



Carbon Restraints: How Resource Dependence ties down Canada's Growth

By Tylor Llewellyn on October 2nd, 2025



Canada's wealth has long flowed from their abundance in oil, gas, lumber, and minerals - but with the world now in a race for net-zero, what was once a blessing may now turn into a curse. For decades, Canada's natural resources exports have been the backbone of the economy. Key resources such as oil, gas, energy, lumber, metals and minerals account for 12.1% of their nation's nominal GDP, 58% of their total merchandise exports, and provide key jobs for hundreds of thousands of Canadians. While these resources create great opportunities for growth and prosperity, they also bring challenges that must be solved with swift strategic management. Such dependence on natural resources is becoming increasingly unsustainable and will leave Canada extremely vulnerable due to global climate commitments, global market pressures, and consumer preferences shifting away from high-carbon technologies. Therefore, Canada must

diversify their economy and expand into renewable energy sources to protect the integrity of the economy and meet rising energy demands.

Canada's Emission Goals

Canada has made their stance clear on emissions - they are striving for clean air and a healthy environment. Canada's 2030 Emissions Reduction Plan outlines a sector-by-sector roadmap to reach its emissions reduction target of 40% below 2005 emissions levels and net-zero emissions by 2050 (Government of Canada, 2024). Canada has drafted regulations to cap emissions from the oil and gas industry, aiming for a 35% reduction from 2019 levels (Government of Canada, 2024). \$9.1 billion CAD has been allocated to investments towards pollution reduction and support for clean economy growth (Government of Canada, 2024). One of the main funds is for zero-emission vehicles, aiming to make them more affordable, expand charging infrastructure, and implement regulatory mandates to ensure that 100% of passenger vehicles sold by 2035 will be zero-emission (Government of Canada, 2024). Although the carbon tax on consumers was repealed this past April, the tax is still enforced on producers and large corporations for the purchase and consumption of fossil fuels, raising operating costs for firms and prices of goods such as gas and electricity for consumers.

Canada's Reliance on Natural Resources is a Problem for Growth

By committing heavily to carbon reduction and shifting to renewable energy sources, Canada will stifle their economic growth by lowering production in key export industries. Fossil fuels such as crude oil, natural gas liquids, and natural gases made up 20% of Canada's exports in 2023, but they emit the most carbon per unit. Carbon taxes and emission caps implemented to reduce carbon emissions will squeeze the margins of major oil producers and manufacturers, leading to lower production volumes.

EV sales and yearly growth rate by major countries/regions, 1H25 (unit: 1,000 vehicles/%)

Country/Region	1H24	1H25	YoY (%)
China	4,339	5,878	35.50%
Europe	1,441	1,782	23.60%
United States	722	737	2.10%
Others	678	895	32.00%
Global Total	7,181	9,292	29.40%

EV Sales and yearly growth by major countries in 1H 2025 (unit: 1000 vehicles.%) (Jarrett, 2024)

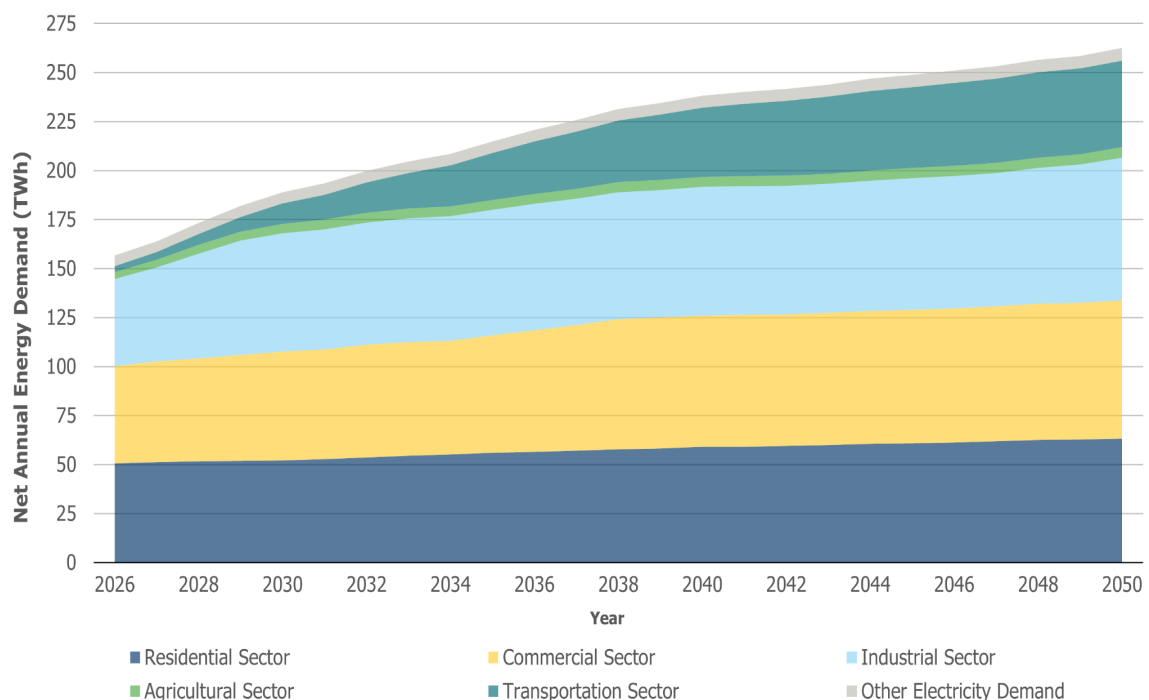
Customer shifts towards zero-emission vehicles (ZEVs) are beginning to grow faster, with Canada's adoption rate reaching 19% in Q4 2024, with adoption rates soaring to 42% in Quebec (Jarratt, 2024). Globally, EV sales have grown on average by 29.4% year-over-year in the first half of 2025, with the most growth noticeable in China (Lin, 2025). Consumer preferences shifting to EV and ZEVs paired with carbon reduction initiatives will shrink Canada's production and export market.

