths of the electricity sector and its supply chain. Electricity Canada's Supply Chain Roadmap for the Electricity Sector will be developed over the coming months and will focus on tangible steps that the sector, its suppliers, and governments can take to make real progress.

Recommendation: Develop a Canadian Electricity Supply Chain Roadmap, in partnership with electricity companies and suppliers, to identify opportunities to expand domestic production, particularly where export potential exists, leveraging existing federal tools such as tax credits, the Business Development Bank of Canada, Export Development Canada, the Canada Growth Fund, and the Strategic Response Fund

Areas for Action: Providing support for the development of domestic manufacturing capabilities for key, strategic electricity components.

Areas for Action: Working with trade partners to diversify import and export supply chains for manufactured components, similar to initiatives for critical minerals.

Electricity Canada and its members support the government's objective to strengthen domestic supply chains and Canadian manufacturing. Domestic manufacturers could serve more of the \$30 billion domestic market for critical equipment while expanding export opportunities, creating more value for Canadians with the build-out of our electricity system.

We believe that these goals can be achieved in ways that maximize economic benefits while maintaining affordability, timely project delivery, and momentum towards Canada becoming



an energy superpower. Providing greater market opportunities for domestic manufacturers, sourcing domestic content where feasible, and working with suppliers to build new capacity must be a long-term, strategic objective.

The global supply chain for electrical components is a complex network that has evolved over decades. Reorienting Canada's electricity supply chains will take years, not months. There are cost implications associated with procuring some products from Canadian suppliers. Electricity companies cannot absorb additional costs without consequence. Moreover, electricity companies are typically subject to domestic and international trade agreements which bind them to competitive bidding processes, preventing them from simply awarding contracts or redirecting procurements to specific Canadian suppliers. Increasing costs or timelines for critical materials will delay necessary infrastructure projects, increasing risk to reliability and electricity rate for Canadians.

Targeted interventions aimed at manufacturers of identified priority components, as well as domestic fabrication and assembly facilities, would enhance domestic capacity and strengthen electricity supply chains. The government already has established tools and agencies to support these efforts, including the Business Development Bank of Canada, Export Development Canada, the Canada Growth Fund, the Strategic Response Fund and more.

More broad-based or punitive actions to encourage domestic procurement, such as tariffs or strict/limiting "Buy Canadian" policies should be avoided. Non-substitutable inputs, as well as products where Canadian suppliers have limited capacity, should be excluded from restrictive measures. Prior to any final policy decisions that will impact procurement, the government should engage directly with electricity companies to determine the feasibility of shifting to domestic suppliers.

Recommendation: Tariffs and "Buy Canadian" policies should only target products with direct substitutes already available at scale in Canada and can be procured in compliance with existing domestic and international trade agreements and procurement obligations.

Recommendation: No mandatory domestic content requirement should be introduced as part of the Clean Electricity and Clean Technology ITCs. Rather, the government should implement a voluntary domestic content incentive that rewards domestic procurement. This would help incentivize domestic manufacturing without risking delays in the delivery of clean electricity projects, increasing costs for Canadians, or compromising the reliability of the electricity system.



Recommendation: Work closely with trusted trade partners to expand and secure access to critical electrical equipment. Canada can and will produce more critical electrical equipment for domestic use and for export, while still relying on international trade for equipment not produced domestically. In order to grow the grid and maintain a resilient electricity supply, Canada must ensure that electricity companies have timely access to critical equipment produced abroad.

Areas for Action: Providing support for the development and deployment of smart, clean energy technologies, such as advanced grid controls, automation, analytics and advanced energy storage, to modernize electricity systems, including in the North.

Electricity Canada is supportive of providing support for the development and deployment of smart, clean energy technologies.

Ensuring the skills and labour needed

“Over 80% of employers in the electricity sector identified finding skilled talent as the most pressing constraint on their outlook over the next five years, far surpassing concerns such as inflation, regulatory requirements, and interest rates.”

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Areas for action: Reviewing labour market measures to ensure that supports for workforce planning and training are aligned with the skills that will be needed, including supporting provinces, territories and Indigenous governments and organizations in this area.

