

Report for the North American Leaders Summit:

Ensuring Energy Security, Maintaining Competitiveness and Expanding Innovation in North America

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Contents

Introduction	2
I. Executive Summary.....	3
II. North America in the Global Energy System.....	8
III. Recommendations: Key Elements of a North American Energy and Innovation Agenda	11
IV. Conclusion: A Pathway Forward for North American Energy	19
Authors.....	22
Acknowledgements	24

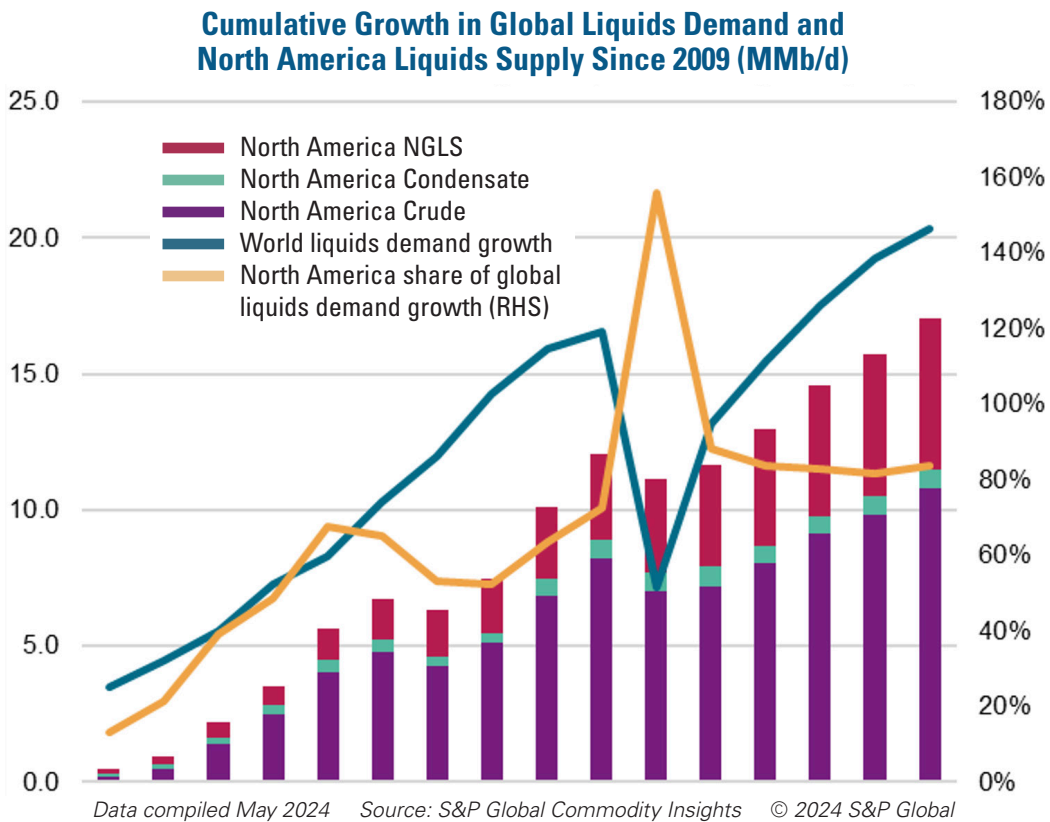
Introduction

This report is the product of a workshop series organized by the Canada Institute and the Mexico Institute of the Wilson Center. It is designed to recommend a pathway to the three heads of state comprising the North American Leaders Summit, specifically to reviving that process and integrating energy and innovation considerations as permanent features. The Wilson Center institutes assembled a working group composed of nearly 40 members, which met three times over several months throughout 2024. The working group received detailed presentations on current and projected supply and demand balances for energy in North America, the prospects for emerging fuels and technology suites such as carbon capture sequestration, hydrogen, and nuclear among others, as well as the challenges of siting and permitting. We discussed the dynamic political context in each country at length and the areas for most fruitful cooperation. This report is the result of these efforts and reflects the views of its authors, but it is deeply influenced by the productive conversations and contributions of the working group members throughout the project.

I. Executive Summary

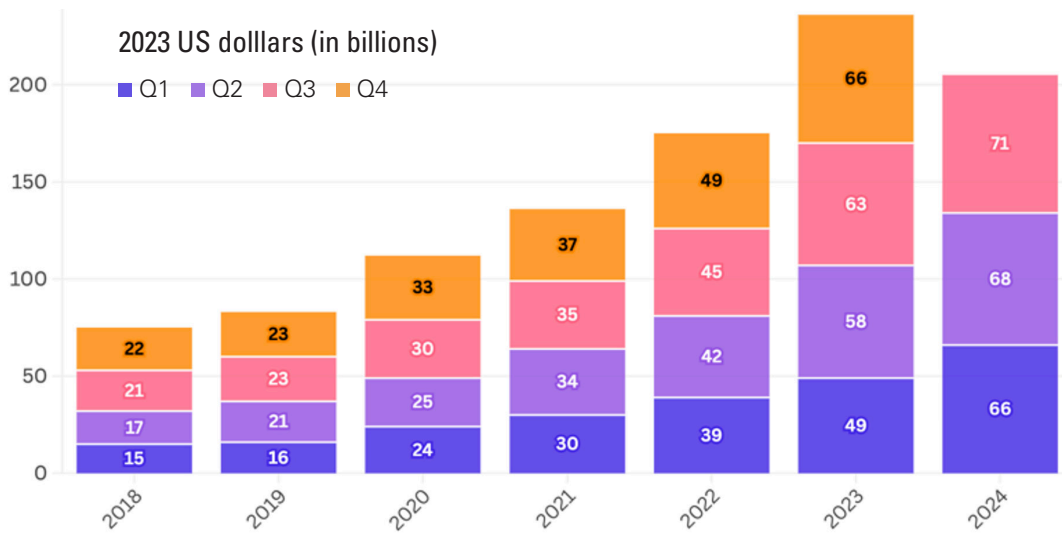
North America’s role in the global energy system has been transformed over the last decade, and its role is set to evolve further still. In the realm of conventional energies, the shale revolution made the North American continent a top region for the global supply of oil, refined products, and liquefied natural gas (LNG)—fuels which remain dominant throughout energy markets in every corner of the world. At the same time, the North American region has positioned itself as an innovator in clean energy technologies and emerging fuels, boasting some of the most favorable incentives which have attracted billions in new investment and laid literal groundwork in a wide array of zero-carbon technology supply chains. These investment opportunities, from new battery storage designs to advanced nuclear energy, could spur an acceleration of the global energy transition.

