Selling to our strengths

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A roadmap for leveraging Canada's energy, agri-food and critical minerals in a time of global uncertainty

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Business Council of Canada

About the Business Council of Canada
Founded in 1976, the Business Council of Canada is a not-for-profit, non-partisan organization representing business leaders in every region and sector of the country. The Council's member companies employ more than two million Canadians, contribute the largest share of federal corporate taxes, and are responsible for most of Canada's exports, corporate philanthropy, and private-sector investments in research and development. Through supply chain partnerships, service contracts and mentoring programs, Business Council members support many hundreds of thousands of small businesses and entrepreneurs in communities of all sizes, in every part of Canada.

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In an era of geopolitical instability and tensions, Canada must lean into its natural resource wealth to unlock a new era of economic opportunity.

It must focus on expanding its market share in response to international demands for energy and critical commodities from allies. Doing so will create benefits that go far beyond creating strong returns for Canadians. As a stable and low-emitting supplier of energy, food and critical minerals, Canada can also play a significant role in advancing the economic and national security interests of its trading partners—all while reducing global emissions as it boosts exports of environmentally top-performing Canadian products.

This is the third report in a series by the Business Council of Canada aimed at modernizing Canada's economy to achieve long-term growth and prosperity. Engines of Growth discusses the need for a more technology-driven economy, while Security & Prosperity makes the case for a defence industrial base strategy.

Executive summary

For Canadians to thrive in an era of geopolitical instability, Canada must diversify its trading relationships and expand its global market share to unlock a new era of economic growth.

Canada has a unique and time-bound opportunity to increase its energy, agriculture and critical mineral exports. ***Selling to our strengths*** reflects the views of business leaders who are prepared to work with the government to seize this generational opportunity. With global operations and a network of professionals throughout the world, Canada's private sector is committed to help expand the country's global reach.

Despite successive Canadian governments having signed trade agreements granting preferential access to more than 60 per cent of the global economy, Canadians are no better off today than they were a decade ago. The problem is clear. Canada lacks the export infrastructure—both physical and regulatory—to fully leverage its natural assets and deliver to allies and trading partners the commodities they need and want.

As real GDP per capita continues to slip and Canada's fiscal situation worsens, policymakers face the daunting task of having to course correct the country's tepid economic outlook while navigating a new era of rising protectionism, economic and security threats, and a weakening multilateral trade system. The margin for error is very low.

Canada must leave no stone unturned to deepen its ties with like-minded nations who share its values and commitment to rules-based trade. Canada requires a coherent framework that connects its admirable ambition to pragmatic policies that bolster the country's capacity to produce, transport and enrich the value of its energy, food and mineral resources.

Foreign policy should evolve to focus on national security and expanding the country's economic interests and global influence through trade. A new trade strategy and action plan can send the right signal to trading partners that Canada's diplomatic efforts will pursue commercial success and contribute to energy, mineral and food security.

Canada's energy capacity—not just oil and gas but also critical minerals, uranium, nuclear technology—should be leveraged for the country's strategic advantage, especially as the world thirsts for energy security. The next era of energy policy should focus on creating strong and resilient supply chains within North America and on expanding Canada's ability to reliably provide energy to trading partners outside of the continent. A new alliance with the United States and Mexico should be pursued to maximize energy security in North America.

Canada's allies are also rushing to find ways to lock in a stable supply of minerals for their national security and defence goals. Mineral supply chains are increasingly under threat due to foreign price manipulation, export controls, rising military demands, and limited inventories held by NATO members. Canada can become a world leader in critical mineral production and processing for defence purposes. It should work immediately with NATO members to create a critical mineral reserve for defence technology and military purposes. Doing so will require targeted federal resources to support mining in Canada.

The weaponization of food and our changing climate are dangerously hampering global food security. Canada can and should reclaim its position as an agriculture and agri-food superpower. This includes building on its strengths as a leading exporter of commodities such as grains and pulse crops and inputs essential to global food production, like nitrogen and potash.

In each of these areas, Canada's ability to solve global security challenges should go beyond exporting raw and unprocessed commodities. Leveraging natural resources could create a generational opportunity to drive technological progress, boost productivity, and develop resources with fewer emissions. To do so, Canada requires a new federal advanced research projects agency to drive innovation and heighten economic competitiveness.

Ultimately, however, unlocking Canada's energy, agriculture, and critical mineral potential will require significant structural changes.

Regulatory reforms are needed in many areas, especially with regard to project approvals and permitting. Canadian business leaders agree with the government's intention to advance the principle of "one project, one assessment." ***Selling to our strengths*** urges the government to go further in its efforts to reduce regulatory redundancy and move to

"one decision" with Indigenous rights holders involved in that process.

Strong trade-enabling infrastructure is a prerequisite for trading more with allies and partners. Canada is in urgent need of a national trade infrastructure strategy—developed collaboratively by the federal, provincial and territorial governments and private sector—to strengthen economic growth and reach new markets. Yet such a strategy will fall short if work stoppages continue to occur at an unprecedented rate. In this respect, a strong commitment by the government to protect Canada's supply chains from future labour disruptions is also urgently needed.

Lastly, Canada's low-emitting exports are a competitive advantage that should be maintained in the decades to come. Access to affordable electricity has been a strategic advantage for decades, but markets now face a new era of constraints, higher costs, and grid security risks. Canada should champion a national effort designed to secure new sources of reliable, affordable and sustainable electricity in strategic jurisdictions. A national effort to strengthen the competitiveness of carbon markets in Canada is also required. Such an effort should include a comprehensive review of carbon pricing regimes and assess the potential to create synergies between existing markets.

The world has changed—and if we play our cards right, it may be changing in Canada's favour. As has often been said, Canada has what the world wants. ***Selling to our Strengths*** seeks to provide a roadmap to ensuring that we can get what we have to those who want it—in a way that increases both economic security and economic growth.

Summarized list of recommendations to the federal government:

1 *Revamp foreign policy to grow Canada's global market share*

- Develop a global trade strategy/action plan designed to champion Canadian business and strengthen the country's competitive advantage in traditional and emerging markets.
- Clearly communicate that Canada's diplomatic efforts will be targeted at pursuing commercial success in markets that hold the greatest promise for Canadian business, and contribute to energy, mineral and food security.
- Create trade envoys, appointed by government, to work directly with regional ambassadors to build relationships and advance trade and investment opportunities identified by the Canadian government.
- Establish an Expert Trade Advisory Panel consisting of private sector representatives to work with the government to share intelligence and exchange information about emerging risks and market opportunities.

2 *Unleash energy as Canada's 'hard power'*

- Pursue the development of a North American energy alliance that focuses on maximizing the shared energy security, economic and geopolitical interests of the U.S., Canada and Mexico.
- The goals of the alliance should be to:
  - Jointly commit to an "all of the above" energy policy that directs public and private sector investment and policy support toward projects that strengthen energy security and resilient energy supply chains in North America.
  - Enhance energy security intelligence capacity by creating a dedicated unit to monitor and collect information regarding risks and threats to energy and critical mineral infrastructure and supply chains in North America.
  - Create a North American regulatory task force responsible for developing a common vision to identify and expeditiously approve infrastructure that strengthens the resiliency of North America's energy and critical mineral supply chains, with a specific emphasis on cross border infrastructure.
  - Use North America's advantage to advance commercial opportunities that combine energy and critical mineral export policy with the needs of allies and trading partners requiring safe and secure supplies of energy.

3 *Make Canada a major supplier of critical minerals to NATO*

- Create a critical mineral reserve in Canada for niche metals vital to strategic defence purposes and where there is the greatest fragility in market mechanisms and supply.
- Work with industry and the financial sector to encourage production and processing of priority minerals using concessional financing and tools like bilateral contracts and derivative instruments such as forwards, futures and options.
- Consult and cooperate in good faith in order to obtain consent from Indigenous nations and align federal and provincial project approval and permitting systems to advance projects in the national interest. Ensure that equity and benefit-sharing programs available to Indigenous Peoples have designated funding for mining projects and supporting infrastructure.
- Create a dedicated financial instrument for defence critical minerals in Canada, modelled after the U.S. DPA Title 3 program.
- Champion efforts to assess NATO ally requirements and bolster Canada's potential to be a go-to supplier in strategic areas of the mineral value chain.

4 *Unlock Canadian resources through a modern, efficient project approval process*

- Advance the principle of "one project and one assessment" across Canada, and move to "one decision" as well, with the understanding that Indigenous rights holders are involved in the process.
  - The goal should be to ensure that federal and provincial governments respect each other's areas of jurisdiction so that proponents clearly understand the primary regulating authority.
  - Ensure that public involvement in project approval processes is scoped appropriately, with logical parameters in place for public involvement.
  - To avoid uncertainty and risk to projects and undermining public confidence, ensure that governments achieve the highest standards in applying the Duty to Consult and Accommodate.

- Ensure that timelines for regulatory processes, including permits and project approvals at both the federal and provincial/territorial levels are short, concrete and adhered to.
    - Move with speed to define shorter approval processes for projects occurring on brownfield sites and/or in locations where a proponent has already received an environmental certificate or is the owner of an existing asset, right of way or corridor.
    - Allocate sufficient capacity and resources to federal agencies responsible for permitting.

