

THE ENERGY OUTLOOK

Delivering an Ontario Energy Supply Chain and Industrial Strategy

SEPTEMBER 2026



Contents

The Energy Outlook	2
Executive Summary	3
Why This Moment Matters	5
A More Competitive Global Environment	5
Energy Security, Economic Security and National Security	7
What's at Stake	9
Why Now?	10
What Ontario Needs to Do	10
Talent Pipeline Management	25
Advance Green Public Procurement as a Cleantech Market Driver	27
Why Delivery Determines Competitiveness: How Ontario Wins	30

SERIES

The Energy Outlook

**Powering Competitiveness.
Enabling Growth.
Executing at Scale.**

The Energy Outlook is a Toronto Region Board of Trade executive briefing series that examines how energy policy, infrastructure, mining and resources, markets, and industrial strategy shape Ontario's competitiveness.

The series provides practical insights for the business community with a focus on execution, reliability, affordability, and growth.



Executive Summary

Ontario is entering one of the largest energy infrastructure build-outs in its history. Over the coming decades, billions of dollars will be invested in electricity generation, transmission, distribution, storage, nuclear energy, and related infrastructure to meet growing demand driven by electrification, population growth, industrial expansion, and economic development. While this investment is essential to ensuring reliable, affordable, and clean energy, it also presents a far broader economic opportunity: to establish Ontario as a leading jurisdiction for clean energy investment and industrial growth.

The central argument of this report is that infrastructure investment alone will not guarantee economic success. Ontario's long-term competitiveness will depend on whether it develops the domestic manufacturing, processing, engineering, logistics, workforce, and supply chain capabilities needed to deliver projects at scale and capture the associated economic

value. Without a deliberate energy supply chain strategy, the province risks importing many of the technologies, components, and materials required for its energy transition, foregoing significant opportunities for investment, job creation, productivity growth, and exports.

The report argues that execution has become the defining competitive advantage. Around the world, governments are increasingly aligning energy policy with industrial strategy to strengthen economic security and reduce dependence on vulnerable global supply chains. Ontario begins from a position of strength, with a clean electricity grid, world-class utilities, leading nuclear expertise, abundant critical minerals, advanced manufacturers, and a strong innovation ecosystem. However, persistent constraints in manufacturing capacity, critical minerals processing, permitting, infrastructure delivery, labour availability, and procurement must be addressed if these advantages are to translate into long-term economic gains.



To capitalize on this opportunity, the report recommends an execution agenda built around five priorities:

- 1 Map and continuously monitor Ontario's energy supply chain** to identify existing industrial strengths, critical bottlenecks, and investment opportunities across manufacturing, logistics, and critical minerals.

- 2 Expand domestic manufacturing and fabrication capacity** for strategic energy infrastructure, including nuclear components, transformers, grid equipment, advanced power electronics, and specialized steel products.

- 3 Accelerate critical minerals refining, processing, and downstream manufacturing** to capture more value from Ontario's resource base while strengthening supply chain resilience and supporting Indigenous economic partnerships.

- 4 Modernize transportation corridors and logistics infrastructure** needed to move oversized energy equipment and components efficiently and improve delivery certainty for major projects.

- 5 Align procurement with industrial development objectives** by providing long-term market certainty that supports investment in Ontario's manufacturing, mining, engineering, and technology sectors while strengthening export competitiveness.

These recommendations are complemented by a broader emphasis on workforce development and green public procurement to ensure Ontario develops the skilled workforce and competitive business environment necessary to support sustained growth.

Taken together, these actions would allow Ontario to transform its planned energy investments into lasting industrial capability rather than one-time construction activity. A *Clean Energy Supply Chain Strategy* would strengthen domestic value creation, improve project delivery, enhance energy security, expand exports, and establish Ontario as a leading jurisdiction for clean energy manufacturing and investment.

Ultimately, Ontario's success will be measured not simply by the amount of energy infrastructure it builds, but by the industrial capacity, high-value employment, resilient supply chains, and long-term prosperity that those investments create. By linking energy policy with industrial strategy and focusing relentlessly on execution, Ontario can ensure that its energy transition becomes a lasting competitive advantage for the provincial economy.



Why This Moment Matters

Ontario's energy sector is entering a multi-decade capital investment cycle characterized by long lead times, complex delivery requirements, and unprecedented infrastructure deployment across generation, transmission, distribution, storage, and critical energy supply chains. In this environment, supply chain performance will increasingly determine both project success and broader economic outcomes.

The province benefits from significant structural advantages, including a clean electricity grid, trusted utilities, a diversified energy mix, and a strong innovation ecosystem. However, persistent gaps in manufacturing capacity, logistics infrastructure, and critical minerals processing could constrain Ontario's ability to deliver projects on time, scale domestic production, and expand exports. Without deliberate action, Ontario risks becoming a purchaser of globally manufactured energy systems rather than a producer, integrator, and exporter of the technologies, materials, and services that will define the next generation of economic growth.

Ontario's energy transition and broader energy expansion agenda present a significant opportunity to strengthen domestic manufacturing, create jobs, enhance economic competitiveness, and establish Ontario as a leading jurisdiction for clean energy investment and industrial growth. As recognized in the Province's Integrated Energy Plan, *Energy for Generations*, Ontario's economic future will increasingly depend

on its ability to deliver affordable, secure, reliable, and clean energy infrastructure at scale.¹ As the Board's recent report, *Ontario's Energy Moment: Get Ready for Prime Time*, makes clear, the coming expansion of nuclear, transmission, distribution, storage, and oil and gas assets is not simply an infrastructure build-out – it is a defining economic strategy for the province. Its success will depend not only on whether Ontario builds new energy infrastructure, but whether it captures the associated industrial activity through domestic manufacturing, processing, fabrication, logistics, engineering, and workforce development.

Achieving this will require effective execution in several areas, including access to capital, talent development, streamlined regulatory processes, expanded market access, and resilient domestic supply chains.

A More Competitive Global Environment

This moment is unfolding within a rapidly evolving geopolitical environment that is reshaping global energy and technology supply chains.² Russia's war in Ukraine and rising instability in the Middle East have exposed vulnerabilities in global energy markets and supply chains for critical minerals and other industrial inputs.³ Escalating tensions in the region have resulted in disruptions to key maritime routes such as the Strait of Hormuz, through which nearly one-fifth of global oil supply transits.⁴

Greater reliance on domestically produced energy for transportation, industry, and building heating reduces exposure to global oil and natural gas price volatility. In Ontario, continued expansion of nuclear generation provides a stable source of domestically produced electricity capable of supporting long-term energy affordability, resilience, and economic security.

These developments underscore the strategic risks associated with concentrated energy infrastructure and transportation corridors. These events also reinforce the strategic value of electrification. Greater reliance on domestically produced energy for transportation, industry, and building heating reduces exposure to global oil and natural gas price volatility. In Ontario, continued expansion of nuclear generation provides a stable source of domestically produced electricity capable of supporting long-term energy affordability, resilience, and economic security.⁵ Geopolitical disruptions are not merely a regional issue, but a direct challenge to global economic stability and energy affordability. In response, governments across North America, Europe, and Asia are increasingly prioritizing domestic industrial capacity, supply chain diversification, and strategic industrial policy to strengthen economic resilience.⁶

Recent diplomatic engagement by Canada reflects this broader shift. The Prime Minister's recent [energy-focused visit to India](#) signaled a new and growing emphasis on international energy partnerships and supply chain diversification. During the visit, Canada and India announced a Strategic Energy Partnership covering LNG, nuclear fuel, solar energy, hydrogen and broader energy technologies while also advancing cooperation on critical minerals essential for batteries, renewable power, and advanced manufacturing.⁷ Canada has also expanded nuclear cooperation across the Indo-Pacific, including recent agreements with India on nuclear fuel and broader energy technologies, and with the Philippines to support the country's civil nuclear program.⁸ These partnerships illustrate how Canada's nuclear expertise is becoming an

increasingly important component of its broader trade diversification and energy diplomacy.

These initiatives align with Canada's broader Indo-Pacific strategy, which aims to strengthen trade, energy cooperation, and technology partnerships across the region. The Indo-Pacific is expected to account for a significant share of future global energy demand growth, making partnerships with countries such as India increasingly important for both energy security and industrial competitiveness.⁹ For Ontario, this evolving landscape reinforces the need to anchor more of the energy value chain domestically while positioning the province as a reliable partner within allied energy and technology networks.