These achievements would not have been possible but for the unique trilateral makeup of North America’s energy market and the deep partnerships therein. The governments of North America—the United States, Mexico and Canada—have frequently prioritized energy supply and affordability in trilateral economic and trade relations. Increasingly, they are partnered



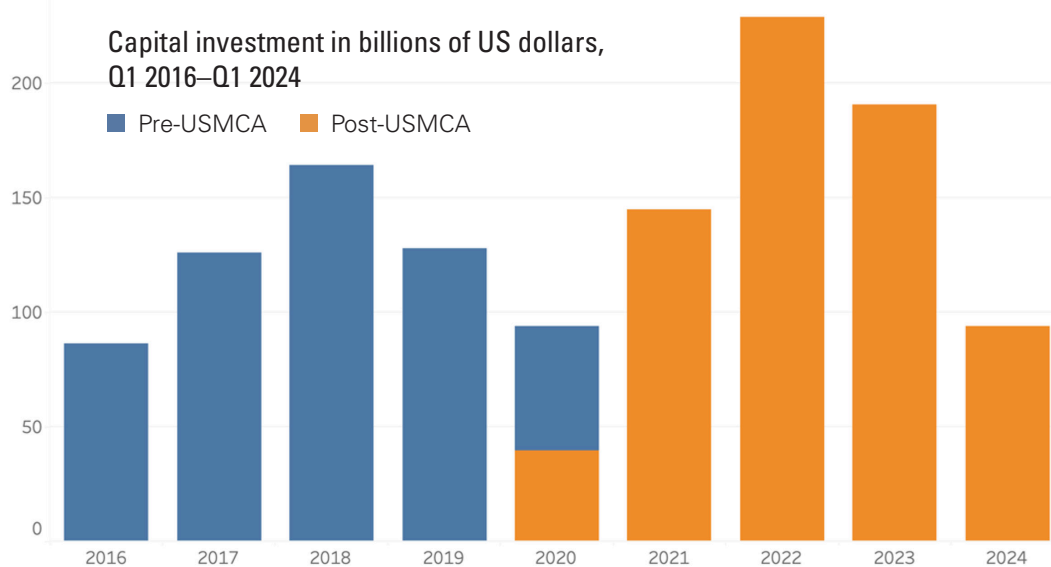
on energy sustainability. All three countries share vast cross-border conventional energy infrastructure, which has facilitated a robust trilateral energy trade worth billions of dollars. The historic 1992 North American Free Trade Agreement, followed by the United States-Mexico-Canada Agreement (USMCA) in 2020, facilitated growth in these interconnections. Looking ahead, USMCA is set to play a key role in fostering new and expanded energy infrastructure supply chains—particularly in emerging energies. These deep connections have enhanced, and maintained, North American competitiveness in an increasingly competitive geopolitical and economic environment throughout the world.

U.S. Clean Energy Investment Growth Accelerates



Source: Rhodium Group-MIT/CEEPR Clean Investment Monitor Author: Diego Marroquín Bitar (@DiegoTMEC)

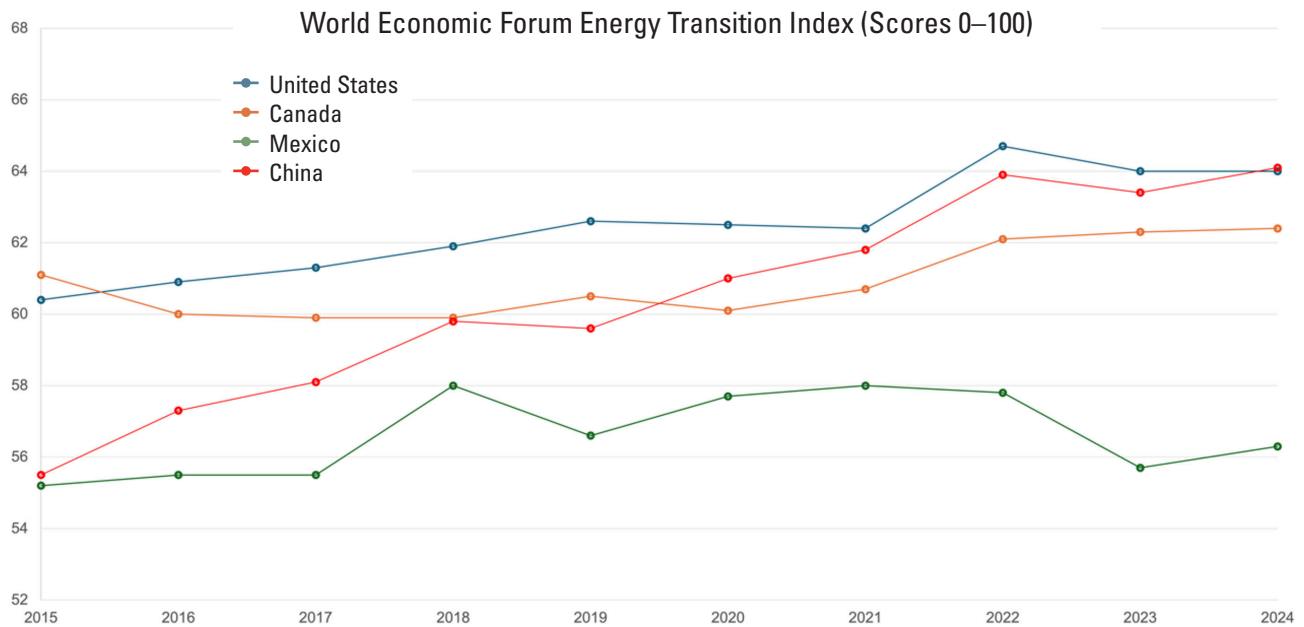
North American Greenfield Investment Soars with USMCA



