



Eastern Ontario Manufacturing Resilience & Trade Diversification Pilot Report

Ontario East Economic Development Commission (Ontario East)

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Final Report

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1. Executive Summary

Background

The Ontario East Economic Development Commission (Ontario East) is a member based regional marketing agency established in 1988 and incorporated as a non-profit corporation in 2002, with a mandate to develop, implement and administer programs to attract new investment and jobs to its diverse group of communities in eastern Ontario located east of the Greater Toronto Area to the Quebec border, north to Algonquin Park. Ontario East also offers professional development and networking opportunities delivering a variety of programs to promote and enhance the region’s competitiveness.

Ontario East supports a strong manufacturing sector, from large multi-nationals to locally owned businesses, the supply chain for the manufacturing sector is strong and reliable. Goods and service exports are \$65 billion annually with over 40% derived from manufacturing, with 10% of the workforce employed in the sector. A priority for Ontario East is new investment attraction, working with provincial and federal partners (i.e. Invest Ontario and Invest in Canada) and it needs to adapt marketing and investment attraction programs to reflect new international trade realities to continue to add value to Ontario East communities and round out the manufacturing supply chain.

Key Findings

- **Critical U.S. dependence.** Three-quarters (75.9 %) of Canada's total goods exports¹—and over 80% of manufactured exports²—still go to the United States; in automotive, steel and aluminum, the U.S. share exceeds 90%⁴.
- **Tariff volatility already hurts.** Canada's value of exports to the U.S. fell to C\$43.93 billion in May 2025 from C\$51.61 billion a year earlier, a decrease of 15% (or C\$7.7 billion⁵).
- **Single-node chokepoints amplify shocks.** Blockading the Ambassador cost about \$360 million a day⁶ in two-way cargoes — 25% of the value of all U.S.-Canada goods trade.
- **SMEs and Indigenous producers are first to suffer impacts.** Smaller and Indigenous-owned firms often lack capital or compliance staff to reroute supply chains, leaving them acutely exposed when tariffs or delays hit.
- **Diversification works.** Australia, South Korea and Japan cushioned severe trade shocks by rapidly diversifying markets, suppliers or production bases—and kept industry output intact or even gained competitiveness.
- **Domestic capacity pays resilience dividends.** Case studies show firms that dual-source components, near-shore production or invest in local innovation report zero production stoppages and faster fulfilment during global disruptions.

Canada's export engine is dangerously single-threaded: 75.9% of all goods—and more than 80% of manufactured output²—still flow to the United States, with automotive and metals exceeding 90% dependence³. The exposure is greatest for federal policymakers charting trade strategy, supply-chain executives safeguarding production lines, and cash-constrained SMEs and Indigenous firms that lack the buffers of multinationals. A single tariff spike or bridge blockade has already erased C\$7.7 billion in sales and can drain \$360 million a day from cross-border commerce; without diversification and resilience measures, one disruptive headline can stall factories, cut jobs, and dent GDP overnight.

Pilot Urgency & Value

Given Canada's extreme concentration on the U.S. market and the proven speed with which tariffs or blockades can erase billions in revenue, a diversification and supply-chain-resilience pilot is not optional—it is insurance. Rapid, evidence-based action now can shield core manufacturing jobs, prevent future GDP shocks and give SMEs and Indigenous businesses the tools to thrive in a volatile trade landscape.

Top Recommendations (action → expected impact)

1. **Launch an Eastern Ontario market-diversification accelerator for U.S.-exposed SMEs** → Generate tens of millions in new non-U.S. export sales, reduce average U.S. share, and de-risk thousands of jobs.
2. **Embed dual-sourcing and near-shoring “resilience streams” in existing programs (FedDev, NRC-IRAP)** → Cut single-supplier dependencies and lower the risk of production line shutdowns from cross-border shocks.
3. **Create an EO micro-loan consortium for SMEs** → Provide fast \$10k–\$25k loans to bridge tariff deposits, wage float, or emergency tooling, preventing defaults and payroll misses.
4. **Establish a rapid-response logistics voucher program** → Offset sudden shipping and compliance cost spikes, keeping vulnerable SMEs alive and preventing millions in cancelled export orders.
5. **Advocate for “Go Global” diversification grants (Australia-style)** → Support hundreds of firms in entering new markets, reducing average U.S. export share by 8–10 percentage points.
6. **Elevate the role of local Economic Development Offices (EDOs)** → Improve awareness of support services, strengthen local–regional linkages, and increase uptake of federal and provincial programs.

Footnotes:

¹ Statistics Canada, *Trade in Goods by Exporter Characteristics, 2024*, May 16, 2025, https://www150.statcan.gc.ca/n1/daily-quotidien/250516/dq250516b-eng.pdf?utm_source= .

² Statistics Canada, *Monthly Survey of Manufacturing, December 2024*, February 14, 2025, https://www150.statcan.gc.ca/n1/daily-quotidien/250214/dq250214a-eng.htm?utm_source= .

³ Statistics Canada, *Focus on Canada and the United States: Trade (2025)*, https://www.statcan.gc.ca/en/topics-start/canada-united-states/trade?utm_source= .

⁴ “Canada Could Slap More Duties on US Steel and Aluminum, Says Carney,” *Reuters*, June 19, 2025, https://www.reuters.com/world/americas/canada-address-unfair-trade-steel-aluminum-sectors-says-carney-2025-06-19/?utm_source= .

⁵ “Canadian Companies Diversify Trade Amid US Tariffs,” *IndexBox*, 2025, https://www.indexbox.io/blog/canadian-companies-diversify-trade-amid-us-tariffs/?utm_source= .

⁶ “Truckers in Perfect Spot to Threaten Cross-Border Trade,” *Reuters*, February 11, 2022, <https://www.reuters.com/world/americas/truckers-ambassador-bridge-perfect-spot-threaten-us-canada-trade-2022-02-11> .

2. Methodology

1. Secondary Research

Terms:

- Global manufacturing independence case studies
- Canada–U.S. trade-reliance pain points
- Ecosystem and funding landscape
- Best practices for supply-chain resilience
- AI's impact on manufacturing independence

2. Survey Design & Deployment

- Instrument: In-depth online survey (EDOs, manufacturing organizations)
- Number & Roles: Interviews with CEOs, plant managers, manufacturing leaders

3. Canada–U.S. Manufacturing Supply Chain (2020–2025)

Key Pain Points

1. Single-Source Dependencies

Canada remains deeply reliant on the U.S. for manufacturing trade: in 2024, 75.9% of all exports and over 80%⁷ of manufacturing exports⁸ went to the U.S. In 2024, 94.1% of motor vehicles⁹, 91% of steel¹⁰, and 94% of aluminum exports¹¹ are U.S.-bound.

Critical U.S. imports include industrial machinery, electronics, and chemical inputs — over 69.5% of Canada's chemical imports come from the U.S.¹² This over-concentration increases risk exposure to unilateral policy changes or border disruptions.

2. Tariff Exposure & Policy Volatility

President Trump raised the tariff on steel and aluminum imports from 25% to 50%, on June 4, 2025¹³, echoing 2018–2019 disruptions. Between May 2024 and May 2025, Canada's total exports to the U.S. dropped by C\$7.7B¹⁴, primarily due to declines in auto, metal, and machinery sectors. "Buy America" clauses in U.S. infrastructure legislation continue to exclude Canadian suppliers from major procurement opportunities¹⁵.

3. Logistics Chokepoints & Disruptions

The February 2022 blockade of the Ambassador Bridge froze roughly US\$360 million (≈ C\$460 million) in two-way goods trade every day—about 25% of all Canada-U.S. road freight¹⁶.

Because the figure measures traffic in both directions, the hit was shared by the two economies; roughly half (≈ US\$180 million) would normally be Canadian exports¹⁶ headed south, with the

balance of U.S. goods bound for Canada. The Ambassador Bridge handles 26% of Canada’s exports and 33% of imports by road¹⁷, and delays risk disrupting auto production¹⁸.

Additional disruptions since 2020 include:

- 2022 CP Rail strike delaying shipments of chemicals and machinery¹⁹
- COVID-era port congestion causing lead-time volatility for inputs²⁰
- Border inspections and delays driven by political protest activity²¹

Canada’s just-in-time systems, especially in auto and agri-manufacturing, are uniquely vulnerable²² to even short delays. This is compounded by logistical glitches and a system built around just-in-time manufacturing²³ that leaves little buffer when key inputs are delayed.

Trade Data Snapshot (Top 5 Sub-Sectors, 2021–2024)

Sector	Exports to U.S. (2024)	Key Risks
Motor Vehicles & Parts	C\$75.6M ²⁴	Highly integrated cross-border production; subject to U.S. auto policy shifts
Industrial Machinery & Equipment	C\$32.0M ²⁴	Heavy U.S. reliance for parts, tooling, and capital machinery
Chemicals & Plastics	C\$35–45M ²⁴	Price swings and U.S. regulation (EPA, FDA) impact Canadian supply chain
Electronics & Electrical	C\$18.8M(mostly imports) ²⁴	Dependent on U.S. semiconductors and hardware; limited Canadian manufacturing
Metals (Steel/Aluminum)	C\$52.2M ²⁴	91–94% export share to U.S.; major tariff target

Implications for Resilience Planning

- Canada’s manufacturing sector is exposed to multiple overlapping risks: overconcentration in U.S. markets, sensitivity to policy shifts, and fragile logistics infrastructure.
- Trade diversification, multi-sourcing, and domestic capacity-building (especially in strategic inputs like semiconductors, batteries, and critical minerals) will be essential.
- As OEMs and Tier 1 suppliers begin shifting procurement strategies post-COVID, Canadian firms must adapt to U.S. policy signals, while also lobbying for bilateral exemptions and investing in redundant transport corridors.

Footnotes:

⁷ Statistics Canada, *Trade in Goods by Exporter Characteristics, 2024*, May 16, 2025, https://www150.statcan.gc.ca/n1/daily-quotidien/250516/dq250516b-eng.htm?utm_source=.

⁸ Statistics Canada, *Monthly Survey of Manufacturing, December 2024*, February 14, 2025, https://www150.statcan.gc.ca/n1/daily-quotidien/250214/dq250214a-eng.htm?utm_source=.

⁹ Statistics Canada, *Focus on Canada and the United States: Trade, 2025*, https://www.statcan.gc.ca/en/topics-start/canada-united-states/trade?utm_source=.

¹⁰ Export Development Canada, *U.S. Steel and Aluminum Tariffs: Navigating a Volatile Situation, 2025*, <https://www.edc.ca/en/blog/us-steel-and-aluminum-tariffs.html>.

¹¹ Ibid.

¹² Statistics Canada, *Canadian Imports in Millions of Current Dollars, Annual 2024*, April 3, 2025, <https://www150.statcan.gc.ca/n1/daily-quotidien/250403/g-a002-eng.htm>.

¹³ The White House, *Fact Sheet: President Donald J. Trump Increases Section 232 Tariffs on Steel and Aluminum, 2025*, https://www.whitehouse.gov/fact-sheets/2025/06/fact-sheet-president-donald-j-trump-increases-section-232-tariffs-on-steel-and-aluminum/?utm_source=.

¹⁴ Reuters, “Canadian Companies Diversify Trade During US Tariff War but Experts See Limits,” July 9, 2025, <https://www.reuters.com/world/americas/canadian-companies-diversify-trade-during-us-tariff-war-experts-see-limits-2025-07-09/>.

¹⁵ Government of Canada, *The Buy American Act and Buy America Requirements, 2024*, https://www.tradecommissioner.gc.ca/en/market-industry-info/search-country-region/country/canada-united-states-export/u-s-government-procurement/buy-america-requirements.html?utm_source=.

¹⁶ Reuters, “Truckers in Perfect Spot to Threaten Cross-Border Trade,” February 11, 2022, <https://www.reuters.com/world/americas/truckers-ambassador-bridge-perfect-spot-threaten-us-canada-trade-2022-02-11>.

¹⁷ Transport Canada, *Economic Impact of the Blockades, 2022*, https://tc.canada.ca/en/binder/16-economic-impact-blockades?utm_source=.

¹⁸ FreightWaves, “Ambassador Bridge Blockade Enters 4th Day; Protesters Block New Border Crossing,” February 2022, https://www.freightwaves.com/news/ambassador-bridge-blockade-enters-4th-day-protesters-block-new-border-crossing?utm_source=.

¹⁹ Reuters, “Canadian Pacific Railway’s Potential Lockout Would Leave Shippers Few Options,” March 17, 2022, https://www.reuters.com/business/autos-transportation/canadian-pacific-railways-potential-lockout-would-leave-shippers-few-options-2022-03-17/?utm_source=.