Canada's nuclear industry is also playing an increasingly prominent role in Europe through CANDU refurbishment and new-build opportunities.¹⁰ Projects in Romania, including the refurbishment of Cernavodă Unit 1 and planned new reactors, demonstrate how Canadian nuclear technology, engineering expertise, and supply chains are supporting allied energy security while creating long-term export opportunities for Canadian firms.¹¹

As governments increasingly pursue supply chain resilience through partnerships with like-minded economies – particularly in areas such as critical minerals, battery manufacturing, nuclear technologies, and clean-energy systems – jurisdictions with strong industrial capabilities, advanced research institutions, and stable regulatory environments will play a central role in shaping these emerging energy alliances.¹²

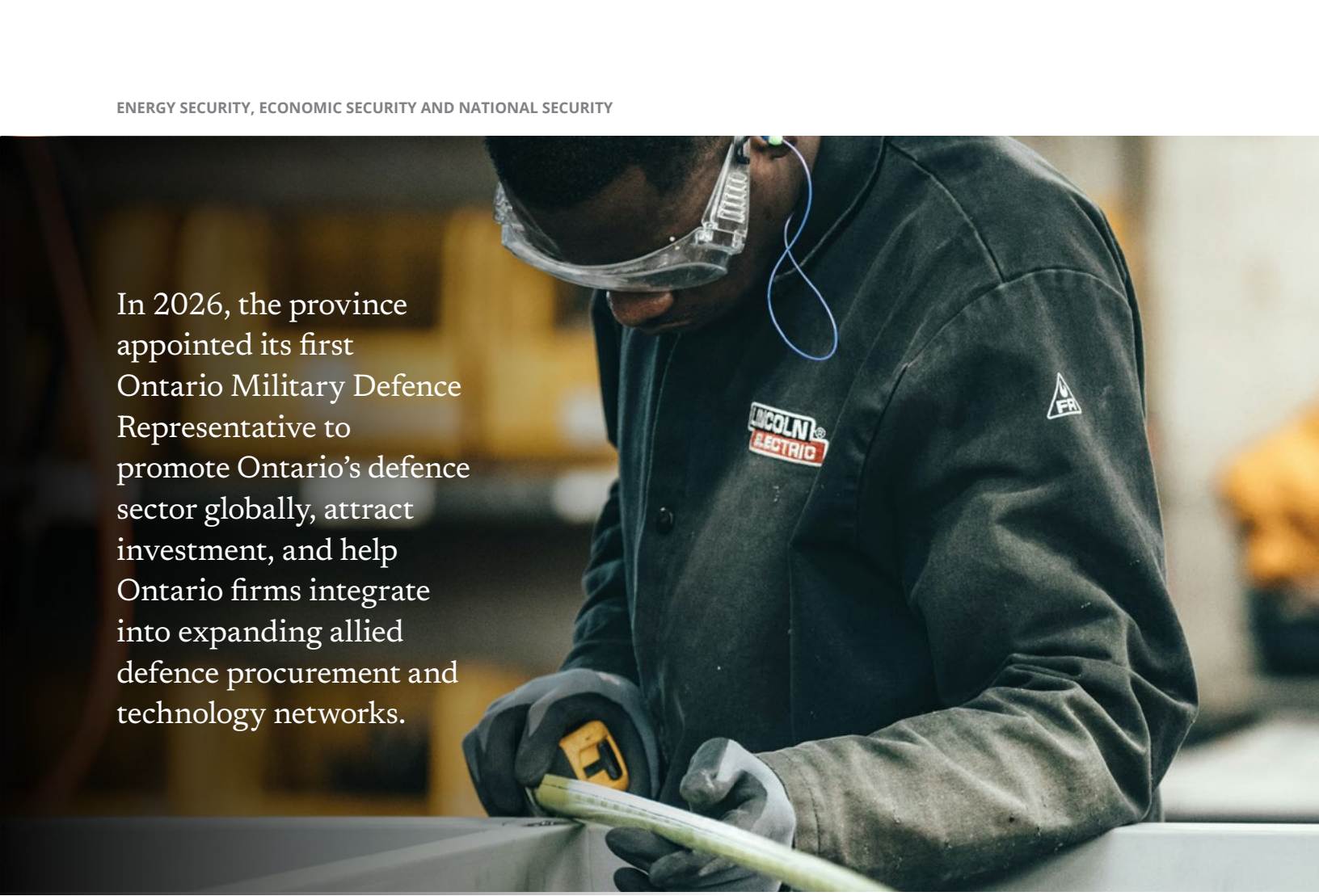
Energy Security, Economic Security and National Security

Increasingly, governments are recognizing that energy security, economic security, and national security are deeply interconnected. The industrial capabilities required to build resilient energy systems, including advanced manufacturing, critical minerals, nuclear technologies, steel production, precision engineering, and digital technologies, are often the same capabilities required to support defence production and broader national resilience. As geopolitical competition intensifies, jurisdictions that strengthen these strategic industries will be better positioned to enhance both economic competitiveness and national security.

An Ontario Energy Supply Chain and Industrial Strategy would also align with emerging national priorities related to economic security and defence industrial capacity. Canada's recently announced [Defence Industrial Strategy](#) reflects growing recognition that economic resilience, industrial capacity, and national security are increasingly interconnected. The strategy aims to strengthen Canada's domestic defence industrial base by prioritizing Canadian suppliers, investing in research and innovation, and expanding domestic production capabilities across strategic sectors.

At its core is the recognition that many of the industrial capabilities required for modern defence systems are shared with key civilian sectors, particularly those underpinning the energy transition.¹³ Advanced manufacturing, steel and metals production, critical minerals mining and processing, nuclear technology, and advanced electronics are foundational inputs for both energy infrastructure and modern military systems – from power grids and nuclear reactors to aerospace components, semiconductors, and communications technologies.¹⁴





In 2026, the province appointed its first Ontario Military Defence Representative to promote Ontario's defence sector globally, attract investment, and help Ontario firms integrate into expanding allied defence procurement and technology networks.

Critical minerals illustrate this convergence particularly clearly.¹⁵ Canada has many of the minerals identified by NATO as essential to defence and high-technology industries, including materials used in semiconductors, batteries, advanced electronics, and weapons systems. Strengthening domestic supply chains for these materials has therefore become both an economic and national security priority. Federal investments are increasingly focused on accelerating mining projects, expanding domestic processing capacity, and building strategic stockpiles to support allied supply chains.¹⁶

For Ontario, these developments highlight the strategic importance of strengthening regional industrial supply chains that serve both civilian and defence markets. Ontario's strengths in advanced manufacturing, nuclear technology, steel production, automotive supply chains, and emerging battery and clean-technology industries position the province as a key contributor to Canada's broader industrial resilience.¹⁷

Strengthening Ontario's energy supply chain therefore supports not only the energy transition, but also Canada's ability to maintain secure and reliable industrial capacity across sectors that are increasingly central to national security and allied defence cooperation.¹⁸

Ontario has begun positioning itself more actively within emerging defence supply chains. In 2026, the province appointed its first [Ontario Military Defence Representative](#) to promote Ontario's defence sector globally, attract investment, and help Ontario firms integrate into expanding allied defence procurement and technology networks.¹⁹ Moreover, Canada's [Nuclear Energy Strategy](#) also identifies microreactors as an emerging strategic capability that can support remote communities, critical infrastructure, military installations, northern economic development, and energy resilience.²⁰ Beyond expanding domestic deployment opportunities, successful demonstration projects could strengthen Canada's export position in an emerging global market for advanced nuclear technologies.



What's at Stake

According to a recent sector analysis prepared by EY for the Toronto Region Board of Trade, Ontario's cleantech economy generated approximately \$24.65 billion in GDP in 2023, supporting an estimated 177,570 jobs across the province.²¹ More than half of that economic activity – \$12.9 billion in GDP and nearly 100,000 jobs – is concentrated in the Toronto region alone.²²

This concentration reflects a strong competitive foundation in domestic nuclear technologies, grid modernization and energy storage, sustainable transportation, building decarbonization, and a wide range of supporting engineering, digital, and professional services. However, the analysis, included as an addendum to this report, also notes that many of these subsectors are highly dependent on timely access to manufactured components, specialized inputs, and integrated supply chains, leaving them exposed to external shocks and limiting their ability to scale domestically.²³

Moreover, the recent release of the [Government of Canada's Nuclear Energy Strategy](#) further reinforces this imperative. The Strategy explicitly positions energy infrastructure as a nation-building exercise and identifies domestic supply chains, advanced manufacturing, workforce development, critical minerals, export competitiveness, and industrial capacity as strategic priorities. Its objectives of enabling new nuclear deployment, expanding uranium production, strengthening fuel-cycle security, and growing Canada's nuclear export footprint highlight the extent to which energy policy is increasingly integrated with industrial policy, economic security, and trade diversification.