Source: Data © FDI Markets, from the Financial Times Ltd 2024, Data subject to terms and conditions of use Note: Capital investment figures in 2024 only cover Q1 2024 Author: Xavier Delgado and Diego Marroquín

This hopeful outlook faces multiple challenges on the North American landscape. One is the need to make the energy transition real and effective in each of our three countries, even as the region remains a lynchpin supplier of conventional fuels (such as oil and natural gas) to like-minded partners and allies overseas. Another is how best to balance the energy security needs of the present with decarbonizing the global future, as our nations face geopolitical and geoeconomic risks in Eurasia, East Asia, the Middle East and our own hemisphere. Another balancing act concerns the supply chains of tomorrow—vital inputs such as critical minerals, battery components and many more—and how to weigh industrial policy in North America and “near-shoring” with the goals of expediting decarbonization. This question raises the specter of key supply chains dominated by geostrategic competitors, how to avoid replacing old vulnerabilities with new ones in an era of transition.

Energy Transition Trajectory (2015-2024) for Canada, China, Mexico, and the United States



Source: World Economic Forum Energy Transition Index (2024)

Energy Transition Index Rank			
2015		2024	
United States	20/120	United States	19/120
Canada	17/120	Canada	27/120
Mexico	50/120	Mexico	57/120
China	47/120	China	17/120

North America is uniquely able to meet these challenges, secure lasting economic growth and provide energy security throughout the continent and abroad, but the task will be impossible unless we deepen and grow North American integration and cooperation. The United States, Canada and Mexico must cooperate more effectively on all these issues to maximize the region's comparative advantages and proactively address vulnerabilities. Unilateralism in the energy and innovation challenge will only result in failure to meet the moment, and to advance both security and prosperity, while potentially ceding that moment to adversaries.

This report offers several recommendations to enhance energy cooperation across the trilateral relationship and ensure its prioritization in that relationship going forward. Each of these is couched within a broader imperative: that the North America Leaders' Summit (NALS) provide a consistent opportunity for leaders to engage on energy, climate and innovation issues at each Summit.

North American energy ministers should commit to meeting annually on these topics, supported by a sub-ministerial process for technical collaboration which produces direct reports back to ministers. In addition, ministers responsible for energy, commerce, foreign relations, decarbonization and innovation should establish a standing public-private forum on energy, climate innovation issues which meets contemporaneously with ministers, to support a regular strategic dialogue on these issues. This forum should not duplicate the work done in other trilateral forums, but focus on areas where public-private cooperation can advance prosperity.

With a major election having passed in Mexico, the election of Donald Trump in the US and another election imminent in Canada, now is the ideal moment to refresh NALS with an energy and innovation component outside the trade negotiation space. The NALS leadership should adopt a concrete plan of action and which will be briefed to Leaders at successive summits.

Importantly, the discussion below is not an exhaustive one: cleavages remain in the North America trilateral energy relationship, many of which are connected to wider political divides and divergent perspectives among the three governments at hand. This reality is especially important to acknowledge given the arrival of new administrations now or in the near future governing from Mexico City, Washington, D.C. and Ottawa. This analysis and its recommendations represent a positive, forward-looking agenda which prioritizes areas with the greatest mutual benefits and politically viable opportunities for improved collaboration than in the recent past. Prioritizing these areas is not intended to overlook or disregard others where cooperative opportunities are less feasible, or unlikely to produce the desired fruits. Indeed, given growing uncertainty around issues such as investor dispute resolution, multinational private sector protections and cross-border investment, the imperative for cooperative work in those areas where forward momentum is possible becomes all the more necessary. A cogent North American trilateral energy agenda need not be perfect to be productive.

A chart summarizing key recommendations, and the full report, follow below.

Summary of Recommendations	
Area of Collaboration	Summary
NALS Consultative Process	A permanent public-private NALS forum concerning energy and innovation cooperation should be paired with sub-ministerial working groups and public-private dialogue opportunities.
Trilateral Investment Forum	A trilateral investment forum should lay the groundwork for managing cross-border permitting and authorization challenges, while providing cooperative space for deconflicting trade and investor disputes.
Interregional Electricity Planning	Given the foundational importance of power grid expansion and modernization to energy goals, the North American partners should develop a joint strategy to expand cross-border transmission infrastructure and maximize trading opportunities.
Industrial Decarbonization Strategy	With rapid manufacturing capacity growth in North America, the trilateral partners should prioritize collaboration in industrial decarbonization pathways, particularly areas where cross-border infrastructure (like pipelines) can be planned for in advance.
Nuclear Power Collaboration	Nuclear power has potential to meet the energy and climate security needs of the continent, but a trilateral collaborative approach can help overcome regulatory, permitting and fiscal challenges
Community Engagement Innovation Forum	The North American partners should conduct a joint discussion focused on redressing historical failures in infrastructure permitting, better managing impacts on stakeholder and others most impacted by emergent new infrastructure, and sharing improved models of consultation and consent.

