



U.S. - CANADA/ CANADA - U.S. SUPPLY CHAINS PROGRESS REPORT

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THE WHITE HOUSE
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The Prime Minister of Canada Justin Trudeau meets with the President of the United States of America Joe Biden

November 18, 2021

Washington, D.C., United States of America

The leaders underscored their commitment to supply chain security and resilience based on the principles of transparency; diversity, openness, and predictability; security; and, sustainability. They recognized the importance of these principles for cross-border economic integration and the future of the North American auto sector. To build on these efforts, the Prime Minister and President announced the launch of the Canada-United States Working Group on Supply Chains and instructed their officials to produce a progress report.

Executive Summary

The U.S.-Canada/Canada-U.S. Supply Chain Working Group supports the February 2021 “Roadmap for a Renewed U.S.-Canada Partnership” to strengthen U.S.-Canada supply chain security and reinforce the deeply interconnected and mutually beneficial economic relationship between our two countries.

The Working Group focuses on enhancing cooperation in key areas, with the objective of reaching greater alignment, allow for the opportunity to identify potential vulnerabilities, and improve supply chain resilience domestically and internationally. It has initiated a Joint Economic Analysis to map supply chains and gives due consideration for cross-cutting issues such as skills development and regulatory cooperation.

This report highlights progress and identifies next steps across the areas that fall under its work. It provides a strong foundation on which to continue to build momentum and a forward work plan, including furthering joint economic analysis to elevate awareness of the intricacies of supply chain dynamics, and ensuring that these supply chains have the strength and resilience to support the sectors that will drive the success of our economies, both today and in the future.

In addition to the joint economic analysis, the key sectors/themes for collaboration include:

1. Electric Vehicles and Batteries
2. Critical Minerals
3. Public Health, Critical Medicines, Medical Devices, and Personal Protective Equipment (PPE)
4. Defense/Defence
5. Information and Communications Technologies, including Semiconductors
6. Solar
7. Transportation and Logistics
8. Regulatory Cooperation



Mandate of the Working Group on Supply Chains

The Canada-U.S. Working Group on Supply Chains will work to enhance supply chain security and resilience based on the principles of transparency; diversity, openness, and predictability; security; and, sustainability.

Its mandate is to

- take stock of existing and prospective supply chain vulnerabilities;
- identify opportunities for joint and individual actions to strengthen Canada-U.S. supply chain security and resilience; and,
- reinforce the deeply interconnected and mutually beneficial economic relationship between the two countries through increased collaboration.

Next steps:

Canadian and U.S. officials agree to undertake the following next steps:

- advance identified priorities under the key areas of work;
- identify key deliverables, as appropriate; and
- plan for future joint work.

Moving forward, Canada and the United States intend to discuss complementary areas of work and explore the merits of adding other sectors to the scope of the Working Group.



Report

Current Supply Chains Context

The economic prosperity of Canada and the United States is underpinned by strong bi-national trade and economic linkages that drive international competitiveness. Globalization has unlocked economic opportunities, but has also led to challenges such as the offshoring of important elements of supply chains, notably in manufacturing.

Unforeseen events such as COVID-19, extreme weather, and transportation disruptions, and most recently Russia's further invasion of Ukraine, have underlined pre-existing vulnerabilities and further placed strains on key supply chains.

Supply chain vulnerabilities have also been exploited on occasion by certain countries, undermining rules-based trade and at times leading to unplanned shortages of supplies. These dynamics underscore the value of vulnerability evaluation and action to realize supply chain security among partners.

Beyond economic concerns, some countries whose manufactured products make up elements of global supply chains use forced labor, which is leading to the institution of new legal regimes to combat this practice. Furthermore, as governments promote the adoption of cleaner, low-carbon technologies, there is an emerging need to create conditions such that supply chains are on a path towards net-zero, and diversify away from unsustainable supply chains.

In this context, friend-shoring strategic supply chain areas in partnership with allies is vital, and Canada and the United States can draw on decades of experience as trusted, reliable partners.