Complementing this, the Province's Integrated Energy Plan, *Energy for Generations*, projects that electricity demand will increase by approximately 65 per cent by 2050, driven by population growth, industrial expansion, transportation electrification, data centres, advanced manufacturing, and critical mineral development. Meeting this demand will require unprecedented investment in electricity generation, transmission, distribution, storage, and associated industrial capacity. Delivering this infrastructure at the right scale will, in turn, require a coordinated approach to supply chain development, workforce readiness, manufacturing competitiveness, and project delivery.

Against this backdrop, reliance on foreign suppliers is no longer a theoretical vulnerability but a practical constraint on economic competitiveness. Global clean energy supply chains are increasingly shaped by geopolitical risk, trade policy, and logistics constraints. Where jurisdictions fail to secure domestic capacity, the consequences are tangible: material shortages, construction delays, rising costs, and lost opportunities for learning-by-doing and export growth.

Ontario's Energy Moment explicitly identifies supply chain readiness as one of the five enabling conditions required to deliver the province's *Integrated Energy Plan* and capture more of the jobs, industrial activity, domestic economic value, and export potential created by this generational build-out.

Why Now?

Several factors have converged to create a once-in-a-generation opportunity for Ontario. The province's Integrated Energy Plan projects significant electricity demand growth through 2050. The federal government's Nuclear Energy Strategy identifies energy infrastructure and supply chains as national economic priorities. Major investments in nuclear generation, transmission, critical minerals, battery storage, and grid modernization are already underway. At the same time, geopolitical instability and shifting global trade patterns are causing governments and businesses to reconsider the resilience of strategic supply chains. Together, these forces create a narrow window for Ontario to strengthen domestic industrial capacity and capture a greater share of the economic value associated with the energy transition.

What Ontario Needs to Do

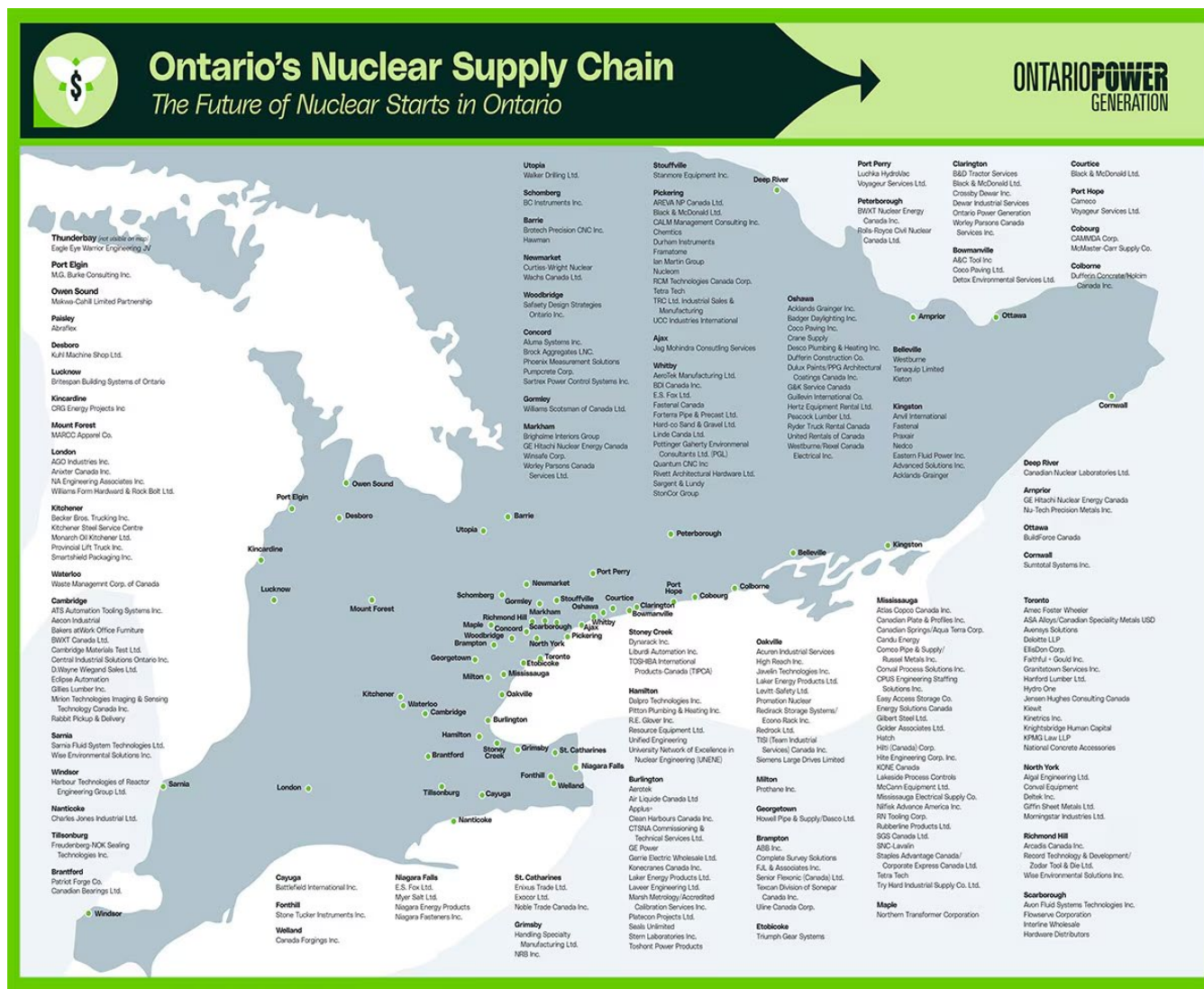
An *Ontario Clean Energy Supply Chain and Industrial Strategy*, as called for by the Board, should therefore be understood as a core economic competitiveness instrument, not a supporting policy. Its purpose must be to translate Ontario's clean energy leadership into durable domestic industrial capacity while reducing exposure to external disruptions and improving execution certainty for major projects.

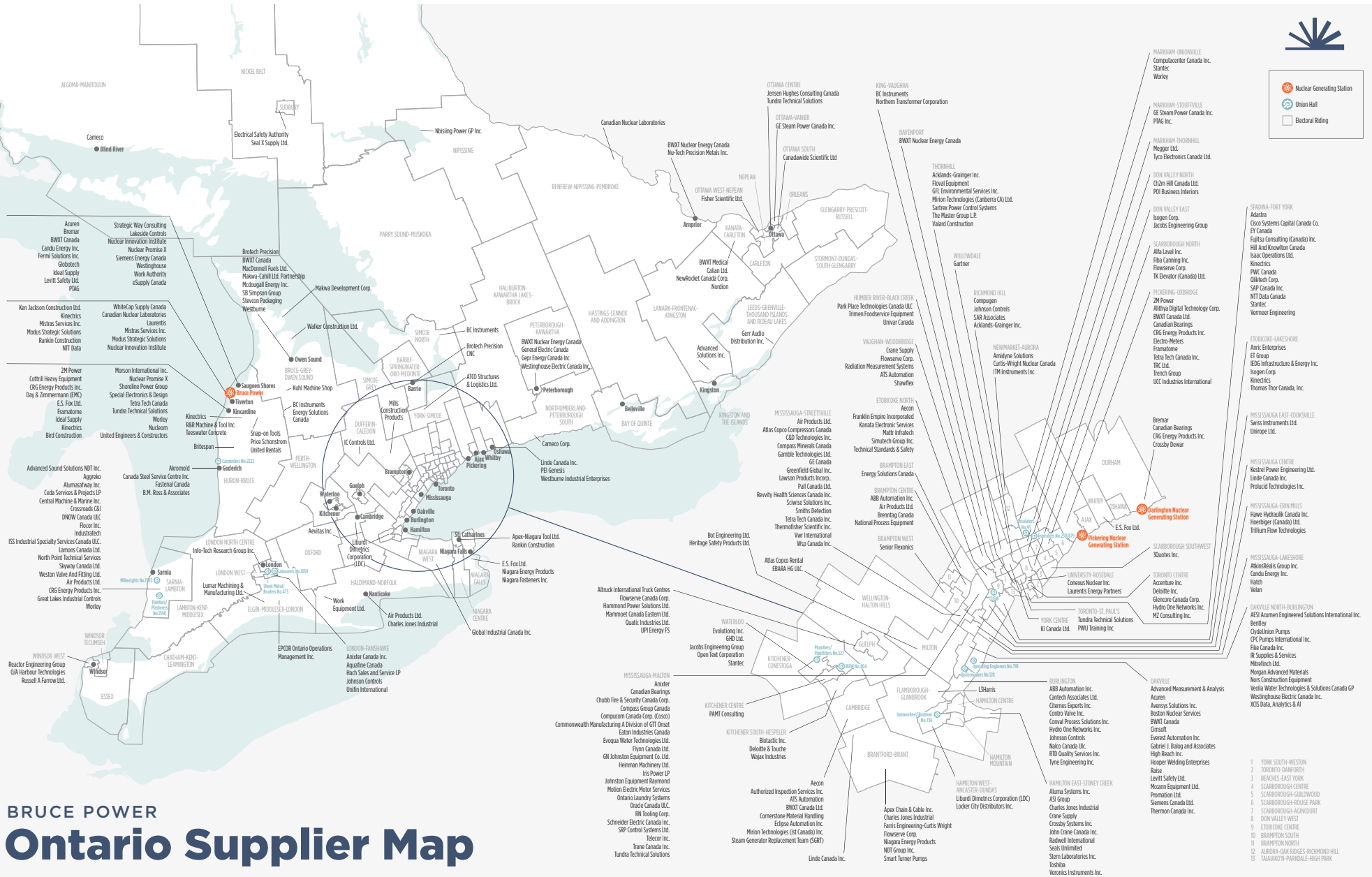
To translate ambition into delivery, Ontario's energy supply chain strategy must focus on a set of five concrete, executable actions.

