

# POWER AT RISK



The Investment Case for a Clean, Competitive Canada

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# Executive summary

The world is undergoing a structural shift from fossil fuels to clean electricity, driven by investor pressure, the electrification of industry and transport, the explosive growth of data-intensive technologies, and decarbonization goals. This transformation is creating surging global demand for abundant and reliable low-carbon power.

This report explores how Canada can harness its clean electricity advantage to attract capital, drive industrial growth and enhance economic competitiveness—while also identifying the growing risks of inaction.

Canada benefits from one of the cleanest electricity systems among industrialized nations. The grid is approximately 85% non-emitting, anchored by hydropower, nuclear power and growing renewables. Since 2021, approximately \$65 billion in investment has been announced in clean economy sectors tied to this advantage, creating at least 26,000 direct jobs, with tens of thousands more across supply chains.

However, Canada's clean electricity edge is under threat. Grid constraints, slow infrastructure build-out, and mounting policy and regulatory barriers are colliding with skyrocketing demand from electric vehicle manufacturing, battery materials, critical minerals, AI and data centres, and green industrial production. At the same time, global competition is intensifying as other jurisdictions rapidly decarbonize their grids with the aim of attracting clean investment.

Interviews with over a dozen senior executives across finance, technology, heavy industry, mining and clean energy development reveal clear signals:

- ⦿ Clean power is essential, but only when it is predictable, cost competitive and available at scale.
- ⦿ For tech, AI and mining, clean electricity adds material asset value and enables market access.

- ⦿ For many projects, grid constraints, permitting delays and interconnection uncertainty are already slowing or cancelling investments.
- ⦿ Industry leaders emphasize that electricity is no longer a marginal siting factor; in many cases it is central to capital allocation decisions.

Our analysis of large-scale projects facing clean electricity constraints suggests that **\$110–\$220 billion in potential capital investment is at risk**, alongside 40,000–80,000 direct jobs. Sectors affected include EVs and batteries, green steel, data centres and critical minerals, and the clean electricity and battery storage needed to supply these operations.

Governments can secure Canada's position by **delivering on five priority actions**:

1. Provide long-term, coordinated federal–provincial–territorial policy certainty.
2. Accelerate the build-out of clean generation, storage and transmission.
3. Improve speed and transparency in permitting and interconnection.
4. Strengthen Indigenous partnership models to unlock project development.
5. Enable demand-side solutions and flexible power procurement tools.

Canada has a historic opportunity to lead the global clean industrial economy. Now it has to deliver clean power at the scale and speed that industry and investors need.



# 01

## Introduction

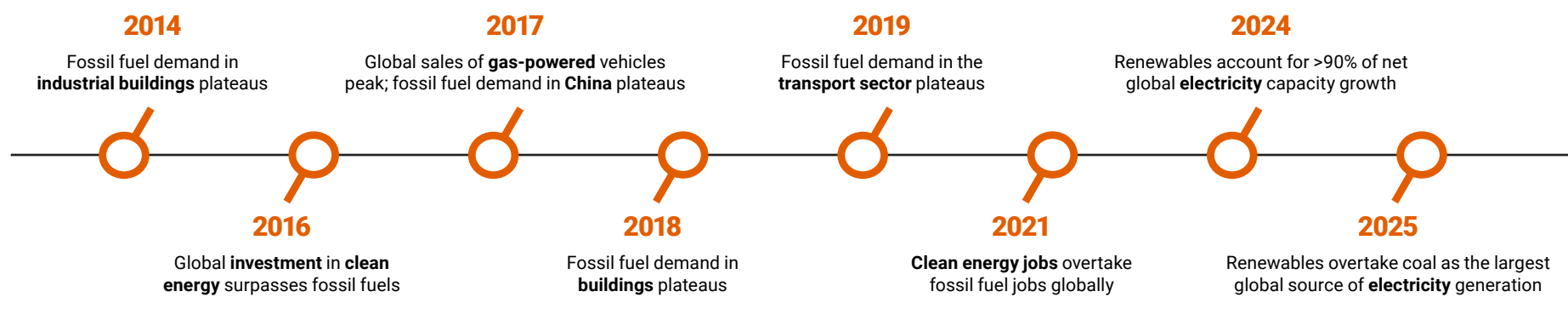
### 1.1 Global capital investment is chasing clean power

Since 2010, **global electricity demand has been rising steadily**, with a notable acceleration in 2024.<sup>1</sup> Growth is being driven by the electrification of industry, transportation and buildings, alongside the rapid expansion of data centres.

At the same time, fossil fuel consumption is no longer growing across the economy—and it has already begun to decline across a number of sectors and countries (Figure 1). Evidence since the mid-2010s shows **sector-by-sector peaks in fossil fuel demand** emerging in buildings, electricity generation, transportation and parts of industry. These shifts are happening alongside rapid cost declines of clean “electro-tech” solutions, including renewables, electric vehicles, heat pumps and batteries.<sup>2,3,4,5,6</sup>

1. International Energy Agency (IEA). “Electricity.” In: *Global Energy Review 2025*. March 24, 2025. <https://www.iea.org/reports/global-energy-review-2025/electricity>.
2. Muyi Yang, Biqing Yang, Sam Butler-Sloss and Euan Graham. *China Energy Transition Review 2025*. Ember. September 9, 2025. <https://ember-energy.org/latest-insights/china-energy-transition-review-2025/>.
3. IEA. *World Energy Investment 2025*. June 5, 2025. <https://www.iea.org/reports/world-energy-investment-2025>.
4. IEA. *World Energy Employment 2024*. November 13, 2024. <https://www.iea.org/reports/world-energy-employment-2024>.
5. International Renewable Energy Agency. *Record-Breaking Annual Growth in Renewable Power Capacity*. March 26, 2025. <https://www.irena.org/News/pressreleases/2025/Mar/Record-Breaking-Annual-Growth-in-Renewable-Power-Capacity>.
6. Brian Khan. “The World Hit ‘Peak’ Gas-Powered Vehicle Sales – in 2017.” *Bloomberg*. January 30, 2024. <https://www.bloomberg.com/news/articles/2024-01-30/world-hit-peak-gas-powered-vehicles-as-evs-gain-market-share>.

**FIGURE 1. TIMELINE OF PEAK GLOBAL FOSSIL FUEL DEMAND BY SECTOR.**



With increasingly volatile energy markets and more extreme weather events, investors and industry have sharpened their focus on energy security. Clean electricity is increasingly viewed as a long-term hedge against fossil fuel price volatility, supply disruptions and stranded asset risk, while also supporting emissions targets, regulatory compliance and market access. This shift is reflected in the growing number of corporations and investors securing long-term clean power through power purchase agreements (PPAs), setting clean science-based emissions targets<sup>7,8</sup> and participating in renewable energy credit markets.<sup>9</sup>

These dynamics are reshaping global capital flows. Global clean energy investment reached approximately C\$3 trillion in 2024 and is projected

to reach C\$5.6 trillion annually by 2030 as economies continue to decarbonize.<sup>10</sup>

For Canada, this transition is directly impacting core export markets. Excluding the U.S., all of Canada's 10 largest trading partners have net-zero commitments and carbon pricing systems. Roughly half are implementing or developing carbon border adjustments and domestic electric vehicle (EV) requirements.<sup>11</sup> Most notably, the European Union will introduce its Carbon Border Adjustment Mechanism in 2026, applying a carbon price to imported industrial materials such as steel, aluminum, cement and fertilizer. The E.U. is also regulating battery imports to ensure they have low-carbon life-cycle emissions.<sup>12</sup>

## Acknowledging the reality

As with any large-scale economic transition, there will be headwinds and setbacks along the way that will require careful navigation. Delays, cost pressures and policy setbacks are inevitable and will require careful management. However, **the structural direction is clear:** the long-term trajectory of the global energy system is toward greater electrification powered by low-carbon electricity—driven as much by financial resilience, energy security and long-term competitiveness as by climate objectives.

7. Science Based Targets Initiative. *Target Dashboard*. n.d. Accessed December 30, 2025. <https://sciencebasedtargets.org/target-dashboard>.

8. The Climate Group. "What Is 24/7 Carbon-Free Electricity (CFE)?" n.d. Accessed December 30, 2025. <https://www.theclimategroup.org/why-247>.

9. Adam Wilson and Tony Lenoir. "US Renewable Energy Credit Market Size to Double to \$26 billion by 2030." *S&P Global*. December 16, 2022. <https://www.spglobal.com/market-intelligence/en/news-insights/research/us-renewable-energy-credit-market-size-to-double-to-26-billion-by-2030>.

10. Oktavia Catsaras. "Global Investment in the Energy Transition Exceeded \$2 Trillion for the First Time in 2024." *BloombergNEF*. January 30, 2025. <https://about.bnef.com/insights/finance/global-investment-in-the-energy-transition-exceeded-2-trillion-for-the-first-time-in-2024-according-to-bloombergnef-report/>.

11. Joanna Kyriazis, Trevor Melanson, Stefan Pauer and Mark Zacharias. *The World Next Door*. Clean Energy Canada. April 2025. [https://cleanenergycanada.org/wp-content/uploads/2025/04/Report\\_2025\\_CanadasCleanEconomicOpportunity-V3.pdf](https://cleanenergycanada.org/wp-content/uploads/2025/04/Report_2025_CanadasCleanEconomicOpportunity-V3.pdf).

12. "EU Battery Regulation 2023/1542: A Complete Guide to Compliance and Sustainability." TÜV SÜD. September 12, 2025. Accessed December 30, 2025. <https://www.tuvsud.com/en-us/resource-centre/blogs/mobility-and-automotive/understanding-the-new-eu-battery-regulation>.

# 02

## **Canada's strong starting position does not guarantee success**

Canada enters the clean energy transition with advantages that few industrial economies can match. Yet these strengths are neither permanent nor sufficient. The evidence emerging from utilities, regulators, investors and project proponents points to a single conclusion: without rapid action to expand clean electricity supply and modernize the regulatory environment, Canada's current edge will erode—and, with it, the flow of capital that underpins clean economic growth.





## 2.1 Canada's clean grid is already attracting investment

From an investor's perspective, Canada offers a compelling value proposition rooted in **four core strengths**: a non-emitting power grid, resource abundance, geopolitical stability and preferential market access.

- ⦿ **A clean, affordable power platform:** Nationally, Canada's electricity sector is roughly 85% non-emitting, a significant head start over most advanced economies. This position is underpinned by abundant low-cost hydropower (approximately 60% of generation), rapid growth in renewables and a strong nuclear sector. Critically, electricity rates have remained stable and affordable relative to many peers, even as the sector has reduced its own emissions by 60% since 2005.<sup>13</sup>
- ⦿ **Resource and talent depth:** Beyond clean power, Canada is a global leader in the critical raw materials required for the energy transition, holding large uranium reserves and substantial deposits of lithium, nickel, cobalt and rare earth elements. This is complemented by a highly skilled labour force and a global reputation for political, economic and financial stability.<sup>14</sup>
- ⦿ **Market access:** With preferential access to markets representing 66% of global GDP, Canada is a strategic location for export-oriented low-carbon manufacturing and processing.<sup>15</sup> Against this backdrop, Canada ranks among the top global destinations for foreign investment.<sup>16</sup>

These advantages are already translating directly into significant capital flows. Since 2021, Canada has attracted an estimated **\$100 billion in announced capital investment** across key clean economy sectors, with the availability of clean electricity as a core driver.<sup>17</sup>

As detailed in Table 1, most of this investment is concentrated in the EV and battery supply chain, hydrogen and critical minerals—sectors that increasingly demand verifiable, low-carbon energy to compete globally. While some high-profile projects have been paused or cancelled due to trade and market shifts (e.g., Honda's \$15 billion EV assembly plant, which was temporarily paused), the majority are proceeding, representing a combined capital expenditure of nearly **\$65 billion** and the creation of at least **26,000 long-term direct jobs**.