Electricity Human Resources Canada (EHRC) has made a submission to *Powering Canada Strong: A National Strategy for an Electrified Canadian Economy*. Electricity Canada supports EHRC's submission regarding labour market measures.

Areas for Action: Conducting skills and training assessments for the electricity sector, including: to chart anticipated needs and deliver training recommendations, and to assess transferrable skills to support workers interested in mid-career transitions into the electricity sector.



EHRC has made a submission to *Powering Canada Strong: A National Strategy for an Electrified Canadian Economy*. Electricity Canada supports EHRC's submission regarding skills and training assessments.

Areas for Action: *Improving labour market data collection, tracking, and analysis in the electricity and energy sectors, and sharing this data with provinces, territories, Indigenous partners, and others making decisions related to jobs and skills training organizations.*

EHRC has made a submission to *Powering Canada Strong: A National Strategy for an Electrified Canadian Economy*. Electricity Canada supports EHRC's submission regarding labour market data.

Areas for Action: *Encouraging growth in apprenticeships and skilled trades by fostering awareness on skilled trades pathways and opportunities in the electricity sector (through engagement and information-sharing).*

EHRC has made a submission to *Powering Canada Strong: A National Strategy for an Electrified Canadian Economy*. Electricity Canada supports EHRC's submission regarding encouraging growth in apprenticeships and skilled trades.

Securing the North

"In the North, access to electricity is not only a necessity, it can also be a strategic resource for defense infrastructure and enable resource development, while bolstering energy sovereignty through reduced dependence on imported fuels."

- Powering Canada Strong: A National Strategy for an Electrified Canadian Economy

Areas for Action: *Addressing energy infrastructure in the North, in partnership with territorial and Indigenous governments and utilities.*



Like other regions of Canada, the North requires significant investment to expand and modernize its infrastructure. However, northern and remote communities face distinct geographic, climatic, and economic challenges that can increase project complexity and costs.

Northern communities can benefit from joint use defence infrastructure modernization and growth. Some northern communities are co-located with military bases, and investments in energy infrastructure can make both more resilient.

However, many other communities cannot directly benefit from dual-use infrastructure. Because of the small populations typical of northern communities, territorial governments and the communities themselves do not have the financial capacity to make investments solely based on their expected future revenues. Further, territorial governments and territorial Crown corporations do not have the same ability to assume debt to finance infrastructure that provincial governments and provincial Crown corporations can. Federal non-defence dollars will be needed to fund these investments.

Finally, there are meaningful environmental and cultural differences in the needs of northern communities compared to the south. Ensuring communities are involved in decisions around their energy resilience and affordability will be important.

Recommendation: The government should prioritize dual-use civilian and defence energy infrastructure where possible while also providing dedicated funding for purely civilian energy infrastructure in the North.



Conclusion

The launch of the National Electricity Strategy is a major step towards a framework that brings federal, provincial, and Indigenous leadership together with the electricity sector to reduce barriers to building and investment in the infrastructure we need to power our energy future.

Electricity Canada and its members call on the federal government to play a sustained role in sharing risk, lowering the cost of capital, and accelerating timelines through financing tools that reflect the long life and broad public benefits of electricity infrastructure. The government must continue its focus on ensuring there is a clear, flexible and investment-friendly regulatory environment that give electricity companies the confidence to move forward with the projects Canadians need. The strategy's emphasis on connecting Canada's grid through expanded transmission and coordinated planning, increasing the capacity of domestic value chains, and investing in the electricity workforce will, if delivered effectively, strength resilience and lower long-term system costs. Continuing to center affordability for Canadians will be imperative to achieving the objectives of the strategy.

We look forward to working with the government to advance the important initiatives outline in the National Electricity Strategy. Thank you for the opportunity to provide comment, should you have any question please do not hesitate to reach out.

Sincerely,

Francis Bradley
President & CEO
Electricity Canada

About Electricity Canada

Electricity Canada is the national voice for electricity in Canada. Our members generate, transmit, and distribute power to homes and businesses across Canada. We represent integrated electric utilities, independent power producers, transmission and distribution companies, power marketers, and system operators. Our members deliver electricity to all Canadians, in every province and territory.