1 Map, continuously monitor, and publish Ontario's clean energy supply chain capability and capacity

The provincial government should undertake a comprehensive mapping of Ontario's energy supply chain capabilities and bottlenecks across manufacturing, logistics, and critical minerals processing. This mapping should cover the full range of energy infrastructure, including nuclear refurbishment and new build, grid modernization, energy storage, electrified transportation, pipelines, and refining.

EY's analysis shows that the Toronto region already demonstrates specialization in several high-value segments, including EV components and vehicle manufacturing, power electronics and semiconductors, computer systems design, and management and engineering services, with location quotients well above the national average.²⁴ A provincial supply chain strategy should build on these existing strengths by identifying where near-term expansion is commercially viable, and where targeted intervention is required to address deployment bottlenecks.





BRUCE POWER Ontario Supplier Map

Source: Bruce Power, 2026.

THE ENERGY OUTLOOK: DELIVERING AN ONTARIO ENERGY SUPPLY CHAIN AND INDUSTRIAL STRATEGY



BRUCE POWER: BUILDING A CANADIAN NUCLEAR SUPPLY CHAIN

Bruce Power illustrates how long-term energy infrastructure investment can strengthen domestic industrial capacity while generating broad economic benefits across Ontario's manufacturing and engineering ecosystem. As one of Canada's largest private investors in clean electricity infrastructure, Bruce Power reports that approximately 95 per cent of its spending remains in Canada, supporting domestic operations, capital investment, procurement, and Canadian suppliers.²⁶ Through its [Canadian at Our Core](#) initiative, the company has also worked with industry partners to strengthen domestic supply chains and promote greater participation by Canadian manufacturers.²⁷

The company's [Major Component Replacement \(MCR\) Program](#), which is refurbishing six nuclear units between 2020 and 2033, and the announced Bruce C expansion provide a multi-decade investment pipeline that supports engineering firms, equipment manufacturers, construction companies, skilled trades, and specialized service providers across Ontario. This long-term visibility enables suppliers to invest in new facilities, workforce development, advanced manufacturing capabilities, and innovation with greater confidence.²⁸

Bruce Power's extensive supplier network demonstrates how sustained infrastructure investment can anchor a highly specialized domestic industrial ecosystem. Mapping these

supplier relationships also provides valuable insight into Ontario's existing manufacturing strengths, geographic clusters, and potential supply chain gaps, supporting more informed industrial policy and investment decisions.

More broadly, Bruce Power's experience and leadership illustrate an important principle for Ontario's Energy Supply Chain Strategy: **predictable, long-term project pipelines create the market certainty required for firms to invest in productive capacity, skilled workers, and advanced manufacturing.**²⁹ When combined with procurement certainty and coordinated industrial policy, these investments help retain a greater share of economic value within Canada while positioning Ontario companies to compete in growing global markets for nuclear technologies and clean energy infrastructure.³⁰

Key Insights for Ontario

- Long-term infrastructure investment provides the certainty manufacturers need to expand production and invest in new capabilities.
- Domestic supply chain development strengthens project delivery, economic resilience, and energy security.
- Mapping Ontario's supplier ecosystem can help identify industrial strengths, strategic gaps, and future investment opportunities.
- Coordinated procurement and sustained project pipelines can transform major energy investments into long-term industrial and export opportunities.

2 Expand domestic fabrication capacity for critical energy infrastructure components

Ontario should expand domestic fabrication capacity for critical energy and electricity infrastructure components by leveraging the province's growing energy project pipeline as a long-term demand anchor. Particular emphasis should be placed on expanding domestic production of power transformers, which have emerged as one of the most significant supply chain constraints affecting electricity infrastructure deployment globally.³¹ Priority areas include large power transformers³² and transformer components,³³ nuclear-grade manufacturing, modular nuclear components, heavy industrial components and specialized fabrication, advanced power electronics, grid infrastructure equipment, and specialized steel fabrication, consistent with the strategic supply chain priorities identified in [Canada's Nuclear Energy Strategy](#). These priorities should be reviewed regularly against Ontario's forward infrastructure pipeline to ensure manufacturing investments remain aligned with anticipated project demand.

Ontario should focus investment in manufacturing segments where it possesses existing industrial strengths and competitive advantages, including nuclear components, transformers, advanced electrical equipment, control systems, specialized fabrication, engineering services, and precision manufacturing, while leveraging international partnerships for highly specialized components that cannot be competitively produced domestically.

Strengthening domestic capacity in these areas would enhance supply chain resilience, support project delivery, attract investment, and position Ontario as a leading hub for clean energy manufacturing and exports. To maximize these opportunities, Ontario should work with industry, [Export Development Canada](#), the Toronto Region Board of Trade's [Trade Accelerator Program](#), and other trade promotion organizations to strengthen export readiness, facilitate access to international markets, and support Ontario firms competing within global energy supply chains. Bruce Power's experience demonstrates that sustained, multi-decade procurement programs can provide the long-term demand certainty needed for manufacturers to invest in new facilities, workforce expansion and advanced production capacity within Ontario.³⁴



The recent expansion of Northern Transformer's Ontario manufacturing footprint illustrates how sustained infrastructure investment and clear demand signals can create the business case for domestic production of strategically important grid equipment, positioning Ontario as both a supplier to domestic projects and an exporter to North American and global markets.

Power transformers have become an increasingly important constraint on electricity infrastructure delivery across North America. Rapid growth in electricity demand, transmission expansion, data centres, electrification, renewable generation, and the replacement of aging grid assets have significantly increased demand while manufacturing capacity has struggled to keep pace.³⁵ As a result, utilities are experiencing longer procurement timelines, higher costs, and delays to major infrastructure projects.³⁶ Strengthening Ontario's transformer manufacturing capacity would improve project delivery, reduce dependence on foreign suppliers, and position the province to serve growing North American demand.

A recent KPMG study indicates that manufacturers increasingly base long-term investment decisions on broader structural competitiveness – including energy affordability, project certainty, access to capital, and operating costs – rather than tariffs alone.³⁷ Long-term infrastructure investment therefore provides an important demand signal that can encourage private manufacturing investment.

Realizing this opportunity will require a combination of procurement certainty, investment tax credits, accelerated capital depreciation, strategic co-investment, industrial land readiness, and long-term offtake visibility that reduces capital risk for manufacturers considering expansion in Ontario.

Ontario's nuclear investment pipeline – including Bruce Power's Major Component

Replacement Program, the proposed Bruce C expansion, Ontario Power Generation's Darlington New Nuclear Project, and emerging opportunities at Wesleyville – provides one of the strongest long-term industrial demand signals in North America for nuclear manufacturing, engineering, and skilled trades. Nuclear refurbishment and new nuclear development alone represent multi-decade investments requiring specialized steel fabrication, control systems, modular construction, and advanced project management capabilities. Battery storage, grid expansion, and electrified mobility similarly depend on power electronics, enclosures, charging hardware, and integration services.