13. Natural Resources Canada. *Powering Canada's Future: A Clean Electricity Strategy*. August 13, 2025.

<https://natural-resources.canada.ca/energy-sources/powering-canada-s-future-clean-electricity-strategy>.

14. Invest in Canada. "Stability." In: *Do Business in Canada*. n.d. Accessed December 30, 2025. <https://www.investcanada.ca/stability>.

15. Global Affairs Canada. *Diversifying Trade for Canada*. n.d. Accessed December 30, 2025.

<https://international.canada.ca/en/global-affairs/campaigns/diversifying-trade>.

16. UN Trade and Development. *World Investment Report 2025: International Investment in the Digital Economy*. <https://unctad.org/publication/world-investment-report-2025>.

17. Based on a non-comprehensive list of publicly announced projects with explicit or implicit links to clean electricity. See Appendix A for details.

**TABLE 1. SUMMARY OF CLEAN ECONOMY PROJECTS LINKED TO CLEAN ELECTRICITY.**

Sector	Number of projects	Announced investment (\$M)	Of which (\$M)		Direct FTE jobs created (estimated)
			Proceeding	Paused or cancelled	
EV and battery supply chain	26	58,708	16,807	41,900	15,000
Hydrogen	4	26,328	26,328	–	800
Critical minerals	5	9,480	9,480	–	6,000
Industry	7	7,373	7,173	–	3,000
Data centres	6	6,355	4,855	1,500	1,200
<b>Total</b>	<b>48</b>	<b>108,243</b>	<b>64,843</b>	<b>43,400</b>	<b>26,000</b>

The full economic impacts are likely to be significantly higher when broader supply chain impacts are considered. For example, on average, critical mining projects create around 2.3 indirect jobs for every direct job.<sup>18</sup> In battery manufacturing, the Volkswagen Group and PowerCo SE St. Thomas facility is expected to create 10,000,000 indirect jobs across the supply chain, 10 times the direct plant jobs, and \$200 billion in economic value over the plant’s lifetime.<sup>19</sup> Perhaps just as important, many of these investments are safeguarding existing jobs—and related supply chains—in crucial industries such as automotive and steel production, as these industries undergo fundamental shifts to align with the global energy transition.

For most proponents, Canada’s clean electricity platform is an essential part of the investment thesis: it enables low-carbon production, supports compliance with global supply-chain rules and provides insulation from energy market volatility.

Concurrently, investor for the power infrastructure to support this growth is surging. Procurements for new clean power generation have been heavily oversubscribed across the country (e.g., 200% in Québec, 300% in B.C., 900% in Alberta).<sup>20</sup> One clean energy developer interviewed noted that Ontario’s Long-Term 1 (LT1) procurement was oversubscribed by more than 40 times the 1,600 MW target.<sup>21</sup> Procurements currently underway across Canada represent an estimated **\$31 billion** of investment in over 17 GW of new clean capacity.<sup>22</sup>

This robust demand signal is compounded by international dynamics. The recent policy shifts and instability in the United States have created a near-term window of opportunity for Canada. As of Novem2025 Annual Planning Outlook, U.S. businesses had cancelled or scaled back more than \$28 billion in clean energy projects, threatening 30,000 jobs.<sup>23</sup> Cancellations are now outpacing new announcements by more than two to one. Canada’s ability to capture a portion of this redirected capital hinges on its immediate action to unlock further clean electricity capacity at scale and speed.

18. Based on modelling by the U.S. Department of Commerce’s Bureau of Economic Analysis. Cited in: NioCorp. “Critical Minerals Mining Means New High-Tech Jobs.” Accessed December 30, 2025. <https://www.niocorp.com/critical-minerals-mining-means-new-high-tech-jobs/>.

19. Office of the Prime Minister. “Volkswagen’s New Electric Vehicle Battery Plant Will Create Thousands of New Jobs.” April 21, 2023. Accessed December 30, 2025. <https://www.pm.gc.ca/en/news/news-releases/2023/04/21/volkswagens-new-electric-vehicle-battery-plant-will-create-thousands>.

20. Nayantara Sudhakar. “Utilities in Canada Are Getting Much More Low-Cost, Clean Power Than They Asked For.” *440 Megatonnes*. Canadian Climate Institute. August 28, 2025. Accessed December 30, 2025. <https://440megatonnes.ca/insight/utilities-canada-are-getting-much-more-low-cost-clean-power-than-they-asked-for/>.

21. LT1 procurement received nearly 44,000 MW in applications.

22. Includes wind, solar and storage. Rachel Doran, Vittoria Bellissimo and Peter McArthur. “Unlocking the True Potential of Canada’s Clean Economy.” Canadian Renewable Energy Association. November 3, 2025. Accessed December 30, 2025. <https://renewablesassociation.ca/unlocking-the-true-potential-of-canadas-clean-economy/>.

23. E2. “Companies Cancel \$4.4 Billion in Clean Energy Projects; \$28 Billion, 30K Jobs Lost in 2025.” November 26, 2025. Accessed December 30, 2025. <https://e2.org/releases/companies-cancel-4-4-billion-in-clean-energy-projects-28-billion-30k-jobs-lost-in-2025/>.

## 2.2 But electricity grid constraints are appearing

The success of attracting billions of dollars in clean economy capital is now colliding with the operational limits of Canada’s aging, decentralized grid infrastructure. Without decisive intervention, Canada’s clean electricity advantage risks becoming a bottleneck that chokes off further high-value investment.

*Transmission and interconnection are the core constraints to scaling clean power in Canada. ... Without coordinated grid expansion, Canada risks losing its clean power edge.*

—Clean energy investor and developer

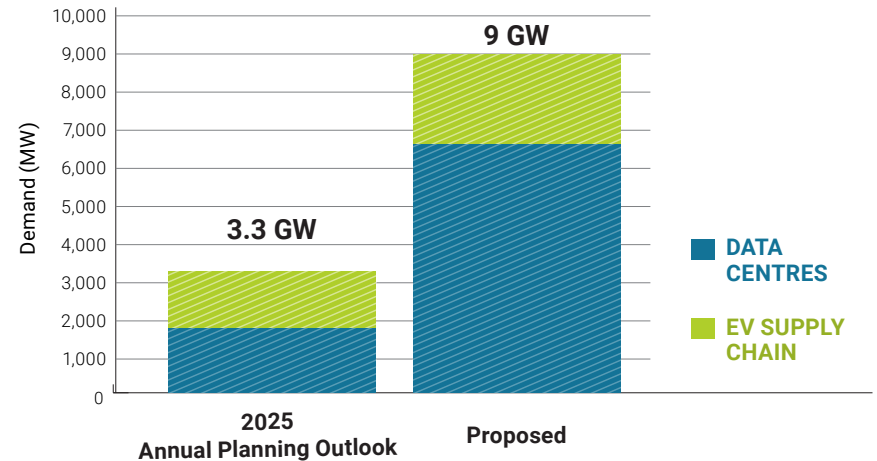
Evidence of grid stress is appearing across the country, driven by two compounding factors: extreme weather risk and unforeseen, aggressive industrial load growth. In April 2025, the North American Electric Reliability Corporation issued a critical warning that most provinces face supply deficits during periods of peak demand or extreme cold, with potential shortfalls of **10.3 GW in Québec** and **3.1 GW in Ontario** being the most severe.<sup>24</sup>

This reliability challenge is intensified by a surge in demand far exceeding utility forecasts. As the global economy electrifies, demand for reliable, clean power is predicted to double or triple by 2050, and provinces are now scrambling to manage a massive influx of requests from energy-intensive sectors:

⦿ **Ontario:** The Independent Electricity System Operator (IESO) is forecasting 75% demand growth by 2050. Recent “large step loads” from new data centres and EV supply chain projects are placing unprecedented pressure on Ontario’s electricity system.<sup>25</sup> Individual data centre proponents are now requesting up to 750 MW on accelerated timelines—an order of magnitude larger than historical load requests—requiring “significant reinforcements”

to grid infrastructure, according to the IESO. While the IESO’s 2025 Annual Planning Outlook includes approximately 3 GW of confirmed data centre and EV supply chain demand, the **total pipeline of proposed projects is 200% higher (~9 GW)** when medium- and lower-confidence requests are considered. This gap highlights a growing disconnect between formal planning assumptions and the scale of industrial demand seeking access to Ontario’s clean electricity system (Figure 2).

**FIGURE 2. THE DATA CENTRE AND EV SUPPLY CHAIN PIPELINE (INCLUDING UNCONFIRMED AND LOWER-CERTAINTY PROJECTS) IS NEARLY THREE TIMES THE INDEPENDENT ELECTRICITY SYSTEM OPERATOR’S 2025 FORECAST<sup>26</sup>**



**Note:** Forecast includes high-, medium- and low-certainty proposals.

**Source:** Independent Electricity System Operator.

24. Matthew McClean. “Most Provinces at Risk of Electricity Shortages in Extreme Weather, Study Finds.” *The Globe and Mail*. April 30, 2025. <https://www.theglobeandmail.com/business/article-most-provinces-at-risk-of-electricity-shortages-in-extreme-weather/>.

25. Independent Electricity System Operator (IESO). *Large Step Loads: Spotlight on Data Centres and Electric Vehicle Supply Chain*. IESO Demand & Conservation Planning Technical Paper. July 2025. <https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/demand-research/Demand-Conservation-Planning-Technical-Paper-Large-Step-Loads-202507.pdf>.