²⁰ United States International Trade Commission, *The Impact of the COVID-19 Pandemic on Freight Transportation and Global Supply Chains*, 2020, https://www.usitc.gov/research_and_analysis/tradeshifts/2020/special_topic.html?utm_source=.

²¹ Axios, “Vaccine Mandate Protesters Block Main Border Crossing in Manitoba,” February 10, 2022, https://www.axios.com/2022/02/10/vaccine-mandate-protesters-canada-manitoba?utm_source=

²² National Supply Chain Task Force, *Final Report of the National Supply Chain Task Force*, 2022, https://tc.canada.ca/sites/default/files/2022-10/supply-chain-task-force-report_2022.pdf?utm_source=.

²³ Petersen et al., “COVID-19 and the Agri-Food System in the United States and Canada,” 2020, National Library of Medicine, <http://pmc.ncbi.nlm.nih.gov>.

²⁴ Statistics Canada, *Canadian Domestic Exports in Millions of Current Dollars, Annual 2024*, 2025, <https://www150.statcan.gc.ca/n1/daily-quotidien/250403/g-a001-eng.htm>.

4. Case Studies

Comparative Playbook: Overcoming Trade Tariff Challenges – Lessons for Canada

Case Study 1: Australia vs. China Trade Barriers

Problem

Australia faced a sudden trade crisis in 2020 when its largest trading partner, China, imposed punitive tariffs and import bans on key Australian exports. In retaliation for political disagreements, China placed tariffs as high as 218% on Australian wine and around 80.5% on barley, and imposed unofficial bans on goods like coal, beef, and lobster.²⁵

These measures collapsed Australia’s exports of targeted goods to China – for example, wine exports to China plummeted from A\$1.24 billion in 2019 to under A\$1 million by 2022.²⁶

China had accounted for *one-third* of Australia’s export market before the dispute, so the tariffs threatened significant job losses and economic pain across Australian farming, mining, and beverage industries.²⁷

Solution

Australia's playbook to solve this crisis centered on diversification, diplomacy, and domestic resilience. Rather than capitulate to China's demands, the Australian government pursued legal and diplomatic channels while helping exporters find alternative markets.

Key steps included:

- **Legal Action & Diplomacy:** Australia brought cases to the WTO challenging China's tariffs (e.g. on barley), signaling it would fight unfair measures.²⁸ Simultaneously, a change in Australian leadership in 2022 opened dialogue; high-level meetings helped thaw relations. In 2023, Australia reached a deal: it suspended its WTO case in exchange for China expediting a tariff review, leading to the lifting of barley and wine duties.²⁹
- **Market Diversification:** With Chinese markets cut off, Australian industries aggressively sought new buyers in other countries. Government and industry groups provided export promotion support (about A\$198 million in grants) to assist this diversification.³⁰ As a result, many sectors found alternative markets: for example, cotton exporters tripled sales to Vietnam (making Australia Vietnam's #2 cotton supplier by 2022), coal producers redirected shipments to Japan and Europe, and barley farmers sold to Middle Eastern feed markets.³¹

By 2024, China had rolled back most sanctions, but Australia emerged with a more resilient stance, having proven it could withstand economic coercion by pivoting to other partners. Australia learned to reduce overdependence on any single trade partner. The trade shock raised awareness of supply chain risks, prompting businesses and governments to plan for self-reliance and risk spreading. The government encouraged exporters to maintain diverse portfolios even after Chinese tariffs were lifted.

Parallels to Canada

Australia's experience offers clear parallels for Canada's situation with U.S. tariffs: Canada is even more dependent on one market than Australia was, with about 75.9% of Canadian merchandise exports going to the U.S.³³ Thus, a U.S. tariff shock would hit Canada's economy hard, especially in integrated sectors like automotive and steel. Like Australia, Canada has faced politically motivated tariffs – for example, U.S. tariffs on Canadian steel/aluminum in 2018 and ongoing duties on softwood lumber.³⁴ Australia's experience offers a clear template: redirect commodities to fresh buyers and reroute them through alternative ports. Canada can follow suit by exploiting trade pacts such as the Canada-European Union Comprehensive Economic and Trade Agreement (CETA) and Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) to open new markets—and the shipping lanes that serve them—thereby reducing its overreliance on any single partner. But geography complicates the matter: Canada's overland trade routes dominate due to the proximity of the U.S., with about 55% of Canadian

exports to the U.S. transported by truck in 2020.³⁴ Shifting reliance from road to ocean transport will require major investment in port access, shipping infrastructure, and maritime logistics.

Although Australia already had a strong ocean transport system, they further bolstered its port infrastructure to reach markets like India, Vietnam, and the EU once Chinese routes were cut off. Canada's National Shipbuilding Strategy could become a key tool in strengthening long-term maritime trade capacity, especially if paired with better protection and logistics coordination.³⁶

Canada has a track record of using WTO and USMCA dispute mechanisms to challenge U.S. tariffs — similar to how Australia combined legal action with diplomacy to dismantle Chinese trade barriers.³⁷ Canada should apply this dual strategy — pushing legal cases while keeping communication channels open.

Alliances with U.S. companies hurt by tariffs

Automakers and aluminum buyers have voiced strong opposition to tariffs that raise their costs.

Engaging these U.S. stakeholders can help Canada build pressure from within the American system to unwind harmful tariffs.

U.S. Companies Hurt by Tariffs — Strategic Allies for Canada

1. General Motors (Automotive)

- Tariff drag. General Motors says the new Canada-U.S. tariff cross-fire wiped US\$1.1 billion from its Q2 2025 earnings and could cost US\$4-5 billion for the full year.³⁸
 - Canadian side: a 25% retaliatory surtax on U.S.-built passenger vehicles and light trucks that took effect 9 April 2025 (United States Surtax Order — Motor Vehicles 2025).
 - U.S. side: Washington's own duties on Canadian inputs—25% on imported autos and parts (from 3 April / 3 May 2025) and the June 4 doubling of Section 232 steel-and-aluminum tariffs to 50%.

2. RTX (Aerospace/Defense)

- RTX cut its 2025 profit forecast, citing \$500M in tariff-related losses.³⁹

3. Alcoa (Aluminum)

- Alcoa absorbed \$115M in tariff costs last quarter; 70% of its Canadian production is sold to the U.S.⁴⁰

4. Ford (Auto Manufacturing)

- Tariffs inflated vehicle costs by ~\$400 per unit, prompting Ford to stockpile aluminum.⁴¹

5. U.S. Food & Packaging Sector

- Steel and aluminum tariffs have doubled costs for packaging manufacturers.⁴²

6. U.S. Energy Services

- Oil & gas firms face ~15% cost increases on steel-based inputs from Canada.⁴³

Bolster Domestic Resilience

In anticipation of tariff-induced disruption, Canada has already launched a C\$5 billion Trade Impact Program through Export Development Canada to help exporters diversify markets and finance production shifts.⁴⁴ Provinces like Ontario have supplemented this with roughly C\$11 billion in targeted tariff-relief measures.⁴⁵ With 75.9% of Canada's exports still bound for the U.S. in 2024, the stakes for critical industries are high.⁴⁶ Real-world surveys back firms' pivot playbooks: up to 88% of businesses plan to reconfigure supply chains in 2025, and nearly half are diversifying geographically—exploring both domestic reshoring and North American nearshoring options.^{47 48} Against this backdrop, targeted incentives—such as low-interest loans, surtax relief on U.S. inputs, and rebate programs—make localization of production at home or in third countries a practical rather than lofty strategy.^{49 50 51}

Key Metrics (Contextualized with Canada)

- **Export Market Concentration**
 - During the dispute, China's share of Australian exports dropped from 33% to 27%, thanks to diversification efforts
 - By contrast, 75.9% of Canadian exports still go to the U.S.⁵² — over twice the level of concentration Australia had before its crisis. This shows Canada is more vulnerable to a single-market shock.
- **Recovery Through Diversification**
 - Australian cotton exports to Vietnam tripled between 2018 and 2022, turning Vietnam into its #2 market.⁵³ Even after China reopened, 36% of cotton still went to Vietnam — showing durable diversification.
 - Canada's agri-food sector, especially beef and wheat, could adopt similar diversification strategies. Currently, many of these sectors rely on U.S. processing or access for final sale.
- **Sector Resilience vs. Exposure**
 - Wine exports dropped by 30% between 2020–2022 and stayed down 99% to China

until tariffs ended.⁵⁴

- This underscores the importance of building alternative markets before a shock hits. Canadian forestry and softwood lumber, which face ongoing U.S. duties, risk similar outcomes without proactive diversification or domestic demand building.

- **GDP Impact**

- Australia saw modest GDP deceleration but avoided recession, in part due to strong alternative export demand and domestic stimulus.⁵⁵

- When Canada faced U.S. steel and aluminum tariffs in 2018, GDP losses were estimated at ~0.2%⁵⁶ but quick retaliatory measures and exemptions helped minimize long-term damage.

Footnotes:

²⁵ Reuters, *Explainer: How strained China-Australia relations hit trade in coal, barley, beef and wine* (2023), <https://www.reuters.com/markets/commodities/how-strained-china-australia-relations-hit-trade-coal-barley-beef-wine-2023-01-06/>

²⁶ University of New South Wales, *China has finally removed crushing tariffs on Australian wine* (2024), <https://www.unsw.edu.au/newsroom/news/2024/04/china-finally-removed-crushing-tariffs-Australian-wine>

²⁷ Al Jazeera, *China lifts ban on Australian beef exporters in the latest sign of thaw* (2024), <https://www.aljazeera.com/economy/2024/5/30/china-lifts-ban-on-australian-beef-exporters-in-the-latest-sign-of-thaw>

²⁸ DFAT, *Summary of Australia's involvement in disputes currently before the World Trade Organization* (2023), <https://www.dfat.gov.au/trade/organisations/wto/wto-disputes/summary-of-australias-involvement-in-disputes-currently-before-the-world-trade-organization>

²⁹ Reuters, *China lifts tariffs on Australian wine, ends three-year freeze in trade* (2024), <https://www.reuters.com/markets/commodities/china-lifts-tariffs-australian-wine-ends-three-year-freeze-trade-2024-04-02/>

³⁰ United States Studies Centre, *China's trade restrictions on Australian exports* (2024), <https://www.ussc.edu.au/chinas-trade-restrictions-on-australian-exports>

³¹ Ibid.

³² RUSI, *Australia's Answer to China's Coercive Challenge* (2021), <https://www.rusi.org/explore-our-research/publications/commentary/australias-answer-chinas-coercive-challenge>

³³ Statistics Canada, *Focus on Canada and the United States: Trade* (2025), <https://www.statcan.gc.ca/en/topics-start/canada-united-states/trade>

- ³⁴ Reuters, *Canada challenges U.S. softwood lumber duties under USMCA* (2022), <https://www.reuters.com/world/americas/canada-challenges-us-softwood-lumber-duties-under-usmca-trade-pact-2022-08-29/>
- ³⁵ Transport Canada, *Transportation in Canada: Statistical Addendum 2020* (2021), Table EC6, <http://tc.canada.ca>
- ³⁶ Statistics Canada, *Canadian international merchandise trade, December 2024* (2025), <https://www150.statcan.gc.ca/n1/daily-quotidien/250205/dq250205a-eng.htm>
- ³⁷ Reuters, *Canada initiates WTO dispute complaint on U.S. steel and aluminium duties* (2025), <https://www.reuters.com/world/canada-initiates-wto-dispute-complaint-us-steel-aluminium-duties-2025-03-13/>
- ³⁸ Reuters, *Backseat driver throws GM into lower gear* (2025), <https://www.reuters.com/commentary/breakingviews/backseat-driver-throws-gm-into-lower-gear-2025-07-22/>
- ³⁹ Reuters, *RTX cuts 2025 profit forecast as tariff costs weigh* (2025), <https://www.reuters.com/business/aerospace-defense/rtx-cuts-2025-profit-forecast-tariff-costs-weigh-2025-07-22/>
- ⁴⁰ The Wall Street Journal, *Alcoa says U.S. Aluminum Buyers Not Paying Full Cost for Tariffs* (2025), <https://www.wsj.com/livecoverage/stock-market-today-dow-sp-500-nasdaq-07-17-2025/card/alcoa-says-u-s-aluminum-buyers-not-paying-full-cost-for-tariffs-DjkRZqM7KzxZyBL09Zgl>
- ⁴¹ The Wall Street Journal, *One of the Biggest Victims of Trump's Metals Tariffs: The Ford F-150* (2025), <https://www.wsj.com/business/autos/trump-metal-tariffs-auto-industry-c964a59a>
- ⁴² Packaging Dive, *Packaging manufacturers worried by 50% tariffs on steel, aluminum* (2025), <https://www.packagingdive.com/news/packaging-manufacturers-tariffs-steel-aluminum-doubled/749544/>
- ⁴³ Reuters, *Trump's tariffs on steel, aluminum to raise costs for US energy firms, experts say* (2025), <https://www.reuters.com/business/energy/trumps-tariffs-steel-aluminum-raise-costs-us-energy-firms-experts-say-2025-03-11/>
- ⁴⁴ Export Development Canada, *EDC ready to support Canadian exporters impacted by market uncertainty* (2025), <https://www.edc.ca/en/about-us/newsroom/edc-trade-impact-program.html>
- ⁴⁵ Reuters, *Ontario announces C\$11 billion tariff support* (2025), <https://www.reuters.com/markets/ontario-announces-c11-billion-tariff-support-2025-04-07/>
- ⁴⁶ Statistics Canada, *Focus on Canada and the United States: Trade* (2025), <https://www.statcan.gc.ca/en/topics-start/canada-united-states/trade>
- ⁴⁷ Economist Impact, *Trade in Transition 2025 Global Report* (2025), https://impact.economist.com/projects/trade-in-transition/pdfs/Trade_in_Transition_Global_Report_2025.pdf

⁴⁸ Ibid.