Canada's expanding role in international nuclear projects, including reactor refurbishment, new-build development, fuel supply, engineering services, and advanced nuclear technologies, illustrates that strengthening domestic manufacturing capacity is not solely about supporting provincial infrastructure projects.³⁸ It is also about positioning Ontario firms to participate in rapidly expanding global clean energy supply chains. The recent expansion of Northern Transformer's Ontario manufacturing footprint illustrates how sustained infrastructure investment and clear demand signals can create the business case for domestic production of strategically important grid equipment, positioning Ontario as both a supplier to domestic projects and an exporter to North American and global markets.³⁹



Photo: McMaster University

MCMASTER'S NUCLEAR AND ISOTOPE CAPABILITIES AS AN ENERGY SUPPLY CHAIN ASSET

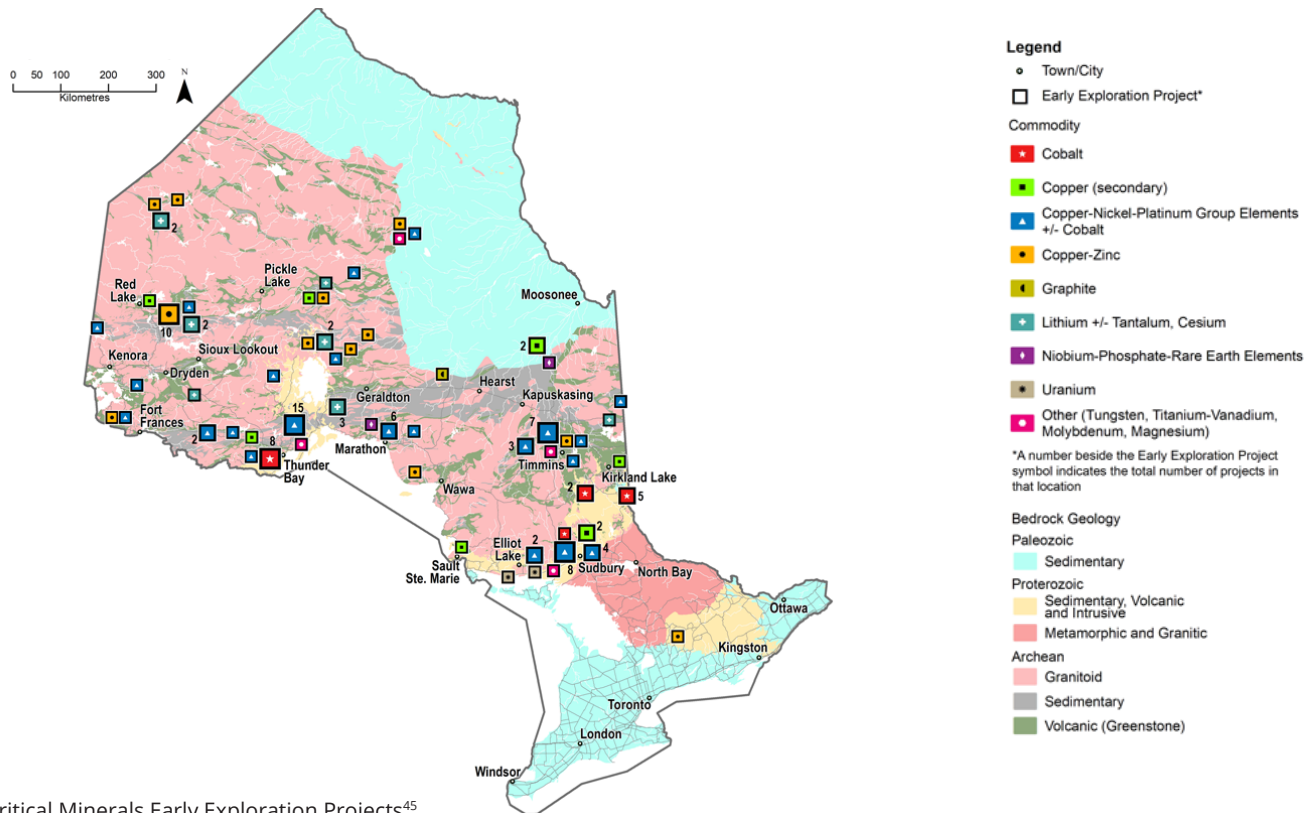
McMaster University illustrates how Ontario's post-secondary institutions can function as strategic assets in the clean energy supply chain. The McMaster Nuclear Reactor is a 5 MW research reactor located on campus in Hamilton and supports medical isotope production, neutron radiography, biomedical research, materials science, geological surveys, clean energy research, and nuclear education. Its operating licence has been renewed by the Canadian Nuclear Safety Commission until June 30, 2044, creating long-term certainty for research, training, isotope production, and industry collaboration.⁴²

McMaster's isotope production also demonstrates how nuclear infrastructure can create high-value economic and social benefits beyond electricity generation. McMaster is a leading supplier of iodine-125, used in cancer treatment, and its isotopes support treatment for more than 70,000 cancer patients annually.⁴³ Ontario's recent \$18 million investment to expand isotope production at the McMaster Nuclear Reactor is expected to support 24/7 operations, create new specialized jobs, and increase the production of custom medical isotopes.⁴⁴ This illustrates how Ontario's nuclear ecosystem can support health innovation, advanced manufacturing, export potential, specialized logistics, and workforce development.

Ontario is also seeing important additions to domestic manufacturing capacity for critical clean energy infrastructure components, particularly grain-oriented electrical steel (GOES). [JFE Shoji Power Canada](#) and German automated equipment manufacturer Heinrich Georg GmbH (GEORG) are expanding the capacity for electrical steel component production in Canada.⁴⁰ As demand for transformers continues to grow, these investments will strengthen Ontario's domestic supply chain, improve resilience, and reduce reliance on imported critical grid infrastructure components.⁴¹

Ontario's Energy Moment emphasizes that aligning energy investment with industrial policy can anchor domestic supply chains, deepen value-added manufacturing, and capture a greater share of the long-term domestic economic value associated with Ontario's multi-decade energy build-out.

In practical terms, this requires long-term procurement visibility, standardized technical specifications, and investment tools – such as co-investment, loan guarantees, and risk-sharing mechanisms – that reduce first-mover risk and makes Ontario an attractive location for capital-intensive fabrication.

Critical Minerals Early Exploration Projects⁴⁵

3 Accelerate critical minerals refining, processing, component manufacturing, and downstream value-added industries

Ontario must accelerate rare earth and critical minerals refining, processing, component manufacturing, and downstream value-added industries. Clean energy technologies, including batteries, motors, grid equipment, advanced electronics, and nuclear technologies are increasingly constrained not simply by access to raw materials, but by access to processed minerals, intermediate products, manufactured components, and resilient industrial supply chains.⁴⁶ The International Energy Agency has observed that refining and processing capacity for many critical minerals remains significantly more geographically concentrated than mining itself, making downstream industrial capability an increasingly important determinant of economic competitiveness and supply chain resilience.⁴⁷ Partnerships with Indigenous communities should be integrated from the outset.⁴⁸ Ontario already possesses significant upstream critical mineral potential across regions such as the Ring of Fire, Timmins, Sudbury, and northwestern Ontario. The

larger strategic challenge is not whether Ontario can produce critical minerals, but whether the province captures the higher-value refining, processing, and manufacturing activity that increasingly determines long-term economic value capture.

Establishing midstream processing capacity would strengthen supply security, create high-value industrial employment, and improve long-term project certainty and economic competitiveness. Regions such as Thunder Bay, Sault Ste. Marie, Sudbury, and Northern Ontario industrial corridors are particularly well positioned to support expanded midstream processing and manufacturing activity given their access to rail infrastructure, industrial land, skilled labour, existing mining ecosystems, and reliable electricity supply.

Ontario's Energy Moment identifies domestic supply chain development as essential to reducing exposure to global disruptions and capturing greater economic value. Developing refining and processing capacity in partnership with Indigenous communities would also support economic reconciliation while anchoring industrial activity within the province.

4 Modernize transportation corridors and logistics hubs to support large-scale energy infrastructure

Ontario should modernize transportation corridors and logistics hubs to support clean energy delivery at scale. Large-scale energy projects increasingly rely on oversized and modular components that place significant strain on existing infrastructure, including roads, railways, ports, and intermodal freight corridors.⁴⁹

Strategic upgrades to infrastructure – such as ports like Hamilton, heavy-transport corridors serving nuclear facilities, and rail connections supporting northern mining regions – would improve delivery timelines and strengthen Ontario's competitiveness. Ensuring aging rail infrastructure, particularly short lines, are preserved and stay viable, would ensure large power transformers (typically 230kV - 750kV sized units) can efficiently and cost-effectively travel from domestic manufacturing sites to their final destination.