26. *Ibid.*



- ◉ **Québec:** The province's clean, low-cost hydropower makes it a magnet for global industrial loads. But available surplus capacity is tightening. Since 2022, Hydro-Québec has received more than **250 industrial connection requests** totalling roughly 43 GW—more than the utility's entire installed capacity. Approximately 33 GW of these requests have been rejected or withdrawn.<sup>27</sup> A further 8.5 GW remains pending, as Québec applies new criteria requiring ministerial approval for projects above 5 MW. The outcome is clear: Québec's clean power remains attractive, but grid scarcity and allocation rules are now severely constraining economic growth.
- ◉ **Manitoba:** Manitoba Hydro reports that the province will face capacity deficits as early as winter 2028/29. The industrial connection queue has ballooned from a dozen to more than **50 energy-intensive projects**,<sup>28</sup> requiring 2.7 GW of capacity<sup>29</sup> (over two times existing surpluses), leading the province to stop accepting large projects on a first-come-first-served basis, permanently ban cryptocurrency mining and cancel lucrative U.S. export contracts.
- ◉ **British Columbia:** BC Hydro is grappling with 6.8 GW of connection requests in its queue, roughly **six times the capacity of the Site C dam**.<sup>30</sup> The government has been forced to introduce new legislation (Bill 31) to prioritize electricity access for specific high-value industrial uses (mining, critical minerals, manufacturing) while limiting access for large-scale AI data centres and hydrogen export and permanently banning new cryptocurrency mining.<sup>31</sup>
- ◉ **Alberta:** The demand from proposed data centres alone (38 projects) is nearly **20 GW**, close to double the province's peak capacity.<sup>32</sup> In response, the provincial grid operator imposed a cap of 1.2 GW for the next three years. Compounding this, regulatory uncertainty has led to **11 GW of cancelled renewable energy projects** at the moment new capacity is most urgently needed.<sup>33</sup> Experts note that Alberta's reliance on fossil fuels introduces price volatility and reliability issues that deter continuous-process industries and major data centre investment.<sup>34</sup>
- ◉ **Atlantic Canada:** New Brunswick has barred new cryptocurrency mining interconnections.<sup>35</sup> Newfoundland and Labrador has followed similar practices.<sup>36</sup> Utilities in the region warn of mounting pressure from AI-driven loads and electrification. While industrial growth is more modest than in central Canada, the region's limited capacity margins and high dependence on interties make it sensitive to even moderate load additions.

27. Sylvain Larocque. "Surprise! Il n'y aura peut-être pas de pénurie d'électricité finalement." *Le Journal de Montréal*. June 9, 2025. Accessed December 30, 2025. <https://www.journaldemontreal.com/2025/06/09/surprise-il-ny-aura-peut-etre-pas-de-penurie-delectricite-finalement>.

28. "Too Little Hydro Means Lost Growth." *The Brandon Sun*. February 25, 2025. Accessed December 30, 2025. <https://www.brandonsun.com/opinion/2025/02/25/too-little-hydro-means-lost-growth/>.

29. Julia-Simone Rutgers. "The Demand for Power Might Make One of Canada's Cleanest Grids Dirtier." *The Narwhal*. March 28, 2024. Accessed December 30, 2025. <https://thenarwhal.ca/manitoba-electricity-grid-natural-gas-reliance/>.

30. Nelson Bennett. "Why B.C. Is Rewriting Energy Rules to Decide Who Gets Power and Who Doesn't." *Business in Vancouver*. November 21, 2025. Accessed December 30, 2025. <https://www.biv.com/news/resources-agriculture/why-bc-is-rewriting-energy-rules-to-decide-who-gets-power-and-who-doesnt-11508107>.

31. B.C. Ministry of Energy and Climate Solutions. *New Legislation Powers Economy With Clean Energy, North Coast Transmission Line*. October 20, 2025. Accessed December 30, 2025. <https://news.gov.bc.ca/releases/2025ECS0044-001032>.

32. Alberta Electricity System Operator. *Connection Project List Dashboard*. n.d. Accessed December 30, 2025. <https://aeso-portal.powerappsportals.com/connection-project-dashboard/>.

33. Will Noel. "Wind and Solar Projects in Alberta Cancelled at an Alarming Rate." Pembina Institute. August 21, 2025. <https://www.pembina.org/pub/wind-solar-projects-alberta-cancelled-alarming-rate>.

34. Alex Riehl. "Danielle Smith Expands Ministerial Team Leading Alberta's \$100-Billion AI Data Centre Push." *BetaKit*. October 17, 2025. Accessed December 30, 2025. <https://betakit.com/danielle-smith-expands-ministerial-team-leading-albertas-100-billion-ai-data-centre-push/>.

35. Jacques Poitras. "Proposed Data Centre Would Need Almost Half of Tantramar Gas Plant's Power." *CBC News: New Brunswick*. November 12, 2025. Accessed December 30, 2025. <https://www.cbc.ca/news/canada/new-brunswick/lorneville-saint-john-data-centre-9.6974115>.

36. Andrew Rankin. "Newfoundland Rations Power to Hungry Cryptocurrency Miner." *Financial Post: Energy/Cryptocurrency*. November 28, 2025. Accessed December 30, 2025. <https://financialpost.com/commodities/energy/newfoundland-rations-cryptocurrency-miner-power>.

Major electricity demand proposals are rising across every strategic sector. **The federal nation-building project list**,<sup>37</sup> which includes major load proposals for critical minerals (e.g., Canada Nickel’s Crawford project), oil and gas, and major transport corridors, highlights a massive pipeline of projects that will ultimately require new generation and transmission that in many cases has not yet been secured or even planned.

Across interviews with investors, corporations and industry experts, a common theme emerges: **clean electricity is an asset, but only if it is available at scale, at predictable prices and on investment-relevant timelines.** As supply tightens







and interconnection delays mount, companies face higher risks and may begin to reassess siting decisions. Provinces that can guarantee abundant clean power paired with transparent, timely permitting will capture the next wave of capital. Others will not.

The window of opportunity to capitalize on the clean electricity advantage is closing. Other jurisdictions in North America, Europe and Asia are moving quickly to decarbonize electricity grids and attract fast-growing sectors reliant on clean power (see “Canada’s competitors in the global race for clean capital” below). While Canada has successfully attracted the initial wave of investment, the physical and regulatory infrastructure to realize this growth is proving inadequate. Without an aggressive, coordinated national effort to rapidly scale and future-proof the grid, the capital that Canada has won risks being stalled, delayed or ultimately relocated, transforming a competitive advantage into a missed economic opportunity.

37. Government of Canada Major Projects Office. *Projects Referred to the MPO*. Updated November 13, 2025. Accessed December 30, 2025. <https://www.canada.ca/en/privy-council/major-projects-office/projects/national.html>.

## Canada’s competitors in the global race for clean capital.

Canada is not alone in offering low-carbon electricity and seeking investment in emerging industries. The jurisdictions below are leaders in grid decarbonization—and turning that clean power advantage into a magnet for global investment in green industry, data centres and advanced manufacturing.

Jurisdiction	Clean power advantage	Key sectors attracted
Norway 	98% renewable (mostly hydro), low prices, cool climate	Data centres (Google, Microsoft), EV/batteries (Freyr), green materials (fertilizer, aluminum)
Denmark 	82% renewables (wind, solar, biomass), mature offshore sector, long-term PPAs	Wind supply chain (Vestas), data centres (Apple), green hydrogen, biotech
Scotland 	>100% domestic demand from wind, up from 37% in 2022; surplus power exports; large offshore wind pipeline	Offshore wind manufacturing, green hydrogen, industrial decarbonization
Texas 	36% wind and solar, rapid growth from near zero in 2005; low-cost power, deregulated market	EVs (Tesla), semiconductors (Samsung), chemicals (Dow), data centres
Spain 	65% renewables in 2024, up from 45% in 2021; prices down 20%; goal: 80% by 2030	Data centres (Amazon Web Services, Microsoft, Google); EVs (Volkswagen), green hydrogen (20% of E.U. supply)
Chile 	70% renewables in 2024, up from 47% in 2019; ultra-low solar life-cycle costs; growing wind sector	Clean copper mining (BHP, Codelco), green hydrogen, critical minerals processing



# 03

## Industry and investors want clean, reliable and abundant power

Across interviews, companies and investors consistently put electricity near the top of their location and investment decisions. They are not chasing “green electrons” in the abstract. They are looking for **clean, reliable, abundant and competitively priced power** that can keep pace with their growth and protect them from regulatory and market risk.

For many manufacturers and resource firms, clean power is not yet the primary driver—labour, logistics and capital costs still dominate—but it is **rapidly moving from a “nice to have” to a hard constraint** for large projects and global supply chains. Scope 2 and 3 emissions targets are being written into contracts, export markets are tightening carbon rules and investors are screening portfolios for exposure to fossil fuel price volatility and transition risk.

The direction is not all one way. The past year has seen many banks and investors walk back their most ambitious climate commitments in response to pressure from governments and growing economic and geopolitical challenges. The Net-Zero Banking Alliance suspended activities in August after an exodus of U.S. and Canadian banks,<sup>38</sup> leading to a restructuring and shift in focus at the Glasgow Financial Alliance for Net Zero.<sup>39</sup>

38. David L. Levy and Rami Kaplan. “Banks Retreat from Climate Change Commitments – But It’s Business More Than Politics.” *The Conversation: Business + Economy*. September 25, 2025. Accessed December 30, 2025. <https://theconversation.com/banks-retreat-from-climate-change-commitments-but-its-business-more-than-politics-265176>.

39. Mark Segal. “Bloomberg, Carney-Led Climate Finance Group Restructures After String of High-Profile Departures from Net Zero Coalitions.” *ESG Today: Investors/Suitable Finance*. January 6, 2025. Accessed December 30, 2025. <https://www.esgtoday.com/bloomberg-carney-led-climate-finance-group-restructures-after-string-of-high-profile-departures-from-net-zero-coalitions/>.

In spite of near-term political headwinds, corporate climate commitments remain robust. More than 12,000 companies—representing 40% of global market capitalization—have now set science-based emissions reduction targets,<sup>40</sup> with the Science-Based Targets Initiative reporting a 227% increase in participating companies over the 18 months ending August 2025.<sup>41</sup> Importantly, more than 9,000 companies have set Scope 2 targets, directly increasing demand for clean electricity.

While political pressure in the United States has led some investment managers and banks to step back from climate-related coalitions, Canada’s financial sector continues to accelerate its commitments. Climate Engagement Canada—a Canadian financial sector-led coalition—has more than doubled its membership since launch and now represents over \$15 trillion in global assets under management, focused explicitly on driving climate-aligned outcomes in the Canadian market.

### 3.1 Clean electricity as a strategic differentiator

Several themes emerged from our investor and industry interviews:

- ⦿ **Clean power is a differentiator, but only when it is cheap, firm and available.** Hydro-backed grids in Québec, British Columbia and Manitoba are attractive because they offer all three; the situation is similar with Ontario’s nuclear- and hydro-dominated grid. Wind and solar are important, but investors value their contribution

more when backed by firm capacity and credible transmission plans. Clean power can add value to physical assets (mines, manufacturing facilities) and export products, providing a hedge against carbon pricing, emerging market access restrictions and energy price volatility.

- ⦿ **Electricity constraints are already destroying value.** Industrial electrification projects are being delayed or scaled back because of capacity shortages and transmission timelines. Technology parks are losing data-intensive tenants to lower-cost, more predictable jurisdictions. Procurement processes that award narrow blocks of capacity (e.g., Ontario’s LT1) have stranded gigawatts of otherwise financeable clean projects.
- ⦿ **Policy and regulatory frictions compound the problem.** Investors highlighted opaque interconnection queues, unclear transmission rights, volatile rate structures and peak-demand rules, and uncertain consultation processes with Indigenous rights holders as material sources of risk.

One institutional investor put it bluntly: “Clean electricity is integral to investment screening; we require low Scope 2.” A developer with a large North American pipeline summarized the situation this way: “Transmission and interconnection are the core constraints to scaling clean power in Canada. Canada risks losing its clean-power edge without coordinated grid expansion.”

The rest of this section unpacks how these dynamics play out in practice: where green premiums exist and how different sectors are factoring clean power into their decisions.