U.S.-Canada Cooperation Alignment and Initiatives

The Working Group held its inaugural in-person meeting on December 13, 2021, in Ottawa. It will complement existing bilateral cooperation across a number of areas, including but not limited to:

- Joint Action Plan on Critical Minerals
- National Technology and Industrial Base Working Group
- Canada-U.S. Regulatory Cooperation Council (RCC)
- Health Canada's assessment towards Enhanced Confidentiality Arrangement with U.S. Food and Drug Administration (FDA) on Good Manufacturing Practices (GMP) of pharmaceutical inspections

At the inaugural Working Group meeting, senior officials from across the Government of Canada hosted a U.S. delegation led by the White House National Security Council staff (NSC). Discussions focused on the need for joint economic analysis of supply chains, and bilateral supply chain issues in the areas of: 1) electric vehicles and batteries, 2) critical minerals, 3) public health/personal protective equipment, 4) defense/defence, 5) information and communication technologies, including semiconductors, 6) solar technology, 7) transportation



and logistics, and 8) the importance of regulatory cooperation to smooth the functioning of supply chains. The value of training and skills development to meet labor/labour needs was an additional cross-cutting theme.

Both Canada and the United States affirmed the importance of near-shoring or “friend-shoring” elements of critical supply chains, acknowledging that periodic shocks, like the COVID-19 pandemic, extreme weather events, or geopolitical conflicts may continue to test the resilience of global supply chains. Coming out of the meeting, Canadian and U.S. officials reached consensus on a list of action items to pursue across areas covered by the working group. Collaboration in these areas, as outlined below, has been ongoing since the December inaugural leading up to a second meeting in the spring on May 26, 2022, in Washington, DC.

Joint Economic Analysis

State of Play. Challenges. Opportunities.

Canada and the United States are individually undertaking work to map supply chains and, in many cases, encountering issues due to differences in data classification, trade data asymmetries, and limitations of published datasets. To address these challenges, collaborative work between our respective statistical agencies is planned to allow data sharing with the objective of reaching greater alignment, improved joint economic analysis and to identify potential vulnerabilities and improve supply chain resilience, domestically and internationally.

Next Steps/Deliverables

Since November 2021, experts from the U.S. Department of Commerce (DOC) and Statistics Canada have met. They exchanged initial data and are currently developing a work plan. An assessment of exchanged data to identify the scope of joint projects, and the establishment of concrete timelines is anticipated. These projects include a review of possible chokepoints for trade across the U.S.-Canada border to reach a better understanding of what sectors could be impacted by disruptions.

Focus on Specific Themes/Sectors

1. Electric Vehicles and Batteries

State of Play. Challenges. Opportunities.

The shift to electric vehicles (EVs) represents one of the most significant transformations in the history of the automotive industry. Given the integrated cross-border nature of the automotive supply chain, bilateral collaboration is key to making this transition a success for both countries. As transportation emissions form a significant percentage of overall emissions in both Canada and the United States, both countries are looking at initiatives to assist the sector with this transition to a decarbonized future.



Both Canada and the United States have made significant recent announcements to build on the emissions targets they have put forward under the 2015 Paris Agreement. For the United States, this includes more stringent vehicle fuel-economy standards beginning in model year 2024, significant investments in EV charging infrastructure, and the Executive Order signed by President Biden in August 2021 setting a goal that 50 percent of passenger cars and light trucks sold in 2030 be zero-emission vehicles.

Canada, for its part, will be aligning its emissions standards with those most stringent in North America, whether at the U.S. federal or state level, and has committed to pursuing a zero-emissions vehicle sales mandate. In June 2021, Canada announced the new mandatory target for all new light-duty car and passenger truck sales to be zero-emission by 2035—accelerating the previous goal of 100 percent sales by 2040.

This shift to EVs presents a significant opportunity for North America to become a global leader in another area, with a shared vision and secure supply chain: large-capacity batteries. Batteries are key to a net-zero future and global demand is increasing exponentially. However, the security of the supply chain is at risk, with current production concentrated in Asia. For North America to lead in these areas, we must strengthen our battery supply chains—from mining and processing the minerals from which batteries are made, to manufacturing batteries and battery components, to setting up the proper infrastructure for reuse and recycling. This transition must also take into account the impact that a shift from manufacturing internal combustion engine (ICE) vehicles and components to batteries and EVs will have on communities and regions that have historically relied on ICE production.

Deliverables/Next Steps

To support the development of a North American EV and battery sector, Canada and the United States are making historic investments to catalyze development of capacity across the supply chain, from upstream projects to materials processing to end-of-life management. To ensure that these resources foster development of a North American battery supply chain, the two countries will endeavor to enhance collaboration that leads to complementary investments and policy development under the United States' and Canada's respective budget allocations and funding vehicles.

This collaboration builds upon ongoing and planned bilateral EV cooperation to deploy interoperable EV charging infrastructure across both countries, creating zero-emission travel corridors for Canadians and Americans to use across the continent.