EY's analysis highlights that infrastructure gaps and logistical constraints can materially delay deployment and weaken competitiveness relative to peer jurisdictions that have invested in dedicated energy and industrial logistics capacity.⁵⁰

Given the increasing size and complexity of nuclear components, large power transformers, HVDC equipment, and modular industrial systems, transportation infrastructure should be planned as an integral component of Ontario's energy and industrial infrastructure system rather than being considered solely as a freight policy issue. The efficient movement of oversized equipment is becoming an increasingly important determinant of project delivery schedules, supply-chain resilience, and construction certainty for major energy investments.⁵¹

Targeted investments in ports, staging areas, rail access, and streamlined permitting for oversized loads would directly improve execution outcomes across multiple project types.





Committed Projects		
a	Ontario Line	18 Jane
b	Line 2 Scarborough Extension	19 Major Mackenzie
c	Line 1 Yonge North Extension	20 Leslie
d	Line 4 Sheppard East Extension	21 Sheppard East
e	Line 5 Eglinton (Crosstown)	22 Waterfront East
f	Line 5 Eglinton West Extension	23 Waterfront West
g	Hamilton LRT	24 Hurontario LRT Extension
h	Hurontario LRT	25 Eglinton East
i	Finch West LRT	26 Finch West LRT West Extension
j	GO Rail - 15 min Two-Way All Day Service (Union and Burlington, Oshawa, Aurora, Bramalea and Unionville)	27 Finch West LRT East Extension
k	GO Rail - Two-Way All Day Service (Allandale Waterfront, Kitchener, Confederation, Mount Joy)	28 Waterloo iON Stage 2
l	Bowmanville GO Extension (Oshawa GO to Bowmanville GO)	29 East-West Cross-Regional Connection (Burlington - Pearson - Locust Hill - Oshawa)
New or Enhanced Higher Order Transit Connection		
1	Highway 7 East Extension	30 Ontario Line Loop Connection (Kipling - Pearson - Hwy 404 - Eglinton)
2	Steeles	31 Line 1 Capacity Expansion
3	Durham - Scarborough	32 Milton GO Line Service Expansion
4	Simcoe	33 Pearson Airport Kitchener Line Connection
5	Airport Rd	
6	Derry	
7	Dundas	
8	Erin Mills	
9	Trafalgar	
10	Downtown Mississauga Transitway & Terminal	
11	Yonge St	
12	Hamilton A-Line	
13	Hurontario North	
14	McCowan	
15	Waterloo iON Stage 3	
16	Gordon	
17	Queen / Highway 7 West	

Greater Golden Horseshoe Transit Map⁵²



5 Align energy procurement with Ontario's steel, manufacturing, and mining sectors

Ontario must align energy procurement with Ontario's steel, manufacturing, and mining sectors, as called for in the Board's recent report *The Steel Imperative: Unlocking Our Competitive Advantage in a Changing World*.

Procurement is one of the most powerful levers governments possess to shape markets and crowd in private investment that anchors domestic supply chains. EY's analysis identifies fragmented and risk-averse procurement as a barrier to scaling local cleantech innovation and retaining high-growth firms.⁵³

Aligning procurement across sectors as part of a coherent industrial policy would provide the certainty employers need to invest in domestic production capacity. This approach complements Canada's broader efforts to strengthen its defence industrial base, where many of the same upstream sectors – such as steel production, advanced manufacturing, precision engineering, and critical minerals – serve both energy infrastructure and national security supply chains.⁵⁴ At the same time,

Ontario must ensure that its energy manufacturers, engineering firms, and technology providers are positioned to compete internationally. Long-term competitiveness will depend not only on meeting domestic infrastructure needs, but also on capturing export opportunities arising from growing global demand for clean energy technologies, nuclear expertise, grid equipment, critical minerals, and advanced manufacturing capabilities.

Procurement policy should therefore be designed to deliver more than project value for money. It should provide long-term market visibility that enables firms to invest confidently in new facilities, equipment, research and development, workforce expansion, and export capacity. Ontario already has a strong foundation on which to build. Hydro One reports that more than 90 per cent of its procurement spending in 2025 was directed to Canadian suppliers,⁵⁵ illustrating the significant role Ontario's incumbent utilities already play in supporting domestic manufacturing, supply chains, and local economic development. Building on this foundation through coordinated procurement strategies can further strengthen Ontario's industrial competitiveness while supporting reliable delivery of the province's growing energy infrastructure program.



NORTHERN TRANSFORMER: BUILDING ONTARIO'S ENERGY MANUFACTURING ADVANTAGE

Northern Transformer Corporation (NTC) illustrates how targeted industrial investment can strengthen Ontario's energy supply chain while creating export-oriented economic growth.

Founded in Ontario in 1981, NTC designs and manufactures power transformers for utility, nuclear, mining, industrial, renewable energy, and petrochemical customers. As electricity demand continues to grow across North America – driven by electrification, data centres, advanced manufacturing, mining development, and grid modernization – transformers have emerged as one of the most strategically important components of the energy value chain.

In September 2025, NTC, through an innovative partnership with Hydro One – whose long-term domestic procurement commitments helped provide a demand signal for investment – announced a \$207 million investment in a new manufacturing facility in Innisfil, Ontario.⁵⁶ The project will create more than 150 highly skilled jobs and enable Northern Transformer to enter the large power transformer market, producing high-voltage transformers for major transmission infrastructure, industrial facilities, mining operations, and large-scale electricity system expansion.

The investment addresses a critical supply chain challenge facing North America's electricity

sector. Demand for large power transformers has increased significantly as utilities pursue transmission expansion, nuclear development, grid modernization, and electrification initiatives. The facility will strengthen Ontario's domestic manufacturing capacity while reducing dependence on imported equipment and supporting greater supply chain resilience.

The project also demonstrates the importance of export competitiveness. Through participation in the Toronto Region Board of Trade's Trade Accelerator Program (TAP), Northern Transformer refined its export strategy, expanded international market access, and strengthened relationships with export financing partners.⁵⁷ Since participating in TAP, the company has expanded its export business to ~20% of sales, demonstrating how Ontario-based manufacturers can compete successfully in global energy markets. Participation in the TAP program helped NTC develop its export strategy and build a helpful network of seasoned professionals with experience accessing global markets.

Northern Transformer's experience demonstrates that access to export development support through programs such as TAP, including market intelligence, trade financing, and international business networks – can play a supporting role in helping Ontario firms scale into global markets. As energy infrastructure investment accelerates worldwide, strengthening these supports will be essential to ensuring Ontario-based manufacturers capture a larger share of international growth opportunities.

By strengthening domestic manufacturing capabilities, supporting high-value employment, expanding export opportunities, and reinforcing Ontario's industrial base, projects such as Northern Transformer illustrate how energy infrastructure investment can serve as a catalyst for long-term economic development.

NTC also invested significantly to deploy a nuclear-compliant quality system, and the company's growth aligns closely with the objectives of Ontario's *Energy for Generations* plan and Canada's *Nuclear Energy Strategy*, both of which emphasize domestic manufacturing capacity, supply chain resilience, energy security, and export growth as essential components of long-term economic competitiveness.

The company's expansion demonstrates that investments in energy infrastructure can generate broader economic benefits beyond reliability and decarbonization objectives.

By strengthening domestic manufacturing capabilities, supporting high-value employment, expanding export opportunities, and reinforcing Ontario's industrial base, projects such as Northern Transformer illustrate how energy infrastructure investment can serve as a catalyst for long-term economic development.

Key Lessons for Ontario

- Long-term energy infrastructure investment creates market certainty that supports manufacturing expansion.
- Domestic production of critical grid equipment strengthens supply chain resilience and energy security.
- Export-oriented manufacturers can leverage Ontario's energy expertise to compete globally.
- Strategic business support programs, including export development initiatives, can accelerate growth and market diversification.
- Energy infrastructure investment can serve as a broader industrial development strategy when aligned with manufacturing, workforce, and trade objectives.
- Strong procurement commitments by Ontario utilities can serve as important demand anchors that encourage private investment in domestic manufacturing capacity.

MANUFACTURERS ARE INVESTING WHERE COMPETITIVENESS IS STRONGEST

KPMG's study illustrates how manufacturers increasingly evaluate jurisdictions based on long-term competitiveness rather than short-term market conditions.