## Policy and regulatory hurdles deterring investment

Investors and clean energy developers are struggling with a suite of overlapping policy and regulatory barriers that increase risk and reduce returns in Canada:

- **Interconnection:** Lack of transparency regarding interconnection queues and transmission rights.
- **Capacity and permitting:** Systemic electricity capacity constraints and prolonged permitting inertia for generation and transmission projects.
- **Rate structures:** Provincial rate structures and peak demand rules that disproportionately penalize new industrial and technology loads.
- **Indigenous consultation:** Uncertainty and lack of clarity around the processes for Indigenous consultation in resource development and infrastructure projects.

40. Science-Based Targets Initiative. *Target Dashboard*. n.d. Accessed December 30, 2025. <https://sciencebasedtargets.org/target-dashboard>.

41. Jennifer L. “Corporate Climate Pledges Surge 227% as SBTi Net Zero Standards Tighten.” *Carbon Credits*. August 20, 2025. Accessed December 30, 2025. <https://carboncredits.com/corporate-climate-pledges-surge-227-as-sbti-net-zero-standards-tighten/>.



## 3.2 Where “green premiums” show up

**Clean electricity does not command a universal price premium.** But it does in specific contexts:

- Sectors where power is a modest share of operating costs but brand; climate, environmental, social and governance commitments; and/or social licence is critical (tech/data centres, finance, some consumer-facing firms).
- Export-facing industries where carbon content is directly priced or regulated (steel, aluminum, battery materials and future Carbon Border Adjustment Mechanism-covered products).
- Operations with high cooling needs that gain from locating in cold climates with clean grids (data centres, some industrial facilities).

**Technology and data centres.** Hyperscale data centre operators and cloud providers have explicit commitments—such as RE100 and 24/7 carbon-free electricity—across their global portfolios. They are typically **willing to pay more for power that is both clean and firm**, especially where it supports their own customer offers on “green cloud” and AI workloads. One technology park representative told us this: “Brokers steer AI firms to Gatineau, because

power is half the price.” The implication is clear: where clean power is cheap as well as low carbon, green premiums translate into location rent for the host jurisdiction.

**Industrial materials and metals.** Canada’s aluminum and low-carbon steel producers already secure price and volume advantages in markets where buyers are under pressure to decarbonize. Major buyers, like automakers, rail operators and construction firms, are locking in low-carbon material supply commitments. Canada’s hydropower-backed aluminum and steel exports, among the lowest carbon intensity globally, are well placed to capture this, provided capacity and grid access are not binding constraints.

**Corporate renewable procurement.** Evidence from U.S. PPA markets and interviews with tech hyperscalers suggests that corporations will pay up to **\$30–\$40/MWh above benchmark** prices (~30% premium) to secure clean, firm, long-term supply that supports their climate targets. In Canada, only Alberta has operated at a similar scale with corporate PPAs, but recent policy restrictions have significantly slowed new renewable development. In the rest of Canada, where industrial rate flexibility is more limited, this willingness to pay often shows up as siting decisions rather than visible price premiums—companies simply favour jurisdictions with the right mix of clean, cheap and reliable power.

*We are comfortable with paying premiums for clean electricity. Company leadership decided it is worth walking the talk from a business standpoint. For our customers, the clean energy story and our sustainability plans are important.*

*—Global technology and AI company executive*

## 3.3 Sector perspectives

### 3.3.1 Data centres

*Brokers steer AI firms to Gatineau, because power is half the price.*

*—Ottawa-based technology cluster executive*

Hyperscalers and AI firms are at the leading edge of electricity-driven siting decisions. Most major players have ambitious targets: 100% renewable, 24/7 carbon-free energy or net zero across Scopes 1 and 2, and, increasingly, Scope 3. These commitments are in the context of unprecedented capital investments by the industry, estimated at US\$400 billion in 2025 on data centres, chips and other infrastructure. However, industry leaders are increasingly warning of electricity shortages that could derail the industry at a key stage in its growth.<sup>42</sup>

Interviews conducted for this study highlight three consistent decision criteria used by data-intensive firms when assessing Canadian locations: **power cost, reliability and carbon intensity.**

Provinces with abundant hydropower—British Columbia, Manitoba and Québec—are especially attractive, offering firm, low-cost, low-carbon electricity alongside colder climates that materially reduce cooling costs. In contrast, Ontario’s rising electricity prices and complex peak-demand rules are beginning to divert interest toward Québec, with one technology park representative noting that “energy predictability now drives every lease conversation.”

Hyperscalers are also reshaping expectations of electricity markets. Firms such as Amazon, Microsoft and Google increasingly expect access to long-term PPAs, 24/7 clean energy contracts or equivalent structured products, reflecting standard practice in the U.S. and Europe. Canada offers limited flexibility to meet these expectations outside Alberta, constraining its competitiveness for the most sophisticated buyers.

At the same time, the scale and speed of AI-driven demand introduce material planning risks for governments and utilities. International evidence points to the growth of so-called “phantom loads”: large electricity requests that enter interconnection queues but may never be built or may be scaled back sharply if capital markets tighten or AI investment cycles turn. Without clear screening, prioritization and decision timelines, these loads risk crowding out other strategic industrial investments or driving inefficient grid expansion.

42. Rafe Rosner-Uddin, Nassos Stylianou, Dan Clark, Caroline Nevitt and Jamie Smyth. “The Power Crunch Threatening America’s AI Ambitions.” *Financial Times*. December 7, 2025. <https://ig.ft.com/ai-power/>.





### 3.3.2 EV and battery supply chain

*Energy is a top cost driver for gigafactories.  
Clean is a bonus; cheap is essential.*

*—North American automaker executive*

Automakers and battery manufacturers face simultaneous pressure on cost and carbon.

On the cost side, energy is now a major line item for gigafactories. As one auto original equipment manufacturer (OEM) representative put it: “Energy is a top cost driver for gigafactories. Clean is a bonus; cheap is essential.” They prioritize power prices, labour costs, logistics and proximity to markets, then factor in carbon and policy risk.

On the carbon side, the E.U. battery regulation and tightening OEM-level climate targets are pushing Scope 2 and 3 requirements deep into the supply chain. Carmakers such as Mercedes-Benz<sup>43</sup> and Volvo<sup>44</sup> are embedding renewable energy and emissions thresholds in contracts for aluminum, steel and battery materials. Midstream suppliers like Umicore<sup>45</sup> are imposing sustainability standards on upstream suppliers of cobalt, nickel and lithium. Contractual requirements are increasingly backed by third-party assurance and traceability platforms.

Interviews with automotive and battery players highlighted:

- Energy cost and availability as primary site-selection drivers, with carbon intensity as an increasingly important tie-breaker and long-term risk hedge.
- Growing importance of siting in low-carbon jurisdictions to future-proof against regulations and customer expectations.
- The reality that grid constraints are already slowing projects, such as in the Bécancour battery hub, where transmission and power allocations have become critical bottlenecks.

As one firm noted: “Québec has advantages, but peak shortages already limit industrial connections.”

43. Mercedes-Benz Group. *Annual Report 2024*. March 11, 2025. <https://group.mercedes-benz.com/documents/investors/reports/annual-report/mercedes-benz/mercedes-benz-annual-report-2024-incl-combined-management-report-mbg-ag.pdf>.

44. Volvo Cars. “Volvo Car AB (Publ.) Publishes Annual and Sustainability Report 2024.” March 12, 2025. Accessed December 30, 2025. <https://www.volvocars.com/intl/media/press-releases/B31AB95ECEEFC4/>.

45. Umicore. “Umicore Publishes Its 2023 Integrated Annual Report.” March 22, 2024. Accessed December 30, 2025. <https://www.umicore.com/en/media/newsroom/umicore-publishes-integrated-annual-report-2023/>.

### 3.3.3 Mining

*Without access to clean electricity grids, a \$500 million asset can become a \$400 million asset.*

*—Canadian mining sector executive*

For mining, electricity is directly tied to asset value and access to future markets.

Mining executives told us that grid-connected low-carbon power is now among the top five investment criteria, alongside ore quality and jurisdictional risk. One mining representative stated: “A \$500 million asset becomes a \$400 million asset without clean grid access.” That order of magnitude—about a 20% hit to value—aligns with the growing importance of low-carbon materials for global buyers and investors.

Drivers include:

- Mining’s share of global emissions (roughly 4%–7%), which is attracting more regulatory and investor scrutiny.<sup>46</sup>
- Customer requirements that incorporate Scope 3 emissions into off-take contracts.
- Instruments like the E.U.’s Carbon Border Adjustment Mechanism, which will increasingly differentiate based on embodied carbon emissions.

Canada already has examples of mines marketed explicitly as low carbon or future net-negative operations, leveraging clean power and carbon-storage potential (e.g., Canada Nickel’s Crawford project in Ontario, Nouveau Monde Graphite’s Matawinie Mine in Québec,<sup>47</sup> McIlvenna Bay Foran Copper Mine in Saskatchewan<sup>48</sup>).

But those models assume reliable access to firm, clean electricity and transmission. Remote reserves such as the Ring of Fire and much of Canada’s North remain constrained by the absence of grid infrastructure and slow progress on permitting and Indigenous partnership models.

46. Lindsay Delevingne, Will Glazener, Liesbet Grégoir and Kimberly Henderson. “Climate Risk and Decarbonization: What Every Mining CEO Needs to Know.” McKinsey Sustainability. January 28, 2020. <https://www.mckinsey.com/capabilities/sustainability/our-insights/climate-risk-and-decarbonization-what-every-mining-ceo-needs-to-know>.

47. Nouveau Monde Graphite. *Matawinie Mine*. n.d. Accessed December 30, 2025. <https://nmg.com/matawinie-mine/>.

48. Foran Mining. *2024 Sustainability Report*. 2025. <https://foranmining.com/wp-content/uploads/2025/11/Final-Foran-Mining-2024-Sustainability-Report-20251016.pdf>.





### 3.3.4 Heavy industry: Steel, aluminum and cement

*Electricity doesn't solve cement emissions on its own—but without clean power, carbon capture and alternative fuels don't scale.*

—Cement industry leader

Canada has a structural advantage in several heavy industrial sectors, but realizing it depends on electricity.<sup>49</sup>

**Steel.** Decarbonizing integrated steel plants using electric-arc furnaces and, eventually, hydrogen-based direct reduction requires vast quantities of electricity. Industry estimates suggest that a roughly 430% increase in electricity consumption would be required to decarbonize the Canadian steel sector, concentrated in Ontario and Québec.<sup>50</sup> Clean power is needed for electric-arc furnaces, hydrogen production and pelletization.

Despite technology and cost challenges, global demand for green steel is rising: tech firms,<sup>51</sup> carmakers and railway companies<sup>52</sup> are signing contracts for near-zero steel to cut Scope 3 emissions.<sup>53</sup> China, once considered the most carbon-intensive global steel producer, is now supplying green steel to Italian buyers,<sup>54</sup> and green steel industry partnerships are emerging between China, the E.U. and Australia.<sup>55,56</sup>

49. Joanna Kyriazis, Trevor Melanson, Stefan Pauer and Mark Zacharias. *The World Next Door*. Clean Energy Canada. April 2025. [https://cleanenergycanada.org/wp-content/uploads/2025/04/Report\\_2025\\_CanadasCleanEconomicOpportunity-V3.pdf](https://cleanenergycanada.org/wp-content/uploads/2025/04/Report_2025_CanadasCleanEconomicOpportunity-V3.pdf).