5 *Develop a national trade-enabling infrastructure strategy and permanently resolve labour disruptions in critical industries*

- Create a national strategy that supports trade-enabling infrastructure and focuses on:
    - Physical infrastructure, ports, railways, pipelines, roads and connectivity into gateways and corridors to support long-term trade;
    - Connecting rural communities to foreign markets by building out broadband to support the digitization of farming and natural resource projects;
    - A focus on resilience in response to climate change and security threats.
- Publicly commit to resolving—through policy or legislative amendments—labour disputes and acts of civil disobedience that harm the country's capacity to trade with its allies and trading partners.

6 *Futureproof Canada's low-carbon advantage*

Build out a new era of electricity generation and transmission

- Champion a national effort focused on achieving a dual mandate for electricity production and grid security.
- Build and strengthen interprovincial transmission connections to create new energy markets and improve energy reliability and energy security.
- Encourage provinces and territories to produce technology pathways and investment strategies to produce, store, transmit and distribute reliable and affordable electricity to Canadians.
- Assess the workforce development, skills and labour pool required to build electricity capacity in various jurisdictions of the country.
- Pursue long-term infrastructure plans designed to strengthen or expand the Canada-U.S. electricity corridor and identify ways to streamline the approval processes for cross-border infrastructure.

Create competitive carbon markets to cut industrial emissions

- Improve Canada's industrial carbon pricing programs by:
    - Reviewing the schedule for the minimum price on industrial carbon pollution and corresponding emissions standards and stringency levels to assess their impact on Canada's economy, energy security, and emissions-intensive, trade-exposed industries.
    - Rapidly scaling up the number of offset protocols available to industry and ensuring that revenue raised through pricing programs is invested in new technologies and emissions-generating facilities; and
    - Encouraging compatibility between existing markets through credit generation and emission trading opportunities in Canada.
- Expand Canada's global reach by working with like-minded countries that prioritize:
    - Low-carbon food, critical minerals and energy security;
    - Emissions reductions through comparable climate policies; and
    - Deterrence of free-riding countries with less stringent GHG regulations.

7 *Create a new agency to drive innovation and breakthrough technologies*

- Create a federal advanced research projects agency to drive technological progress, innovation and economic competitiveness.
    - Mandate the agency to ensure better technology transfers between publicly funded research and the Canadian companies that could commercialize those ideas.
    - Create dedicated streams for high-value export-oriented industries such as agrifood, energy and critical minerals.
    - Allow the agency to invest in high-risk, high-reward research and development, and in technologies that emerge from the agency's collaboration with the private sector.

Poor performance, lost decades

If there was ever a time for an urgent call to action, it is now.

In 2024, Carolyn Rogers, the senior deputy governor of the Bank of Canada, made headlines when she described Canada's persistently poor record on productivity as an emergency "break the glass moment."[1] She noted that Canada has fallen behind its G7 peers in several areas, notably capital investment, labour productivity and intellectual property.

The country's economic outlook is equally disappointing. The Organisation for Economic Co-operation and Development (OECD) predicts Canada will rank dead last among OECD members in real GDP per capita growth until 2060.[2] U.S. President Donald Trump's trade policies are expected to deteriorate global outlooks in the near term, with growth in Canada expected to be 1.3 per cent this year and just 1.1 per cent in 2026.[3]

Canadians are no better off economically today than they were a decade ago. Real GDP per capita continues to slip and is effectively at the same level it was in 2014. From a wage perspective, real average weekly wages doubled from 1945 to 1975 through improved productivity. But at the current rate, it would take roughly four centuries to achieve the same improvement.[4] Canada has fallen from the sixth most productive economy in the OECD in 1970 to 18th as of 2022.[5]

Canada's fiscal situation is also worsening. Budget deficits and increasing debt are major fiscal challenges facing the federal and several provincial governments. Overall, the combined federal-provincial debt-to-GDP ratio climbed from 53.1 per cent in 2007/08 to 76.2 per cent in 2023/24.[6] Canada's gross debt position is among the lowest in the G7 as rating agencies continue to warn governments in Canada about the dangers of more debt-financed spending and higher borrowing costs that are expected to persist in the foreseeable future.

At the same time, global tariff wars are shocking the fundamentals of Canadian trade and threatening the country's industrial competitiveness, economic stability and long-term growth prospects. Prime Minister Mark Carney has committed his government to forging a new economic and security relationship between Canada and the United States. Canada must also urgently strengthen ties with other trading partners and engage with new customers around the globe.

The growing bank of evidence illustrating Canada's tepid economic outlook and precarious fiscal position is concerning. It means the federal government's margin for policy errors is very low. Fundamental changes are necessary to unlock a new era of economic capacity that improves the standard-of-living of Canadians well into the future and transforms Canada into the strongest economy in the G7.

Contributing to a safe, secure new world order

Escalating geopolitical tensions have exposed the vulnerability of global supply chains for energy, raw materials and food. Canada and its allies are navigating a new era, one with heightened geopolitical risks. Foreign entities are manipulating supply chains so that western democracies face higher levels of economic and national security risk. The next era of policymaking must therefore prepare to respond to a new world order increasingly shaped by economic and security threats.

Canada should pursue a transformational strategy focused on creating economic growth through increased resource trade with its allies and trading partners. An agenda focused on growing the country's market share through increased natural resource trade, particularly in energy, agrifood and critical minerals, can generate the strong economic returns urgently required by Canadians. It can also position Canada as an influential player in addressing some of the world's most pressing challenges related to energy and food security as well as improved defence capacity.

National security and clean energy applications are driving a global demand for critical minerals

- Western democracies are racing to secure stable supplies of critical minerals, including tungsten, rare earth elements and germanium, to bolster economic security and national defence. However, supply chains for many niche metals are dominated by China, with the U.S. reliant on supply from several foreign entities of concern.
- A surge in data centres will require critical energy materials, including uranium, lithium, nickel, and copper. All are facing long-term supply deficits.[7]
- Mineral demands for clean energy technologies alone are expected to double or triple between today and 2030.[8]
- IEA scenarios predict that battery storage will increase by sixfold to 1,500 GW by 2030 with batteries making up 90 per cent of that storage capacity.[9]
- More countries are aiming to reduce their trade with China and Russia, a development that could position Canada as a preferred trading partner for raw materials.

The global threat of food insecurity is growing

- Food is in short supply for roughly 10 per cent of the world's population.[10]
- Shortages and soaring prices of staple foods have put 345 million people in danger of acute food insecurity. Low-income countries, many of which source their food from authoritarian regimes, are the most vulnerable.[11]
- The world's population is expected to grow by 26 per cent and reach 9.8 billion by 2050.[12]
- Rising global incomes are expected to increase total food consumption by 50 to 70 per cent by 2050, with demand in India and Southeast Asia forecasted to grow by 31 per cent in the next decade.[13]

All signals point to higher global energy consumption

- Geopolitical and energy market uncertainty are negatively impacting energy security around the world.
- Global energy demand is set to grow by 10 to 15 per cent by 2050.[14] Global electricity supply for data centres alone is expected to increase from 1.2 to 4.1 per cent by 2030.[15]
- Europe is more vulnerable than ever before, relying on imports to meet more than 50 per cent of its energy requirements, a new record for the region.
- Eighty per cent of the world's population lives in countries where electricity consumption per capita is low.
- Primary energy production (petroleum, natural gas, coal, nuclear energy and renewable sources) will increase between 16 per cent and 57 per cent by 2050, with natural gas strongly positioned to be a fuel of the future.
- Annual global energy demand is mostly met by fossil fuels produced in countries with declining oil and gas fields. New investment in existing oil and gas inventories is necessary to support global energy security, according to the IEA.[16]

Countries in both the Global North and South are rushing to secure safe and reliable sources of all forms of energy as the world's largest economies place energy security at the heart of their national security agendas.

Successive governments in the United States have prioritized energy security. Joe Biden's administration called on American oil companies to increase investment and production while it also authorized the release of the country's Strategic Petroleum Reserve before and after Russia's invasion of Ukraine.

On the same day he was sworn in as president for a second time, Donald Trump declared a national energy emergency. "An affordable and reliable domestic supply of energy is a fundamental requirement for the national and economic security interests of any nation," he said, adding that American energy policy would be designed to "protect the United States' economic and national security and military preparedness by ensuring that an abundant supply of reliable energy is readily accessible in every State and territory."

Beyond North America, Germany, China, and India have also made bold policy decisions to position energy security at the heart of their economic and national security strategies.

China's dominance in the manufacturing of advanced technologies—paired with its unparalleled ability to harvest and process critical minerals—underscores its ability to influence a wide range of markets, from energy to defence to clean technology. In 2024, China controlled more than 85 per cent of global rare earth processing and 60 per cent of lithium refining capacity, giving it unprecedented leverage over the major technologies needed to build defence capacity, digitization and decarbonization.[17]

The country's economic impact is evident through deindustrialization across North America and other parts of the world, and through trade imbalances in principal markets such as the United States. And from a security perspective, the threat has become very real. China is now a global powerhouse. A regional conflict in Asia could have far-reaching consequences for Canada and its allies in terms of their access to the materials and technology necessary to bolster defence capacity.

The repercussions of this reality are being felt economically in the form of deindustrialization and trade imbalances. But they are even more problematic from a security perspective. In the event of a regional conflict involving China, for example over Taiwan, the United States and its NATO allies could not depend on Chinese goods to maintain their defence industrial base. China has already shown a willingness to apply export restrictions on key critical minerals and components needed for defence, including drones and the aerospace industry.

