

TO: THE FEDERAL GOVERNMENT'S DEPUTY MINISTER COMMITTEE ON ECONOMIC FRAMEWORKS AND INCLUSIVE GROWTH

Thank you to the Committee for the opportunity to appear before you in October and voice the major issues that we are hearing from our community. This brief will outline the major areas we would like to bring to the Committee's attention: supply chain infrastructure, domestic manufacturing capability, digitization of the supply chain, and our supply chain workforce. In our opening remarks, we highlighted three observations that we believe are important for the Committee to appreciate and which we would like to reiterate in this brief.

First, supply chain is comprised of many discrete participants and functions, all of which contribute to source, make, transport, and deliver our goods and services. In the aggregate, we refer to this overall process as 'end-to-end supply chain' and it is our focus as an association. As you can imagine, each of these discrete functions has its own set of issues and concerns. In fact, there are multiple advocacy organizations across these functional areas. Unfortunately, these discrete functions tend to sub-optimize the overall process by focusing only on the efficiency and effectiveness of their own piece of the chain. If we step back to a 30,000 foot view, which we call 'end-to-end supply chain', we generally see a disjointed and inefficient process. Because of this, supply chains will generally be more expensive and less reliable as they become more geographically diverse, more complex, and more complicated. The best supply chains have a single purview over the widest breadth of that end-to-end set of functions. For example, the food production business is connected to numerous ecosystems internally and to those of their suppliers, business partners, and customers; in the event of a failure (for example, a cyber attack or labour issue) in any one of these interlinked ecosystems, the effect can be catastrophic for any food business. To anticipate future shocks, it is important to understand the interconnected nature of supply chain.

We encourage the committee to make future recommendations on the modernization of Canada's supply chains with this broad, end-to-end, and interconnected "systems" view.

Second, today's supply chains are global and interlinked and vulnerable to a range of risks, with less margin of error for absorbing delays and disruptions. Many are too linear and transactional and challenged with a long latency. Intelligent supply chains compete with these less sophisticated ones in the ecosystem and must make compromises, leading to both fragmented processes and coverage of risks. Supply is primarily determined by historical sales order data and not by actual consumption and market data. During this crisis, latency has caused the dichotomy of shortages in some products and excess in others. This dichotomy has been particularly acute in the food supply chain during the pandemic, with simultaneous shortages and waste: these ripples through the food industry and grocery retailers nationwide resulted in consumer concerns about food security and increasing prices. **Future agile and resilient supply chains must ensure all links in the chain respond cohesively to demand changes and reduce latency times. This will require more visibility throughout the entire value chain.** Visibility will require more data and analytics while simultaneously prioritizing information security. All of which will require a digitization strategy of the end-to-end value chains of key industries, such as agriculture. We believe that there is a role for the Federal Government to both lead in this area and to support industry in the transition to digitization.

Third, Canada's international supply chain is largely linked through ocean transport, which means that containerized flow is critical. Over 90% of Canadian containerized flow moves through our major gateways (Port Metro Vancouver, Port of Prince Rupert and the Port of Montreal). Our future supply chain success and modernization will be contingent on, and need to reflect, the centrality of containerized flow both within and outside of the country.

With these points in mind, we can now turn to the major issues that we are hearing from our community.

INFRASTRUCTURE: THE SUPPLY CHAIN ENABLER

Perhaps the most prevalent concern is with key supply chain infrastructure: the capacity of our gateways and ports.

We believe there is a genuine need for a comprehensive multi-ministry federal review of the impact on business and the economy of our ports and gateways building on the work of Transport Canada's initiative "Transportation 2030: A Strategic Plan for the Future of Transportation in Canada". Over the past several years, we have seen our Canadian port, rail and overall land infrastructure exhausted due to very limited modernization. We have been additionally challenged by recent labour disruptions at our ports that tested flows dramatically across the country, and from which industry is still digging out. Improvements in port facilities and operations is critical to reduce dwell times so they do not become bottle necks in the supply chain. More automation and visibility are keys as there are significant data quality issues in the supply chain sector contributing to the inefficient use of our infrastructure and supply chain resources. Proper port infrastructure with dedicated rapid arteries is critical to an exporting country like ours. And not just maintaining our existing network and dealing with current capacity issues but having a national strategy around the flow of goods that enables ongoing investments in port capacity and automation that serves us for a number of years into the future.