The survey found that, while tariffs triggered many recent investment decisions, manufacturers consistently identified broader structural factors – including energy affordability, capital access, tax competitiveness, supply chain resilience, and timely delivery of major infrastructure projects – as the primary factors shaping future investment decisions.⁵⁸ More than half of surveyed manufacturers reported pausing or scaling back capital investment,

while many indicated that improving Canada's competitiveness would be more effective than relying solely on temporary trade measures.⁵⁹

These findings reinforce an important principle for Ontario's Energy Supply Chain and Industrial Strategy: **long-term energy infrastructure investment creates demand, but competitiveness determines whether manufacturers invest alongside it.**

Ontario's competitive advantage will therefore depend not only on the scale of planned energy infrastructure, but on creating an integrated investment environment that combines reliable electricity, efficient permitting, skilled labour, access to capital, modern logistics, and long-term policy certainty.

While equipment and manufacturing capacity can often be expanded within relatively short timeframes, developing highly skilled tradespeople and industrial technicians requires years of apprenticeship, practical experience, and continuous training.

The Workforce Challenge

Recent federal projections associated with [Canada's Nuclear Energy Strategy](#) include a commitment to effectively double Canada's nuclear workforce over the coming decades. Achieving this objective will require closer coordination among governments, utilities, post-secondary institutions, unions, Indigenous partners, and industry to establish a durable talent pipeline capable of supporting simultaneous expansion of electricity generation, transmission, critical mineral development, manufacturing, and export-oriented activities.

While workforce shortages remain an important constraint, manufacturers also increasingly identify access to affordable energy, financing, project certainty, and capital investment as interconnected factors affecting long-term competitiveness.⁶⁰ Addressing Ontario's workforce challenge therefore requires a broader competitiveness agenda that supports sustained private investment alongside talent development.

Ontario's clean energy manufacturing challenge is increasingly one of workforce capability rather than industrial footprint. Across the province, many machine shops, fabrication facilities, and industrial suppliers already possess physical capacity that could support a larger share of clean energy manufacturing. In many cases, the more immediate constraint is access to workers with the specialized skills required for precision machining, advanced welding, modular assembly, non-destructive testing (NDT), quality assurance, controls integration, and other advanced manufacturing processes essential to nuclear and electricity infrastructure.

A separate EY analysis – also included as an addendum to this report – estimates a workforce

gap of approximately 7,745 workers in Ontario's energy sector between 2025 and 2033, with the most acute shortages expected in trades and specialized technical occupations vital to transmission and distribution expansion, as well as new generation projects.⁶¹

Developing this workforce requires long-term investment. While equipment and manufacturing capacity can often be expanded within relatively short timeframes, developing highly skilled tradespeople and industrial technicians requires years of apprenticeship, practical experience, and continuous training. This reality should be reflected in Ontario's industrial and workforce strategies. Collaboration among industry stakeholders, educational institutions, and government agencies will be essential to developing a cohesive workforce development strategy that addresses skill gaps and promotes knowledge sharing.

Broader industry forecasts reinforce both the scale of the opportunity and the urgency of the workforce challenge ahead. Electricity Human Resources Canada (EHRC) projects significant long-term labour demand across electricity generation, transmission, grid modernization, nuclear refurbishment, and electrification infrastructure, while Natural Resources Canada estimates that Canada's electricity sector alone could face approximately 28,000 job openings between 2023 and 2028, driven by both system expansion and workforce retirements.⁶²

Recent sector growth trends underscore this trajectory. EHRC reported that employment in Canada's electricity sector grew by approximately 19 per cent year-over-year between 2025 and 2026, reflecting the accelerating pace of investment and infrastructure deployment across the country.⁶³

Ontario's planned build-out – including Bruce Power's Major Component Replacement Program, the announced Bruce C expansion, Ontario Power Generation's Darlington new nuclear development, emerging opportunities at Wesleyville,⁶⁴ grid expansion, battery storage, and transmission modernization – will require sustained growth across engineering, skilled trades, manufacturing, project management, and specialized technical occupations over multiple decades.

Bruce Power's proposed Bruce C project alone is projected to support approximately 18,900 jobs over its lifecycle, reinforcing the scale of what is quickly

becoming one of the largest long-term industrial and infrastructure build-outs in modern Ontario history.⁶⁵

Addressing these challenges does not require trade-offs between reliability, affordability, and domestic value capture. Rather, it requires procurement frameworks that consider lifecycle performance, supply chain resilience, and domestic economic impact alongside upfront cost.

As *Ontario's Energy Moment* argues, jurisdictions that integrate energy expansion most effectively with their industrial base and workforce will shape the next generation of economic leadership.

BUILDING ONTARIO'S CLEAN ENERGY WORKFORCE THROUGH MICRO-CREDENTIALS

Ontario's transition to a clean energy economy will require thousands of highly skilled workers with expertise in areas such as advanced manufacturing, electrification, energy management, cybersecurity, project management, data analytics, and emerging clean technologies. Developing this workforce demands a more agile approach to education and training that can respond quickly to evolving industry needs.

eCampusOntario, a provincially funded consortium of Ontario's publicly assisted colleges, universities, and Indigenous Institutes, operates the [Ontario Micro-credentials Portal](#) as the province's official upskilling platform. The portal brings together more than 2,500 short-duration training opportunities from post-secondary institutions across Ontario, allowing learners and employers to identify rapid training options aligned with labour market needs and emerging industries. The platform uses labour market information to connect training opportunities to specific occupations, skills, technologies, and sectors, making it easier for individuals and employers to find relevant programs.

The micro-credential ecosystem developed by eCampusOntario demonstrates how higher education can respond to sectoral workforce

challenges. Since 2017, eCampusOntario has worked with institutions, employers, and government to build a harmonized framework for micro-credentials and to support the rapid creation of industry-informed training programs that address skills gaps.

This model is particularly relevant to Ontario's clean energy transition. As the province invests in nuclear refurbishment and expansion, electricity transmission, battery manufacturing, hydrogen, and other clean energy technologies, micro-credentials provide an effective mechanism to rapidly reskill existing workers and prepare new talent for emerging occupations. Post-secondary institutions can work directly with industry partners to design targeted, short-duration programs that respond to changing workforce requirements far more quickly than traditional program development cycles. Employers using the Portal can access training opportunities and graduates of programs targeted to their industry sector.

The Ontario Micro-credentials Portal illustrates the important role that higher education can play in supporting economic transformation: creating accessible pathways for lifelong learning, enabling rapid workforce adaptation, and ensuring that Ontario has the highly qualified and skilled talent needed to power a competitive and sustainable clean energy future.



Talent Pipeline Management

Mobilizing the clean energy supply chain simply isn't possible without also building the workforce needed to expand capacity and meet demand. One framework that has demonstrated success in systematically addressing workforce needs through coordinated action is Talent Pipeline Management (TPM).

TPM is a demand-driven workforce strategy developed by the [U.S. Chamber of Commerce Foundation](#) that applies supply chain management principles to talent development. TPM organizes employers into sector-based collaboratives to define demand, align job requirements, analyze the capacity of existing talent sources, and work with post-secondary institutions and workforce organizations to build the necessary talent supply chains to meet industry demand.

The core objective of the framework is to provide clear and detailed signals on what employers need so that post-secondary, training, and workforce partners can respond in a more targeted, demand-driven, and continuously improving manner based on shared data and common goals.

By forming industry collaboratives and working collectively, employers are able to make faster, more durable progress towards meeting their workforce needs.

The TPM Framework



Organize employer leadership and collaboration to identify shared workforce needs



Project critical jobs demand by developing hiring projections to determine the type of talent and how much of it employers need



Align and communicate job requirements to signal similarities and differences



Analyze talent supply to identify capacity of current and untapped talent sources to meet projected demand



Build talent supply chains for return on investment



Engage in continuous improvement and resiliency planning to identify improvement opportunities for the future

Source: the U.S. Chamber of Commerce Foundation



Given the significant projected workforce gaps in Ontario's energy sector, a coordinated employer-led approach could also help preserve and expand Ontario's existing industrial capabilities by better aligning training investments with anticipated demand.⁶⁶ Beyond attracting new workers, employers will increasingly need structured apprenticeships, paid work-integrated learning, targeted upskilling opportunities, and mentorship programs that facilitate knowledge transfer from experienced tradespeople to the next generation of skilled workers.⁶⁷ Such approaches recognize that many of the capabilities required for advanced manufacturing are acquired through practical experience on the shop floor rather than classroom instruction alone. In doing so, it would support the skilled workforce required to deliver Ontario's large-scale clean energy build-out.