Both countries are also working together through the Canada-U.S. Regulatory Cooperation Council, listening to businesses, scientists, environmental experts, and workers on both sides of the border to align respective EV regulations and to ensure they help create a stronger, greener, North American automotive sector without impeding supply chains. Joint action on critical minerals, as detailed below, is also essential to advancing EV and battery-sector goals.



2. Critical Minerals

State of Play. Challenges. Opportunities.

In order to secure supply chains for the critical minerals needed for important manufacturing sectors such as aerospace and defense/defence, EV batteries, and other clean technology, through which good jobs are created, Canada and the United States announced the Joint Action Plan for Critical Minerals Collaboration in January 2020. The Joint Action Plan continues to guide cooperation in the area of critical minerals under the Working Group.

Progress under the Joint Action Plan includes: 1) multiple industry engagement sessions to attract investment and build business ties; 2) releasing a new critical minerals mapping portal online to improve mineral discovery; and 3) promoting broader application of Environmental, Social, and Governance (ESG) practices and standards—including community engagement—for mining and processing through the U.S.-led Energy Resource Governance Initiative, in the United Nations Environment Assembly, and through participation in the International Organisation for Standardization (ISO).

Both governments have reinforced this bilateral work with domestic action—in the last year the U.S. government has invested heavily in minerals processing, battery manufacturing, and recycling, while Canada has supported a range of projects and announced significant funding in its 2022 Federal Budget to implement a Critical Minerals Strategy.

However, the pace of development should be accelerated if Canada and the United States are to effectively reduce their reliance on critical mineral imports from non-market economies, boost domestic production to meet future demand, and adhere to high ESG standards. This is especially true due to the specific demands of the mining sector—steep upfront costs, regulatory hurdles, delayed revenue streams, opaque markets, and fluctuating prices, all within a typical 5-to-25-year timeline for mines to become operational.

Building on progress over the last two years, as well as existing integration in the sector, Canada and the United States can scale up ambition under the Joint Action Plan to advance projects, and further promote responsible and sustainable supply chains, along with continuing to drive innovation, all of which are vital to long-term competitiveness.

On March 31, President Biden invoked Section 303 of Title III under the Defense Production Act of 1950 (DPA) to spur domestic production of critical materials and support the transition to a clean energy economy. The DPA provides potential opportunities for collaboration between Canada and the United States as it includes Canada as a domestic source. Canada is a preferred partner of the United States with critical mineral resources and expertise that could be leveraged to expand processing capacity and the manufacturing of intermediate and final goods, further strengthening North American supply chains.

Next Steps/Deliverables

To help achieve these objectives, Canada and the United States are going to elevate and accelerate our joint efforts to secure critical minerals on a bilateral basis across production, processing, and recycling through a renewed Joint Action Plan on Critical Minerals. Objectives and outcomes under the Joint Action Plan will be reported to the Privy Council Office and the White House in support of leadership efforts under the Roadmap for a Renewed U.S.-Canada Partnership. This year, we will complete an ongoing analysis of North America's level of



reliance on critical mineral net imports and develop joint investment priorities for critical minerals in North America. This is especially timely and relevant given both countries' recent large-scale investments and funding envelopes. Identifying projects for joint funding is important in order to de-risk critical-mineral projects in North America, which have higher ESG standards and are therefore more costly to develop. This will help us ensure the development of green critical minerals supply chains.

We will also advance supply chain resilience discussions within the National Technology and Industrial Base (NTIB) Working Group.

Meanwhile, Canada and the United States seek to continue to work together to highlight critical minerals investment opportunities in both countries to investors from around the world by organizing webinars and workshops with interested businesses, and engaging with investors to identify ways to increase investment flows that adhere to the highest ESG standards.

Canada and the United States also expect to organize additional webinars and workshops to advance collaboration between researchers in both countries in areas such as Life Cycle Assessments of critical minerals.

Finally, Canada and the United States plan to build on our collaboration with our allies and international partners to promote and further strengthen ESG standards and practices, as well as share best practices for ensuring meaningful consultation and engagement with Indigenous peoples and timely permitting of critical minerals projects.

3. Public Health, Critical Medicines, Medical Devices, and PPE

State of Play. Challenges. Opportunities.

In the past decade, both Canada and the United States have experienced a sustained and increasing pattern of shortages in pharmaceuticals, medical devices, and medical supply that is not associated with specific global or regional emergencies. Going forward, further collaboration opportunities based on lessons learned, and identifying predictable and sustainable solutions beyond the current pandemic, should be pursued.