50. Nuclear Innovation Institute, Bruce Power Centre for New Nuclear & Net Zero Partnerships and Canadian Steel Producers Association. *Greening Steel: How Nuclear Energy and Electrification Can Power the Future of Steel*. October 2023. [https://ad69703e-eadc-486b-ba27-25eb8c488334.usrfiles.com/ugd/ad6970\\_0868bfc8df794c13a77b8d18c3bc34fa.pdf](https://ad69703e-eadc-486b-ba27-25eb8c488334.usrfiles.com/ugd/ad6970_0868bfc8df794c13a77b8d18c3bc34fa.pdf).

51. Stegra. "Stegra Announces Agreement with Microsoft." September 23, 2025. Accessed December 30, 2025. <https://stegra.com/news-and-stories/stegra-announces-agreement-with-microsoft>.

52. Esther Geerts. "Deutsche Bahn Launches First Pilot With Green Steel Rails From Saarstahl to Cut Emissions." *RailTech.com*. November 11, 2025. Accessed December 30, 2025. <https://www.railtech.com/all/2025/11/11/deutsche-bahn-launches-first-pilot-with-green-steel-rails-from-saarstahl-to-cut-emissions/>.

53. Global companies and governments representing over US\$ 8.5 trillion in purchasing power have committed to purchasing low-carbon industrial products, including steel, aluminum and cement, through the First Movers Coalition. First Movers Coalition. *Members*. n.d. <https://initiatives.weforum.org/first-movers-coalition/community>.

54. Alexander C. Kaufman. "China Is Winning on Renewables. Will It Win on Green Steel Too?" *Canary Media*. August 15, 2025. Accessed December 30, 2025. <https://www.canarymedia.com/articles/green-steel/china-us-competition-dri-hydrogen>.

55. Alexander C. Kaufman. "Chinese and European Industry Groups to Decide on Green-Steel Standards." *Canary Media*. November 17, 2025. Accessed December 30, 2025. <https://www.canarymedia.com/articles/green-steel/china-europe-industry-emissions-standards-partnership>.

56. Prime Minister of Australia. "Prime Minister's Visit to China." July 18, 2025. Accessed December 30, 2025. <https://www.pm.gov.au/media/prime-ministers-visit-china>.

If Canada can provide cheap, clean power and timely interconnections, it is well placed to serve the growing demand for green steel, with the potential to retain—and attract new—valuable industrial jobs. If not, these supply chains will form elsewhere.

**Aluminum.** Canada already has a global low-carbon advantage: aluminum production is concentrated in hydropower-rich regions. Demand from U.S. and global buyers for low-carbon aluminum is growing as the auto and packaging sectors decarbonize.<sup>57</sup> The challenge is not market appetite but ensuring continued access to cheap, firm hydro, while accommodating new loads from other sectors.

**Cement.** The path is different. Most cement emissions are process related, so decarbonization hinges on carbon capture, utilization and storage (CCUS) rather than electrification. However, CCUS pilots are electricity intensive—for compression, transport and, in some cases, alternative fuels—and interviews pointed to electricity availability as a constraint. Lafarge’s Richmond project was repeatedly cited as an example where expansion opportunities are power limited.

### 3.3.5 Other sectors

Climate and energy requirements are also filtering through consumer and retail supply chains:

- **Large food retailers** report that most of their top suppliers now have science-based targets.
- **Consumer-goods companies** such as Unilever are embedding climate clauses directly into supplier contracts to secure low-carbon materials like aluminum and recycled plastics.
- **Beverage firms** like Diageo are starting to contractually require renewable electricity in supplier road maps, both to manage Scope 3 emissions and to mitigate exposure to future carbon costs.

These sectors do not drive large load increases themselves, but their purchasing power multiplies the demand for low-carbon electricity across upstream industries.

Overall, the message from industry and investors is unambiguous: clean power is moving from optional to foundational. Canada still has a structural advantage, but the combination of grid constraints, policy uncertainty and slow processes is already eroding it.

57. Maria Gallucci. “Sortera Raises \$45M for Recycling Tech as US Demands Low-Carbon Aluminum.” *Canary Media*. November 20, 2025. Accessed December 30, 2025.  
<https://www.canarymedia.com/articles/clean-aluminum/aluminum-recycler-sortera-funding-ai>.



# 04

## What Canada stands to gain—or lose

Canada's clean electricity system has already proven to be a powerful economic asset. Since 2021, the country has attracted an estimated **\$60–\$70 billion in announced capital investment** across EV and battery supply chains, data centres, critical minerals, clean hydrogen, carbon management and low-carbon industry.

These projects will support tens of thousands of direct jobs and many more indirect jobs, as well as create substantial GDP and fiscal benefits. These investments are not theoretical; they are **directly linked to access to clean, reliable and competitively priced electricity**.

The upside is far larger. Independent estimates suggest that **\$1.3–\$1.5 trillion in capital** will be required by 2050 to expand and decarbonize Canada's electricity system in line with net-zero goals, with a comparable order of magnitude needed across the industry, transport, buildings and resource sectors to electrify and decarbonize.<sup>58</sup> A 2021 projection estimated that Canada's clean energy economy could exceed \$100 billion in annual GDP and create 600,000 jobs by 2030, with evidence that a well-managed transition could reduce overall energy costs for households and businesses.<sup>59</sup>

However, realizing this opportunity depends on whether Canada can deliver the scale and speed of clean power that industry increasingly requires.

58. Natural Resources Canada. *Powering Canada: A Blueprint for Success. Canada Electricity Advisory Council: Final Report*. May 2024. <https://natural-resources.canada.ca/energy-sources/powering-canada-blueprint-success>. John Stackhouse, Colin Guldemann, Ben Richardson, Steven Frank, Darren Chow, Carolyn King and Farhad Panahov. *The \$2 Trillion Transition: Canada's Road to Net Zero*. Royal Bank of Canada. October 20, 2021. <https://www.rbc.com/en/thought-leadership/economics/featured-insights/the-2-trillion-transition/>.

59. Rachel Doran, Vittoria Bellissimo and Peter McArthur. "Unlocking the True Potential of Canada's Clean Economy." Canadian Renewable Energy Association. November 3, 2025. Accessed December 30, 2025. <https://renewablesassociation.ca/unlocking-the-true-potential-of-canadas-clean-economy/>.

As shown in Section 3, large clean economy projects are electricity intensive (illustrative values):

- ◉ **AI and hyperscale data centres:** ~100–1,000 MW per campus
- ◉ **Battery gigafactories:** ~100–300 MW
- ◉ **Green steel plants:** ~500–1,000 MW
- ◉ **Green hydrogen facilities:** ~50–1,000 MW
- ◉ **Large mines and processing facilities:** 10–300 MW

(For context, 1,000 MW is enough to power a mid-sized city.)

These projects generate outsized economic returns. Individual facilities often represent billions of dollars in capital, hundreds or thousands of direct jobs, deep supply-chain impacts, and significant opportunities for Indigenous equity participation and regional development. Clean electricity is therefore not just an environmental input; it is an economic growth engine.

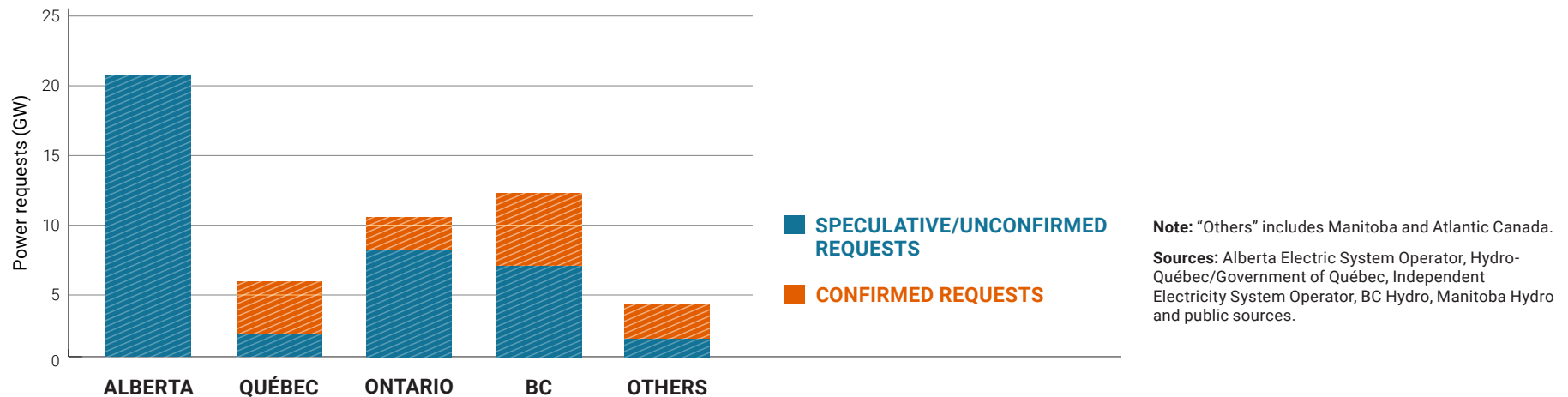
## Missed opportunities and growing risks

The risk is no longer hypothetical. Power constraints are already leading to cancelled, delayed and scaled-back projects.

Public data remain incomplete, but what is visible should concern decision makers. Québec is the clearest example: since 2023, the province has reportedly rejected or deferred more than 3 GW of industrial and data centre load due to electricity constraints,<sup>60</sup> representing an estimated \$25 billion in forgone or delayed investment. More broadly, Québec’s industrial pipeline exceeded 13 GW in 2024, with officials indicating that only “a handful” were likely to proceed under current supply conditions.<sup>61</sup>

Alberta aims to attract \$100 billion of AI data centre investments over the next five years, but this strategy risks being undermined by a lack of low-cost, reliable power. Under the temporary cap of 1.2 GW for “large load” projects, only two data centre requests were approved. This leaves 37 proposed data centre projects with a combined capacity of nearly 20 GW in the Alberta Electric System Operator’s queue, unlikely to be connected until 2028 at the earliest. According to Morningstar DBRS, this delay creates a risk of “potential loss of opportunity,” and “marquee technology companies may choose other provinces that already have codified pathways to low GHG emissions.”<sup>62</sup>

**FIGURE 3. LARGE-SCALE ELECTRICITY REQUESTS EXCEED 50 GW ACROSS CANADA.**



60. Sylvain Larocque. “Surprise! Il n’y aura peut-être pas de pénurie d’électricité finalement.” *Journal de Montréal*. June 9, 2025. Accessed December 30, 2025. <https://www.journaldemontreal.com/2025/06/09/surprise-il-ny-aura-peut-etre-pas-de-penurie-deelectricite-finalement>.