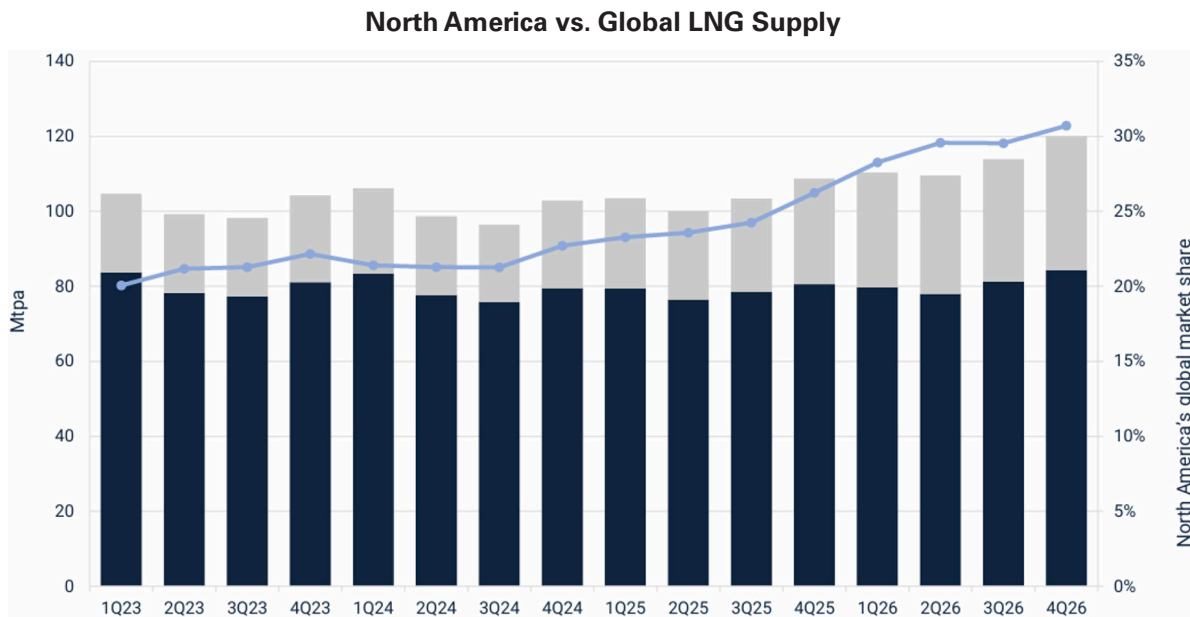
II. North America in the Global Energy System

It is undeniable that North America’s role as both an energy producer and innovator, across fuels and technologies, has dramatically changed over the last decade.

In conventional fuels, North America has seen an astonishing doubling of oil production since 2010, which has met 80% of global demand growth over that period.¹ The US has led on this front: the Energy Information Administration (EIA) projected earlier this year that US oil production had reached a historic record for any producer country, averaging 12.9 million barrels per day (b/d) in 2023.² The growth of natural gas production, again led by the US, has been no less impressive. In 2022, US natural gas production alone exceeded that of the entire Middle East, and its abundance and affordability has been a key factor in displacing coal from the US power generation mix.³ North America is now the world’s leading LNG exporting region, with a robust international trade within the continent itself. These factors have helped stabilize the global energy system amid intense geopolitical volatility, most crucially during the Russian invasion of Ukraine which temporarily spiked global oil prices and threatened to leave Europe in the cold apart from a surge in LNG exports to the European Union.

North America’s Share of the Global LNG Market will Grow to More than 30% within the Next Two Years

North America could potentially grow this market share further next decade through another wave of planned construction



Source: Rapidan Energy Group

But conventional fuels are only part of the fast-changing North American energy landscape. Increasingly, low- and zero-carbon fuels are a growth area. It is difficult to overstate the impact of the 2022 Inflation Reduction Act, signed into law by President Biden, which represented \$300 billion in direct funding and incentive programs for a wide range of clean energy technologies. Combined with earlier laws favoring infrastructure and technology investment, the IRA instigated a US “Manufacturing Renaissance” with particularly bright prospects for US electric vehicles (EVs) manufacturing, renewable power and hydrogen infrastructure.⁴ The IRA’s EV incentives are favorable to the USMCA partners, such that a car with battery minerals produced or processed in a free-trade agreement country would be eligible to qualify for at least a portion of the EV cash incentive.

The other North American partners share policy directives favorable to the clean energy economy. Canada provided \$80 billion in new clean energy tax credits and infrastructure investment incentives in its 2023 budget as part of its response to the passage of the US IRA.⁵ Canada’s new Investment Tax Credit mechanism which increases the value of select zero-emissions power generation projects by up to 50% and will remain in place through 2033, among other measures aimed at economy-wide decarbonization.⁶ The Mexican government has set ambitious goals to grow clean power capacity by 30 gigawatts (GW) by 2030, a near doubling of current levels.⁷ The advent of the Sheinbaum administration in Mexico City, which has framed climate considerations as a top priority, could reinvigorate these pledges with fresh momentum.

All these developments throughout the energy and climate space are reinforced by the trilateral North American partnership—specifically, what should be a steady pattern of integration and mutual growth benefitting each economy. Total US goods and services trade with USMCA totaled about \$1.8 trillion in 2022.⁸ Cross-border investment has reached historic levels: US investment in Canada and Mexico grew 21% between 2019 and 2022, to over \$560 billion, while Canadian and Mexican investment in the US grew 34% to over \$620 billion.⁹

USMCA Boosts Mexico and Canada to Forefront of US Goods Trade in 2023

Country	Exports	Imports	Total Trade Value
Mexico 	\$322.74B	\$475.22B	\$797.96B
Canada 	\$354.36B	\$418.62B	\$772.97B
China 	\$147.78B	\$426.89B	\$574.66B
Germany 	\$76.70B	\$159.27B	\$235.97B
Japan 	\$75.68B	\$147.24B	\$222.92B
South Korea 	\$65.06B	\$116.15B	\$181.21B