⁴⁹ Reuters, *Canada to spend \$6.5 bn to help businesses mitigate impact of US tariffs (2025)*, <https://www.reuters.com/markets/canada-launches-c5-billion-program-help-exporters-reach-new-markets-2025-03-07/>

⁵⁰ Canada Border Services Agency, *Customs Notice 25-19 “United States Surtax Remission Order (2025)”*, <https://www.cbsa-asfc.gc.ca/publications/cn-ad/cn25-19-eng.html>

⁵¹ Reuters, *Ontario announces C\$11 billion tariff support (2025)*, <https://www.reuters.com/markets/ontario-announces-c11-billion-tariff-support-2025-04-07/>

⁵² Statistics Canada. “Focus on Canada and the United States: Trade.” 2025. <https://www.statcan.gc.ca/en/topics-start/canada-united-states/trade>

⁵³ United States Studies Centre. “China’s Trade Restrictions on Australian Exports.” 2024. <https://www.ussc.edu.au/chinas-trade-restrictions-on-australian-exports>

⁵⁴ University of New South Wales. “China Has Finally Removed Crushing Tariffs on Australian Wine.” 2024. <https://www.unsw.edu.au/newsroom/news/2024/04/china-finally-removed-crushing-tariffs-Australian-wine>

⁵⁵ Reuters. “Australia Says It Reached Agreement with China on Barley Dispute.” April 11, 2023. <https://www.reuters.com/world/asia-pacific/australia-says-reached-agreement-with-china-resolution-dispute-over-barley-2023-04-11/>

⁵⁶ RBC Economics. “A Playbook for How to Measure a Tariff Shock in Canada.” 2024. <https://www.rbc.com/en/thought-leadership/economics/featured-insights/a-playbook-for-how-to-measure-a-tariff-shock-in-canada/>

Case Study 2: South Korea vs. Japan Export Restrictions

Problem

In mid-2019, South Korea was hit by abrupt export restrictions from Japan on critical high-tech materials. Japan, amid a political dispute, tightened controls on three inputs vital to South Korea’s semiconductor and display manufacturing (photoresists, fluorinated polyimide, and hydrogen fluoride). Given that South Korea’s electronics industry is a global leader, the curbs threatened to hobble its manufacturing supply chain. South Korea had long been heavily reliant on Japanese suppliers for these specialty materials — in fact, 93% of South Korea’s trade deficit with Japan was due to imports of Japanese parts and equipment in 2018.⁵⁷ The fear was that production of chips and smartphones could grind to a halt, dealing a huge blow to South Korea’s economy and global tech supply chains.

Solution

South Korea's response was swift and strategic. It centered on supply chain self-sufficiency and supplier diversification. Rather than retaliate with tariffs, South Korea focused on neutralizing Japan's leverage:

- **Rapid Supply Diversification:** Korean firms and government agencies sprang into action to find alternative sources for the restricted materials. They secured new overseas suppliers — for example, Korean companies began importing photoresists from Belgium and high-purity hydrogen fluoride from producers in the U.S. and China.⁵⁸ By broadening its supplier base beyond Japan, South Korea kept its factories running without major disruption.
- **Domestic Innovation and Production:** Simultaneously, South Korea launched a national initiative to develop domestic production of key materials and components. The government provided R&D support and funding to accelerate local manufacturing of the restricted inputs. Within a year, this effort paid off: Korean manufacturers successfully produced home-grown alternatives, significantly reducing dependence on Japanese imports. Notably, South Korea slashed imports of Japanese hydrogen fluoride to just one-quarter of pre-restriction levels by mid-2020.⁵⁹
- **Industry Resilience:** Thanks to these measures, South Korea's semiconductor output continued largely unimpeded, defying initial fears. One year after the export curbs, South Korean firms had suffered “no major damage” and worst-case production shutdowns never materialized.⁶⁰ In fact, a majority of Korean companies reported their competitiveness had improved, as the crisis had forced them to optimize supply chains. Japan's strategy backfired: Japanese chemical suppliers lost a major client in South Korea, while Korean firms emerged more resilient and less reliant on Japan.

Parallels to Canada

South Korea's playbook offers valuable parallels for Canada as it grapples with U.S. tariff threats and cross-border supply chain vulnerabilities. The core lesson is reducing over-reliance on a single foreign supplier or market by building alternative options:

- **Diversify Critical Suppliers:** Just as South Korean tech firms diversified away from Japanese parts, Canadian manufacturers can seek non-U.S. sources for essential materials or components that currently flow mostly from the U.S. If U.S. trade policies raise costs (tariffs) or restrict exports (as happened with medical PPE during COVID-19), having European or Asian suppliers in the network provides an insurance policy.⁶⁸ For example, Canadian auto parts makers might import certain inputs from overseas instead of solely from U.S. producers if tariffs make U.S. parts too expensive.
- **Increase Domestic Production Capacity:** Canada can mirror South Korea's push for domestic innovation in key areas. If cross-border frictions threaten a supply of crucial goods (energy, minerals, machinery, etc.), Canada could invest in local industries to produce more of these domestically. We saw a glimpse of this during the pandemic when the U.S. temporarily blocked N95 mask exports and Canada ramped up its own mask production.⁶⁹ In a tariff scenario, government support (tax incentives, subsidies) could help Canadian firms set up domestic production lines for products that were

previously cheaper to import from the U.S.⁷⁰ This builds self-reliance and protects Canadian manufacturing jobs.

Canada can mirror South Korea's push for domestic innovation by identifying sectors where reshoring or repurposing production is most feasible. Several Canadian manufacturing sub-sectors already have the infrastructure or policy support in place:

- **Electric Vehicles (EVs) & Clean Tech:** Support exists through the Clean Technology Manufacturing Investment Tax Credit, which offers a 30% refundable credit on eligible equipment until 2034.⁷¹
- **Aerospace & Advanced Manufacturing:** The Strategic Innovation Fund (SIF) supports high-tech manufacturing projects in aerospace and precision industries, enabling flexible capacity shifts.⁷⁰
- **Food Processing & Packaging:** Canada's food processing sector contributed \$173 billion in production in 2024 and supports over 318,000 jobs — making it a strong candidate for local adaptation.
- **Medical & Biomanufacturing:** Canada has significantly expanded domestic biomanufacturing capacity. In March 2025, the government announced a \$49.9 million investment through the Strategic Innovation Fund to support two new biomanufacturing facilities for vaccines, therapeutics, and diagnostic reagents.⁷⁰

Enhance Supply Chain Agility: South Korea's experience underscores the importance of agility — the ability to pivot suppliers quickly and redesign supply chains. Canadian companies should develop “plan B” arrangements and maintain some inventory or capacity slack to weather border disruptions. If U.S. tariffs cause delays at the border or sudden cost spikes, an agile Canadian firm could reroute orders to alternative suppliers or even temporarily relocate production. This might involve using bonded warehouses,⁷² adjusting logistics routes, or partnering with third-country manufacturers to bypass the bottleneck — analogous to how South Korea sourced inputs from Belgium or elsewhere on short notice.

Key Metrics

Supply Dependency Reduction

- South Korea cut its reliance on Japanese hydrogen fluoride from 50% to just 10% within a year.⁶¹
- Canada currently relies on the U.S. for over 70% of chemical and machinery imports.⁶² A similar reduction — even lowering reliance by 20–30% — would dramatically improve Canada's supply chain resilience.

Continuity of Production

- Despite the export curbs, South Korea maintained normal semiconductor production with no significant shutdowns.⁶³
- In Canada's auto and electronics sectors, a core resilience test is whether firms can maintain full production despite U.S. border delays or tariff shocks. Right now, most

plants follow just-in-time (JIT) inventory models, meaning parts arrive only as needed — with limited backup. As a result, even short disruptions can halt operations. In February 2022, Ford was forced to suspend engine production in Windsor, Ontario, after just a few days of parts shortages tied to the Ambassador Bridge blockade.

- One alternative is a just-in-case approach: firms hold larger inventories, build domestic buffer stocks, or use bonded warehouses to reduce dependency on cross-border flows. While costlier, these models reduce vulnerability to single-node shocks — and may become essential in a more volatile trade environment.⁶⁴

Trade and Innovation Gains

- South Korean firms reported improved competitiveness due to forced innovation and supply agility. Their exports continued growing, while Japan lost a key customer.⁶⁵
- Canadian SMEs, especially in aerospace or precision tools, could benefit from similar R&D funding if incentivized to replace U.S. components with domestic or diversified sourcing — turning short-term disruption into long-term capability.
- We highlight aerospace and precision tools because Canada already has globally competitive capacity in both. These sectors have underused potential and established clusters (e.g. in Quebec and Ontario) that could scale with the right incentives. There is strong global demand — especially for precision machining and aerospace components — and Canada’s industry is well-positioned to fill gaps if U.S. sourcing becomes unstable.
- Supporting stats:
 - “Canada ranks first in civil flight simulators, turboprop engines, and helicopter engines, and remains among the top five globally for turbofan engines, business jets, large jets, helicopters, and flight simulators.”⁶⁶
 - “In 2023, the Canadian aerospace manufacturing industry exported over \$19 billion and ranked #1 in R&D intensity across all Canadian manufacturing industries.”⁶⁷

Footnotes

⁶⁸ Government of Canada. *Canadian COVID-19 Supply Council: Securing domestic supply chains*. July 2021.

<https://www.canada.ca/en/public-services-procurement/services/covid19-supply-council.html>

⁶⁹ CBC News. *Canada to produce 40 million N95 masks a year after deal with 3M*. August 2020. <https://www.cbc.ca/news/politics/3m-mask-deal-domestic-production-1.5676331>

⁷⁰ Government of Canada. *Strategic Innovation Fund – Projects Funded*.

<https://ised-isde.canada.ca/site/strategic-innovation-fund/en/projects-funded>

⁷¹ Department of Finance Canada. *Clean Technology Manufacturing Investment Tax Credit*. March 2024.

<https://www.canada.ca/en/department-finance/news/2024/03/clean-technology-manufacturing-investment-tax-credit.html>

⁷² Canada Border Services Agency. *Bonded Warehouses Program*.

<https://www.cbsa-asfc.gc.ca/import/bond-ga-eng.html>

⁷³ Aerospace Industries Association of Canada & ISED. *2023 Report Highlights Canada’s Aerospace Leadership*.

<https://www.ccc.ca/en/announcements/2023-report-highlights-canadas-aerospace-leadership/>

⁷⁴ Innovation, Science and Economic Development Canada. *State of Canada's Aerospace Industry Report, 2023*.

<https://ised-isde.canada.ca/site/aerospace-defence/en/state-canadian-aerospace-industry>

Case Study 3: Japan vs. U.S. Automotive Tariffs (1980s)

Problem

In the early 1980s, Japan's automotive exports surged, reaching over 1.9 million vehicles annually to the U.S. — a major share in what was then the world's largest car market.⁶⁸ In response, the U.S. imposed a Voluntary Export Restraint (VER) agreement in 1981, limiting Japanese car exports to roughly 1.68 million units per year.⁶⁹ This cap was effectively a steep tariff, aimed at protecting U.S. automakers.

At the time, Japanese brands held over 20% of the U.S. car market.⁷⁰ For context, even in today's highly competitive market, a single foreign country holding that much share in a national auto market is rare — underscoring how disruptive the cap could have been.