61. Sylvain Larocque. “Québec a été ‘pris de court’ par le manque d’électricité, admet Fitzgibbon.” *Journal de Québec*. April 3, 2024. Accessed December 30, 2025. <https://www.journaldeQUEBEC.com/2024/04/03/quebec-a-ete-pris-de-court-par-le-manque-deelectricite-admet-fitzgibbon>.

62. Karan Gupta and Ravikanth Rai. “Alberta Opens the Door, Not the Floodgates: A New Chapter for Data Centres.” Morningstar DBRS. November 10, 2025. Accessed January 6, 2026. <https://dbrs.morningstar.com/research/466855/alberta-opens-the-door-not-the-floodgates-a-new-chapter-for-data-centres>.

Electricity supply and grid constraints are leading to similar stories in other provinces where demand outpaces supply, including Ontario, Alberta, Manitoba and B.C. All told, the capital opportunity from both large industrial electricity demand and the required clean electricity supply **exceeds \$500 billion** based on projects currently seeking utility grid connections.<sup>63</sup>

Drawing on interviews with current and former utility executives and a review of public data from the Alberta Electricity System Operator, Independent Electricity System Operator and other sources, we estimate that approximately 11–22 GW of large industrial are at risk of not being met. These projects may face indefinite delays, cancellation or relocation to other jurisdictions.

As a conservative estimate, this equates to **\$85–\$170 billion** in at-risk industrial capital investment and **40,000–80,000 direct FTE jobs** (with potential for many thousands more across the supply chain). Meeting this demand would require substantial clean electricity supply and grid-scale storage. Based on Dunsky's

internal resource cost benchmarks, this would entail an additional **\$25–\$50 billion** in renewable generation and battery storage investment. In total, **\$110–\$220 billion** of potential capital investment is at risk in the near term due to insufficient clean electricity supply and grid capacity.<sup>64</sup>

The case studies in this section illustrate how these missed opportunities play out in three key sectors: EV battery supply chains, AI data centres, and green iron and steel.

Section 5 outlines the policy priorities identified by industry stakeholders we spoke to for this project, and by other similar efforts focused on expanding Canada's clean electricity capacity to attract investment and enable net zero by 2050. Key among these requests are clarity, speed and credible pathways to power. Where and when those conditions are present, capital flows quickly. Where they are absent, projects end up being delayed, paused or shifted to other jurisdictions.



63. This includes approximately \$420 billion of industrial capex and \$120 billion of renewable energy and battery storage capex.

64. Assumptions: 50%–75% of power allocation requests will drop off through natural attrition; of the remaining higher-likelihood load requests, 20% will proceed and 80% will be unmet in the next five years (based on rates in Québec, Alberta, Ontario and U.S. jurisdictions); we used sector-average multipliers of \$7.8 million capex per MW of capacity and 0.47 direct FTE jobs created per \$M capex. Joseph Rand, Nick Manderlink, Steven Zhang, Chris Talley, Will Gorman, Ryan H. Wiser, Joachim Seel, J. Kemp, Seongeun Jeong and Fredrich Kahr. "Queued Up: 2025 Edition – Characteristics of Power Plants Seeking Transmission Interconnection as of the End of 2024." Lawrence Berkeley National Laboratory. December 1, 2025. <https://www.osti.gov/biblio/3008763>.

# 4.1 Case studies

## CASE STUDY

### Battery plant relocated from Windsor, Ontario, to the U.S.

<b>Project cancelled:</b>	Due to an inability to provide 10–25 MW of electricity within three years, LG Chem cancelled plans to build a \$2.5 billion battery manufacturing facility in Windsor, Ontario <sup>65</sup>
<b>Opportunity lost:</b>	1,000–1,500 jobs, domestic supply of battery components
<b>Outcomes:</b>	LG Chem invested in a facility in the U.S. instead
<b>Lessons:</b>	<p>The City of Windsor could have had the electricity to meet LG Chem’s needs if the Ontario government had not cancelled 188 MW of large renewable procurement projects in 2018<sup>66</sup></p> <p>In 2022, the provincial government committed to adding five transmission lines in Southwestern Ontario to support the manufacturing and greenhouse sectors.</p>
<b>Capex:</b> \$2.5B	<b>Key stakeholders:</b> LG Chem, Government of Ontario, Independent Electricity System Operator, Hydro One and a local distribution company
<b>Timing:</b> 2021	

*I am annoyed that something as basic as electricity infrastructure is hindering the further expansion of our automobility cluster.*

–Stephen MacKenzie, Invest WindsorEssex CEO

65. "Windsor Loses Out on \$2.5-Billion Plant from LG Chem Due to Lack of Energy Supply." *CBC News: Windsor*. May 11, 2022. Accessed December 30, 2025. <https://www.cbc.ca/news/canada/windsor/windsor-plant-lg-1.6448304>.

66. Jacob Lorinc. "Closed for Business? Ontario Loses Out on LG Chem Plant. Business Groups Blame Ford’s Cancellation of Renewable Energy Contracts." *Toronto Star: Business*. May 26, 2022. Accessed December 30, 2025. [https://www.thestar.com/business/closed-for-business-ontario-loses-out-on-lg-chem-plant-business-groups-blame-ford-s/article\\_34a9fb2c-c828-5eb4-8690-81a20f30f738.html](https://www.thestar.com/business/closed-for-business-ontario-loses-out-on-lg-chem-plant-business-groups-blame-ford-s/article_34a9fb2c-c828-5eb4-8690-81a20f30f738.html).

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## CASE STUDY

# Data centres and missed investment opportunities

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**Background:** There is growing interest in Canada as a destination for global data centre investment. However, a growing number of projects are at risk or have been cancelled due to electricity constraints, regulatory uncertainty or social licence challenges.

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**Cancelled or at-risk projects:** **QScale, Québec:** \$750 million St-Bruno-de-Montarville data centre cancelled due to inability to secure sufficient electricity. Lévis phase 3 and 4 expansions, representing a \$320 million investment, are stalled waiting for power allocations.

**Rocky View County, Alberta:** \$750 million 90 MW AI data centre is rejected following community opposition.

**Wonder Valley, Alberta:** Up to \$70 billion 7.5 GW data centre campus is facing uncertainty, with no confirmed power supply, regulatory approvals and Indigenous opposition.

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**Opportunity lost:** More than **\$1.5 billion** in investment and **hundreds of direct jobs**.

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*You can't win that race if you're trying to restrict wind, solar and batteries. There's a five- to seven-year wait time for natural gas turbines right now. That's just not an option.*

—Jesse Lee, *Climate Power*





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**Lessons:**

Data centre projects face a number of challenges:

- **Need for fast access to significant electricity capacity:** AI companies need up to 1 GW of electricity to power new data centres—20 times more than just a few years ago.
- **Provincial queues and allocation caps:** Most provinces now have caps on data centre connections. Alberta rejected 94% of requests for its recent 1.2 GW capacity allocation to 2028. B.C., Ontario and Québec have also placed limits on new data centres.
- **Regulatory uncertainty:** Need for public hearings, social licence and Indigenous support can extend timelines and increase risk.
- **Limited market flexibility:** Few Canadian jurisdictions offer PPAs or similar mechanisms for corporate renewable procurement, which are common in the U.S.

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**Broader context:**

**Total opportunity:** ~30 GW of data centre requests in Canada, with the potential to attract **\$100–\$150 billion of investment** (mostly in Alberta, Québec and Ontario).

**Global demand for clean power accelerating:** Google, Microsoft, Amazon and other hyperscalers committed to **24/7 carbon-free energy by 2030**. To meet these commitments, they are willing to pay hefty premiums (as much as 15%–30%) for clean, firm power.

While other public policy goals and priorities may reasonably limit the growth of data centres in Canada, the example is illustrative: **limited availability of clean power should not be the barrier** to industries seeking to locate in Canada.

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*The number one factor is how fast a jurisdiction can secure large blocks of power. If they can't, we go elsewhere.*

*—Technology and AI executive*

## CASE STUDY

# Can Canada meet its green steel potential?

Canada's steel sector is under acute pressure. U.S. steel tariffs have effectively closed access to what has historically been Canada's largest export market, placing an industry that employs 24,000 people (with many more jobs indirectly supported) and generates roughly \$4 billion in annual GDP at risk.

At the same time, the sector faces a rare strategic opportunity. As global markets begin a structural shift toward green iron and green steel, Canada is one of the few countries with both abundant clean electricity and high-grade iron ore—the core inputs required to compete. One recent study estimates that **developing a Canadian green iron industry could generate \$25 billion in annual value, create 14,000 jobs** and prevent more than 100 million tonnes of global emissions by displacing carbon-intensive production abroad. As Fortescue CEO Andrew Forrest has noted, “the trend towards green iron ore and steel cannot be denied.”

Industry representatives such as the Canadian Steel Producers Association are clear that **“low cost, low carbon matters for competitiveness—if we lose that edge, we lose a lot.”** One of the country's largest producers—Algoma Steel Inc., located in Sault Ste. Marie, Ontario—has already taken a significant step toward decarbonizing its operations and is transitioning from a blast furnace—basic oxygen furnace combination to an electric-arc furnace (expected to cut emissions by around 70% while increasing output). Along with a broader set of market and technology advances, decarbonizing steel production will require **enormous quantities of low-cost, low-carbon power: a 430% increase on current sector use**, according to one estimate.<sup>67</sup>

Securing power has been “a major consideration” for Algoma throughout its transition, requiring a new 11 km transmission line and government commitments to future bulk grid upgrades in 2029. As CEO Michael Garcia

explained, **“Our customers are more mindful of the carbon profile of what they're buying... that's what drove our board to approve this project.”**<sup>68</sup>

The transition plans of Algoma and ArcelorMittal Dofasco (also based in Ontario) face further headwinds from rising electricity costs, which are forecast to increase significantly in the province in the near term, and from concerns that growing reliance on natural gas generation could erode the province's clean power advantage over time.<sup>69</sup>

In Québec, which is home to Canada's second-largest steel sector, **power constraints are already limiting investment**. A proposed \$1.1 billion direct-reduced iron and pellet plant in Saguenay was scaled back by roughly 50%, explicitly citing electricity availability, with the higher-value metallurgical phase deferred.

Another producer, Les Forges de Sorel, was unable to advance decarbonization plans after being refused a 16 MW power allocation, putting more than 320 high-wage jobs at risk. As the company's president warned:

*In the medium term, it becomes more difficult to compete. **If we are not able to get energy to decarbonize, we end up penalized, paying for carbon credits that competitors do not have to pay.***

The lesson is clear. Canada's long-term steel competitiveness—and its ability to secure emerging markets for green iron and steel—depends on timely access to affordable, clean electricity. The upside is substantial. The risk, if power constraints persist, is the loss of thousands of high-quality jobs and a strategically important multi-billion-dollar industry.

67. Nuclear Innovation Institute, Bruce Power Centre for New Nuclear & Net Zero Partnerships and Canadian Steel Producers Association. *Greening Steel: How Nuclear Energy and Electrification Can Power the Future of Steel*. October 2023. [https://ad69703e-eadc-486b-ba27-25eb8c488334.usrfiles.com/ugd/ad6970\\_0868bfc8df794c13a77b8d18c3bc34fa.pdf](https://ad69703e-eadc-486b-ba27-25eb8c488334.usrfiles.com/ugd/ad6970_0868bfc8df794c13a77b8d18c3bc34fa.pdf).