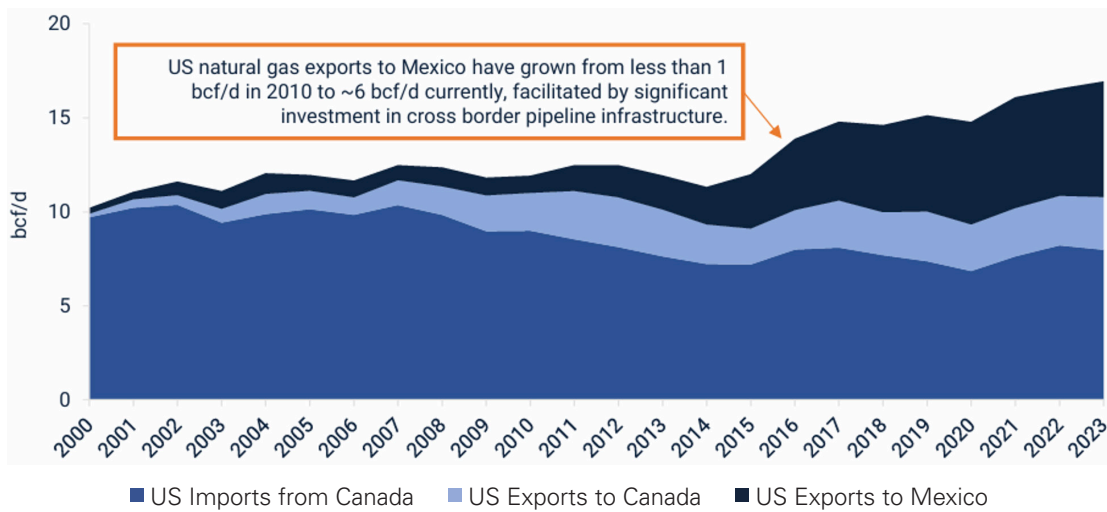
Note: Dollars on a nominal basis, not seasonally adjusted

Data source: US Census Bureau Author: Xavier Delgado and Diego Marroquín Bítar

Energy trade and investment have been key pieces of this economic success story: crucially, USMCA confirms zero-tariff treatment for energy exports/imports between borders. In 2022, the value of energy trade between the US and Canada grew over 40% from the year prior and reached \$190 billion.¹⁰ In the same year, the value of energy trade between the US and Mexico was nearly \$78 billion.¹¹ This enormous volume of energy trade, mostly concentrated in conventional fuels and electricity, has been foundational to the continent’s secure energy supply and affordability.

Cross-Border Natural Gas Trade Has Steadily Increased, Primarily Due to Rising US Exports to Mexico

Approximately 13% of total North American natural gas production is traded intra-regionally, with a notable 60% of Mexico’s supply being imported from the US



Source: Rapidan Energy Group, EIA

The NALS has previously recognized the role of energy in North American trilateral resilience, as well as the need for a forward-looking view of the continent’s energy transition. The 2023 NALS resulted in agreements to improve North American methane emissions across sectors through reaffirmation of the Global Methane Pledge, a commitment to a North American clean hydrogen market and green freight corridors, a cross-border EV infrastructure plan, and mapping of North American critical minerals supplies.

III. Recommendations: Key Elements of a North American Energy and Innovation Agenda

The next decade will bring growth opportunities, and challenges, to the forefront of the North American energy and climate landscape. The world benefits from a strong and resilient North American continent: North American energy, technological innovation and manufacturing capacity is well-positioned to support global economic growth, present-day energy demands and the global energy transition just ahead. In these areas, the continent's natural abundance of valuable resources—from conventional fuels to critical minerals—complements the democratic alignment of its governments which are committed to trilateral free trade as well as the rule of law.

But the pressures ahead are considerable. North America must be prepared to compete in a decarbonizing world where new considerations, like carbon intensity of goods, are increasingly important. Tensions with overseas competitors, particularly China, in areas such as manufacturing capacity, industrial policy and control of vital energy supply chains will demand thoughtful and calibrated responses. Border adjustment policies, particularly the European Union's version recently launched, will see unprecedented scrutiny of the carbon intensity of high-value industrial products. North America enjoys many advantages in leading a global energy transition—resource availability, superb human capital, wide-ranging public incentives and investment tools, and a robust and agile private sector—but these advantages alone do not translate into a coherent strategy. At the same time, North America's internal energy security needs are rapidly evolving, and North America remains a key supplier of fuels to the entire world.

The recommendations below, taken together, form the building blocks of a strategy which recognizes North America's role in the global energy economy today and looks forward proactively toward what it might become.

A New NALS Consultative Process

Summary: A permanent public-private NALS forum concerning energy and innovation cooperation should be paired with sub-ministerial working groups and public-private dialogue opportunities.

In multilateral fora, such as NALS, directives from leaders are often the fastest pathway to concrete progress by facilitating whole of government and ministerial engagement. The trilateral leaders, and relevant agencies and ministries, should formally commit to a permanent role for energy and innovation in the recurring NALS agenda. Historically, this category has been approached in limited, highly specific issue areas (e.g., cross-sectoral methane mitigation goals). A permanent role enabling consistent and evolving dialogue on a range of energy collaboration opportunities will be more effective than sporadic inclusion. Beyond leaders however, energy ministers or secretaries (in the respective countries) should commit to their own independent annual meeting. These meetings would be ideal for discussing the results of sub-ministerial technical, regulatory and policy working groups' efforts throughout the year. These working groups, which would include other ministries responsible for commerce, investment policy, decarbonization or critical minerals cooperation, would be particularly suitable to conduct deep collaboration around specific fuels, infrastructure and technologies delineated as priority areas below.