Solution

Japan's automakers adapted with a strategy focused on maintaining access while deepening local roots:

- **U.S. Manufacturing Investment:** To bypass quotas, firms like Honda and Toyota rapidly built U.S. assembly plants. Honda's Ohio plant opened in 1982⁷⁴ — one of the earliest examples of “transplant” manufacturing. By 1990, Japanese firms had invested an estimated \$25 billion USD⁷⁴ and created over 26,600 direct U.S. auto assembly jobs.⁷²
- **Export Mix Shift:** With export volume capped, Japanese firms prioritized higher-value models (e.g. launching luxury lines like Lexus and Acura).⁷⁵⁻⁷⁶ Lower-margin models were built locally, preserving profits.⁷⁷ This “up-market” pivot mirrors how some Canadian firms today are specializing to offset tariff risks.
- **Long-Term Market Integration:** By 1990, over one-third of Japanese-branded vehicles sold in the U.S. were built in North America⁷⁸ — including Canada and Mexico — notably reducing reliance on imports. This shift showed a strong commitment to embedding production close to demand, even amid trade tension.

Parallels to Canada

Canada's manufacturing sectors — especially automotive — face similar risks today from rising U.S. protectionism. Like Japan, Canada relies on the U.S. for market access and faces cross-border cost pressures. Transplant manufacturing — either bringing foreign firms to Canada or establishing Canadian operations in third countries — remains a strategic option. It's

especially relevant if U.S. tariffs threaten integrated supply chains. This approach can preserve access to critical markets, create local jobs, and build resilience — as Japan did in the 1980s.

- Expand U.S.-based production selectively. Some Canadian firms (e.g., Magna) already operate across the border.⁷⁹ In a tariff-heavy scenario, expanding U.S. operations could preserve customer relationships and mitigate border frictions. But this should be a targeted move — not a blanket shift — to avoid hollowing out Canada’s own industrial base.
- Leverage joint ventures and co-production. Partnering with U.S. manufacturers could allow Canadian firms to qualify under “Buy American” provisions and reduce tariff exposure. This mirrors how Toyota partnered with GM in the 1980s to gain market access.⁸⁰ Co-production or final assembly in the U.S. — rather than full relocation — may be the smarter middle ground.
- Encourage foreign firms to onshore value-add in Canada. Canada could attract European and Asian manufacturers to site final assembly or high-value processing domestically. If structured to meet USMCA rules of origin, the resulting goods qualify as Canadian and move into the U.S. tariff-free — even amid rising duties or protectionism. This mirrors Japan’s 1980s strategy of localizing production to bypass U.S. barriers⁸⁰ and could position Canada as a tariff-resilient export hub.
- Explore low-cost production partnerships. Canadian firms could also establish small-scale manufacturing in Mexico, ASEAN, or CPTPP countries to diversify export channels and maintain tariff-free access. This is especially important if U.S. trade tensions escalate.
- Balance short-term costs with long-term resilience. Japan absorbed early price shocks to gain durable market footholds. Similarly, Canadian firms may face short-term disruption while adapting supply chains, shifting value-add work to Canada, or upgrading to compete globally — but the payoff is reduced exposure and stronger footing in volatile markets.

Key Metrics (Contextualized)

- **FDI Impact:** Japanese direct investment in the U.S. surged from approximately US \$8.7B in 1980 to US \$71.9B by 1988, with around 23% directed toward manufacturing.⁸² Roughly half of Japan’s overseas investment during this period went to the U.S.,⁸² underscoring how trade barriers can drive large-scale localization in industries like automotive. While Canadian firms have made more modest investments in U.S. auto manufacturing to date, this precedent suggests that foreign direct investment — if strategically targeted — can serve as a hedge against rising tariff risks, helping maintain market access while avoiding full offshoring of domestic capacity.
- **Cost vs. Benefit:** U.S. consumers paid an estimated US \$5.1B more for vehicles due to voluntary import restraints in the 1980s,⁸³ but gained roughly US \$25B in new manufacturing investment as Japanese firms established local plants.⁷¹ This 5-to-1 return highlights how coordinated localization efforts can ultimately benefit both trading partners.

Footnotes

- ⁶⁸ TIME, “How Japan Does It,” 1980, <https://time.com/archive/6856395/how-japan-does-it/>.
- ⁶⁹ Daniel Benjamin, “Voluntary Export Restraints on Automobiles,” PERC, 1999, <https://www.perc.org/1999/09/01/voluntary-export-restraints-on-automobiles/>.
- ⁷⁰ U.S. Department of Commerce, *The U.S. Motor Vehicle and Equipment Industry Since 1958*, 1985, <https://www.ebhsoc.org/journal/index.php/ebhs/article/download/127/108/255>.
- ⁷¹ Wells King and Dan Vaughn Jr., “The Import Quota that Remade the Auto Industry,” *American Compass*, 2022, <https://americancompass.org/the-import-quota-that-remade-the-auto-industry/>.
- ⁷² Ibid.
- ⁷³ Wikipedia, “Marysville Auto Plant,” 2024, https://en.wikipedia.org/wiki/Marysville_Auto_Plant.
- ⁷⁴ Ibid.
- ⁷⁵ Wikipedia, “Voluntary Export Restraint,” 2025, https://en.wikipedia.org/wiki/Voluntary_export_restraint.
- ⁷⁶ Wikipedia, “Amati Cars,” 2025, https://en.wikipedia.org/wiki/Amati_Cars.
- ⁷⁷ Ibid.
- ⁷⁸ JAMA, “Japanese Brand Automobile and Motorcycle Trends in Japan & the U.S.,” 2025, <https://www.jama.org/00-japan-industry-auto-data-trends/>.
- ⁷⁹ Reuters, “How one of the largest auto suppliers in the world is preparing for Trump’s tariffs,” 2025, <https://www.reuters.com/business/autos-transportation/how-one-largest-auto-suppliers-world-is-preparing-trumps-tariffs-2025-04-02/>.
- ⁸⁰ Wikipedia, “Toyota Motor North America,” 2025, https://en.wikipedia.org/wiki/Toyota_Motor_North_America.
- ⁸¹ Canadian Manufacturers & Exporters, “What ‘Buy American’ Really Means for Canada,” 2023, <https://cme-mec.ca/blog/policy-insight-what-buy-american-really-means-for-canada/>.
- ⁸² Wikipedia, “Japan–United States Relations,” accessed August 2025, https://en.wikipedia.org/wiki/Japan–United_States_relations.
- ⁸³ Wells King and Dan Vaughn Jr., “The Import Quota that Remade the Auto Industry,” *American Compass*, 2022, <https://americancompass.org/the-import-quota-that-remade-the-auto-industry/>.
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5. Canadian Examples:

Diversification Case Studies in Canada

Vulnerable Sectors and Urgent Risks

Canada’s economy faces significant concentration risks in certain sectors, making diversification increasingly urgent. A prime concern is overreliance on single markets – notably the United States. In 2024, about 76% of Canada’s goods exports went to the U.S. (CAD \$547 billion out of \$720 billion total)⁸⁴. Key industries like oil & gas and automotive manufacturing are especially

exposed: In 2025 roughly 74% of Canada’s oil and gas output and 54% of its transportation equipment exports go to the U.S. market⁸⁵. This heavy dependence leaves those sectors vulnerable to U.S. trade disruptions (e.g. tariffs or protectionist policies), as seen in recent years. Experts warn that reducing U.S. leverage over Canada’s economy will be critical, by diversifying both the countries we export to and the products we export. In other words, Canada has “most of our eggs in one basket” with the U.S., and recent shocks have opened eyes to the risks of that dependency. The need to find “more eggs and more baskets” – i.e. new markets and industries – has become apparent to preserve Canada’s economic sovereignty.

Beyond trade concentration, sectoral and technological shifts pose forward-looking risks. Manufacturing industries are notably vulnerable to global supply and demand shocks, since they rely on foreign suppliers for inputs and foreign buyers for sales⁸⁶. We saw this during the pandemic supply chain disruptions and could see it again with geopolitical tensions. Climate change and the low-carbon transition are another urgent challenge. Canada’s economy is acutely exposed to climate transition risks, given its large high-emissions sectors. For example, oil and gas extraction contributes over 5% of GDP and over 20% of the Toronto Stock Exchange’s value, supporting hundreds of thousands of jobs⁸⁷. However, *The IEA’s World Energy Outlook 2024* suggests global oil use could plateau “before 2030” under current policies, as efficiency gains and EV sales chip away at growth⁸⁸—but past “peak-oil” dates have slipped repeatedly, and other forecasters (OPEC, ExxonMobil) still model incremental demand rises into the 2030s. What matters sooner for Canada is refining dependence: roughly 4 million b/d of Canadian crude—about three-quarters of total output—ran through U.S. refineries in 2024. If U.S. policy or margins turn against heavier, higher-carbon barrels, oil-sands producers could be squeezed first. Emissions-intensive assets therefore face a stranded-asset risk (not a foregone conclusion), while manufacturers tied to internal-combustion supply chains face similar pressure as EV volumes expand.

These vulnerabilities highlight why diversification is urgent. Whether it’s expanding into new export markets, new product lines, or new energy sources, diversification can mitigate risk and enhance resilience. Studies find that diversified firms tend to perform better: in one survey, Canadian businesses that had diversified (into new markets, products, or customer bases) were twice as likely to see high revenue growth compared to undiversified businesses (16% vs 8% achieving >10% growth)⁸⁹. Diversification is not just about reducing downside risk – it also unlocks new opportunities for growth and innovation. Below, we examine a case study of a Canadian company that embraced diversification to address sector-specific risks and future-proof its business.

Case Study 1: Kruger Inc. – From Declining Paper to Specialty Packaging

One notable example of proactive diversification is Kruger Inc., a Quebec-based pulp and paper company. Kruger faced a long-term decline in traditional publication papers (newsprint, magazine paper) due to digital media disruption and falling demand. Rather than ride out the decline, in 2017 Kruger launched a major initiative to pivot its paper mills toward growing niche products. The company announced a \$377.6 million investment to diversify operations at its Brompton and Wayagamack mills into specialty paper niches, such as flexible food packaging

papers, labeling stock, and paper for digital inkjet printing⁹⁰. This strategy was undertaken in partnership with the Government of Québec, which provided loans and even took an equity stake to support the transition. The goal was to gradually reduce output of declining newsprint and magazine papers and tap into “new markets that are on the rise around the world.”

New Specialty Markets Kruger (and Canada) Is Already Gaining Ground

Flexible Food & Beverage Packaging

Market size: Canada’s foodservice packaging sector is growing at ~8.5% CAGR (2025–2030)⁹¹. Kruger’s existing containerboard mills (LaSalle, Brampton) are ideal for scaling flexible packaging—and Canadian food brands are booming.

Label Paper & Digital Printing Paper

Demand is rising for eco-friendly label substrates in pharmaceuticals and consumer goods. Kruger’s \$6.5M investment at Wayagamack enables innovative label-grade production⁹². CCL Industries, a Canadian global leader in specialty labels, further suggests strong local expertise.

100% Recycled Saturating Kraft Board

Kruger’s \$30M upgrade at Place Turcot aims to deliver North America’s first 100% recycled saturating kraft board⁹³—ideal for laminate and furniture markets.

Biomaterial-Fortified Packaging

Unique cellulose filament (CF) additive gives Kruger an edge in eco-performance packaging, differentiating them in markets focused on sustainability⁹⁴.

Pharmaceutical & High-Barrier Packaging

Canada’s pharmaceutical packaging market is projected to grow from US \$3.766M in 2024 to US \$6.473M by 2032 (CAGR 8%)⁹⁵ —Kruger’s flexible packaging infrastructure is well-suited to meet this uptick.

Why Canada Is Well-Positioned

- **Existing Facilities:** Kruger already operates paper, containerboard, and packaging plants across Quebec and Eastern Ontario.
- **Government Support:** Programs like IFIT, Innovation Bois, and eco-performance investments back these modernization efforts^{96–97}.
- **Rising Demand & Niche Leadership:** With global packaging growing 2.5–4% CAGR and Canada’s sustainable and pharma packaging expanding faster, Kruger (and similar firms) have a clear runway to scale quickly.

Over the next three years, Kruger’s new Specialty Papers division invested in retooling the mills, enabling them to shift away from shrinking product lines and start supplying fast-growing segments like food packaging (which is seeing higher demand with the rise of e-commerce and plastic substitution).

Crucially, this diversification move helped preserve jobs and regional economic stability. It was projected to maintain over 500 jobs in the Mauricie and Estrie regions of Québec, despite the secular decline of traditional paper products⁹⁰. Kruger also owns and operates several manufacturing locations in Ontario, including a facility in Quinte West in Eastern Ontario. By redirecting capacity to expanding markets, Kruger aimed to sustain its workforce and mills that might otherwise have faced closures. There were also positive spillovers for related sectors – for instance, the new packaging production required an extra 100,000 tonnes of wood chips annually, benefiting local sawmills and forestry suppliers⁹⁸. In essence, Kruger transformed a vulnerability (overreliance on a dying product) into an opportunity by leveraging its expertise in pulp & paper to serve new customer needs. This case underlines how a traditional resource-based Canadian company can adapt and thrive by diversifying its product mix in response to shifting demand. It also illustrates the government's role in facilitating diversification through investment support in strategic industries.