Europe's reliance on Russian natural gas also offers a stark reminder to the West: countries with net import energy trade balances must reduce their reliance on autocratic countries seeking dominance in their energy and materials supply chains. High energy prices cost lives. A recent study showing that Russia's ability to cut off natural gas supplies to Europe caused prices to surge so high that people refrained from heating their homes properly and living comfortably. A price rise of around €0.10 per kWh was related to an increase in a country's weekly mortality of around 2.2 per cent.[18]

Russia's illegal invasion of Ukraine also fuelled far-reaching shock waves in the global energy supply system. European countries scrambled to secure new

sources of liquified natural gas (LNG); more than half was provided by U.S. suppliers. Europe's ability to pay a premium for LNG came at a high cost for developing countries in Asia and Africa, many of which were priced out of the natural gas market and effectively forced to return to using higher emitting forms of energy like coal, wood, waste and cow dung.

Closer to home, adversaries like China, Russia, North Korea, Iran and non-state entities are constantly engaged in cyberattacks against Canadian and American energy infrastructure. The Colonial Oil Pipeline cyberattack in 2021 and the physical attack on electric infrastructure in North Carolina the following year show that North America's energy assets are increasingly under threat. In Canada, the Cyber Centre has warned the country's oil and gas sector already faces threats from state-sponsored entities that could become more severe in the event of any conflicts between the United States and Russia and China.[19]

From a climate policy perspective, the global resurgence of coal represents the single biggest threat to decarbonization. Global coal demand reached a new record of 8.70 billion tonnes (Bt) in 2023, surpassing the previous year's record by 2.6 per cent. More than 80 per cent of coal consumption took place in Asia and other parts of the world where fewer energy alternatives exist. There are also strong warning signals that the pace of the global energy transition is at risk because of the projected shortfall of minerals required for renewable energy production and transmission as well as a broad suite of battery technologies and storage.[20]

The war in Ukraine also highlights another serious challenge: food weaponization. The enduring conflict's shock to agricultural production and trade is a key driver of a global food crisis that has nearly tripled global acute hunger since 2020, leaving as many as 333 million people at risk of starvation.[21] Countries with a low food self-sufficiency are amongst the most vulnerable to food weaponization. For example, Japan has a food self-sufficiency ratio of only 38 per cent and is heavily reliant on imports of food, despite being the world's third largest economy.

Canada is uniquely positioned to address global challenges driven by energy and food security. Its agriculture abundance and natural resource wealth, as well as its environmental best practices are among the highest in all areas globally. Canada is energy-independent across all sources, has ample access to freshwater and minerals and boasts world-class financial sectors and labour pools. Canadians are also ready to see Canada do more on the global stage. For example, recent polls suggest most Canadians believe oil and gas are important to the country's current and future economy and that expanding oil and gas exports can increase global energy security.[22]

But unlocking natural resources in Canada is no easy task due to myriad challenges driven by regulatory and policy uncertainty, slow and cumbersome project approvals and permits, supply chain disruptions and a lack of consensus among policymakers about which projects to support.

Case in point:

- Between 2015 to 2023, the real value of major projects in constant 2015 dollars fell roughly 33.5 per cent (or $231.3 billion).
- The number of natural resources projects decreased by 10.04 per cent.
- The average project value dropped 6.1 per cent.
- The total number of completed projects declined by 36 per cent.[23]

Canada's rich supplies of energy and natural resources place it in a position of strength, allowing the country to respond to a world searching for more energy and goods with fewer emissions. But urgent solutions to longstanding policy challenges and a new culture of commitment to develop natural resources are required to unleash Canada's full capacity.

Canada's low-carbon advantage: A competitive strength

Climate change remains one of the greatest challenges of our time.

While Canada's ability to achieve its commitments under the Paris Agreement are ambitious, recent evidence suggests the country is beginning to decouple emissions from economic growth. National emissions remain roughly six per cent lower than the pre-pandemic levels of 2019, while the Canadian economy has grown 3.2 per cent since then.[24] Canada's abundance of reliable and affordable clean electricity, including nuclear power and low-emitting natural gas, have allowed it to phase out coal-fired electricity. Its industrial carbon-pricing programs have also proven to be an effective way to reduce emissions across Canada's industrial base and natural resource sectors.

While the goal of achieving net zero emissions by mid-century may seem aspirational, business leaders remain aligned in their belief that global emissions must significantly drop. Companies across Canada are doing their part by investing billions of dollars to transform their operations using innovative industrial technologies, lower-emitting forms of energy and

supply chains designed to deliver products to customers and consumers using the fewest emissions possible. Underpinning Canada's low carbon advantage is the unparalleled access to reliable, affordable and low-emitting electricity.

Canada ranks among the lowest emitting producers of several critical minerals like copper, nickel and aluminum, and dozens of agrifood products ranging from canola to pulse crops, dairy and beef. The conventional oil and gas sector's emissions performance has improved over the last decade, while Canadian LNG production is among the lowest-emitting globally according to a new report completed by S&P Global this year.[25]

From a trade perspective, many of Canada's exports contain lower carbon emission footprints than products they are competing against or displacing.As global markets continue to search for lower carbon alternatives and more countries seek pathways for achieving their emission reduction goals, Canada's low-carbon export advantage should be positioned as a competitive advantage and as a magnet for investment in markets where demand remains strong, like natural gas and for many critical minerals and agri-food products.

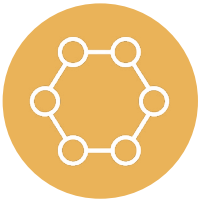
Agrifood

- Canada is a top food exporter, with a food system that ranks among the highest in sustainability, according to the Food Sustainability Index.[26]
- More than 65 per cent of Canada's farmers have adopted at least one practice to improve their farm's resiliency to adverse soil, water or biodiversity challenges.[27]
- Canadian wheat, canola, lentils and peas are produced with substantially lower emissions than their international competitors. Canadian beef and dairy cattle have some of the smallest footprints globally, with greenhouse gas (GHG)s per kilogram of meat well below global averages.[28]

Mining and critical minerals

- Canada's total carbon emissions for aluminum, copper, gold, iron ore, potash and metallurgical coal are lower than Australia, the United States, Russia, South Africa, Indonesia, Chile and Brazil.[29]
- Canada is a leading global nickel producer and is among the lowest-carbon intensive globally.[30]
- Canada's end-to-end supply chain proficiency in uranium and nuclear technology is second to none.

Energy



- Oil and gas sector emissions have dropped in absolute terms by eight per cent since 2014 and by 34 per cent on an intensity basis since 2012 as found by a recent assessment completed by the Bank of Montreal.[31] Canadian oil and gas companies are among the lowest methane emitters in the world.[32]
- Switching from coal to natural gas for electricity generation reduces emissions by 35 to 50 per cent on average, according to the IEA.[33] [34] Canada's proximity to an emerging Asia-Pacific market is a competitive advantage.
- Chemical production in Canada is up to 80 per cent less GHG intensive than Asia and European countries.[35]
- Canada has the second cleanest electricity grid in the G7 and third cleanest in the G20.

On an emissions basis, a report by the Public Policy Forum found that 45 per cent of the country's emissions leave the country through low-carbon exports such as energy, steel, minerals and canola, allowing Canada's trading partners to reduce their emissions by using products with a lower-carbon intensity or displacing products acquired from countries with higher emissions intensities.[36]

The international framework for measuring and reporting emissions under the Paris Agreement fails to recognize the contributions of low-emitting exporters like Canada to global emissions reductions. Arguably, Canada's interests on the international stage have historically been represented poorly and the international framework for measuring emissions does not give Canada the credit it deserves.

A change in strategy by policymakers is necessary to better position Canadian companies as enablers of low-carbon opportunities abroad. The recent completion of the Article 6 rulebook at COP29 could potentially spur international market-based co-operation by mobilizing private investment in projects in countries seeking to fulfil their emissions reduction goals. Canada should capitalize quickly on this development and implement an ambitious framework for reducing global emissions through increased levels of Canadian trade of low-carbon commodities like energy, critical minerals and sustainable agriculture.

Unlocking Canada's export potential

Trade is the lifeblood of the Canadian economy, generating roughly two-thirds of the country's GDP.[37] Canadians enjoy a relatively high standard of living because Canadian businesses excel in export markets. A sizable portion of those exports are created by natural resource extraction, production and processing.

But Canada is struggling to grow the country's exports on a per capita basis, with the value of exports flatlining since 2000.[38] This suggests waning Canadian competitiveness for export-focused and export-capable industries, with outbound Canadian foreign direct investment (FDI) rising faster than inbound FDI.

Expanding reach to global markets will require resolve, intentionality and an unprecedented emphasis on unlocking higher levels of production in Canada's energy and resources sectors. Future policymakers will need to advance Canada's interests through twin goals—one that focuses on bolstering the country's economic output and another that responds to allies and trading partners seeking low-emitting energy, food and critical minerals.

How to grow Canada's market share

Shifting Canada's foreign policy so that it deepens the country's relationships with its allies and trading partners requires both discipline and focus.

Canada is fortunate to have 14 bilateral and regional free trade agreements in force, covering 51 countries and nearly two thirds of global GDP. In many respects, Canada already has substantial market access to the world's economies. Paired with the country's abundance in natural resources, few countries can boast the comparative advantage Canada has over its allies.