A public-private component should feature within these sub-ministerial gatherings as well as the annual ministers meeting and perhaps NALS itself. In the North American context, there exists both an opportunity and need for greater communication between private sector developers and trilateral officials—particularly amid rapid manufacturing capacity growth and near-shoring opportunities. A public-private component could also bring in other stakeholders, such as civil society members, and broaden the range of voices involved in the official NALS processes. This model has precedent in the US-EU Energy Council, the Asia Pacific Economic Cooperation forum and Summit of the Americas and could be replicated and refined for the North American context also.

Trilateral Investment Forum

Summary: A trilateral investment forum should lay the groundwork for managing cross-border permitting and authorization challenges, while providing cooperative space for deconflicting trade and investor disputes.

The energy transition has often been framed as an investment challenge as much as a scientific or technical one. The latest IEA World Energy Investment Report projects that \$1.2 trillion of cumulative investment is needed between now and 2030 for clean energy manufacturing and critical minerals supply alone to meet the demands of a global 1.5°C scenario.¹² Each of the North American partners sees pivotal roles for private investment in both energy and climate security, but trilateral cooperation (particularly concerning cross-border investment) has been limited in the past by various regulatory and policy barriers.

A trilateral investment forum, perhaps meeting on an annual or biennial basis, could advise national leaders on cross-border investment trends and promising project or technology areas. A high priority area for consideration is power generation and transmission infrastructure; other midstream infrastructure, such as hydrogen and carbon pipelines, merit discussion. In addition to delineating ideal investment conditions (i.e., legal and fiscal frameworks for multinational partners), the Trilateral Investment Forum should closely review any trade and customs barriers which can elevate risk for private investment.

Broadly, the Trilateral Investment Forum should provide a neutral space for reviewing and deconflicting trade and industrial policy in a forward-looking, constructive manner tailored to energy market and investor concerns. Accordingly, representatives of each government from the energy, commerce, trade and foreign affairs ministries or departments should be represented in this Forum. Additionally, sub-national and regional, provincial and state authorities play major roles in infrastructure development in North America. This forum should be open to these stakeholders, as appropriate, including local and municipal governments and regional planning authorities.

Interregional Electricity Planning

Summary: Given the foundational importance of power grid expansion and modernization to energy transition goals, the North American partners should develop a joint strategy to expand cross-border transmission infrastructure and maximize trading opportunities.

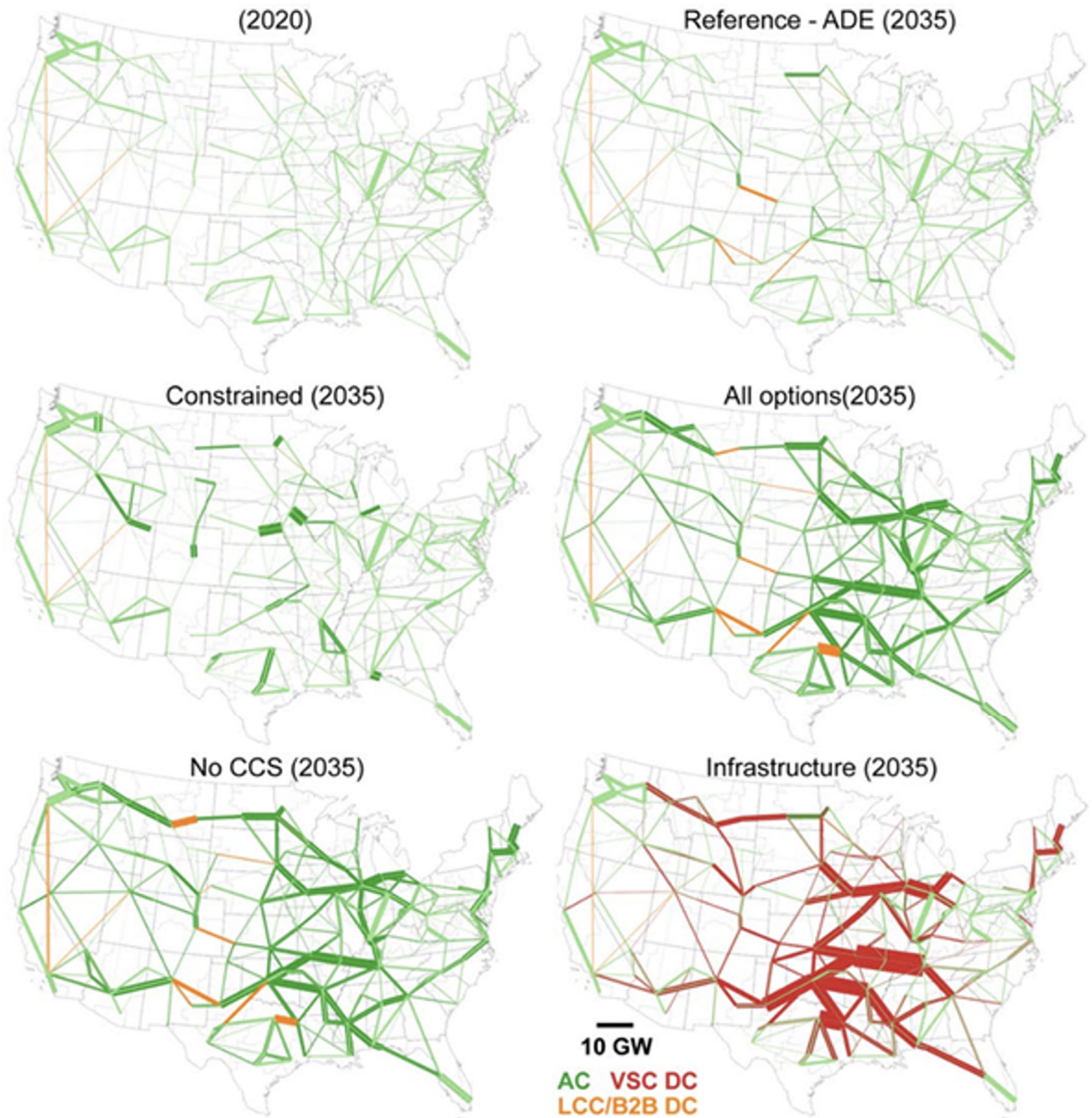
The need for expanded and modernized power infrastructure, to meet both today's and tomorrow's energy security needs, is virtually undisputed across governments and political affiliations. Indeed, recent estimates from the National Renewable Energy Laboratory (NREL) suggest that anywhere from 1,400 to 10,100 miles of new high voltage transmission will be required on an annual basis to achieve net-zero emissions on the US grid by 2035.¹³