Footnotes

⁸⁴ Statistics Canada, *Canadian International Merchandise Trade, February 2025*, <https://www150.statcan.gc.ca/n1/daily-quotidien/250403/dq250403a-eng.htm>

⁸⁵ Statistics Canada, *Gross Domestic Product by Industry, November 2024*, <https://www150.statcan.gc.ca/n1/daily-quotidien/250131/dq250131a-eng.htm>

⁸⁶ Global Affairs Canada, *Vulnerability of Canadian Industries to Disruptions*, <https://international.canada.ca/en/global-affairs/corporate/transparency/reports-publications/chief-economist/global-value-chains/2020-06-vulnerability>

⁸⁷ Ortec Finance, *Are Canadian Financial Institutions Sufficiently Prepared for Their Climate Risks*, <https://www.ortecfinance.com/en/insights/blog/are-canadian-financial-institutions-sufficiently-prepared-for-their-climate-risks>

⁸⁸ Reuters, *World Oil Demand to Keep Growing This Decade Despite 2027 China Peak, IEA Says*, <https://www.reuters.com/business/energy/world-oil-demand-keep-growing-this-decade-despite-2027-china-peak-iea-says-2025-06-17>

⁸⁹ Business Development Bank of Canada, *Business Diversification in Alberta and Saskatchewan*, <https://www.bdc.ca/en/articles-tools/blog/diversification-key-recovery-alberta-saskatchewan-businesses>

⁹⁰ Kruger Inc., *Kruger Creates a New Entity*, <https://www.kruger.com/news/kruger-creates-a-new-entity-2/>

⁹¹ Mordor Intelligence, *Canada Foodservice Packaging Market Size & Share Analysis*, <https://www.mordorintelligence.com/industry-reports/canada-foodservice-packaging-market>

⁹² Kruger Inc., *Kruger Innovates and Diversifies Production at Its Wayagamack Mill*, <https://www.kruger.com/news/wayagamack-diversifies-production/>

⁹³ Kruger Inc., *Kruger Packaging Announces Important Transformation Project...*, <https://www.kruger.com/news/kruger-packaging-announces-important-transformation-project-that-will-make-its-place-turcot-mill-the-first-in-north-america-to-manufacture-100-recycled-saturatin>

[g-kraft](#)

⁹⁴ Kruger Inc., *The FiloCell Advantage – Biomaterials*,

<https://biomaterials.kruger.com/products/the-filocell-advantage/>

⁹⁵ Grand View Research, *Canada Pharmaceutical Packaging Market Size & Outlook, 2030*,

<https://www.grandviewresearch.com/horizon/outlook/pharmaceutical-packaging-market/canada>

⁹⁶ Natural Resources Canada, *Canada Announces Support for Quebec’s Forest Sector*,

<https://www.canada.ca/en/natural-resources-canada/news/2025/03/canada-announces-support-for-quebecs-forest-sector.html>

⁹⁷ Newswire, *Quebec and Canada Invest in Energy Efficiency in Industrial Facilities*,

<https://www.newswire.ca/news-releases/quebec-and-canada-invest-in-energy-efficiency-in-industrial-facilities-811654635.html>

⁹⁸ Kruger Inc., *Kruger Creates a New Entity*,

<https://www.kruger.com/news/kruger-creates-a-new-entity-2/>

Case Study 2: BlackBerry – Pivoting from Hardware to Software

BlackBerry is a high-profile Canadian example of a company that reinvented itself via diversification after a disruptive technological shift. In the 2000s, BlackBerry (formerly Research In Motion) was renowned for its smartphones with physical keyboards, but the advent of Apple’s iPhone and Google’s Android touchscreen phones caused BlackBerry’s handset sales to collapse.⁹⁹ By the early 2010s, BlackBerry’s core product business was no longer viable – a classic case of overreliance on a single product that became obsolete. Facing this existential threat, BlackBerry’s leadership made a bold pivot: exit the phone hardware market and refocus on software and services. In 2016, CEO John Chen announced that BlackBerry would stop all internal development of new smartphones and instead rely on partners for any future hardware,¹⁰⁰ allowing the company to concentrate on its growing enterprise software business.¹⁰¹ This marked a decisive shift to diversify the company’s revenue streams away from devices and toward areas like cybersecurity, enterprise mobility management, and embedded software (for example, BlackBerry’s QNX operating system used in automobiles).

The pivot showed positive results within a couple of years. By late 2016, Chen reported that BlackBerry’s “pivot to software is taking hold” – in fact, software and services revenue had more than doubled year-over-year, leading to the highest gross margins in the company’s history.¹⁰² Essentially, BlackBerry transformed from a hardware manufacturer into a software firm specializing in secure communications and IoT applications. This diversification rescued the company from the brink of failure and leveraged its strengths in security technology and network services. Today, BlackBerry is a smaller company than at its smartphone peak, but it’s sustainable in its new niche – a testament to how adapting one’s business model can mitigate the risk of technological disruption. The BlackBerry case underscores the importance of not being overly dependent on one product line; when market tastes and technologies change rapidly, companies must be willing to reinvent their core offerings. By diversifying into software services, BlackBerry avoided the fate of other one-time tech giants that failed to adapt. It serves as a Canadian example of strategic transformation in the tech sector, aligning with

forward-looking trends (enterprise cybersecurity, connected cars) to stay relevant. This success wasn't just about pivoting, it was about doubling down on core strengths. By recognizing what it already did well (secure communications and enterprise software), BlackBerry found a future-proof path that didn't rely on chasing trends.

Footnotes

⁹⁹ Wikipedia, *BlackBerry Limited* (2025), https://en.wikipedia.org/wiki/BlackBerry_Limited.

¹⁰⁰ Wikipedia, *BlackBerry Limited* (2025), https://en.wikipedia.org/wiki/BlackBerry_Limited.

¹⁰¹ Business Insider, "BlackBerry to Stop Making Its Own Phones" (2016), <https://www.businessinsider.com/blackberry-to-stop-making-its-own-phones-2016-9>.

¹⁰² BizTech Magazine, "BlackBerry To Stop Developing Phone Hardware Internally" (2016), <https://biztechmagazine.com/article/2016/09/blackberry-stop-developing-phone-hardware-internally>.

Case Study 3: TransAlta – Transitioning from Coal to Clean Energy

TransAlta—once Alberta's largest coal-fired power generator—demonstrates how a Canadian energy firm proactively adapted to climate-policy risk and turned disruption into strategic advantage. After Ottawa's 2016 national coal phase-out announcement and Alberta's original 2030 target (which the province met six years early in 2024), TransAlta invested over C\$300 million to convert its Sundance and Keephills stations from coal to natural gas and to expand renewable capacity.¹⁰³

Importantly, while the province met its coal exit target in 2024, TransAlta completed its transition three years earlier, in 2021. The company reached an agreement with the Alberta government in 2016 to go off coal by 2030,¹⁰⁴ but chose to accelerate the timeline. It converted multiple coal-burning units to run on natural gas,¹⁰⁵ shut down others entirely, and invested in new clean generation projects. By late 2021, TransAlta had fully exited coal-fired power generation in Canada—achieving a 100% coal-free portfolio well ahead of both provincial and federal deadlines.¹⁰⁶

This early, voluntary shift gave TransAlta a competitive head-start. It reduced exposure to rising carbon costs, regulatory risk, and reputational damage. At the same time, it positioned the company to meet growing demand for lower-emission electricity—especially from industrial customers and ESG-focused investors. "We're motivated to find solutions that keep our customers competitive, our communities strong, and that maximize the value of existing assets," said the company's VP of Energy Trading,¹⁰⁷ pointing to the reuse of legacy infrastructure through natural gas conversions.

In effect, TransAlta diversified its fuel base. Founded over a century ago as a hydroelectric utility,¹⁰⁸ it grew into a coal-heavy operator in the 20th century and has now pivoted toward

natural gas and renewables. As of 2023, the company was also advancing plans to build an additional 2 GW of clean power by 2025.¹⁰⁹

The transition didn't just reduce emissions—it also supported a just transition for workers. By moving early and steadily, TransAlta was able to collaborate with governments and communities on retraining programs during the coal phase-out. That stability gave it time to reinvest in future-facing projects while minimizing local disruption.

TransAlta's case shows that early diversification—particularly when backed by clear market signals—can turn policy risk into business opportunity. The company's head start allowed it to secure investment capital, expand customer relationships, and help shape Alberta's low-carbon power landscape.

This experience also raises a broader question for Canada: where else do we see rising global demand that aligns with Canadian strengths? Whether in renewables, critical minerals, agri-tech, or AI-driven manufacturing, the opportunity lies in acting early—before external shocks force reactive change.

Footnotes

¹⁰³ Wikipedia, *Electricity Sector in Canada* (2025),

https://en.wikipedia.org/wiki/Electricity_sector_in_Canada?utm_source=.

¹⁰⁴ TransAlta Corporation, *TransAlta Reaches Agreement with the Government of Alberta on Transition Payments and Executes Memorandum of Understanding* (2016),

<https://www.globenewswire.com/news-release/2016/11/25/1275335/0/en/TransAlta-Reaches-Agreement-with-the-Government-of-Alberta-on-Transition-Payments-and-Executes-Memorandum-of-Understanding.html>.

¹⁰⁵ Ibid.

¹⁰⁶ TransAlta Corporation, *TransAlta Achieves Full Phase-Out of Coal in Canada* (2021),

https://transalta.com/newsroom/transalta-achieves-full-phase-out-of-coal-in-canada/?utm_source=.

¹⁰⁷ Western Energy Institute, *Transforming To A Cleaner Future* (2024),

https://www.westernenergy.org/resource/transforming-to-a-cleaner-future/?utm_source=.

¹⁰⁸ Wikipedia, *TransAlta* (2025), https://en.wikipedia.org/wiki/TransAlta?utm_source=.

¹⁰⁹ TransAlta Corporation, *Accelerating Clean: 2021 Integrated Report* (2022),

https://www.transalta.com/wp-content/uploads/2022/09/TransAlta-Corporation-CDP-Climate-Change-2022.pdf?utm_source=.

Strategic Takeaways

These Canadian case studies – from traditional manufacturing to high tech to energy – demonstrate the multifaceted benefits of diversification. By expanding into new products,

markets, or technologies, companies can reduce their exposure to any single point of failure. Kruger mitigated the risk of a declining market by innovating into growing niches, BlackBerry survived technological upheaval by reinventing its business model, and TransAlta navigated an economy-wide energy transition by altering its fuel mix ahead of the curve. In each scenario, diversification proved to be a forward-looking resilience strategy, turning urgent risks into opportunities for renewal.

Looking ahead, the sectors most vulnerable to external shocks or transformative trends will need similar proactive diversification. Canada's heavy reliance on the U.S. market and on carbon-intensive industries is a liability in a world of trade uncertainty and climate action. Fortunately, the warning signs are prompting action – from trade diversification initiatives (e.g. new pipelines enabling oil exports to Asia) to corporate shifts into sustainable technologies.

The examples above show that with strategic vision (and sometimes public support), diversification can bolster not only a company's fortunes but also workers and communities dependent on that sector. In a time of rapid change, the old adage "don't put all your eggs in one basket" has never been more relevant for Canadian businesses and the economy at large. Diversification is essentially a form of future-proofing – ensuring that as certain baskets empty or break, others are filling and emerging, thereby securing long-term prosperity and resilience for Canada.

Best Practices in Supply Chain Resilience for Manufacturing

Public-Sector Programs (Government-Led)

Global Initiatives

Supply Chain Resilience Initiative (SCRI) – Japan, India, Australia (2021). This trilateral program was launched to reduce overreliance on single-country suppliers (notably China) and promote supply chain diversification. The SCRI facilitates best-practice sharing, investment promotion, and buyer–seller matching to encourage multi-sourcing. For example, Japan earmarked ¥250 billion (US\$2.2 billion) in subsidies to help manufacturers shift production out of China as part of its COVID-19 stimulus.¹¹⁰ By mid-2020, Japan had approved grants for 87 projects (57 firms investing in domestic Japanese facilities and 30 in Southeast Asia) to broaden supply sources.¹¹¹ Australia also announced a A\$107 million Supply Chain Resilience Initiative in 2020 to strengthen local critical production capacity for future crises.¹¹² These programs have begun funneling investments into alternative production hubs, enhancing resilience through supplier diversification.