Despite this advantage, Canada has run an overall trade deficit in most years since 2008.[39] It imports more goods and services than it produces. Over the past decade, the country's current account deficits with the rest of the world have hovered between two and three per cent of GDP. Non-energy exports have remained flat, and the share of Canadian exports that go to emerging economies is among the lowest of G7 countries. Canada is losing global market share in several important areas, including minerals, agrifood and forestry. Canada is no longer a top-five producer of important minerals like nickel, cobalt, graphite and copper.

Even though Canada continues to increase its annual agriculture and agrifood exports in absolute numbers, it continues to lose market share. The country was the world's third largest agriculture and agri-food exporter from 1990 to 2005, with an average global market share of 3.6 per cent. But since 2000, Canada's market share has declined by 12 per cent while its international ranking has dropped from fifth to seventh because of the growing market shares of Brazil and China.[40]

As a medium-sized economy heavily dependent on exports, Canada must contend with the rise of protectionism, the erosion of the multilateral rules-based international order and geopolitical changes that have left it increasingly isolated on the global stage. Along with the rest of the world, Canada must also address the multi-faceted challenge of global climate change, including the need for more climate-resilient infrastructure and significant financial investments to support the transition to a low-carbon society.

Canada's lacklustre export numbers leave its most important allies, like the U.S. and Europe, increasingly dependent on other countries, notably China, Russia and other autocratic regimes, for supply.

Canada's foreign policy has been subject to criticism in several areas, notably pertaining to national security and defence policy. At the same time, the country's reputation as a reliable trading nation has been challenged due to recurring labour disputes at ports, railways and airlines, as well as acts of civil disobedience such as pipeline and railway blockades in 2020, the illegal occupation of the Ambassador Bridge and the so-called Freedom Convoy actions in Ottawa in 2022.

Calls for a foreign policy review continue to grow amid concerns that Canada has drifted away from a traditional set of core values focused on national security, promoting economic interests and playing an influential role on the global stage.[41]

Future policymakers have an opportunity to re-establish Canada's reputation as a credible ally and influential supplier of the commodities and goods required to address some of the world's most pressing energy and food security challenges. The size of the prize is formidable if Canada can act swiftly. For example, a recent report published by RBC found that maximizing Canada's agrifood trade potential alone by 30 per cent by 2035 could add $44 billion in export revenue.

Recommendations:

- Develop a global trade strategy/action plan designed to champion Canadian business and strengthen the country's competitive advantage in traditional and emerging markets. Clearly communicate that Canada's diplomatic efforts will be targeted at pursuing commercial success in markets that hold the greatest promise for Canadian business, and contribute to energy, mineral and food security.
- Create trade envoys, appointed by government, to work directly with regional ambassadors to build relationships and advance trade and investment opportunities identified by the Canadian government. Trade envoys should have demonstrable experience in advancing opportunities in commodity markets linked to Canada's trade objectives.
- Establish an Expert Trade Advisory Panel consisting of private sector representatives to work with the government to share intelligence and exchange information about emerging risks and market opportunities.

Canada's energy capacity is 'hard power'

The next era of energy policy in Canada should focus on two outcomes: Creating strong and resilient energy supply chains across North America and expanding Canada's global reach to provide a safe and secure supply of reliable and affordable clean energy and critical minerals to allies and trading partners.

No other region in the world can enhance energy security and achieve energy dominance to the extent that North America does. The continent now produces more oil and gas than any other region in the world. The combined power of North America's energy sector places it as the top global producer of oil and natural gas, the top exporter of LNG and the third largest exporter of crude oil. Production of this magnitude is an advantage that Europe and mainland China lack.

Canada is starting from a position of strength. It is the fourth and fifth largest producer of oil and natural gas in the world, and the second and sixth largest producer of uranium and nuclear power respectively. Its abundance of energy resources places it on strong footing to match the security needs of allies and trading partners that require a different optimal mix of energy sources to balance their own domestic supply of energy and their security priorities. Make no mistake, Canada's energy capacity is the country's most significant form of hard power.

A stable supply of abundant and affordable energy, paired with an integrated transportation system, has allowed North America to remain competitive by ushering in an era of unprecedented investment over the last two decades. This is mostly due to the U.S. shale revolution and the expansion of Canada's oilsands.

Policies aimed at expanding energy resources through a wide array of technology discoveries have generated a remarkable return – upstream North American capital investments increased from approximately US$50 billion in 2001 to US$250 billion in 2014, with upstream capital expenditures expected to rise by US$77 billion between 2024 and 2030. That's more than all other regions of the world combined.[42] Growth in renewable energy investment has also gone from strength to strength, albeit at a significantly lower rate than oil and gas.

These benefits go beyond generating strong returns for capital markets. They highlight the potential of what can be achieved when North American policy agendas are aligned rather than fragmented. In this case, North America has proven it can achieve top producer and exporter status through its access to the largest capital markets in the world for new energy sources and technologies. North America's resources and export capacity can offer a near-term solution to global challenges concerning energy security and low-carbon energy.

Canada's role as an important supplier to the North American market cannot be overstated. Growth in Canadian oil imports to the U.S. is a key factor driving America's reduced reliance on OPEC countries, with Canada now accounting for 60 per cent of U.S. petroleum and roughly 100 per cent natural gas imports. The recent start of the Transmountain Expansion and the launch of LNG Canada will also expand global access to Canadian oil and gas, primarily in the Asia-Pacific region and in strategic markets along the U.S. West Coast.

Growth in North American energy exports has also played a leading role in helping to fill the gap left

by declining Russian exports to Europe, Asia and elsewhere. This growth is in large part due to the continent's increase in LNG export capacity in the U.S. Gulf Coast, emerging outlets in Mexico, and Canada via its LNG Canada project. North America, Europe and the rest of the world would have been notably more vulnerable following Russia's invasion of Ukraine without this boost in capacity.

Yet Canada's potential as a global energy powerhouse is still fledgling. Roughly 15 years ago, Canada and the U.S. were similarly poised to export substantive volumes of natural gas to Europe, Asia and elsewhere. Since then, there have been 18 proposals to advance LNG projects off Canada's coasts, with only one expected to be in service this year and several more expected to begin operations between 2027 and 2030.[43] High costs, regulatory complexity and the lack of policy alignment across governments are just some of the reasons that have held Canada back from fulfilling its potential to develop natural gas. Combined, Canada's LNG capacity could reach 6.62 billion cubic feet per day (Bcf/d), just over half of what the U.S. currently exports today as the world's largest LNG exporter.[44]

Resetting Canada's trade interests outside of North America will require an intentional effort by the government to work closely with the private sector to secure access and strategic advantage in markets seeking Canadian supply. A sense of urgency and deeper partnerships between political leaders and the private sector is necessary to attract investment and secure long-term export opportunities with other countries seeking Canadian products. The U.S. offers an example: the federal government and the state of Alaska are currently working with investors and private operators to expand American natural gas market share by securing agreements with Japan, South Korea and Taiwan.

Maintaining a range of North American energy options will allow the continent's allies and trading partners to reduce their reliance on OPEC, Qatari and Russian energy supplies. It will also help countries achieve their emission reduction goals by moving away from coal to natural gas. For the benefit of Canada's economic growth and security today, and the world's energy security tomorrow, Canada needs to create the conditions to build energy infrastructure faster and more efficiently. Doing so can also unlock possibilities to support the country's struggling manufacturing sector by using more Canadian inputs and materials for nation-building projects.

Achieving these goals will not occur in isolation. Canada should seek to revitalize its trading relationship with the U.S. and Mexico to focus on building resilient energy and critical mineral supply chains across North America. All three countries have a long history of collaboration and co-operation dating back decades.

It is unfortunate that the North American relationship has deteriorated in recent months, but it can and should be rebuilt. Canada and U.S. energy production, paired with Mexico's potential capacity to refine and process oil and gas, can be the basis for creating stable energy markets and alleviating energy poverty in North America while improving each country's access to global markets.

Yet trilateral co-operation on energy has drifted in recent years, spread across numerous task forces and memorandums of understanding led by multiple departments and agencies with varying mandates and expertise. While the Canada-United States-Mexico Agreement includes important provisions related to energy trade, collaboration among North American energy leaders has faded, with the last North American Energy Ministers meeting occurring in 2017.

Critical minerals and nuclear technology

There is an emerging consensus amongst policymakers about the need to secure various minerals and metals required for national security and new energy and transportation technologies. Canada has an immense opportunity here.

Global mining and refining capacity for critical minerals is extremely concentrated, with the bulk of raw mineral resources and processing capacity in a small number of weakly governed countries. China has cornered the market for mineral inputs essential to the energy transition and national security. More than two-thirds of global output of mined cobalt, graphite and rare earth elements come from China, while the country's stronghold on processing is even more entrenched. While China's supply of critical minerals is limited, its dominance has been entrenched in part by its ability to secure supply from a handful of important suppliers, notably the Democratic Republic of Congo, the Philippines, Indonesia and Myanmar.

China refines more than 90 per cent of the world's graphite, 90 per cent of rare earth elements, three quarters of cobalt and almost two thirds of lithium, according to IEA data. China also dominates clean technology production, boasting 75 per cent and more than 80 per cent respectively of global battery and solar panel manufacturing capacity. This dominance poses a risk to North America's energy position and compromises global efforts to reduce emissions in accordance with international commitments.

Conversely, minerals mined in North America move back and forth across borders often as they undergo various stages of processing and manufacturing. Canada has top ten reserve status for important minerals such as nickel, lithium and cobalt and is a leading producer of aluminum, iron ore, copper as well as indium, niobium, platinum group metals, and titanium concentrate. It also remains the biggest source of imports to the U.S. for aluminum, nickel, steel, copper and niobium.