68. Samantha Beattie. “ArcelorMittal Dofasco Misses Key Milestones in \$1.8B ‘Green’ Steel Project Promised for 2028.” *CBC News: Hamilton*. September 3, 2024. Accessed January 13, 2026. <https://www.cbc.ca/news/canada/hamilton/arcelormittal-dofasco-decarbonization-update-1.7309360>.

69. Independent Electricity System Operator. *Annual Planning Outlook Capacity Expansion Scenario, Costs, and Emissions*. September 2025. <https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/apo/2025/Capacity-Expansion-Scenario-Costs-and-Emissions-Module.pdf>.

# 05

## What governments need to do

Across our industry interviews, one theme was clear and consistent: clean electricity is a key driver of many investment decisions—with significant potential opportunities for Canada.

Investors view clean power as a way to meet corporate climate commitments and supply chain requirements; to reduce exposure to fossil fuel volatility; to manage carbon and regulatory risk; to secure predictable, long-term operating costs; and to secure social licence to operate and maintain access to strategic markets.

Canada's clean power is also low cost and fast to deploy. Hydropower in Québec, Manitoba and B.C. remains among the cheapest electricity in the G20, while wind, solar and storage continue to decline in cost and were added five times faster than conventional generation in 2024.<sup>70</sup>

Also clear from interviews is that clean electricity is but one of many siting factors. Companies and investors also assess energy cost, permitting/interconnection speed, grid capacity, labour, access to ports and export markets, and access to critical resources.

As global competition intensifies, it is important that Canada strengthen all of these attributes or risk losing out on the next wave of clean energy, industrial, resource and data centre investments—and the significant jobs and economic benefits associated with it.

70. Ricardo Rütter and Andrew Blakers. "The Fastest Energy Change in History Continues." *PV Magazine*. January 13, 2025. Accessed December 30, 2025. <https://www.pv-magazine.com/2025/01/13/the-fastest-energy-change-in-history-continues/>.

Our recommendations focus on five pillars that emerged consistently across investor and company interviews and credible external sources:

- 1 Provide long-term, predictable policy signals.
- 2 Accelerate clean electricity infrastructure build-out.
- 3 Deliver clarity, transparency and speed on interconnection and permitting decisions.
- 4 Strengthen Indigenous partnerships and modernize permitting frameworks.
- 5 Enable demand flexibility, distributed energy and behind-the-meter solutions.

# 5.1 Priority actions for federal, provincial and territorial governments

Table 2 summarizes the top-priority actions for federal, provincial and territorial governments. Section 5.2 includes a broader list of policy recommendations under the five strategic priorities above.

**TABLE 2. PRIORITY POLICY ACTIONS TO UNLOCK CLEAN ELECTRICITY-RELATED INVESTMENT IN CANADA.**

Actions	Lead(s)	
	Federal	Provincial/Territorial
Establish a standing federal–provincial–territorial clean electricity table with a clear mandate to coordinate, track and accelerate clean electricity and transmission build-out across Canada.		
Implement the federal clean electricity strategy, <i>Powering Canada’s Future</i> , and adopt the unanimous recommendations from the Canada Electricity Advisory Council report, in particular recommendations 1 to 3.		
Ensure that industrial carbon pricing systems are strengthened, are applied consistently across Canada and cover 100% of emissions from electricity generation.		
Expand and accelerate clean electricity procurement and permitting by removing duplicative processes and shifting low-risk projects to a compliance-based audit system.		
Co-develop clear, consistent Indigenous consultation and accommodation guidance for proponents and utilities to improve project certainty and predictability.		
Link power-allocation and funding decisions to best-in-class energy-performance standards in energy-intensive sectors.		



## 5.2 Detailed policy recommendations

### Provide long-term, predictable policy signals

#### Why this matters:

Investors commit capital when they have durable visibility on demand, supply, costs and carbon-policy trajectory.

#### Key actions:

- ⊙ Establish a standing federal–provincial–territorial clean electricity table with a clear mandate to coordinate, track and accelerate clean electricity and transmission build-out across Canada.
- ⊙ Implement *Powering Canada's Future*<sup>71</sup> and the unanimous recommendations from the Canada Electricity Advisory Council report, in particular recommendations 1 to 3.
- ⊙ Ensure that industrial carbon pricing systems are strengthened, are applied consistently across Canada and cover 100% of emissions from electricity generation.
- ⊙ Establish clean electrification as a national economic priority, with explicit clean economy growth targets for 2030 and beyond.
- ⊙ Align federal industrial strategy and nation-building project designations with long-term provincial/territorial electricity plans, road maps and net-zero pathway assessments.
- ⊙ Align federal and provincial/territorial mandates (e.g., regulators, Crown utilities, independent system operators) around clean capacity expansion and large-load readiness (including sector-specific load-growth planning).
- ⊙ Finalize and implement Canada's national climate investment taxonomy ("sustainable investment guidelines") by the end of 2026 to provide clarity around green and transition investments, and unlock domestic and international clean economy investments.
- ⊙ Market Canada's low-carbon industrial advantage (metals, materials, manufactured goods) to capture value ahead of global carbon border adjustments.

71. Natural Resources Canada. *Powering Canada's Future: A Clean Electricity Strategy*. August 13, 2025. <https://natural-resources.canada.ca/energy-sources/powering-canada-s-future-clean-electricity-strategy>.

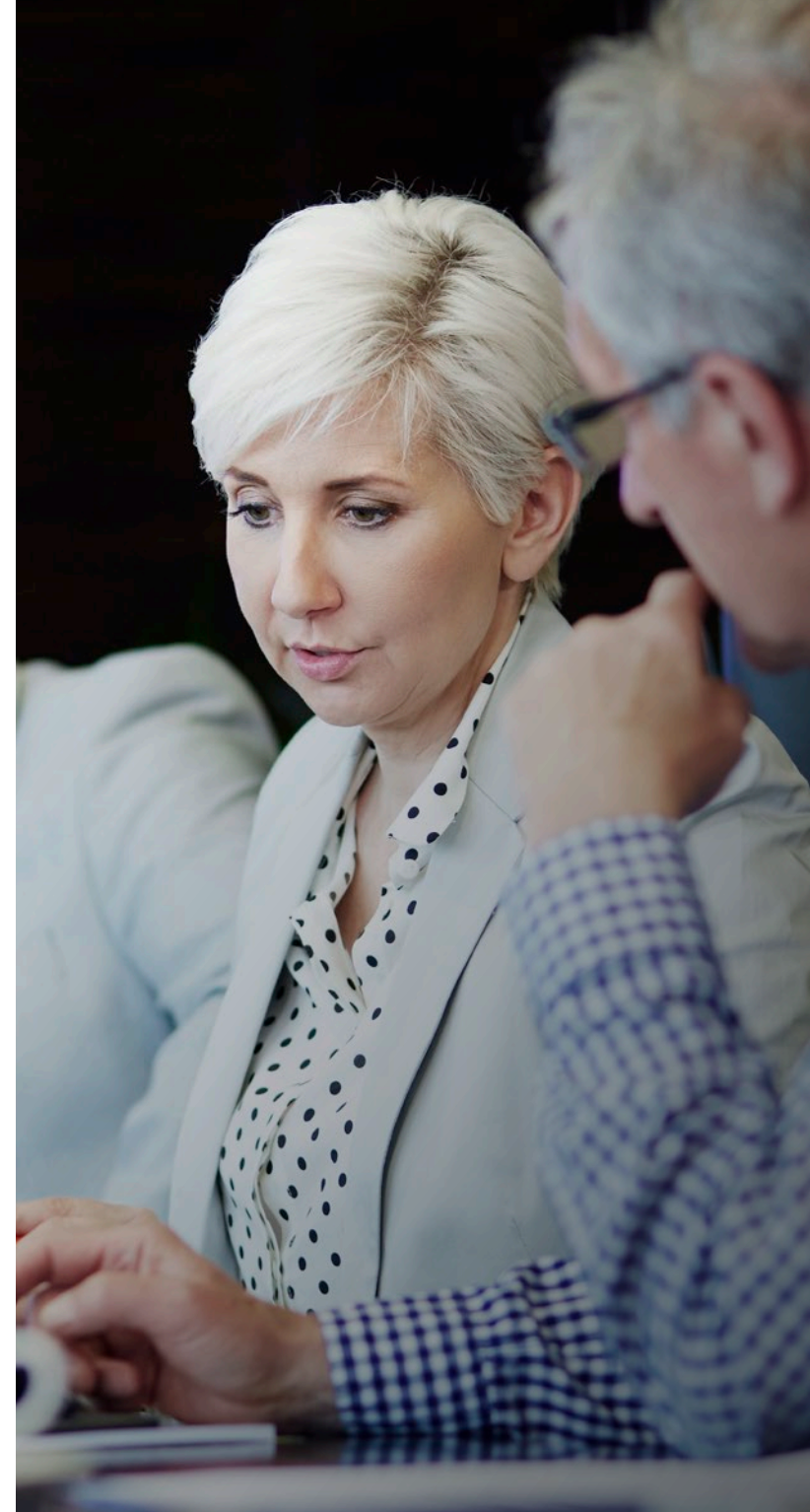
## Accelerate clean generation, storage and transmission build-out

### Why this matters:

Demand growth is outpacing supply. Canada should expand clean power and grids at a pace consistent with industrial and electrification needs.

### Key actions:

- ⦿ Expand and accelerate clean generation procurement and federal, provincial and territorial permitting (wind, solar, storage, hydro upgrades and firm low-carbon resources), to remove duplicative processes and shift low-risk projects to a compliance-based audit system.
- ⦿ Remove regulatory constraints that limit the deployment of low-cost, quick-to-deploy resources—particularly in jurisdictions where renewable development has slowed.
- ⦿ Prioritize and accelerate strategic inter-provincial and intra-provincial transmission projects to unlock low-cost generation, resource basins and industrial hubs, supported by a federal–provincial–territorial framework that provides clear cost-benefit methodologies, risk-sharing and financing mechanisms to enable timely delivery.
- ⦿ Enable long-term contracting tools (e.g., PPAs, 24/7 clean power products) to finance new supply and support industrial siting.
- ⦿ Expand federal financing supports (e.g., contracts for difference, loan guarantees, tax incentives) for clean generation and grid infrastructure.
- ⦿ Designate “clean electricity projects of Canadian Interest” for fast-tracking by the Major Projects Office and ensure enabling infrastructure (transport corridors, port expansions) is included in “projects of national interest.”
- ⦿ Pre-zone and pre-permit strategic Crown lands and industrial sites to signal investable locations for major clean power projects and large electrified industry.



## Deliver clarity, transparency and speed on interconnection and permitting decisions

### Why this matters:

“Speed to power” is now a top decision factor for data centres, manufacturers and mining firms. Uncertain timelines can suppress investment and delay critical projects.