European Union’s Critical Raw Materials Act (2023) – European Commission (Global). The EU enacted this framework to secure critical inputs (e.g. lithium, rare earths) by boosting domestic output and diversifying import sources. By 2030 it targets at least 10% of critical minerals to be mined in the EU,¹¹³ 40% processed in the EU,¹¹⁴ and no more than 65% of the EU’s annual consumption of any strategic raw material coming from a single country.¹¹⁵ To achieve this, the act streamlines permitting for new mines, funds strategic projects, and pursues trade partnerships with reliable supplier nations. While still in early implementation, the policy reflects a best-practice approach of multi-sourcing critical materials to mitigate supply shocks (for instance, reducing dependence on one country for rare earth elements from ~98% toward the 65% threshold).¹¹⁶

Canadian & North American Initiatives

U.S. CHIPS and Science Act (2022) – United States (North America). This landmark legislation provides \$52 billion in subsidies¹¹⁷ and a 25% tax credit¹¹⁸ to near-shore semiconductor manufacturing and reduce reliance on East Asian chip supply chains. By incentivizing new fabs in the U.S., the act aims to shorten and stabilize tech supply lines. Real-world outcomes include TSMC and Samsung constructing advanced chip plants in Arizona and Texas, and Intel’s \$20 billion investment in two new Ohio factories.¹¹⁹ These projects, supported by CHIPS Act grants, are expected to cut lead times for U.S. electronics manufacturers and have already begun creating domestic capacity (e.g. TSMC’s 4nm fab slated to come online in 2024–25).¹²⁰ The policy’s resilience impact will be measured in reduced import reliance – currently over 75% of cutting-edge chips are made in East Asia¹²¹ – and improved continuity for automotive and electronics production that previously stalled due to chip shortages.

Joint Critical Minerals Supply Strategy (Canada–US) – Canada/United States (North America). Recognizing the risk of single-source inputs, Canada and the U.S. launched a Critical Minerals Action Plan in 2020 to secure materials like cobalt, nickel, lithium (vital for EV batteries, defense and aerospace). Both governments have since invested in domestic mining, refining, and recycling projects. Canada’s 2022 federal budget, for example, allocated significant funding to implement a national Critical Minerals Strategy. In parallel, the U.S. invoked the Defense Production Act in 2022 to spur domestic mining and included Canada as a “domestic source” under the DPA – an unprecedented step treating a foreign ally’s resources as part of the U.S. base supply. This friend-shoring approach has led to new cross-border initiatives (e.g. battery

metal processing plants in Canada supplying U.S. gigafactories).¹²² Key metrics will be reductions in import dependence on non-allied nations. For instance, the Li-Bridge roadmap envisions boosting U.S. lithium supply nearly 500% by 2030¹²³ and capturing 60% of the battery-value chain in North America¹²⁴ — an explicit push to erode China’s current grip on more than 60% of global lithium refining.¹²⁵

(Additional North American context): The US–Mexico–Canada Agreement (USMCA) has also smoothed regional trade, encouraging manufacturers to regionalize supply chains. Since USMCA’s enactment, companies have accelerated near-shoring to North America – for example, Mexican exports to the U.S. hit a record \$475 billion in 2023.¹²⁶ In Canada, logistics firms report a “35% spike” in warehousing inquiries since 2023 due to near-shoring demand.¹²⁷ These trends reflect public-policy support (trade pacts, tariff incentives) translating into greater supply base diversification across the US–Canada–Mexico corridor.¹²⁸

Footnotes:

¹¹⁰ Simon Denyer, “Japan Helps 87 Companies to Break from China After Pandemic Exposed Overreliance,” *The Washington Post*, 2020, https://www.washingtonpost.com/world/asia_pacific/japan-helps-87-companies-to-exit-china-after-pandemic-exposed-overreliance/2020/07/21/4889abd2-cb2f-11ea-99b0-8426e26d203b_story.html.

¹¹¹ *Tokyo Review*, “No, Japan Is Not Decoupling from China,” 2020, <https://www.tokyoreview.net/2020/08/no-japan-is-not-decoupling-from-china>.

¹¹² Ibid.

¹¹³ *Wikipedia*, “The Supply Chain Resilience Initiative,” 2021, https://en.wikipedia.org/wiki/The_Supply_Chain_Resilience_Initiative.

¹¹⁴ Council of the European Union, *Critical Raw Materials Act Infographic*, 2023, <https://www.consilium.europa.eu/en/infographics/critical-raw-materials>.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

¹¹⁷ Council of the European Union, *Communication COM(2020)474: Critical Raw Materials Resilience*, 2020, <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52020DC0474>.

¹¹⁸ Emily Ashbridge, “Semiconductor Industry Needs More Than CHIPS Act to Succeed,” *National Defense Magazine*, 2022, <https://www.nationaldefensemagazine.org/articles/2022/10/5/semiconductor-industry-needs-more-than-chips-act-to-succeed>.

¹¹⁹ *Wikipedia*, “CHIPS and Science Act,” 2022, https://en.wikipedia.org/wiki/CHIPS_and_Science_Act.

¹²⁰ Intel Corporation, “Intel Invests in Ohio – Newsroom,” 2024, <https://newsroom.intel.com/press-kit/intel-invests-ohio>.

¹²¹ TSMC, “Fab 21,” 2025, <https://www.tsmc.com/static/abouttsmcaz/index.htm>.

¹²² Semiconductor Industry Association, “Strengthening the Global Semiconductor Supply Chain in an Uncertain Era,” 2022, <https://www.semiconductors.org/strengthening-the-global-semiconductor-supply-chain-in-an-uncertain-era>.

¹²³ U.S. Department of Energy, *Li-Bridge Report: Building a Robust and Resilient U.S. Lithium Battery Supply Chain*, 2023, <https://netl.doe.gov/sites/default/files/2023-03/Li-Bridge%20-%20Building%20a%20Robust%20and%20Resilient%20U.S.%20Lithium%20Battery%20Supply%20Chain.pdf>.

¹²⁴ Ibid.

¹²⁵ RBC Wealth Management, “The New Great Game: How the Race for Critical Minerals Is Shaping Tech Supremacy,” 2023, <https://ca.rbcwealthmanagement.com/xiangzhou-kong/blog/4512911-The-New-Great-Game-How-the-race-for-critical-minerals-is-shaping-tech-supremacy>.

¹²⁶ Boston Consulting Group, “The Shifting Dynamics of Nearshoring in Mexico,” 2024, <https://www.bcg.com/publications/2024/shifting-dynamics-of-nearshoring-in-mexico>.

¹²⁷ MacMillan Supply Chain Group, “How Nearshoring Is Reshaping Canadian Supply Chains in 2025,” 2025, <https://www.macmillanscg.com/blog/how-nearshoring-is-reshaping-canadian-supply-chains-in-2025>.

¹²⁸ Brookings Institution, “Broad Support for Prioritizing Responsible Critical Minerals Development,” 2023, <https://www.brookings.edu/articles/broad-support-for-prioritizing-responsible-critical-minerals-development>.

Global Corporate Examples

Dual-Sourcing & Dual-Design Strategy (Global Telecom Case): Following COVID disruption, a leading telecom hardware firm adopted a dual-sourcing and dual-design approach—contracting with multiple suppliers and maintaining alternate component versions for critical products. It also piloted business models weighing the trade-off between R&D cost

versus lower inventory dependency. This strategy enhanced agility, reduced reliance on single-supplier risk, and structural resilience—though specific output gains weren't disclosed.

Apple's Supplier Diversification ("Friendshoring") – Apple Inc. (Global): The electronics giant has pursued supplier diversification and regional balancing to mitigate geopolitical and pandemic risks. Traditionally, over 95% of Apple's flagship product (iPhone) was assembled in China, but Apple recently began reallocating production to other countries. In 2022, it moved some iPhone assembly to India, both to reduce sole dependence on China and to be closer to emerging markets. Early results show progress: currently ~5% of Apple's output is outside China, and JP Morgan analysts forecast up to 25% by 2025 – a fivefold increase in non-China sourcing.¹²⁹ This multi-sourcing strategy paid off when COVID-19 lockdowns in China threatened holiday-quarter shipments; Apple was able to shift some orders to India and Vietnam, partially shielding sales.¹³⁰ The company has also diversified suppliers for components (e.g. dual sourcing memory chips from Japan and Korea, in addition to China). This approach aligns with "friend-shoring" trends encouraged by governments. The tangible benefits for Apple include greater supply continuity (fewer stock-outs of new products) and increasing negotiation leverage on cost, while also meeting host country requirements (e.g. India's local sourcing rules).¹³¹ Apple's case is often cited by others as evidence that a phased multi-country production strategy can bolster resilience without sacrificing profitability.

Johnson & Johnson's Global Supplier Diversity Program – J&J (Multinational Healthcare): As part of its resilience and corporate citizenship strategy, J&J has institutionalized supplier base diversification over two decades. The company launched its Global Supplier Diversity & Inclusion program in 1998 to broaden its network beyond traditional vendors.¹³² The program actively recruits and mentors small, minority-owned, and women-owned businesses as accredited suppliers. All suppliers must meet J&J's quality and cost standards, but the company provides capacity-building support (e.g. mentoring, matchmaking forums) to help new vendors qualify. Today this program operates in >20 countries and has yielded a \$4.9 billion annual spend with small and diverse suppliers as of 2023.¹³³ That figure represents a growing share of J&J's procurement (97% of strategic suppliers are now evaluated on CSR and diversity performance). The resilience pay-off is evident – a more diversified supply base means J&J is less exposed to any single supplier's failure. For instance, during the 2021 global container crisis, J&J could tap alternative suppliers in its network to source packaging and ingredients, avoiding plant shutdowns. Additionally, by sourcing from different regions, J&J has shortened some lead times and fostered innovation (its diverse suppliers often provide "a wealth of new

ideas and solutions,” according to the company). This example shows how a corporate policy can successfully institutionalize multi-sourcing, yielding both risk mitigation and social value.

IKEA's Localized Sourcing Strategy – IKEA (Global Home Furnishings): IKEA has long tailored its supply chain to near-shore production close to key consumer markets. The furniture retailer works with 1,500+ suppliers globally,¹³⁴ often sourcing materials and manufacturing within the same region as the selling market. This regional multi-sourcing approach reduces transportation distance, lead time, and exposure to global logistics disruptions. For example, IKEA sources a large share of wood and boards for North American stores from producers in the US and Canada,¹³⁵ while its European stores draw from Eastern European and Scandinavian suppliers. The benefits were highlighted during recent crises: despite ocean freight upheavals, IKEA's regional supply hubs kept European stores stocked by rerouting to closer suppliers. On a strategic level, IKEA reports that its localization yields shorter lead times and quicker delivery to stores, as well as lower carbon emissions and logistics costs. It also strengthens contingency options – if a factory in Asia goes offline, stores in other regions are less affected because they rely on different suppliers. Moreover, IKEA's long-term partnerships (average supplier relationship >11 years)¹³⁶ mean suppliers are more willing to help in a crisis (e.g. prioritizing IKEA orders). The outcome is a resilient supply network where disruptions in one region have limited ripple effect globally. In the 2021 Suez Canal blockage, for instance, IKEA could lean on its regional warehouses and local suppliers in Europe to maintain stock, softening the impact. This model of geographically diversified, near-shored sourcing is increasingly emulated as a private-sector best practice.

Footnotes

¹²⁹ TechNode, *China continues to produce over 95% of Apple's products*, 2023,

<https://technode.com/2023/10/23/china-continues-to-produce-over-95-of-apples-products>

¹³⁰ Reuters, *Apple may move a quarter of iPhone production to India by 2025 – JPM*, 2022,

<https://www.reuters.com/technology/apple-may-move-quarter-iphone-production-india-by-2025-jpm-2022-09-21>

¹³¹ Reuters, *Apple may move a quarter of iPhone production to India by 2025 – JPM*, 2022,

<https://www.reuters.com/technology/apple-may-move-quarter-iphone-production-india-by-2025-jpm-2022-09-21>

¹³² Veridion, *7 Examples of Successful Supplier Sourcing Strategies*, 2024,

<https://veridion.com/blog-posts/successful-supplier-sourcing-strategies-examples>

¹³³ Veridion, *7 Examples of Successful Supplier Sourcing Strategies*, 2024,

<https://veridion.com/blog-posts/successful-supplier-sourcing-strategies-examples>

¹³⁴ IKEA Global, *Let's grow together: become an IKEA supplier* (n.d.),

<https://www.ikea.com/global/en/our-business/how-we-work/for-suppliers/>

¹³⁵ IKEA Global, *The wood we use*, 2024,

<https://www.ikea.com/global/en/our-business/sustainability/wood-we-use/>

¹³⁶ IKEA Global, *Let's grow together: become an IKEA supplier* (n.d.),

<https://www.ikea.com/global/en/our-business/how-we-work/for-suppliers/>

Canadian & North American Corporate Examples

Walmart's Local Sourcing Initiative – Walmart Inc. (USA/Global): The world's largest retailer has driven resilience by significantly diversifying and localizing its supplier base. Walmart's long-standing "Everyday Low Price" strategy required efficient sourcing, and in recent years it has extended that philosophy to resilience: sourcing closer to stores to reduce transit risk and foster agility. Over two-thirds of the products Walmart sells in the U.S. are now made or assembled domestically.¹³⁷ In 2021 Walmart pledged to invest \$350 billion in U.S.-made products over the next decade – an initiative expected to create 750,000 American jobs and shorten many supply lines.¹³⁸ Concretely, this has led Walmart to increase orders from domestic manufacturers in categories like plastics, textiles, and household goods. The company has also mirrored this approach abroad: for example, Walmart Canada now sources more food from local producers, and Walmart committed to source \$10 billion annually in Indian-made goods by 2027 for its Flipkart unit.¹³⁹ The measurable results include cost savings on import freight, improved inventory turnover (by cutting long transit lead times), and better supply continuity. Walmart notes that local suppliers can often restock stores in days instead of weeks, which proved crucial during COVID-19 surges when international shipments were delayed. By 2023, Walmart had avoided an estimated \$2 billion in supply chain costs through domestic sourcing and saw in-stock levels in the U.S. reach record highs even as other retailers struggled. This illustrates how a private company can leverage multi-sourcing and near-shoring (backed by massive purchasing power) to harden its supply chain against global shocks.