Announced in 2020, the Canada and U.S. Joint Action Plan on Critical Minerals Collaboration promotes an integrated approach to developing critical mineral supply chains and is a useful starting point for strengthening continental trade. The recently tabled G7 Critical Minerals Action Plan can also be useful in this regard. But much work remains to overcome the challenges North America faces in terms of financing, permitting and ultimately securing a mineral supply for defence, energy transition and advanced manufacturing purposes.

Canada's ability to support a robust buildout of nuclear technology across North America and beyond should not be understated. Canada is the second largest producer of uranium in the world, supplying the U.S. with nearly 30 per cent of its uranium imports. Investments in Saskatchewan's Athabasca basin, which boasts the world's richest uranium deposits, are increasing—with several new projects reaching advanced stages—to complement existing world-class mines. Comparatively, U.S. uranium production is at some of its lowest levels in history, while Mexico does not mine uranium.

In addition to uranium production, Canada has developed a robust nuclear supply chain all the way to generation. Because all of Canada's current commercial nuclear power is generated by CANDU reactors, which use a heavy water technology, enriched uranium is not required. That means Canada's nuclear supply chain is almost wholly domestic, affording an incredible degree of energy independence. Recent refurbishments at the Bruce, Darlington, and in due time, Pickering facilities in Ontario—massive, multi-billion-dollar projects that have been completed on time and on budget—have ensured the Canadian nuclear sector is literally firing on all cylinders.

This is a huge strategic and competitive advantage as the world moves towards a nuclear renaissance. Canada, the U.S. and 29 other countries have signed a declaration committing to triple nuclear energy capacity by 2050. This goal is driven by a desire to invest in cleaner baseload power and enhance energy security and is being supported by a new generation of nuclear technologies. These include both small modular and large-scale reactors that offer new applications for nuclear energy while enhancing safety.

Canada has already been taking advantage of new demand for nuclear energy, including moving to expand uranium production; collaboration with eastern European allies to increase nuclear energy capacity while also reducing dependence on Russia; pro-active regulation of new, advanced nuclear reactors by the Canadian Nuclear Safety Commission; and support for the development of the small modular reactor and large scale reactors, including the first SMR to be constructed in the G7 in Darlington, Ontario.

Recommendations:

- Pursue the development of a North American energy alliance that focuses on maximizing the shared energy security, economic and geopolitical interests of the U.S., Canada, and Mexico. Core elements of the alliance should include:
    - Jointly commit to an "all of the above" energy policy that directs public and private sector investment and policy support toward projects that strengthen energy security and resilient energy supply chains in North America. Key elements should include:
        - Creating robust and resilient energy supply chain capacity in each country, reinforced by cross-border energy trade where necessary;
        - Expanding LNG and other energy exports on both west and east coasts;
        - Cooperating on policies related to mining and critical mineral supply chains, including identification and development of critical mineral mining and processing projects that advance national security;
        - Developing world-class nuclear supply chains to lower prices domestically and create new markets abroad; and
        - Identifying shared priorities for technology development and deployment that enhance energy security.
    - Enhance energy security intelligence capacity by creating a dedicated unit within government to monitor and collect information regarding risks and threats to energy and critical mineral infrastructure and supply chains in North America.

- Create a North American regulatory task force responsible for developing a common vision to identify and expeditiously approve and permit infrastructure that strengthens the resiliency of North America's energy and critical mineral supply chains.
- Use North America's advantage to advance commercial opportunities that combine energy and critical mineral exports policy with the needs of allies and trading partners seeking to address their energy deficits or security risks.

Canada's opportunity to supply NATO with critical minerals

Risks to mineral supply chains are increasing due to foreign price manipulation, export controls and outright bans, rising military demands and limited inventories held by NATO allies and trading partners. The U.S., the European Union and the United Kingdom remain net importers of the critical minerals required for their vital industries, militaries and broader defence purposes.

NATO partners are ill-prepared to respond to global conflicts and are beholden to China's market dominance and powerful ability to exert export controls. This affects NATO members' ability to ensure access to strategic critical minerals including bismuth, titanium, tantalum, rare earth elements, gallium, germanium, antimony, scandium, indium and graphite. As geopolitical tensions escalate, NATO members require a concerted strategy to develop a safe and secure supply of critical minerals required for national security and defence.

Countries are rushing to find ways to lock in a stable supply of critical minerals from credible partners for their national security and defence goals. The EU recently closed a consultation on a new stockpiling strategy, signalling its intentions to move forward in this space. The U.S. is also moving ahead with unprecedented speed to unlock new supplies of critical minerals through executive orders, emergency permits and targeted funding programs overseen by the Departments of State and Energy, the International Development Finance Corporation and the Export-Import Bank of the U.S.

Canada is well-positioned to become a world leader in critical mineral production and processing that are essential for strengthening its defence capacity and the rearmament efforts of its NATO allies. But despite its status as a major mineral producer, a secure supply route to the U.S. and access to major ports on its east and west coasts, Canada has yet to signal its interest in creating a critical mineral reserve or stockpile for domestic or NATO purposes.

Existing markets for niche metals remain opaque and immature, posing challenges for Canada and its allies because of their limited trade potential. These challenges are exacerbated by China's dominance as a direct or indirect supplier of key minerals. Nonetheless, Canada's mastery of sustainable mining production and finance, its understanding of global markets and its stable governance structure can position the country as an important supplier to NATO allies.

By developing a suite of tools to incentivize Canadian production of defence-related minerals and products, including a critical mineral reserve, Canada can usher in a new era of investment in mining and mineral-processing projects. Doing so will restore its reputation as a credible NATO partner and can support the build-out of a defence industrial base that contributes to the government's military spending target.

A deeper partnership with the private sector is necessary to unlock the country's critical mineral potential for defence purposes, and to assist Canada's NATO partners and other defence allies. Japan's Organization for Metals and Energy Security and the EU's Critical Raw Material Centre provide examples where the public and private sectors work together to advance national and economic security.

Recommendations:

As a founding signatory to NATO, Canada should champion an effort with NATO members to create a critical mineral reserve for defence technology and military purposes. Such an effort should:

- Create a critical mineral reserve in Canada for niche metals vital to strategic defence purposes and where there is the greatest fragility in market mechanisms and supply. The assessment must carefully consider the roles and responsibilities of government, the private sector and the implications for commodities traded in open markets.
- Work with industry and the financial sector to encourage production and processing of priority minerals using concessional financing and tools like bilateral contracts and derivative instruments such as forwards, futures and options.
    - Such an initiative should identify where the government can commit research and development and technology support to close the gap on projects and insulate the market from third party interference.

- Consult and cooperate in good faith in order to obtain consent from Indigenous nations and align federal and provincial project approval and permitting systems to advance projects in the national interest. Ensure that equity and benefit-sharing programs available to Indigenous Peoples have designated funding for mining projects and supporting infrastructure.
- Create a dedicated financial instrument for defence critical minerals in Canada. Such an instrument should be designed to work in conjunction with existing NATO partner programs, such as the U.S. DPA Title 3, and as an element of NATO's Membership Action Plan for countries seeking NATO membership.
- Align NATO member trade policies to assess critical minerals supplied by countries that pose a security threat to NATO members' national security.
- Champion efforts to assess NATO ally demands and requirements and bolster Canada's potential as an alternative supplier in strategic areas of the mineral value chain.

Creating a modern, efficient project approval process

There is widespread, non-partisan and cross-jurisdictional consensus that Canada's system for regulating and approving major infrastructure projects is too slow and burdensome. Far from simply imposing costs on proponents, an inefficient regulatory system is hurting Canada's economic competitiveness, climate goals and the energy security of Canadians and their allies.

Federal, provincial and territorial energy and mines ministers committed in March 2025 to the "acceleration of resource development through more efficient and timely permitting and regulatory processes.[45] Just ten days after starting his role, Canada's Minister of Energy and Natural Resources signalled the need for a new era of project reform that reduces project approvals to two years.[46] Shortly after, First Ministers underscored their commitment to accelerate nation building projects and simplify approval and permitting processes.[47] Business leaders fully support these ambitions.

Yet significant regulatory challenges persist. Canada must move from rhetoric to action. If not overcome in the near term, Canada's goal to regain or grow its global market share in agrifood, energy and critical mineral sectors will fall short. Projects are approved slowly amid divisions among different levels of government. Alberta, for example, announced its intention in November 2024 to once again challenge the constitutionality of the Impact Assessment Act just six months after the federal government amended the legislation in response to an opinion provided by the Supreme Court of Canada in October 2023.

The number of energy and natural resource major projects completed in Canada has dropped by 37 per cent since 2015.[48] [49] Critical minerals production in some commodities is down by double digits, particularly in battery metals, despite investments by federal and provincial governments of tens of billions of dollars in downstream processing and manufacturing. According to the Mining Association of Canada,[50] Canada had no lithium or rare earths production in 2012, nor did it in 2022. Even when mines are approved, it takes far too long to get them up and running—on average, almost 20 years, according to S&P Global insights.[51]

Canadian policymakers must take note of the bold bipartisan policy legislation evolving in the U.S. and several European countries as they simplify permitting processes and fast-track efforts to advance energy security and climate goals. By establishing tight maximum timelines for major project reviews and shorter timelines for project-level litigation, the U.S. is on a path to developing clear processes that will empower businesses to invest and respond more efficiently to growing energy markets while ensuring responsible and efficient resource development. Projects once subject to approval processes that took years will now be reviewed within 14 to 28 days. While respecting its own values and obligations, Canada must be competitive on this front.