Both Canada and the United States have increased domestic manufacturing of critical medical supplies during the COVID-19 pandemic, including PPE, bio-manufacturing of vaccines and therapeutics, and production of inputs into the vaccine manufacturing process as well as ancillaries. More work is needed to ensure that these solutions remain viable in the long term (e.g., by strengthening access to raw material, and in identifying and enhancing access to key markets for domestic suppliers, including through regulatory cooperation and flexibility).

In April 2020, the United States granted DPA exemptions for Canada for certain medical supplies, demonstrating that there is an opportunity to build on work to strengthen the U.S. strategic reserve of medical supplies with Canadian products. More broadly, Canadian and U.S. officials can also improve the strength of their respective national medical stockpiles through the sharing of ideas and exchange of best practices/lessons learned from the COVID-19 pandemic.

Deliverables/Next Steps:

Senior officials from the U.S. Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response (ASPR), Health Canada (HC), and the Public Health



Agency of Canada (PHAC) have and intend to continue to meet to discuss critical medical supply chain issues for both countries, especially on stockpiling and regulatory flexibility.

As part of Canada-U.S.-Mexico Agreement (CUSMA/USMCA), Canada and the United States are working to help limit undue regulatory barriers to Canada-U.S. pharmaceutical trade. This includes exploring mutual recognition of conformity assessment requirements and the specific issue of aligning pharmaceutical facility inspections.

4. Defense/Defence

State of Play. Challenges. Opportunities.

Defense/defence industrial cooperation between Canada and the United States stretches back more than 70 years, when the two nations began to develop a strategic partnership to support the creation and maintenance of a vibrant North American defense/defence industrial base.

Since that time, the United States and Canada have taken deliberate actions to integrate their domestic industrial bases through a series of agreements and provisions. In 1956 and 1963 respectively, the United States and Canada entered into the Defense Production Sharing Agreement (DPSA) and the Defense Development Sharing Agreement (DDSA) to remove barriers to the development and purchase of defense/defence items. Additionally, the United States has designated Canada as part of the U.S. defense/defence industrial base. Furthermore, the United States and Canada entered into a Memorandum of Understanding (MOU) on Priorities and Allocations Support between the DOC and Public Services and Procurement Canada. This MOU enables Canada to request priority rating authority directly to the DOC. The United States may also request priority assistance from Canada. This special arrangement—unique to the U.S.-Canada relationship—provides assurance that the U.S. Department of Defense will work to fulfill Canada’s priority assistance requests and ensures both U.S. and Canadian industry partners are able to acquire industrial resources needed to meet defense/defence requirements in a timely and efficient manner.

Next Steps/Deliverables

To maintain and strengthen the bilateral defense/defence supply chain and the defense/defence industrial base, Canada and the United States will continue to work collaboratively and deepen their cooperation to ensure that they are aligned on their approaches to combating and preventing cyber security threats.

5. Information and Communication Technologies, including Semiconductors

State of Play. Challenges. Opportunities.

Semiconductors and advanced information and communication technologies (ICT) have become increasingly important across all industrial sectors, particularly given the significant growth in advanced fields such as artificial intelligence and quantum computing. As a result, global demand for semiconductors is currently outpacing supply, creating bottlenecks and potentially straining manufacturing and innovation capacity.

To ensure supply chain resilience, efforts are currently underway to bolster domestic research and development, and fabrication capacity in both countries, helping to reduce reliance on the



Asia-Pacific for production and assembly, and to help foster greater diversity in suppliers and vendors.

To this end, the United States and Canada have recently announced measures to help strengthen their domestic supply of semiconductors. In February 2022, the United States published a review of its ICT industrial base, with concrete recommendations to increase supply chain resilience and security for hardware, software, and services—as well as how funds under the CHIPS for America Act could be deployed, when an appropriation is forthcoming. In the same month, Canada signaled its commitment to strengthen its work with domestic researchers and businesses and has announced initial funding to support scaling up Canada’s semiconductor manufacturing capacity and advance its research and commercialization efforts.

Next Steps/Deliverables

Building on these developments and to ensure both countries maintain complementarity in these efforts, Canadian and U.S. officials in this area are engaging in ongoing dialogue.

In the coming months, the United States and Canada intend to continue to seek input, analysis, and targeted funding proposals from industry and stakeholders, and identify further opportunities for cooperation in ICT and semiconductor research and development, collaboration, and production.

6. Solar

State of Play. Challenges. Opportunities.

The solar industries in Canada and the United States have the potential to be closely integrated and contribute greatly to shared climate objectives, including by expanding beyond their current focus on downstream segments of the supply chain, such as module production and installation. Both countries are working to identify solutions to enable closer collaboration on solar supply chains that support a green energy transition.