Avery Dennison's Supplier Diversification Approach – Avery Dennison: A global manufacturer of adhesives and packaging materials, Avery Dennison has long emphasized supplier diversification to enhance resilience. While not detailed in the LMA case study, the firm has been cited in industry analysis as a model for building geographic redundancy across its paper and chemical supply chain. A related case involved a healthcare client who paid a premium to maintain U.S. sourcing alongside Brazil — when Brazilian ports went on strike, they quickly switched to domestic supply and avoided downtime.¹⁴⁰ This illustrates the value of "resilience premiums" — small added costs that yield large benefits during disruptions.

Each of these programs and frameworks – whether led by governments or by companies – demonstrates a facet of supply chain resilience: multi-sourcing critical inputs, near-shoring production to reduce transit risks, and diversifying supplier partnerships. The evidence ranges from strategic policies (e.g. billions invested in domestic capacity or caps on single-source dependency) to on-the-ground outcomes (e.g. 0% production loss during a strike, 10%+ lead time reduction, or millions in cost savings). Public-sector initiatives show how policy can incentivize resilient practices (such as funding dual sources or easing regional trade), while

private-sector successes illustrate practical strategies – from redesigning products for dual sourcing to committing spend to a wider supplier pool – that have delivered real results in risk mitigation, cost control, and agility. These examples can serve as building blocks for regional policy recommendations and business playbooks aimed at fortifying manufacturing supply chains against future disruptions.

Footnotes

¹³⁷ Auras Tanase, *7 Examples of Successful Supplier Sourcing Strategies*, 2024, Veridion, <https://veridion.com/blog-posts/successful-supplier-sourcing-strategies-examples>

¹³⁸ Auras Tanase, *7 Examples of Successful Supplier Sourcing Strategies*, 2024, Veridion, <https://veridion.com/blog-posts/successful-supplier-sourcing-strategies-examples>

¹³⁹ Auras Tanase, *7 Examples of Successful Supplier Sourcing Strategies*, 2024, Veridion, <https://veridion.com/blog-posts/successful-supplier-sourcing-strategies-examples>

¹⁴⁰ LMA Consulting Group, *Diversify to Thrive in Manufacturing Supply Chain*, 2022, <https://www.lma-consultinggroup.com/diversify-to-thrive-in-manufacturing-supply-chain>

Inclusivity Angles: Why Supply Chain Resilience Matters for Canadian SMEs and Indigenous Businesses

1. SMEs Are Disproportionately Exposed to U.S. Trade Friction

- Small and medium-sized enterprises (SMEs) make up 97.8% of employer businesses in Canada, and employ 61.6 % of the workforce in manufacturing-heavy sectors like wood products, fabricated metals, and food processing.¹⁴¹ ¹⁴² Many of these businesses are tightly linked to the U.S. market — either as tier-2 suppliers to larger exporters or as direct exporters themselves.

- However, SMEs typically lack the capital and compliance resources needed to manage border disruptions, pivot to new markets, or build multi-source supply chains. This creates acute exposure when U.S. trade policy shifts — for example, 2018 steel and aluminum tariffs disproportionately hit small metalworking and machining firms that relied on cross-border supply.

2. Indigenous-Owned Businesses Face Structural Barriers

- Indigenous-owned businesses contribute an estimated \$56 billion annually to Canada's economy and are projected to grow by over 23% in the next decade.¹⁴³ There are currently more than 37,000 Indigenous-owned SMEs across Canada — a 36% increase since 2005 — representing one of the fastest-growing segments of the small business sector. While many of these businesses operate within Indigenous communities, clear national data on revenue by location is limited — highlighting the need for better disaggregated reporting on Indigenous

economic activity.

- Despite their growing footprint, these businesses are often younger, smaller, and more geographically remote than their non-Indigenous peers. Many operate in forestry, agri-food, construction, and resource processing — sectors particularly vulnerable to trade disputes (e.g. softwood lumber, processed seafood).

- They are also frequently excluded from traditional industrial policy and trade diversification efforts, limiting their participation in national resilience strategies. However, targeted programs — such as the Indigenous Growth Fund and Supply Change™ procurement platform — have proven effective in improving access to financing, scaling, and export opportunities.

3. Policy Design Should Prioritize Inclusive Resilience

- Canada's future trade resilience strategy must intentionally include SMEs and Indigenous firms.

Key opportunities include:

- Low-barrier grant programs modeled after Australia's A\$198M export support fund¹⁴⁴ (e.g. for U.S.-exposed SMEs in rural Ontario).
- Dedicated procurement or reshoring incentives that reward supply chain diversification and local production among smaller manufacturers.
- Simplified export readiness programs (e.g. mentorship, certification, logistics supports) adapted for non-urban or Indigenous entrepreneurs.

Footnotes

¹⁴¹ Statistics Canada, *Key Small Business Statistics 2023*, 2023, ISED Canada, <https://ised-isde.canada.ca/site/sme-research-statistics/en/key-small-business-statistics/key-small-business-statistics-2023>

¹⁴² Statistics Canada, *Table 14-10-0215-01: Employment for all employees by enterprise size, annual*, 2025, ISED Canada, <https://ised-isde.canada.ca/site/sme-research-statistics/en/key-small-business-statistics/key-small-business-statistics-2024>

¹⁴³ Indigenous Prosperity Foundation, *Closing the Prosperity Gap: Indigenous Economic Reconciliation in Canada*, 2023, <https://indigenousprosperity.ca/wp-content/uploads/2023/10/IPF-Final-Prosperity-Report-2023.pdf>

¹⁴⁴ ABC News, *Australia's Deteriorating China Relationship Had Silent Influence Over Budget*, 2021, <https://www.abc.net.au/news/2021-05-13/australia-china-relationship-silent-influence-over-budget/100134288>

6. Primary Data Insights

The below distills the most salient themes from our 15-respondent survey of economic-development offices and manufacturing associations, revealing where Canadian exporters feel most exposed, which supports they actually use, and what gaps they still need filled to diversify beyond the U.S. market.

1. Who answered?

Org Type	Count	Notes
Economic-development offices	10	Municipal or regional EDOs dominate the sample, so answers naturally skew toward “how can we help manufacturers?” rather than first-hand shop-floor impacts.
Manufacturing or industry associations	4	Northumberland Mfg. Assn., Excellence in Mfg. Consortium, Canadian Manufacturers & Exporters, etc.

2. Reliance on the U.S. market

- **Very dependent (> 75 %)** ≈ 5 respondents
- **Moderately dependent (25 – 75 %)** ≈ 8
- **Minimally dependent (< 25 %)** 1

3. Common trade-related pain points

(Ordered by frequency of mention)

Theme	Typical wording in answers	Why it matters
Tariffs & cross-border taxes	“Tariffs and cross-border taxes”, “uncertainty related to tariffs”	Every new duty drives margin anxiety; small firms have no hedge strategy.
Border delays / customs friction	“Border delays or customs issues”, “transportation / logistics problems”	Speed-to-customer suffers → lost U.S. contracts.
Loss of suppliers or customers	“Loss of suppliers or customers”	Supply-base fragility; single-source risk.

Currency / market volatility	“Currency or market volatility”	Thin-margin shops feel every exchange-rate update.
Inter-provincial trade barriers	“Interprovincial trade barriers”, “lack of consistency across regions”	Even inside Canada, red tape slows input sourcing and resale.
Program confusion	“Different programs, different levels of support; manufacturers unsure who to go to for help”	Nobody has a one-stop roadmap; awareness ≠ access.

4. Supports currently on the ground

(These are the resources respondents ticked or described as available.)

1. **Trade Commissioner Service (GAC)**
2. **Export Development Canada (EDC)** financing/advisory
3. **Invest Ontario / site-selection help**
4. **Sector-specific government (provincial and federal) grants (FedDev, MRA & MAFA, NGen, etc.)**
5. **Local job fairs / employment training**
6. **Export-marketing assistance & “Made-in-X” branding campaigns**
7. **Supplier-matchmaking (ad-hoc, often project-based)**

Tools exist, but they’re siloed, paperwork-heavy and reactive.

5. Issues frequently complained about

Gap	#Mentions	Quick read
<i>“Awareness is low / programs not aligned with local needs”</i>	10	Communication failure + poor tailoring.
<i>Funding hard to access or too slow</i>	8	Timing mis-match between grant cycles and cash-flow crises.
<i>Supplier-matchmaking & capacity mapping absent</i>	7	Firms can’t find alternative inputs quickly.
<i>Export intelligence & market data</i>	6	People want decision-grade intel, not generic

		country profiles.
<i>Infrastructure (industrial land, broadband, housing)</i>	4	Rural plants can't scale or attract labour.

6. “Missing pieces” respondents wish existed

1. **Always-on supplier-match engine** (live database + warm intros)
2. **Export-readiness bootcamps** tailored to SME bandwidth
3. **Shared site-selection & industrial-land inventory portal**
4. **Regional peer-learning forums** (manufacturer-to-manufacturer)
5. **Integrated intelligence hub**: tariffs, logistics costs, FX risk dashboards

7. What respondents value in the next 12-18 months

(Respondents chose from a list and/or added comments)

- **Regional supplier forums** – networking that actually leads to POs
- **Export-planning workshops** – hands-on, not webinars
- **Shared data tools** – asset mapping, supplier databases
- **Collaboration with international partners** – soft-landing programs
- **Trade-ready grants** – tied to concrete diversification plans

Nearly every org volunteered to *host or co-deliver* events—capacity is there, content is missing.

8. Emerging markets (non-U.S.) on their radar

Europe and **Asia-Pacific** dominate, with *Latin America* a distant third.

A few mention *inter-provincial* diversification—an under-exploited low-hanging fruit.

9. Readiness to diversify?

Mixed. Overall tone: *“We know we should diversify, but we lack the playbook and risk capital.”*

10. Advice respondents give peers

- Get obsessive about **BR&E** (Business Retention & Expansion) touchpoints.
- **Map infrastructure gaps** (housing, broadband) before chasing FDI.
- **Leverage trade associations**—don't reinvent the wheel.
- Keep **regular, face-to-face outreach**; web portals alone won't cut it.

11. Manufacturers named as ideal feedback partners

Repeated shout-outs: **Belden Canada, Quickmill, Flexjet, MetalCraft Marine, Novelis, SnapCab, FabCut, Charlotte Products.**

7. Ecosystem Map

Ecosystem and Funding Landscape

Key Regional Partners – Ecosystem Roles

1. EMC – Eastern Manufacturers' Consortium

Mandate & Services: Canada's largest manufacturing consortium (~13,000 member companies), EMC offers wide-ranging support in lean manufacturing, workforce training, energy efficiency, supply-chain collaboration, and funding navigation (e.g., SR&ED).¹⁴⁴

- Role in Pilot: A key outreach partner for Eastern Ontario. EMC can support survey distribution, host focus groups, and provide regional insights through its active member base.

- Strengths: Broad network across Ontario and established expertise in coordinating manufacturing improvement programs.

2. CME – Canadian Manufacturers & Exporters

Mandate & Services: A national leader in industrial policy and export development, CME provides training, lean systems support, tariff and trade policy insight, and advocacy for manufacturers at all levels.¹⁴⁵

- Role in Pilot: Ideal for providing national-level context and policy guidance. CME's networks can validate findings and amplify regional needs to federal audiences.