Different sectors of the economy face different headwinds when it comes to approvals and permitting, and reforms are needed in many areas. Almost all industry stakeholders can agree, however, on the need to move to the principle of "one project, one assessment, one decision," with the caveat that Indigenous rights holders are meaningfully involved in the process.

Canada is a federation, with all the accompanying opportunities and challenges that come with it. One negative trend has been the practice of different jurisdictions implementing their own, often contradictory, regulatory systems for project regulation. This adds cost, complexity and time—and no value—for the project or for taxpayers. The provinces and the federal government must stick to their lanes and excel at issuing permits and providing regulatory approval in their specific areas of jurisdiction.

To avoid duplication, and to respect the division of powers in Canada's Constitution, provinces should lead environmental assessments for projects under their jurisdiction, including mines, oilsands projects, refineries, power-generating facilities and intra-provincial pipelines. Canada-wide and international pipelines and transmission lines, on the other hand, should be assessed by the Canadian Energy Regulator. Nuclear projects should be assessed by the Canadian Nuclear Safety Commission. And railroads, marine terminals, offshore and other projects on federal lands and waters that meet certain thresholds should be assessed by the Impact Assessment Agency of Canada.

It's not just federal regulators who must improve their processes. The provinces need to aim for excellence in their regulatory duties as well if Canada is to attract capital and build infrastructure desired by Canadians. As the annual ranking of 86 mining jurisdictions by the Fraser Institute shows, about half of the provinces and territories are global leaders in mining governance, while the other half are laggards.[52] In terms of oil and gas, only Saskatchewan ranked in the top half of the Fraser Institute's ranking of 17 North American jurisdictions, with Alberta, Newfoundland and Labrador, and British Columbia in the bottom half.[53]

Alongside project approval processes, the permitting system in Canada needs to be streamlined. Some major projects must apply for and receive hundreds of permits from multiple federal, provincial and municipal agencies . The culture of permitting in Canada must change. Canadians demand that standards are high. But they must also be transparent, reasonable and competitive.[54] The federal government's recent commitment to create a new federal major projects office is welcome in this regard.

Canadian governments have historically underestimated the value Indigenous nations bring to major resource projects as rights-holders, environmental stewards and economic partners. Integrating First Nation, Métis and Inuit rights, interests and knowledge into major projects, and ensuring that Indigenous nations have a seat at the table, can increase the likelihood of advancing projects with speed and scale. Without economic reconciliation, Canada's efforts will certainly fall short. The only way forward is to elevate Indigenous rights holders in the process.

The federal Indigenous Loan Guarantee Program can catalyze First Nation, Métis and Inuit partnerships by unlocking access to capital needed for Indigenous groups to invest in major resource projects. While initially slow to roll out, the program's funding envelope was topped up to $10 billion this year. It recently finalized its first transaction, demonstrating its potential to support critical natural resource and infrastructure projects. Comparatively, Canada has allocated only $3.4 million to assist Indigenous nations with commercial due diligence and the business capacity building necessary to support successful partnerships with the private sector. Canada needs to do better on this front.

There is an urgent need for an efficient and modern regulatory approval system to develop Canada's immense energy and critical mineral assets. This will bolster energy security and advance efforts to decarbonize the economy.

Recommendations:

- Policymakers must advance the principle of "one project and one assessment" across Canada, and move to "one decision" as well, with the understanding that Indigenous rights holders are involved in the process.
    - Federal and provincial governments must respect each other's areas of jurisdiction. Project proponents must understand who's the regulating authority, and there should be only one.
    - A clear and value-added role for public involvement should be a prominent feature of Canada's project approval regimes. But projects must also be scoped appropriately, and logical parameters should be placed on public involvement.
    - Both provincial and federal levels of government, and their designated regulators, are legally responsible and jurisdictionally competent to fulfil the Crown's Duty to Consult and Accommodate Indigenous communities. To avoid uncertainty and risk to projects and undermining public confidence, governments must achieve high standards in applying the Duty to Consult and Accommodate in regulating projects in which they are the responsible jurisdiction.
- Timelines for regulatory processes, including permits and project approvals at both the federal and provincial/territorial levels, should be short, concrete and adhered to.
    - Governments should move with speed to define shorter approval processes for projects occurring on brownfield sites and/or in locations where the developer has already received an environmental certificate or is the owner of an existing asset, right of way or corridor.

- Resources should be moved into departments responsible for permitting to speed up processes. Fisheries and Oceans Canada, for example, is responsible for mitigating effects within federal jurisdiction on fish and aquatic species and fish habitat. Its capacity should be bolstered to issue permits faster.

A bold vision for moving goods to market

Canada's ability to meet the needs of its allies and trading partners is dependent on the resilience of its trade-enabling infrastructure. As the federal government's Industry Strategy Council noted in its December 2020 report, investments in trade infrastructure and similar nation-building projects improve the country's ability to withstand economic shocks, reduce the burden of public debt and help to generate the tax revenues needed to support government-funded social programs.[55]

As a trade-dependent country, Canada must invest strategically in infrastructure that improves the country's ability to deliver goods and resources to global markets. Efficient transportation networks are vital to ensure that Canada can compete for market share as a top supplier of commodities such as potash, nitrogen, grain, pulse crops and oilseeds, titanium, gold, aluminum and in time, natural gas.

Unfortunately, Canada's trade-enabling infrastructure is rarely viewed as a strategic asset by policymakers, suffering from a lack of investment and inconsistent performance. On a per capita basis, investments in Canadian infrastructure lag those of many peer countries, including Australia, Spain, the Czech Republic and Sweden. According to the World Economic Forum and others, the quality of Canada's infrastructure is average and comparable to countries such as Hungary and Azerbaijan.[56] Canada's turnaround times at ports are among the longest in the world at an average 2.5 days, ranking 103rd out of 113 countries tracked by the World Bank in 2023.[57]

Canada is in urgent need of a national trade infrastructure strategy, developed collaboratively by the federal, provincial and territorial governments, to strengthen economic growth and materially improve the quality of life of Canadians in every region. A well-defined strategy can help align public investments in trade-enabling infrastructure and attract higher levels of private sector investment. Framed properly, a national strategy can also create immediate benefits for the country's manufacturers through the procurement of goods and materials required to build strong and resilient supply chains.

Many previous calls for such a strategy have been ignored. In his review of the Canada Transportation Act in 2015, David Emerson, the former minister of innovation, science and industry, called on policymakers to develop a national freight transport and logistics strategy.[58] In 2017, the Advisory Council on Economic Growth recommended a similar approach. In 2023, Canada's premiers emphasized the need to prioritize strategic infrastructure and trade corridors so that Canada could compete in a global economy and increase international trade opportunities.[59]

While investments in trade-enabling infrastructure are overdue, Canada should not lose sight of the key role connectivity plays in driving the innovation and technology required to elevate productivity and higher levels of output by the country's miners, agriculture producers and energy providers. Technologies that include artificial intelligence, the Internet of Things and quantum computing will drive change and support Canada's evolution towards precision agriculture, advanced manufacturing and smart grid technology, all of which can be accelerated with improved connectivity.

The federal government has also launched a National Adaptation Strategy to enhance the country's ability to respond to a changing climate. Importantly, the impacts of increasingly intense and more frequent extreme weather events—ranging from major storms, floods, droughts and forest fires—are compromising Canada's vital trade corridors. Canada's strategy will need to include a strong focus on protecting transportation networks from extreme weather events. Canadians need an approach that looks beyond elections and budgetary cycles to identify the projects that will best meet the country's future needs. Australia offers a compelling model that includes an independent, non-partisan body to provide research and advice to all levels of government, as well as to investors and owners of nationally significant infrastructure.

Infrastructure Australia operates at arm's length from the federal government and conducts periodic audits of the country's nationally significant infrastructure, develops 15-year rolling infrastructure plans to enhance productivity and economic growth and weighs the business case for each project. It is insulated from the political process and can therefore assess infrastructure needs and develop recommendations based on objective scientific and economic criteria. The Australian government is free to ignore its advice, but the organization's work ensures greater transparency and accountability in

decision-making—areas where Canada's approach to infrastructure planning falls short.

The National Trade Corridors Fund is an important lever that can unlock private and public sector investment in addressing longstanding bottlenecks and supply chain challenges. Resources allocated to the fund have totalled $3.8 billion since its inception in 2017-18.[60] The Canada Infrastructure Bank has also made important progress recently by facilitating investments in trade and transportation infrastructure in various port, rail and logistics projects.

While these investments are important, the government should explore new and transformative approaches to investing in trade-enabling infrastructure. Australia's experience with asset recycling offers useful lessons for Canada as the government aims to inject higher levels of private capital into trade-related infrastructure. By creating a two-year window for states and territories to sell off or lease assets, Australia's national government helped unlock more than $17 billion in new infrastructure developments, including port, highway and freight infrastructure and rail systems.

Canada's supply chains have also faced unprecedented disruptions in recent years due to illegal blockades, extreme weather events and railway and port worker strikes. Canada experienced 62 work stoppages in the transportation sector alone in 2023 and 2024. A new approach to protect Canada's supply chains from future disruption is also urgently needed.