We are told that Port Authorities in Canada continue to have limited ability to borrow money for modernisation to drive continuous and predictable service or for expanding their green strategy to become more environmental. A national fund could be instrumental in supporting capacity, efficiency and environmental improvement. We also recommend the fast-tracking of investments in port infrastructure in British Columbia, Quebec and Nova Scotia. Today we have only five major Canadian gateways for containerized flow (Vancouver, Prince Rupert, Montreal, Saint John NB, Halifax). In addition, the St. Lawrence traditionally closes between mid-to-late December and mid-to-late March due to ice. Investments in dredging and other means of allowing for a shorter closure period would improve competitiveness for Canadian business. As well, we would benefit from environmental assistance for companies looking to develop supply chain infrastructure (warehousing, stevedores, distribution centers) in and around ports but whose land requires decontamination. This is a major problem in cities like Montreal, Quebec and Halifax that have long histories of economic development in an era where environmental concerns were unknown.

Perhaps no where else is infrastructure more limited than in our Northern communities. For example, Nunavut is the only province or territory with no highway or railroad access. The territory has only one harbour out of the 1,010 harbours across the country, despite being home to about 40 per cent of Canada's shoreline. Many remote communities in the Arctic have gravel runways which limit the type of aircraft that can fly in with supplies. This alone creates bottlenecks and exposes limited transportation options. The other major issue is with deep water ports in the Arctic. As the northwest passage opens, there is a great opportunity to take advantage of more economical fuel supply and materials access with port infrastructure. Where ice roads are threatened by global warming, we need to be thinking about all weather road infrastructure. These gaps would seem to be a missed opportunity to further our collective arctic sovereignty claims through infrastructure development. To build resiliency for industry to keep the north viable, there needs to be infrastructure. To build infrastructure to attract investment, we need federal funding support.

Additional policy recommendations to modernize and strengthen our ports and gateways include:

- Reviewing and modernizing our Cabotage Rules;
- Reviewing the Canada Border Services Agency's ability to quickly mobilize alternative access points, if and when needed, due to gateway and port disruptions;
- Consider deeming Canadian Port Authorities and the Terminal Operations supporting our supply chains as essential services and;
- Consider supporting ports with readily available labour alternatives.

DOMESTIC MANUFACTURING CAPABILITY

Another key issue facing our supply chain community is the recognized need for more nearshoring, local sourcing, and domestic manufacturing.

But there are barriers to moving this forward, including the availability of options and the cost challenges of smaller scale. Currently the financial attractiveness for new manufacturing investment for companies is limited. Most critical to understand is that Canadian companies (in fact, this is a North American challenge) have a heavy dependence overseas (mainly China) for raw materials and packaging supplies, in particular glass, plastic and cardboard packaging. The ability to increase domestic manufacturing, particularly of Consumer Packaged Goods, is reliant on the ability to increase domestic production of raw materials and packaging. The secondary challenge is that the cost of distribution of CPG goods in Canada is more expensive than purchasing goods from overseas. Manufacturing production is heavily weighted in higher population density areas like Eastern Canada. To get goods to market in Western Canada is extremely expensive. The low population density and distribution of people in Western Canada creates headwinds for CPG manufacturing in Canada. However, if we create more consolidated distribution models where multiple products can be distributed, we can mitigate these costs. Other options are to create more manufacturing capability in Western regions and to consider an intensified labour strategy to make jobs in this sector attractive to young people.

As such, we strongly recommend that the government find ways to make the finances work better for business, with a particular emphasis on supporting the increase of domestic raw and packaging production and distribution in support of our CPG manufacturers. As part of our manufacturing capability, the government should also be looking to support the logistics sector with the transition to autonomous trucks, dedicated rapid lanes, and warehousing of the future (shared, small, close to consumers, and touchless).

There is much discussion now about the need to have larger inventories, particularly with respect to critical items.

While larger inventories are not a silver bullet, there is no doubt that inventory and stockpiles will need to be examined based on the challenges that we have seen during the crisis. This should include a future state framework for PPE/Critical Items supply chain including sourcing, procuring and pandemic stockpile management with a system for total visibility for all stakeholders, federal and provincial. We strongly encourage this to be overseen by a Chief Supply Chain Officer for Canada, leading the functions strategically, and building the digitization solutions and end-to-end trade-offs to ensure success. However, we also believe that more important than inventory and stockpile management is to have what we call 'strategic capacity' – defined as the ability to understand and anticipate what products we can make when needed in Canada, by which companies, and to turn on that corporate capacity quickly and effectively. This is an opportunity that we believe will strengthen and protect Canada and likely calls for a public-private partnership. We encourage the Federal Government to develop such a comprehensive Made-in-Canada PPE/Critical Items strategy together with industry. We know that Canadian manufacturing is ready and willing, but needs production incentives and federal and provincial procurement policies that encourage domestic manufacturing and incent the investments that will need to be made by Canadian companies.