If Canadian industries face carbon costs while nations such as the US and China do not, production may shift to those respective countries. Canadian exports of oil, gas, minerals, lumber, and some manufactured goods will decrease as a result of the production shifts. Provinces such as Alberta, BC, and Saskatchewan, that are heavily reliant on fossil fuel and forestry revenues, may face regional recession, out-migration, and social strains in the long-term.

Rising Energy Demands

With energy demand rising globally, carbon reduction and net-zero initiatives may be counterproductive to being capable of meeting this growing demand for energy and electricity. For example, Ontario's electricity demand alone is projected to grow by 75% by 2050, driven by growing demand for data centres, EV supply chain, industrial growth, and population growth (IESO, 2025). According to the International Energy Agency, global electricity demand is

forecasted to increase by 4% annually through to 2027 (International Energy Agency, 2025). In 2021, the US Energy Information Administration forecasted energy to grow by 50% between 2020 and 2050, driven by electrification, digitalization, and future economic projects (Energy Information Administration, 2021). Net-zero initiatives will lead to lower volumes of oil, natural gases, and lumber that are used to generate energy and electricity for homes, offices, and data centres, leaving the economy vulnerable from declines in both domestic demand and foreign demand. As energy demand is expected to grow materially alternative renewable energy sources may not be able to meet the rising demand or offset current energy needs resulting in continued demand and potentially growing demand for oil and natural gas despite the move towards green energy and carbon taxes.



25 year forecast of Canadian energy consumption by sector (IESO, 2025).

Transitioning a large portion of the energy system to renewable energy is achievable and beneficial to Canada. It will create new jobs and diversify the economy away from natural resources. As oil and gas may not be able to meet the rising demand or effectively supply energy to where it is needed due to lack of infrastructure and costs this growth can be accretive to the economy. The expansion of the renewables industry in Canada can also reduce the imports of oil and natural gas that we depend on, primarily from the US. In certain regions, Canada relies on

imports of oil and natural gas from the US that amounted to \$36 billion CAD in 2023 (Canada Energy Regulator, 2025). Strategically adding more renewable energy sources to these areas will lessen their dependence on US imports while not negatively impacting the domestic markets. Overall, by diversifying their energy supply to renewable energy sources, Canada can make strides in their carbon reduction goals, protect their economy integrity and stability, and meet the rising energy demand in the country.

Combatting Reliance with Diversification

To combat their overreliance on natural resources, Canada must actively pursue economic diversification initiatives. The nation has made great strides in advancing their technology sector, with a laser focus on AI infrastructure and innovation and clean energy technologies. Some of these projects include building four small modular nuclear reactors as part of the Darlington project to power over 300,000 homes and committing \$2 billion under its Canadian Sovereign AI Compute Strategy to fund small and medium enterprises access to compute resources and developing a best in class supercomputing system to anchor public AI research in Canada (Wall, 2022). Toronto, Vancouver, and Waterloo are slowly developing into major hubs for technology companies and startups, fostering innovation, creating vital jobs for Canadians, and offering export value through fintech solutions, software, and artificial intelligence (Wall, 2022). Diversifying our economy will lead to more diversified exports, de-risking the importance of natural resources to the Canadian economy.

Canada must also look to diversify their trading partners to reduce over-exposure to the US and reduce the risk of a singular nation imposing carbon reduction policies or tariffs that will harm Canadian industries and exports. Over 90% of Canada's oil and gas exports are destined to the US. Although the current US administration is not part of the Paris Accords and has repealed subsidies for renewable resources, the large concentrations of our economy that is dependent on US consumers can be used against Canada in trade negotiations through targeted tariffs to hurt specific sectors. Canada has established trade agreements with 19 out of the 20 G20 nations, which is the most out of any G7 nation, positively positioning themselves to expand trading relationships with these countries (Government of Canada, 2025). With more trading partners,

Canada reduces dependence on a specific country and de-risk actions taken by one of those countries that may hurt Canada's natural resources exports.

Conclusion

Overall, Canada's reliance on natural resources to support and grow the economy has left the country in a dilemma amidst carbon reduction initiatives, shifting consumers preferences, and needing to meet growing energy and electricity demands. The lack of diversification in Canada's economy may stifle growth as they are left vulnerable to fluctuating and potentially decreasing demand domestically and globally with trading partners such as the U.S. Ultimately, Canada must diversify both their economy and their trading partners to achieve economic prosperity and accomplish their carbon reduction and net-zero emissions goals within the next 25 years.

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