Ontario also faces a significant demographic challenge. Many experienced machinists, welders, millwrights, fabricators, industrial electricians, tool-and-die makers, and quality specialists are approaching retirement after decades working in advanced manufacturing sectors.⁶⁸ Their expertise extends beyond technical competencies to include troubleshooting, process optimization, quality assurance, and the practical knowledge required to deliver highly complex industrial projects. Preserving and transferring this knowledge should be recognized as an economic competitiveness priority as Ontario expands its clean energy manufacturing base.⁶⁹

ONTARIO'S ENERGY FOR GENERATIONS PLAN: A SUPPLY CHAIN IMPERATIVE

Ontario's first Integrated Energy Plan, [Energy for Generations](#), establishes a long-term vision to build the infrastructure required to support a 65 per cent increase in electricity demand by 2050 while maintaining affordability, reliability, security, and competitiveness.⁷⁰ The Plan includes major investments in nuclear generation, transmission infrastructure, grid modernization, critical minerals development, data centre growth, and industrial electrification.

The scale of these investments reinforces the need for a comprehensive Ontario Energy Supply Chain and Industrial Strategy to ensure the province captures greater economic value through domestic manufacturing, fabrication, engineering, logistics, workforce development, and export growth. Rather than viewing energy infrastructure solely as a system reliability requirement, Ontario has an opportunity to leverage the coming build cycle as a long-term industrial development strategy.



Advance Green Public Procurement as a Cleantech Market Driver

Ontario's cleantech conversation is often framed around supply, grants, pilots, and project announcements, while the demand signal remains fragmented across dozens of public buyers. In practice, many municipalities and broader public-sector institutions still procure on a project-by-project basis with limited standardization of "green" specifications, few pathways for pre-qualified innovators, and limited use of procurement as a bridge to commercialization.⁷¹

This matters because public procurement is one of the few policy tools that can turn energy and climate ambition into a bankable market. By reducing first-customer risk, shortening the path from demonstration to scale, and creating repeatable demand, procurement can attract private capital and support the expansion of local production capacity.

Without a coordinated regional approach, however, Ontario's public sector leaves significant buying power untapped – particularly in buildings, water, energy management, and infrastructure. In many cases, retrofits and renewals are already planned and budgeted but are not consistently structured to accelerate local cleantech adoption. A coordinated regional green procurement framework could translate dispersed public purchasing into predictable, investable demand for Ontario-made cleantech solutions.

By reducing first-customer risk, shortening the path from demonstration to scale, and creating repeatable demand, procurement can attract private capital and support the expansion of local production capacity.

At the federal level, green procurement is already framed as a tool that reduces environmental impacts while also supporting economic competitiveness by creating markets for innovative products and services.

This is not about protectionism or symbolic ‘buy local’ policies. It is about ensuring public procurement frameworks recognize total system value, including delivery certainty, resilience, lifecycle performance, emissions reduction, and domestic economic value capture.⁷² Many Ontario-based firms are already well positioned to support this shift. Companies such as [Armstrong Fluid Technology](#) are developing high-efficiency pumping and fluid-flow solutions that reduce building energy use and operating costs, while [Schneider Electric](#) provides digital energy management, automation, and grid-integration technologies that enable public owners to optimize performance across entire portfolios.⁷³

Engineering and advisory firms such as [CIMA+](#) play a critical role in translating green procurement objectives into bankable, delivery-ready infrastructure projects, ensuring that sustainability criteria are embedded from design through construction and long-term operations.⁷⁴

At the federal level, green procurement is already framed as a tool that reduces environmental impacts while also supporting economic competitiveness by creating markets for innovative products and services. Ontario can apply the same logic at municipal and regional scale.

Leadership from the City of Toronto – through its [Net Zero Existing Buildings Strategy](#) and recent procurement work clarifying pathways for acquiring clean and green technologies – demonstrates how large public buyers can reduce friction for innovative suppliers.⁷⁵

Scaling this approach across the broader region would build consistency, accelerate adoption, and unlock the full demand-side potential of public procurement as a cleantech market driver.





CANADA'S NUCLEAR ENERGY STRATEGY AND THE INDUSTRIAL OPPORTUNITY FOR ONTARIO

The Government of Canada's [Nuclear Energy Strategy](#), released in June 2026, provides a timely example of how energy policy is increasingly being used as a tool of industrial policy, economic security, and trade diversification.

The Strategy sets out a national vision to expand nuclear generation, strengthen domestic supply chains, increase uranium production, support workforce development, modernize reactor technologies, and position Canada as a leading exporter of nuclear technology, equipment, services, and fuel-cycle expertise.⁷⁶ Among its objectives are enabling up to ten new large-scale reactors in Canada, supporting small modular reactor deployment, expanding domestic manufacturing capabilities, strengthening critical supply chains, and securing at least four new international CANDU markets by 2040.

Several elements of the federal strategy align directly with the recommendations advanced in this report.

First, it recognizes that supply chain readiness is a prerequisite for project delivery, identifying domestic manufacturing capacity, heavy industrial fabrication, specialized materials, logistics infrastructure, workforce development, and regulatory certainty as essential enabling conditions for successful deployment.

Second, it adopts a fleet-based approach to infrastructure development, recognizing that standardized procurement, repeatable project delivery, and long-term visibility create the market certainty required to attract investment in domestic production capacity.

Third, it explicitly links energy infrastructure development to broader economic objectives including export growth, industrial competitiveness, economic resilience, and national security.

Ontario is uniquely positioned to benefit from this policy direction. As home to Canada's largest nuclear supply chain, a leading advanced manufacturing base, a major steel sector, a deep engineering ecosystem, and Canada's leading financial centre, the province is well positioned to capture a disproportionate share of the economic value associated with Canada's emerging nuclear and clean-energy expansion.

The federal strategy therefore reinforces a central conclusion of this report: energy infrastructure should be understood not only as a reliability or decarbonization imperative, but as a long-term industrial development strategy capable of anchoring domestic manufacturing, strengthening supply chains, creating high-value employment, and expanding Ontario's role in global energy markets.



Why Delivery Determines Competitiveness: How Ontario Wins

Taken together, these actions define what an *Ontario Clean Energy Supply Chain and Industrial Strategy* must become: a delivery-focused framework that links energy investment to industrial capability, and industrial capability to long-term economic competitiveness and domestic value capture.

Ontario is already committing to a generational expansion of clean energy infrastructure and has a foundation in cleantech innovation and adoption. The decisive question is no longer whether this investment will occur, but who captures its economic benefits.

Recent investments in Ontario's electricity equipment manufacturing sector underscore the economic opportunity associated with energy infrastructure expansion.⁷⁷ As utilities and governments accelerate investments in generation, transmission, distribution, and grid modernization, demand for strategically important equipment – including transformers, switchgear, conductors, electrical steel, and grid technologies – is expected to increase significantly.



Ontario has an opportunity to position itself as both a domestic supplier and export platform for these critical components, strengthening economic resilience while reducing reliance on foreign supply chains.

In an era where major economies are increasingly linking energy policy, industrial strategy, and economic security, the jurisdictions that succeed will be those able to translate long-term energy investment into domestic industrial capability. From the United States' [Inflation Reduction Act](#) to [Europe's Net-Zero Industry Act](#) and growing energy partnerships across the Indo-Pacific, governments are actively reshaping supply chains for strategic technologies.

Absent deliberate execution, coordinated procurement, and targeted supply chain investment, much of the associated GDP, employment, and export value will leak outward through fragmented and foreign-dominated supply chains.

With disciplined delivery, Ontario can instead translate its planned multi-decade energy build-out into durable domestic manufacturing capacity, higher productivity, and resilient growth.

The defining question is whether Ontario becomes primarily a consumer of globally manufactured energy systems, or whether it builds the industrial capacity to manufacture, process, fabricate, engineer, and export them.

Ontario's competitive advantage will ultimately be determined not by the scale of its planned energy investments, but by how effectively those investments are translated into domestic industrial capability, resilient supply chains, high-value employment, export growth, and long-term economic prosperity.

Ontario's energy transition will ultimately be judged not only by megawatts deployed, but by how much industrial capacity, economic resilience, and long-term prosperity it leaves behind.

This is how the energy transition becomes more than a reliability strategy; it becomes an industrial competitiveness strategy that strengthens Ontario's industrial base, advances economic security, and anchors long-term prosperity for generations to come.

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ACKNOWLEDGEMENTS

This report was authored by Chris Warren on behalf of the Toronto Region Board of Trade, with valuable input and guidance from the Board's Energy, Mining, and Resources Committee. Design was led by LDD Studio.