Additional policy recommendations to modernize and strengthen our manufacturing supply chain include:

- Tax incentives to encourage the building of more storage, specifically frozen storage where current capacity is very challenged, and tax rates built on capacity percentage to incent developing larger facilities to provide emergency capacity;
- Pragmatic energy source solutions for supply chain facilities that are not a burden to obtain due to contradictory regulations;
- Payroll tax reductions related to the pay rate of essential supply chain workers such as warehouse and packers to help encourage and offset increased wages that support a more stable and less transient supply chain work force;
- Harmonization between FDA and CFIA to accelerate the flow of goods by eliminating the inefficient need to inspect on both sides of the border;
- Ensure that transport drivers always have access to washrooms, food, and proper rest areas in times of crisis, which could also include a fund or tax incentives to upgrade warehouse and distribution facilities to segregate drivers from other employees while allowing them adequate facilities while waiting and;
- In future manufacturing investments, the government might consider requiring companies to define their plans to retool their operations to the most efficient product to be made in the event of a pandemic, war, natural disaster, or other catastrophe.

DIGITIZATION OF THE SUPPLY CHAIN

We believe that Canadian supply chains and companies are lagging when it comes to the adoption of supply chain technologies such as artificial intelligence and machine learning, advanced analytics, blockchain, robotics and autonomous vehicles. Bringing all parties in the chain to a level playing field is key.

For many companies there has been an awareness of the need for technology, but many have not yet built it into their business planning and processes. Many are operating with a significant lack of technology. Due to the pandemic there is now a recognition that these areas are vital; many companies, however, particularly our SMEs, are finding themselves behind the proverbial 'eight ball', struggling to catch-up. These smaller players should have an easier access to technology at low cost. We do want to commend the government, however, for its foresight as it relates to supply chain and technology. Supply Chain Canada was pleased to be a founding partner of Scale AI, one of Canada's innovation superclusters launched with funding from ISED. Scale AI's mission is to boost productivity across industries in Canada by integrating AI with supply chains and by building a knowledge-sharing framework to advance technological research. ISED has contributed \$230M to its work. It is an industry-led consortium and a model of how the government can invest in industry-led projects. In fact, we would encourage a discussion with the consortium about how its mandate might be enhanced to incorporate as wide an influence on supply chain technology adoption as possible. We would also encourage the government to consider tax rebates for corporations to support technological automation in areas that specifically improve employee distancing, which is a challenge in many production industries, yet critical for future pandemic-proofing.

SUPPLY CHAIN WORKFORCE

In the longer term, it is clear that supply chains will need to change. How we train supply chain professionals will also need to change.

Investing in reskilling our supply chain workforce will increase our ability to manage agile and resilient supply chains. We must also support the introduction and acceleration of the education system for jobs in the supply chain industry: an education that is not just about textbook thinking but rather about reimagining the possibilities. At the university level we have a steady stream of professionals coming out of advanced learning today, but we need more talent flowing from colleges and trade schools, even high schools, where an education work stream could introduce young people to the importance of supply chain to our economy, and to the thousands of career opportunities that exist in logistics, customs brokerage, distribution, and sea, air and land transportation. We have a critical, national need for skilled employees that could easily come right out of high schools, colleges, or CEGEPs in Quebec to fill the gap in the years ahead. If we don't grow the talent, we will have to import it, or else it simply won't be there and we will have missed the opportunity.

Finally, while this is not the focus of this committee, we would be remiss if we did not flag the immediate concern within our community about the challenges that the country will face with respect to the distribution of a COVID vaccine.

The supply chain capacity for products like this is limited, it's a sensitive product, must travel under controls, in sanitary conditions. The only units that can handle this are air containers or medical purpose trailers with electronic real time temperature tracking. The same goes for storage and warehousing of the vaccine. Distribution to remote locations in Canada with smaller populations will need additional thought and oversight. We recommend that the government setup a 'war room'-type approach to monitor this critical supply chain, staffed by experienced operators who know transport operations. In the distribution of the vaccine, we recommend that the government engage the Canadian Armed Forces, leveraging their tested logistics capability, coupled with industry experts who understand the realities on the ground. In addition, in its prioritization of population groups, we would encourage the government to include supply chain workers essential in sustaining the ongoing COVID-19 response: transportation workers, food system workers, warehouse and delivery workers, and other workers carrying out critical, frontline interventions in the community. We are here to help and would respectfully ask the committee to share our thoughts with its appropriate colleagues.

In closing, we would like to propose and encourage the committee to consider the establishment of a Supply Chain Modernization Task Force. Such a group should reflect earlier comments about the necessity of having an end-to-end view of supply chain. It should involve practitioners and academics. It should involve manufacturing, retail and other industry sectors together. It should bring together our various transportation modalities along with port authorities and bring together various levels of government. Supply Chain Canada has put together a similar task force to address issues arising from the pandemic. We would like to play a role if such a body is convened and we would be more than pleased to work with the government to suggest some of the most knowledgeable individuals from across Canada.

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