Fortunately, the North American partners already share electricity across borders. The US and Canada enjoy a robust power trade, with 35 international transmission lines connecting each border province to at least one border state.¹⁴ However, the US-Mexico cross-border electricity trade is much more limited. Power from Mexico supplies just 0.6% of electricity consumption in the border states of Arizona, Texas, California and New Mexico, while US power exports to border Mexican states constitutes just 2% of Mexican consumption.¹⁵

To be sure, interregional electricity planning is a circuitous process within each North American country, to say nothing of the difficulty of crossing international lines, but greater focus in this area is essential. As all three countries pursue dramatic growth in variable renewable energy capacity and utility-scale battery storage, deeper international grid integration promises manifold benefits for security of supply and power reliability. However, the extant model of project design, development and execution on ad hoc bases is unsuitable to realizing these benefits.

Maps of Transmission Capacity in 2020 and 2035 (ADE Demand Case) Show Substantial Additions into Wind-Rich Regions of the United States

Transmission capacity is differentiated into alternating-current (AC) and two direct-current (DC) technologies: lines using voltage source converters (VSC) and lines using line-commutated converters (LCC) or back-to-back interties (B2B).



Source: NREL 2035 Study

Principals in the relevant power and planning agencies should instead consider a joint, trilateral strategy for cross-border power integration and expanded transmission capacity. Preferably, such a strategy would assess the potential for North American power trade across each border and mutually agreed benchmarks. Such a process could begin with technical analysis of expected power demand trends in key border regions, such as Southern California, and provide scenarios of new power trade along with cost-benefit analysis to impacted communities. These analyses could inform next steps, such as analyzing which siting and permitting barriers exist in either bilateral situation. Ideally, this work could undergird eventual bilateral agreements, and direct public support, for high-reward cross-border projects. The US Department of Energy, the National Renewable Energy Laboratory and the US Energy Information Administration are well-equipped to facilitate these initial steps alongside their relevant counterparties in the Canadian and Mexican governments. Initial gatherings around this agenda should include relevant regional and local stakeholders, particularly officials and regulatory leaders as appropriate—especially when specific projects are under consideration.

Industrial Decarbonization Strategy

Summary: With rapid manufacturing capacity growth in North America, the trilateral partners should prioritize collaboration in industrial decarbonization pathways, particularly areas where cross-border infrastructure (like pipelines) can be planned for in advance.

Among the crucial, yet unsolved pieces of the energy transition puzzle are industrial decarbonization: how to produce cleaner, lower-emission industrial inputs including steel, iron, concrete, chemicals, refined products and more. A recent Congressional Budget Office (CBO) report points to both the extent of the problem, and possible solutions. It estimates that US manufacturing was responsible for about 12% of total emissions in 2021, and 75% of those emissions came from burning fuel for heat production; however, emissions from the sector declined 17% from 2002, largely due to emissions intensity improvements.¹⁶ With North American manufacturing on a steep incline, and carbon border adjustment mechanisms moving toward implementation throughout the world, finding scalable pathways to decarbonizing industrial production is an urgent matter.

Fortunately, the North American economies are already closely intertwined in terms of manufacturing supply chains—making this an ideal area for maximizing decarbonization potential and avoiding duplicative efforts in any one country. Carbon capture sequestration (CCS) and hydrogen fuels, for example, are often cited as promising pathways for reducing emissions in those industrial sectors which cannot easily electrify. Both emerging sectors face deep challenges in terms of siting, permitting, supportive regulation and reaching economies of scale. At the same time, each North American partner has their own unique approach to policies and incentives geared toward these sectors and differing visions for their roles in each respective economy. In this context, harmonization or alignment of policies is perhaps not politically feasible, or necessarily conducive to the end goal of reducing emissions as fast as possible in each country.

That said, these remain promising areas of cooperation around technical and regulatory design, public collaboration with private sector project developers and investors, and developing a long-term vision for a clean industrial North American supply chain (e.g., for hydrogen midstream infrastructure). Indeed, the 2023 NALS agreement committed the partners to designing a clean hydrogen network for the continent, including research and development, safety codes and green freight corridors. This work can be mirrored in other sectors, such as CCS and advanced manufacturing, and supplemented with target benchmarks for progress (e.g., a shared North American goal for reaching gigaton-scale carbon capture on the continent by a certain date). On the US side, the Department of Energy (and its Loans Programs Office), the Environmental Protection Agency, and the Department of Commerce could engage in these discussions with their partner agencies and ministries in Canada and Mexico.

Nuclear Power Collaboration

Summary: Nuclear power has potential to meet the energy and climate security needs of the continent, but a trilateral collaborative approach can help overcome regulatory, permitting and fiscal challenges.