Solar energy plays a very substantial role in both countries’ pledges to achieve decarbonized electricity grids. Preventing and mitigating the impact of solar supply chain disruptions through supply chain diversification is essential to solar energy’s cost competitiveness and role in the transition to a net-zero economy.

Credible allegations of inputs made with forced labor have surfaced in the solar supply chain, revealing the market concentration that China has achieved, particularly in the ingot and wafer stages of production. The United States and Canada should consider the need to diversify sources and work together to set standards around solar products, including strong labor and other human rights standards. Solar demand is forecast to grow rapidly in the coming decade and significantly further thereafter to achieve global net zero commitments, which will require large-scale expansion of existing manufacturing capacity.

Canada and the United States are working to encourage the development of nimble and resilient supply chains that increasingly bring upstream products and processes into North America.

Deliverables/Next Steps

Following the CUSMA/USMCA panel report and President Biden’s February 4, 2022, proclamation, both countries are working to arrive at a mutually agreeable solution to ensure



both Canada and the United States can work together to fully contribute to the North American clean energy transition, and encourage further upstream production processes in our countries.

Canada and the United States are looking into the sharing of information on enabling conditions for solar manufacturing development and coordinated outreach to third countries, enhanced coordination to improve solar supply chain traceability, including capabilities to better document environmental, social, and governance safeguards and standards, and evaluating existing supply chains for solar products, and ways to foster greater North American capacity at all stages in the short-, medium-, and long-term.

7. Transportation and Logistics

State of Play. Challenges. Opportunities.

Over the last year, Canada and the United States have faced similar issues in supply chains logistics, such as road and rail bottlenecks around borders and major ports. Significant weather events, worker shortages, security disruptions, work stoppages, and the impact of Russia's further invasion of Ukraine, have further highlighted the need for redundancy and forward planning.

To help address these issues for the United States, in June 2021, the White House announced the creation of the Supply Chain Disruptions Task Force, which has since launched a pilot to increase digital information flow between private companies operating logistics supply chains. Meanwhile, Canada has been in the process of establishing its own Supply Chains Task Force to consult with industry experts, businesses, and workers, and make recommendations regarding short- and long-term solutions to logistics supply chains problems.

Supporting this common determination to address supply chains logistics issues, Canada and the United States have a long-standing cooperative relationship in transport logistics through regular engagement and cooperation—from joint management of the Great Lakes St. Lawrence Seaway System to the deployment of Intelligent Transportation Systems, enabling commercial vehicle access to border delay information in real-time.

Next Steps/Deliverables

Transport Canada and the U.S. Department of Transportation are continuing to work together to identify common key data and metrics to assess the flexibility, travel time, and cost effectiveness of supply chain performance. A common approach to supply chain logistics data would support the development of common Canada-U.S. contingency plans for future logistics disruptions.

8. Regulatory Cooperation

State of Play. Challenges. Opportunities.

International regulatory cooperation can promote economic growth, competitiveness, innovation, and job growth while protecting high standards of public health, welfare, safety, and environmental protection. It can reduce unnecessary differences in regulatory frameworks.

Over the past decade, the U.S.-Canada Regulatory Cooperation Council (RCC) has worked to support the alignment of regulations and to reduce barriers to trade. Continuing work should help support greater policy alignment between Canada and the United States in key areas of potential joint action, such as medical devices, PPE, critical minerals, semiconductors, electric



vehicles and batteries, and solar energy, and strengthen supply chain resiliency between the two countries.

Next Steps/Deliverables

As part of this work, discussions on supply chain priorities that can be addressed through the RCC are planned between the President of Canada's Treasury Board and the Director of the U.S. Office of Management and Budget.

U.S.-Canada Regulatory Cooperation Council

- As supported by the President and Prime Minister in the Roadmap for a Renewed U.S.-Canada Partnership, international regulatory cooperation enhances economic competitiveness while maintaining the high standards of health, safety, and environmental protection.
- The Canada-U.S. Regulatory Cooperation Council (RCC) has supported Canadian and U.S. regulators in aligning regulations and breaking down barriers to trade for the last decade.
- Supporting regulatory and industrial policy alignment in Canada and the United States, specifically in sectors that have been identified as areas of opportunity for joint action, can increase supply chain resiliency in policy areas related to medical devices and personal protective equipment, critical minerals, semiconductors, electric vehicles and batteries, and solar energy.
- The RCC has worked with numerous Canadian and U.S. departments and agencies to develop successful regulatory cooperation work plans in the transportation, health, energy, and natural resources sectors.