### Key actions:

- ⦿ Expand the Major Projects Office mandate to coordinate, accelerate and prioritize strategic transmission interties and large clean energy projects (e.g., Kivalliq Hydro-Fibre Link,<sup>72</sup> proposed transmission interties between Alberta, B.C. and Saskatchewan<sup>73</sup>).
- ⦿ Implement compliance-based approvals for low-risk clean power projects (and related infrastructure), shifting detailed review to auditing rather than up-front permitting.
- ⦿ Reduce regulatory duplication through federal–provincial–territorial equivalency agreements, moving toward a “one project, one review” model for major clean economy projects.
- ⦿ Establish transparent, time-bound provincial/territorial interconnection processes with binding study timelines, allocation criteria and go/no-go decision deadlines.

## Strengthen Indigenous partnerships and modernize permitting frameworks

### Why this matters:

Indigenous consent and participation are essential for permitting certainty, project financing and long-term legitimacy—especially for transmission, mining and generation.

### Key actions:

- ⦿ Co-develop clear, consistent consultation and accommodation guidance for proponents and utilities.
- ⦿ Support early, coordinated engagement with Indigenous nations and provide sustained capacity funding throughout project development.
- ⦿ Prioritize Indigenous equity ownership options in project approvals.
- ⦿ Establish predictable Indigenous equity models for clean power, transmission and resource projects, enabling co-development rather than sequential review.

## Enable demand flexibility, distributed energy and behind-the-meter solutions

### Why this matters:

Demand-side flexibility can lower system costs, defer infrastructure and improve reliability—especially for fast-growing data centre and industrial loads.

### Key actions:

- ⦿ Tie power-allocation and funding decisions to best-in-class energy-performance standards in energy-intensive sectors.
- ⦿ Update legislation governing building codes to incorporate demand response and broaden the criteria for enabling higher standards and codes.
- ⦿ Expand incentives for industrial demand response and interruptible load programs (including data centres and non-continuous industrial processes).
- ⦿ Enable clean alternatives, such as batteries, automation and thermal storage, to replace diesel-based peak-management requirements.
- ⦿ Support district-energy and thermal-network solutions in industrial parks and on technology campuses.

72. Nukik Corporation. *The Kivalliq Hydro-Fibre Link*. n.d. <https://nukik.ca/khf/>.

73. Office of the Prime Minister. *Canada-Alberta Memorandum of Understanding*. November 27, 2025. <https://www.pm.gc.ca/en/news/backgrounders/2025/11/27/canada-alberta-memorandum-understanding>.

# Appendix A

## Announced clean economy projects linked to clean electricity

Project	Sector	Description	Province	Status	Economic impacts
Red Chris Mine and others	Critical minerals	North Coast Transmission Line connecting mines to BC Hydro grid ( $\approx 75$ MW)	British Columbia	Announced	$\sim$ C\$2.0B; $\sim$ 1,500 permanent jobs
Foran Mining – McIlvenna Bay	Critical minerals	Underground copper–zinc mine with new hydro transmission line ( $\approx 75$ MW)	Saskatchewan	Announced	$\sim$ C\$1.08B; $\sim$ 450 permanent jobs
Nouveau Monde Graphite	Critical minerals	Graphite mine (50 MW)	Québec	Announced	$\sim$ US\$1.4B; $\sim$ 583 jobs
Canada Nickel – Crawford	Critical minerals	Low-carbon nickel project for batteries/green steel (217 MW)	Ontario	Announced	$\sim$ C\$5.0B; $\sim$ 2,083 jobs
QScale (phases 1 and 2)	Data centres	Hyperscale data centre, phases completed (142 MW)	Québec	Completed	$\sim$ C\$1.05B; $\sim$ 200 specialized jobs
QScale (phases 3 and 4)	Data centres	Expansion awaiting electricity allocation (72 MW)	Québec	Financed; awaiting power	$\sim$ C\$320M; $\sim$ 96 jobs
QScale St-Bruno-de-Montarville	Data centres	Cancelled data centre due to power constraints ( $\approx 59$ MW)	Québec	Cancelled	$\sim$ C\$750M; $\sim$ 250 jobs (not realized)
Kineticor/Rocky View Technology Park CAL-3	Data centres	Hyperscale facility proposal (90 MW)	Alberta	Rejected	$\sim$ C\$750M; $\sim$ 225 jobs (not realized)
Wonder Valley	Data centres	Large AI data centre, phase 1 ( $\approx 1,400$ MW)	Alberta	Announced; early stage	$\sim$ US\$2.0B; $\sim$ 840 jobs
Microsoft	Data centres	AI and cloud infrastructure (54 MW)	Québec	Announced	$\sim$ C\$685M; $\sim$ 206 jobs
EcoPro	EV and battery supply chain	Bécancour battery materials plant (88 MW)	Québec	Construction halted	$\sim$ C\$1.2B; $\sim$ 345 jobs
E-One Moli	EV and battery supply chain	Battery materials expansion (30 MW)	British Columbia	Halted	$\sim$ C\$1.05B; $\sim$ 350 permanent jobs
Ford Oakville	EV and battery supply chain	Shift from EVs to internal combustion engine production (36 MW)	Ontario	Will not produce EVs	$\sim$ C\$1.84B; $\sim$ 1,800 jobs
GM and POSCO (phase 2)	EV and battery supply chain	Battery materials expansion (59 MW)	Québec	Indefinitely paused	$\sim$ C\$400M; $\sim$ 200 construction jobs

Project	Sector	Description	Province	Status	Economic impacts
<b>GM and POSCO (phase 1)</b>	EV and battery supply chain	Battery materials facility (59 MW)	Québec	Under construction	~C\$600M; ~200 FTE
<b>GM Ingersoll</b>	EV and battery supply chain	EV van production halted (36 MW)	Ontario	Production halted	~C\$1.0B; ~1,200 jobs
<b>Honda and POSCO</b>	EV and battery supply chain	EV and battery plants (43 MW)	Ontario	On hold (two years)	~C\$15B; ~1,000 jobs
<b>LG Chem</b>	EV and battery supply chain	Cancelled battery plant (36 MW)	Ontario	Not building	~C\$2.5B; ~1,500 jobs lost
<b>Lion Electric</b>	EV and battery supply chain	Battery plant auctioned (59 MW)	Québec	Auctioned	~C\$185M; ~400 jobs
<b>Northvolt (Lyten TBD)</b>	EV and battery supply chain	North American gigafactory (59 MW)	Québec	Abandoned; for sale	~C\$7.0B; ~3,000 jobs
<b>Nova Bus</b>	EV and battery supply chain	Electric bus production (59 MW)	Québec	In operation	~C\$185M; ~1,000 jobs
<b>Government of Québec (Bécancour)</b>	EV and battery supply chain	Port and industrial park funding (MW not specified)	Québec	Funding announced	~C\$327M; ~171 jobs
<b>Stellantis and LG (NextStar)</b>	EV and battery supply chain	EV battery plant (36 MW)	Ontario	Construction completed	~C\$5.0B; ~5,100 jobs
<b>Stellantis Assembly Plants</b>	EV and battery supply chain	Refocus away from EV assembly (36 MW)	Ontario	Will not produce EVs	~C\$3.6B; ~7,500 jobs
<b>Umicore</b>	EV and battery supply chain	Cathode materials plant (36 MW)	Ontario	Construction on hold	~C\$2.8B; ~600 jobs
<b>Volkswagen and PowerCo</b>	EV and battery supply chain	EV gigafactory (43 MW)	Ontario	Under construction	~C\$7.0B; ~3,000 jobs
<b>Asahi Kasei</b>	EV and battery supply chain	Lithium-ion battery separator plant (36 MW)	Ontario	Active	~C\$1.7B; ~1,000 jobs
<b>Corvus Energy</b>	EV and battery supply chain	Maritime battery manufacturing (30 MW)	British Columbia	Announced	~C\$21M; ~40 jobs
<b>Electra Battery Materials</b>	EV and battery supply chain	Cobalt refinery (36 MW)	Ontario	Announced	~C\$100M; ~50 permanent jobs
<b>GM BrightDrop</b>	EV and battery supply chain	Electric delivery van plant (36 MW)	Ontario	Cancelled	~C\$2.0B; ~1,200 jobs
<b>GM Silverado EV</b>	EV and battery supply chain	EV production expansion (36 MW)	Ontario	Moving to the U.S.	~C\$2.0B; ~2,600 jobs

Project	Sector	Description	Province	Status	Economic impacts
Goodyear	EV and battery supply chain	EV tire manufacturing (36 MW)	Ontario	Announced	~C\$575M; ~1,000 jobs
Linamar (gigacasting)	EV and battery supply chain	EV gigacasting facility (36 MW)	Ontario	Cancelled	~C\$1.0B; ~2,300 jobs
Linamar (R&D and manufacturing)	EV and battery supply chain	EV parts and semiconductor R&D and manufacturing (36 MW)	Ontario	Announced	~C\$1.0B; ~2,300 permanent jobs
Minth Group and AISIN	EV and battery supply chain	Battery casings manufacturing (36 MW)	Ontario	Active	~C\$300M; ~1,100 jobs
Vale	EV and battery supply chain	Nickel sulphate plant (59 MW)	Québec	Cancelled	~C\$325M; ~100 jobs
EverWind Fuels	Hydrogen	Green hydrogen and ammonia export hub (≈800 MW)	Nova Scotia	Announced	~C\$13.7B; ~200 jobs
EVREC	Hydrogen	Green hydrogen hub (≈3,500 MW)	Newfoundland and Labrador	Announced	~C\$8.5B; ~200 jobs
TES Canada plant	Hydrogen	Electrolyzer and clean power generation (≈1,150 MW)	Québec	Announced	~C\$4.0B; ~200 permanent jobs
World Energy GH2	Hydrogen	Green hydrogen and ammonia export project (≈3,500 MW)	Newfoundland and Labrador	Announced	~C\$128M; ~200 jobs
Deep Sky	Industry	Carbon removal facility (37 MW)	Manitoba	Announced; pre-construction	~C\$200M; ~95 jobs
Electra (clean iron)	Industry	Low-carbon iron production plant (99 MW)	TBD	Proposed	~C\$910M; ~400 jobs
Volta Energy Solutions	Industry	Copper sheet production facility (88 MW)	Québec	Under construction	~C\$750M; ~260 jobs
ArcelorMittal Dofasco	Industry	Direct-reduced iron electric-arc furnace steel conversion (325 MW)	Ontario	Announced	~C\$1.8B; ~100 jobs
Irving Pulp and Paper	Industry	Mill modernization with clean energy addition (145 MW)	New Brunswick	Announced	~C\$1.5B; ~600 permanent jobs
Rio Tinto/ELYSIS	Industry	Low-carbon aluminum smelting (345 MW)	Québec	Announced	~C\$1.1B; ~100 permanent jobs
Algoma Steel	Industry	Electric-arc furnace steelmaking transformation (275 MW)	Ontario	Under construction	~C\$703M; ~1,000 jobs lost
Hitachi Energy	Industry	Power transformer manufacturing plant	Québec	Announced	~C\$410M; ~500 permanent jobs



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This report was prepared by Dunsky Energy + Climate Advisors, an independent firm focused on the clean energy transition and committed to quality, integrity and unbiased analysis and counsel. Our findings and recommendations are based on the best information available at the time the work was conducted as well as our experts' professional judgment. **Dunsky is proud to stand by our work.**

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