It is difficult to overstate the importance of growing nuclear power. At the recent COP28, more than twenty countries agreed to a Declaration to Triple Nuclear Energy, including commitments to collaborate around nuclear innovation and galvanizing financial support for maintaining and expanding the global civilian nuclear fleet.¹⁷

The US and Canada were both signatories to this agreement. In the US, nuclear power is a critical source of baseload energy powering the grid, supplying 18% of electricity from 54 nuclear power plants.¹⁸ In Canada, five nuclear power plants supply 15% of the country's electricity and new reactor projects and designs are under active consideration.¹⁹ In Mexico, the deployment of nuclear power is more recent than in the US or Canada; Mexico has two reactors supplying about 3% of the country's electricity—potentially a growth area of new power supply for its fast-growing economy in the right conditions.²⁰ Mexico's existing La Verde site could house two additional reactors to provide zero-carbon, highly reliable fuel to its growing economy.²¹ The US and Mexico, alongside the International Atomic Energy Agency (IAEA), have supported Mexico's civilian nuclear energy sector for decades, and the existing United States-Mexico 123 Agreement affirms IAEA support for their cooperation around peaceful nuclear energy use, particularly civilian nuclear trading.²²

Despite the many advantages offered by expanding nuclear power capacity, both in an economic and climate sense, the industry has faced a range of problems: cost-overruns at new conventional facilities, slow review and approval processes for advanced and small module reactor (SMR) designs, high interest rates undermining project viability and unresolved debates over management of nuclear waste. The US Congress has made efforts to address some of these issues: the ADVANCE Act, recently signed into law by President Biden, aims to

bolster the US nuclear industry by increasing staff at the US Nuclear Regulatory Commission, reducing nuclear design application costs and timelines, and taking steps to strengthen the nuclear fuel supply chain.²⁵

But facilitating faster growth in nuclear power should not be a unilateral endeavor; indeed, a more effective multilateral approach would recognize the deep importance of this industry to all three North American partners. To be sure, there will be lessons learned (and lessons to share) as the nuclear power industry leapfrogs into the future with SMRs, microreactors, advanced conventional designs and innovative fuel types. Cross-border collaboration on each of these fronts could prove fruitful, including for powering rural, remote and isolated communities throughout the Americas which are often disconnected from major urban power grids. Mexico in particular could benefit from this attribute, in addition to supporting the country's wider emissions mitigation objectives.

The North American partners could set an agenda and timeline for technical workshops, led on the US side by the Department of Energy and Nuclear Regulatory Commission, to discuss a framework for faster expansion of nuclear power throughout the continent. Ideally, private sector and community stakeholders would be engaged as a part of this learning process to determine how public support can best uplift the industry, while addressing the concerns of those who are most immediately impacted by new projects or infrastructure. Likewise, the US Export-Import Bank might lead discussions of financing frameworks or development finance opportunities in this space given the presently high costs facing most types of nuclear projects.

Community Engagement Innovation Forum

Summary: North American partners should conduct a joint discussion focused on redressing historical failures in infrastructure permitting, elevating the voices of those most impacted by emergent new infrastructure, and sharing improved models of consultation and consent.

Decades of infrastructure siting and permitting have overwhelmingly impacting marginalized and indigenous communities in North America. Because the energy transition challenge is as much an infrastructure challenge as anything else, the question of effective stakeholder engagement, local support, redressing historical injustices, and avoiding further harm to vulnerable groups to the maximum possible extent, is critically important to the success of a North American energy and innovation agenda. Failure to design effective regulatory, permitting and siting frameworks risks undermining the democratic values which all three North American partners claim to share, and could exacerbate costs and legal risks to projects which do not enjoy widespread support and local consent.

Given this history, each of the North American governments have taken steps to improve transparency and access in infrastructure permitting processes in recent years. These efforts have included greater emphasis on justice and community impacts in federal permitting decision-making at key agencies. The Canadian government has undertaken efforts to improve

its consultation processes and integrate indigenous and First Nations consent into federal permitting decisions, especially in areas like mining. Private sector companies have devised new forms of stakeholder engagement, in some cases, giving indigenous groups, equity, and projects which cross their territory to provide shared benefits. In Mexico, the right of prior consultation for indigenous groups for development projects (and the need to obtain full consent when impacts are likely to be high) has been enshrined in law.²⁴

Given the importance of this issue, a forum for trilateral discussion of best practices and new learnings about stakeholder engagement would be both worthwhile and constructive for the principal officials in each country responsible for these issues. This subject is also increasingly important from a private sector perspective: a growing body of anecdotal evidence confirms that effective and proactive stakeholder consultation has been important to the success of expensive, multi-billion dollar investments.

A single meeting, or series of meetings if logistically possible, should facilitate the inclusion of representatives of diverse groups at the forefront of new infrastructure buildout. This representation is especially important for consideration of any cross-border infrastructure projects which may result from the earlier recommendations. Similarly, private sector entities who have robust, first-hand experience working with various stakeholder groups and especially indigenous communities will have useful knowledge and lessons learned to contribute. In all likelihood, there are models of stakeholder engagement already deployed in any one of the three North American countries that have helpful applications elsewhere. This discussion can also inform local and state-level permitting and siting approaches in each country, and relevant officials from specific areas weighing these considerations might also be welcomed into this dialogue.

IV. Conclusion: A Pathway Forward for North American Energy

The recommendations suggested here do not address all of the energy and infrastructure challenges within the North American trilateral relationship by any stretch; likewise, these recommendations do not represent a panacea for all the potential difficulties facing the North American partners on the road ahead. To be sure, difficult and complex decisions remain in how the changing North American governments work together, and crucially, how North America engages with the rest of the world. The opportunities in the energy and innovation agenda are vast, and the potential rewards for all three countries are arguably historic in scale, but none of this will occur without a deliberate, committed strategy.

As new administrations are set to take office in Ottawa, Mexico City and Washington D.C. over the next several months, the upcoming NALS offers a prime opportunity to leverage every advantage the trilateral partners can bring to their relationship. Moreover, our governments can signal to markets the desire of all three countries to welcome investment, advance energy security and energy reliability, and promote innovation and prosperity. With volatility throughout global energy markets, and the climate crisis a real and present threat, there can be no delay in securing unity throughout North America on these urgent matters. The time for a comprehensive energy and innovation strategy is now, and there is no time left to lose.

Endnotes

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