The federal government must have the power to rapidly exercise its authority in extreme circumstances to prevent work stoppages that threaten to cripple Canada's economy. This could take the form of compelling parties into binding arbitration prior to a work stoppage to prevent disruptions to essential services such as railways, ports, terminals and other vital transportation infrastructure. While the rights of workers must be respected and protected, the government has a responsibility to ensure the economic health and safety of all Canadians.

The U.S. *Railway Labour Act* provides a framework that seeks to avoid any interruption of interstate commerce by providing for the prompt disposition of disputes between carriers and their employees while protecting the right of employees to organize and bargain collectively. Frustrated with the start-stop nature of Canada's supply chains, a recent Nanos poll found that more than 70 per cent of Canadians prefer government to intervene during labour disputes at ports and railways.[61]

Portions of Canada's vital transportation networks have also been subjected to illegal blockades. These blockades caused significant economic disruption and damaged the country's reputation as a reliable trading partner. In 2022, emergency measures were required by the Ontario and federal governments to address blockades at border crossings. Canada simply cannot afford self-inflicted wounds produced by blockades or illegal occupations of its trade infrastructure.

All levels of government share a responsibility in ensuring there is the authority and the capacity to prevent the illegal occupation of roads and bridges, rail lines, pipelines, ports, or other critical infrastructure. Such occupations are a matter of national interest and call for national leadership. Peace, order and good government are national priorities. In co-operation with provincial and municipal governments, the federal government should seek to protect critical trade infrastructure by establishing a federal authority to respond to events that seriously disrupt the economy.

Recommendations:

- Canada requires a national strategy that supports trade-enabling infrastructure, including:
  - Physical infrastructure, ports, railways, pipelines, roads and connectivity into gateways and corridors to support long-term trade;
  - Connecting rural communities to foreign markets by building out broadband to support the digitization of farming and natural resource projects; and
  - A focus on resilience in response to climate change and security threats.
- Canada should publicly commit to resolving—through policy or legislative amendments—labour disputes and acts of civil disobedience that limit the country's capacity to trade with its allies and trading partners.

Futureproofing Canada's low-carbon advantage

Maintaining Canada's competitive advantage as an exporter of low-emitting commodities will require discipline and strategies focused on driving growth. Access to cheap electricity has been a strategic advantage in Canada for decades, drawing in the investments necessary to grow natural resources, energy and manufacturing industries. Whereas our energy, food and critical mineral resources can help power our export economy, affordable and reliable electricity can serve as Canada's calling card for investment in the decades to come.

Canada's electricity system is one of the cleanest in the world, with roughly 85 per cent of electricity coming from non-emitting sources. But markets once thought to have an abundance of clean electricity are now aware there will be constraints on the future availability of power, as well as a likelihood of higher costs. That's because policies that render the environmentally and economically competitive power system more expensive will have the unintended consequence of pushing heavy industry to jurisdictions with dirtier but cheaper grids.

Canada will need to at least double its generating capacity and infrastructure to meet the demands of an economy that will become increasingly dependent on clean, reliable and affordable electricity necessary in a data-driven economy and amid the electrification of industry and households across the country. Doubling the system's capacity will require different tactics and different approaches to investing in new capacity, storage, transmission and distribution.

The Canada Electricity Advisory Council highlighted the size of the investment challenge when it found that anywhere from $1.1 trillion to $2 trillion will be required to produce the additional electricity needed to respond to projected demands.[62] Recent polls also suggest Canadians continue to rank reliability and affordability over reduced emissions as their most important energy needs over the next five years.[63]

At the same time, Canada's electricity systems are being exposed to an increasing number of threats driven by cyber-attacks, ransomware and the security challenges posed by a rising number of extreme weather events. Canadian electricity companies are showing resolve by investing in security measures and taking a proactive approach to developing partnerships with governments, suppliers and security forums designed to share information and protect grid infrastructure in North America, like GridEx.[64]

The opportunities to invest in Canada's electricity sector are substantive due to the long-term demand for electricity and production shortfalls now prevalent in provinces like British Columbia, Ontario and Quebec.

There is significant value in building a more integrated east-west transmission grid to encourage interprovincial coordination and electricity trade. The federal government has signalled its intent to encourage higher levels of investment by issuing investment tax credits for clean electricity and related technologies, while the Canada Infrastructure Bank's recently expanded mandate to invest in electricity-producing projects is helpful in this regard. These and other funding mechanisms can strengthen Canada's electricity dominance across provinces.

But provincial governments are navigating larger deficits and higher borrowing costs, with the aggregate provincial deficit projected to be the largest since 2013 outside of the pandemic years. Conversely, there's a large pool of capital in pension funds and private equity looking for the stable returns that electricity markets can provide. But only Alberta, and to a lesser extent Ontario, have the marketplaces to support investments in electricity supply.

Even though electricity generation, transmission and distribution falls largely under provincial and municipal jurisdiction, all levels of government need to collaborate on developing the electricity grid of the future. This should include a collective understanding of the best options to expand electricity capacity and decarbonize in each region and feasible timelines that include costs and potential implications for consumers. This type of collaboration, including with Indigenous partners, will ensure timely investment in clean electricity generation and transmission, maintaining the competitiveness of Canada's industry in decades to come.

Recommendations:

- The federal government should champion a national effort focused on achieving a dual mandate for electricity production and grid security. All provinces and territories should be encouraged to produce technology pathways with investment strategies to produce, store, transmit and distribute reliable, affordable clean electricity to Canadians. Enhanced information-sharing on projected electricity demands and investment strategies can determine federal support in areas under provincial jurisdiction.
    - These efforts should also include a pro-active focus on strengthening the security and resilience of Canadian electricity grids from cyber-related and natural hazard threats.
- Initiatives should:
    - Build and strengthen interprovincial transmission connections to create new energy markets and improve energy reliability and energy security.
    - Focus on the interdependence of electric generation, transmission, and distribution, including threats.
    - Focus on grid security and resiliency to ensure there's sufficient availability to generate electricity in step with demand when renewables aren't available.
    - Facilitate the exchange of information among provinces about projected electricity demand driven by consumer

trends, industrial composition, economic outlook and decarbonization objectives.

- Develop technology aimed at minimizing supply chain bottlenecks and delays by supporting procurement strategies focused on technology readiness and minimizing costs to ratepayers.
- Assess the workforce development, skills and labour pool required to build out electricity capacity in various jurisdictions of the country.

Reinvigorating the Canada-U.S. electricity relationship

Canada and the United States have one of the most integrated electricity grids in the world, with roughly 1,500 kilometres of transmission lines providing reliable, secure and affordable electricity to citizens of both countries. Canada's hydro-rich provinces and nuclear supply in Ontario have historically positioned the country as a net exporter of electricity to the U.S.

But abnormally warmer winters, increasing drought conditions and a rising demand for electricity within Canada are straining the amount of electricity available for export. Canada's exports to the U.S. fell sharply in 2023 to their lowest levels since 2010.[65] Conversely, U.S. electricity imports are peaking, with net outflows from the U.S. to British Columbia among the highest in recent history.[66]

Signed in 2016, the Joint United States-Canada Electric Grid Security and Resilience Strategy is a collaboration between the U.S. and Canada to strengthen the security and resiliency of their shared electric grid. Shortly after committing to the strategy, Canada produced a grid security and resilience action plan in 2016, which has yet to be updated.

Recommendations:

- Canada should reinvigorate its agreement with the United States and table an action plan that focuses on grid resiliency, cross-border electricity trade and security. The plan should:
  - Enhance information-sharing about projected electricity demands in regional markets that could benefit from higher levels of trade between both countries.
  - Pursue long-term infrastructure plans that identify projects designed to strengthen or expand the Canada-U.S. electricity corridor and identify ways to streamline the approval process for cross-border infrastructure to ensure it's efficient, predictable and results in timely decisions.
  - Reconfirm Canada's support to assess cross-border electricity security by working with American counterparts to assess the strengths and weaknesses of existing infrastructure; improve each country's ability to respond to threats and incidents caused by foreign entities and natural hazards.

A market-based approach to cutting industrial emissions

As of June 2024, 82 per cent of global emissions were covered by a net zero commitment. That figure is expected to be lower by as much as 10 per cent when the U.S. withdraws from the Paris Agreement in 2026. Nonetheless, per capita emissions are declining in most export markets receiving Canadian goods, signalling a demand for lower-emitting products and energy.

Canada's climate policy should evolve to support firms competing in markets that value the carbon content of goods produced within or imported to their jurisdictions. The European Union introduced Carbon Border Adjustment Mechanisms in 2023 for select heavy industries like cement, iron, steel and aluminum, while several of Canada's trading partners such Australia, Japan, South Korea, Taiwan, the United Kingdom and Brazil have signalled that they intend to introduce similar policies in the future.

Support is also building in the United States with Republican senators recently tabling a trade and manufacturing plan designed to address economic and national security concerns by imposing fees on imported goods based on their carbon intensity.[67] Canada will need to move quickly to determine its strategy in a new world order poised to protect domestic industries and place a premium on carbon reduction.

Policymakers should examine how border carbon adjustment policies will influence emissions performance in Canada and their strategic importance to fulfilling the country's objective to build the most prosperous economy in the G7. Much can be done by the federal government to ensure Canada's trading partners recognize the value of the country's low-carbon exports and the role they can play in reducing global GHGs. A convincing case can be made that Canada's carbon policies and environmental standards are already amongst the strongest in the world, thus its exports should be exempt from carbon border adjustment policies introduced by trading partners.

Creating growth and restoring fiscal balance through increased resource trade will require policymakers to balance objectives related to reducing emissions with the need for companies to compete in global markets seeking lower-emitting products.

Business leaders are concerned about Canada's climate policy trajectory. Companies are forced to navigate a complex and dense policy environment that includes multiple regulatory requirements and programs designed to encourage higher levels of investment. Major policies, including the Clean Electricity Regulations, incoming methane regulations and a cap on oil and gas emissions, will oblige businesses to wait for policy clarity before determining how best to invest their shareholders' dollars in their operations. Further new provisions for environmental claims and greenwashing have increased the complexity for firms to market their low-emitting products to customers abroad. In many cases, the pace and frequency of new policy and regulatory developments are working at cross purposes to the government's programs and incentives designed to accelerate investments in technology and innovation.

Pricing carbon remains an effective and powerful incentive for industry to conserve energy, enhance efficiency and reduce emissions.[68] Industrial carbon pricing has shown to be an effective incentive for the implementation of new technologies that allow firms to produce less carbon-intensive products.

Since 2019, every jurisdiction in Canada has priced carbon pollution from industrial emitters, with most provinces and territories developing systems for industrial emissions produced within their jurisdictions. In the roughly five years since the national system came into force, research suggests that pricing industrial emissions can reduce emissions in Canada anywhere from 20 to 48 per cent by 2030.[69] Evidence also shows that a price signal alone isn't enough; it needs to be backed by supportive economic policies to quickly decarbonize industrial operations and help firms remain competitive in the future.

The federal government has introduced a series of tax credits to encourage higher levels of investment in emerging technologies, while roughly $50 billion is available through the Canada Growth Fund and Canada Infrastructure Bank for emission-reducing projects. Yet the scope and scale of the investment challenge remains daunting—a net-zero economy by 2050 is expected to require a $2 trillion investment, but year-over-year investment levels remain well off the mark. They need to increase by 5.5 to 8.5 times from where they are today.[70]

Clear policy and stable pricing for industrial carbon emissions are essential for enabling a market-driven approach to financing large-scale decarbonization projects.

At the same time a sizable portion of Canada's trade is related to natural resource extraction, production and processing. Given the inherently energy-intensive nature of its resource-based economy, Canada's policymakers cannot lose sight of the urgent need to grow the country's economic capacity through increased resource trade while delivering positive environmental outcomes that foster a resilient and innovative economy.

Policies that use price signals to change behavior should carefully adjust both price and stringency levels to prevent companies from moving to countries with less stringent regulations. The federal government must ensure that no regional or sectoral disadvantages make businesses less competitive compared to global rivals. Additionally, emissions reductions should come from investments in carbon-reducing technology, not from deindustrialization. Striking this balance will be key for Canada.

As Canada seeks to revamp its economy by building out new export capacity to diverse markets, policymakers must resist the temptation to develop new regulations designed to reduce emissions at this time. Instead, the government should implement a comprehensive review of policies, regulations and programs to ensure that a clear and consistent policy framework is in place to reduce emissions and support the competitiveness of Canadian businesses in a lower-carbon economy. Such a review should seek to identify markets where Canada's low carbon exports can reduce global emissions.

Recommendations:

- Improve Canada's industrial carbon pricing programs by:
  - Reviewing the schedule for the minimum price on industrial carbon pollution and corresponding emissions standards and stringency levels to assess their impact on Canada's economy, energy security, and emissions-intensive, trade-exposed industries. The goal of this review should be to prevent carbon leakage and ensure that trade-exposed firms can compete with their global peers.
  - Rapidly scaling up the number of offset protocols available to industry, including existing commitments to develop new protocols for direct air capture, methane emissions, forest management and soil sequestration;

    - Ensuring that revenue raised through pricing programs supports the development of new technologies and investment into emissions-generating facilities; and
    - Encourage synergies between existing markets through credit generation and emission trading opportunities in Canada.
- Canada should move quickly to trade with like-minded countries that prioritize:
    - Low-carbon food, critical minerals and energy security value chains;
    - Emissions reductions through comparable climate policies in the hardest to abate industrial sectors; and
    - Deterring free-riding countries with less stringent GHG regulations.

Driving innovation and break-through technologies

Canada's opportunity to position itself as a solution to global energy and food security challenges should go beyond exporting raw and unprocessed commodities. Leveraging Canada's natural resources could create a generational opportunity to drive technological progress, boost productivity and develop resources with minimal emissions. Innovation will also be key to addressing the labour and skills gaps in areas of the resource-based economy, such as agriculture and mining.

Canada boasts world-class expertise in agriculture, mining and energy systems. But breakthrough ideas and technologies often don't make it to the commercialization stage. That must change. Canada needs to do a better job at taking innovative research and development through to commercial applications.

An innovation-led approach has impressive potential. In the agriculture sector alone, a report published by the Arell Food Institute found that emerging innovations in agricultural technology can achieve enough efficiency and productivity gains to unlock a $30 billion opportunity for Canada.[71] Doing so could position Canada as a global leader in sustainable agriculture, ag-tech development and in driving food security at home and abroad.

Similar arguments can be made for the energy and mining industries, which include a high number of companies with proportionally low Intellectual Property (IP) and AI data portfolios that ship raw products to be refined and upgraded elsewhere. Canada is currently a net importer of IP, a position it shares with developing countries.[72]

But investments in research and development require a substantive boost. As a percentage of GDP, Canada's combined public and private expenditures on R&D have been declining since 2001.[73] The U.S. currently invests 2.9 per cent of its GDP in R&D, with its Department of Energy alone receiving US$2 billion to enhance the country's capacity to conduct transformative science and research in groundbreaking technologies. Canada invests 1.57 per cent, significantly less than the OECD average. Both public and private R&D investments must increase. Businesses are eager to invest more but need a willing partner in the federal government to help remove risks from investments in emerging technologies, to address market failures and to improve social well-being.

Canada's venture capital investments as a percentage of GDP are average in the OECD. The country also struggles to turn research into market solutions, ranking below China and the U.S. in commercializing patents per capita. The net effect is that Canada's science and technology investments are not producing innovation at the same pace as its peers. We should aspire to do better.

Commitments to improve the working relationship between the federal government and private sector to drive innovation have either yet to be fulfilled or are struggling to produce concrete results. Last year's decision to delay the creation of the new Canada Innovation Corporation to 2026-2027, and the recent decision to reprofile Sustainable Development Technology Canada under the National Research Council, have limited the private sector's ability to work with government on best-in-class research and to create a competitive advantage for Canadian firms through commercial technologies. Canada's regulatory frameworks will need to keep up with the pace of innovation so that companies can utilize a range of technologies to improve the efficiency and safety of their operations.

A recent report from the Commissioner of the Environment and Sustainable Development also found that the Strategic Innovation Fund's Net Zero Accelerator Initiative—the government's $8 billion flagship funding program for innovation—is not connected to a coherent or comprehensive industrial policy targeted at decreasing emissions produced by Canada's most critical industries.[74] Collectively, these shortcomings illustrate a real need to rebuild Canada's innovation architecture.

A new government agency to boost technology, innovation and economic competitiveness is required. This agency would focus on improving the transfer of technology from public research to Canadian companies in sectors like energy, mining, agrifood and

key enablers like transportation. Its main goal should be to encourage applied research by strengthening collaboration between industry, academia and government.

The U.S. Advanced Research Projects Agency for Energy (ARPA-E), Emissions Reductions Alberta and British Columbia's Centre for Innovation and Clean Energy all offer successful models for consideration. A strong and credible innovation agency can also better position Canada to partner and collaborate meaningfully with its international peers on important initiatives concerning next gen technologies such as geothermal baseload power, energy storage systems and nuclear innovation.

Recommendations:

- Create a federal advanced research projects agency to drive technological progress, innovation and heighten economic competitiveness.
    - Such an agency should be tasked with a mandate to ensure better technology transfers between publicly funded research and the Canadian companies that could commercialize those ideas.
    - Dedicated streams should be created for high-value export-oriented industries such as agrifood, energy and critical minerals.
    - The new agency should be properly equipped with a procurement function that allows it to invest in high-risk, high-reward research and development, and in technologies that emerge from the agency's collaboration with the private sector.

Conclusion

Canada has a unique opportunity. As a stable democracy with abundant energy and natural resources, a talented workforce and strong capital markets, it could become a global energy and resource powerhouse. These advantages position Canada to grow its economic capacity and support the needs of its allies and trading partners seeking a secure supply of energy, food and critical minerals.

As geopolitical tensions increase, Canadian policymakers must position Canada for success in a new world order increasingly shaped by economic and security priorities. Incrementalism should not be the goal. Rather Canada should pursue a vision that builds a future where capturing global market share in energy and resources creates a high quality of life for Canadians and positions the country as a stable destination for long-term capital valuing returns from responsible resource development.

Canada can strengthen its economic sovereignty and play a vital role in addressing global challenges related to energy, food and national security. But it has a limited window of opportunity to rebuild its economy and re-establish its global position as a major supplier of commodities the world needs. Global alliances are being recreated, requiring countries to move with speed to source their resources from dependable suppliers.

A bold and transformational export strategy is necessary to reclaim Canada's position as a global leader, to ensure it flourishes in international markets and to restore its reputation as a reliable trading nation. This strategy requires true partnerships between the public and private sectors and a coherent and ambitious policy framework designed to safeguard investments over multiple decades.

Canada must act now.

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