- Strengths: Deep policy expertise, strong federal connections, and robust data access.

3. NMA – Northumberland Manufacturers’ Association

Mandate & Services: Regional association focused on local economic development, workforce training, and funding access (e.g., Eastern Ontario Development Fund, Jobs & Growth Fund, SWPP).¹⁴⁶

- Role in Pilot: Valuable on-the-ground partner with close relationships to local SMEs and regional program administrators.
- Strengths: First-hand knowledge of Eastern Ontario business dynamics and direct line to SME concerns.

4. KMA – Kawartha Manufacturers’ Association (Peterborough & Kawartha Lakes)

Mandate: The KMA supports the growth and competitiveness of manufacturing supply chain partners in the Peterborough and Kawartha Lakes region. Their services include promoting and developing training and funding opportunities, facilitating networking and best-practice sharing, advocating for manufacturing concerns at all levels of government, and strengthening strategic partnerships with industry, education, and community stakeholders.

- Role in Pilot: Serves as a vital local facilitator to connect your pilot project with manufacturers across Peterborough and the Kawarthas. KMA can assist with regional outreach, survey distribution, organizing stakeholder forums, and sharing insights into the regional manufacturing ecosystem.
- Strengths: Deep-rooted presence in the regional manufacturing community, with a well-established network and credibility. Their positioning enables efficient collaboration with local SMEs, educational institutions, and policy stakeholders—all instrumental for engaging the Eastern Ontario manufacturing ecosystem.

5. NGen – Next Generation Manufacturing Canada

Mandate: Canada’s advanced manufacturing supercluster focused on scaling innovation, digital adoption, and supply chain modernization.¹⁴⁷

- Role in Pilot: Strategic innovation partner, offering guidance on funding programs, technological capacity building, and future-proofing regional ecosystems.
- Strengths: National-level insight into cutting-edge manufacturing innovation; experience coordinating multi-partner projects.

6. Trillium Manufacturing Network

Mandate & Services: A province-wide network that supports Ontario’s advanced manufacturing sector by promoting industrial collaboration, workforce development, and technology adoption. Trillium works closely with manufacturers to help identify growth opportunities and connect them with funding and innovation partners.¹⁴⁸

- Role in Pilot: Acts as a sectoral convenor with strong ties to provincial stakeholders. Can support strategic alignment between SMEs and broader industry trends.
- Strengths: Province-wide reach, strong focus on advanced manufacturing, and facilitation of cross-sector collaboration.

7. QMA – Quinte Manufacturers’ Association

Mandate & Services: A regional, member-driven organization representing manufacturers in the Bay of Quinte region. QMA promotes industry growth by providing networking opportunities,

workforce development initiatives, advocacy on policy issues, and connections to training and funding programs. It serves as a platform for collaboration among manufacturers, educational institutions, and community stakeholders.

- Role in Pilot: Acts as a sectoral convenor with strong ties to provincial stakeholders. Can support strategic alignment between SMEs and broader industry trends.

- Strengths: Strong local presence and credibility, with an active membership base. QMA's ability to bridge industry, government, and education ensures broad-based engagement and meaningful regional insights.

Inventory of Funding Programs

Program	Purpose & Scale	Eligible Recipients	Matching Requirements / Pitfalls
TICP (<i>Trade & Investment Competitive Program</i>)	Ontario's trade-impacted communities, up to ~2 years project funding	Lead applicants w/ ≥2 years operational history	Must not bundle overlapping programs; watch project timelines
FedDev Ontario (Southern Ontario)	Grants/repaid zero-interest contributions (\$125 K–\$10 M) for innovation, scale-up, competitiveness	Incorporated firms, Southern Ontario	Applicants must present a repayment plan; the repayable portion
NRC-IRAP	Non-repayable funding: 50–80% labour & contractor costs, R&D projects up to \$10M in mid-size	Canadian SMEs (<500 FTE), profit-oriented	Must apply before project starts; fiscal-year constraints
OITC (<i>Ontario Innovation Tax Credit</i>)	Refundable 8% tax credit on eligible R&D expenditures in Ontario	Corporations conducting R&D in Ontario	Only covers qualified R&D; requires tax filings
CanExport SMEs	Fed. export expansion funding (variable amounts)	SMEs looking to enter new international markets	Must demonstrate export potential; cost-sharing requirements
Trade Commissioner Service (TCS) ¹⁴⁹	Export advisory, market intelligence, and trade promotion through 160+ international offices.	Canadian SMEs and larger firms entering/exporting to global markets.	Advisory-based; limited direct funding; firms must be export-ready.
Export Development Canada (EDC) ¹⁵⁰	Crown corporation offering trade finance, credit insurance, and global	Canadian exporters and their buyers.	Commercial financing terms; repayment

	connections to help firms scale abroad.		obligations; must demonstrate export activity.
Business Development Bank of Canada (BDC) ¹⁵¹	Federal development bank providing SME financing, venture capital, and advisory services.	Canadian SMEs across all sectors.	Loan-based programs; requires repayment; limited non-repayable options.
Trade Accelerator Program (TAP – TBOT/WTC Toronto) ¹⁵²	Cohort-based export training (8–10 weeks) to build vetted export plans with expert guidance.	Canadian SMEs with export potential.	Participation fee (often subsidized); requires leadership commitment.
OCI – Critical Industry Technologies (CIT) ¹⁵³	Supports development and commercialization of critical tech in Ontario’s strategic industries (e.g., medtech, cleantech, advanced manufacturing)	Ontario based companies partnered with eligible research institutions	Must show IP ownership or license; industry contribution required (min. 1:1 cash match); funds paid to research partner
Ontario Vehicle Innovation Network (OVIN) ¹⁵⁴	Supports Ontario’s automotive and mobility ecosystem through R&D funding, talent programs, and commercialization support	Startups, SMEs, and academic/industry collaborations in automotive innovation	Some streams require Ontario co-investment; limited to transportation-related innovation sectors
Ontario Together Trade Fund (OTF) ¹⁵⁵	Supports production of critical goods in Ontario, incl. PPE, medical supplies, and trade-disrupted sectors	Ontario manufacturers, especially SMEs	Applications must align with sectoral priorities; funding often tied to specific calls for proposals
SOFII – Southern Ontario Fund for Investment in Innovation ¹⁵⁶	Loans up to \$500K to support innovation-driven growth for SMEs in Southern Ontario	Incorporated for-profit SMEs with innovative products or services	Must demonstrate potential for job creation and commercialization; loans must be repaid
Regional Economic Development Offices (REDAs) ¹⁵⁷	Municipal/provincial offices offering advisory services, local grants, and investment incentives.	SMEs and investors operating in specific regions.	Varies by region; often requires co-investment, job creation, or community impact.

Protect Ontario Financing Program (POF)¹⁵⁸	Low-interest financing to support Ontario sectors affected by U.S. tariffs	Ontario-based firms facing direct tariff impacts	Loan-based program; must demonstrate trade disruption and recovery potential
Regional Tariff Response Initiative (RTRI – FedDev Ontario)¹⁵⁹	A \$450 million national initiative delivered through Regional Development Agencies; \$160 million allocated to Southern Ontario to help firms respond to trade challenges, improve productivity, diversify markets, and strengthen domestic supply chains.	Southern Ontario businesses—especially those in steel, automotive, and similarly impacted sectors.	Application timelines and eligibility criteria may vary; priority may be given to firms demonstrating significant sector exposure or tariff-related disruption.
Strategic Response Fund (SRF)¹⁶⁰	\$5 billion fund to support highly trade-exposed Canadian businesses facing revenue losses, reduced profitability, and job cuts. Covers front-end development and capital costs; pre-front-end engineering design, retooling, and investments to pivot into new markets/competitiveness.	Companies in highly trade-exposed sectors experiencing significant economic impact. Projects must be large-scale and critical to maintaining industrial or skills capacity.	Recipients must secure matching funding commitments equal to or greater than the SRF amount, typically from provinces or territories. Pitfall: failure to demonstrate or lock in matching support may disqualify projects.

Footnotes:

¹⁴⁴ CME-MEC. “EMC Canada.” <https://cme-mec.ca/emc-canada/>

¹⁴⁵ CME. “Stuff Made and Built.” <https://cme-mec.ca/>

¹⁴⁶ EMC Canada. “Member Associations.” <https://emccanada.org/>; NMA. <https://nmaontario.ca/>; HelloDarwin. “Northumberland Manufacturers’ Association.” <https://hellodarwin.com/ca/company/northumberland-manufacturers-association>

¹⁴⁷ NGen. “About.” <https://www.ngen.ca/>

¹⁴⁸ Trillium Manufacturing Network. <https://trilliummfg.ca/>

¹⁴⁹ Government of Canada. “Trade Commissioner Service.” <https://www.tradecommissioner.gc.ca/en.html>

¹⁵⁰ Export Development Canada. “About Us.” <https://www.edc.ca/en/about-us.html>

¹⁵¹ Business Development Bank of Canada. “Financing and Advisory Services.” <https://www.bdc.ca/en/financing>

¹⁵² Toronto Region Board of Trade. “Trade Accelerator Program (TAP).” <https://bot.com/Programs-Networks/trade-accelerator-program>

¹⁵³ OCI – Critical Industry Technologies (CIT). “OCI Programs.” Ontario Centre of Innovation. <https://www.oc-innovation.ca/programs/cit/>

¹⁵⁴ Ontario Vehicle Innovation Network (OVIN). “Programs and Resources.” <https://www.ovinhub.ca/>

¹⁵⁵ Ontario Together Trade Fund. “Ontario Together Trade Fund.” Government of Ontario. <https://www.ontario.ca/page/ontario-together-trade-fund>

¹⁵⁶ SOFII – Southern Ontario Fund for Investment in Innovation. “Program Overview.” Community Futures Eastern Ontario. <https://www.cfeasternontario.ca/sofii/program-overview>

¹⁵⁷ Government of Ontario. “Regional Economic Development.” <https://www.ontario.ca/page/economic-development>

¹⁵⁸ Protect Ontario Financing Program. “Province Launching Protect Ontario Financing Program to Support Sectors Impacted by U.S. Tariffs.” Government of Ontario Newsroom, 2024. <https://news.ontario.ca/en/release/1006305/province-launching-protect-ontario-financing-program-to-support-sectors-impacted-by-us-tariffs>

¹⁵⁹ Federal Economic Development Agency for Southern Ontario. “Southern Ontario businesses facing trade challenges can now apply for funding.” <https://www.canada.ca/en/economic-development-southern-ontario/news/2025/08/southern-ontario-businesses-facing-trade-challenges-can-now-apply-for-funding.html>

¹⁶⁰ Government of Canada. “Strategic Response Fund.” <https://ised-isde.canada.ca/site/ised/en/programs-and-initiatives/strategic-response-fund>

8. Recommendations & Next Steps

Based on the pilot’s findings, the following initiatives are recommended to reinforce Eastern Ontario’s manufacturing resilience and trade diversification:

1. Launch Eastern Ontario Market-Diversification Accelerator

What: Cohort-based accelerator that gives U.S.-exposed manufacturers a playbook and 1-on-1 coaching to win first non-U.S. purchase orders.

Who (Lead + Key Delivery Partners): Recommended Lead: FedDev Ontario. Delivery: CME + EMC (recruit), local EDOs (intake), Global Affairs Canada-TCS (market intel).

Expected Impact:

- Lower average U.S. share.
- Generate tens of millions in new non-U.S. export sales.
- De-risking thousands of jobs.

Why Now? 75.9 % export dependence + survey insight that firms “know they should diversify but lack the playbook.”

Core Design Features:

- 12-week blended program: market selection sprints, in-country buyer intros, etc.
- Focus on SMEs < 500 FTE and Indigenous-owned manufacturers receive automatic acceptance if eligible.
- Use case managers to track KPIs 18 months post-cohort.

2. Dual-Sourcing & Near-Shoring Grant Top-Up

What: Recommend the creation of a “resilience stream” inside NRC-IRAP & FedDev to subsidize engineering and tooling costs when a firm qualifies a second supplier (domestic or USMCA/CPTPP).

Why Now? Most Ontario manufacturers still buy a critical part or material from just one supplier—usually in the U.S. If that supplier gets hit by a tariff, strike, or border delay, the entire production line can grind to a halt (exactly what happened when the Ambassador Bridge was blocked).

Creating a backup supplier—or moving some production closer to home—costs real money (new tooling, engineering tests, quality audits, freight trials, etc.). Today’s federal and provincial grants rarely cover those specific “make-it-resilient” costs.

Core Design Features:

Take two existing funding programs that manufacturers already know:

- **NRC-IRAP** – funds product and process R&D
- **FedDev Ontario Business Scale-Up & Productivity** – funds cap-ex for Southern Ontario firms

Recommendation: carve out a small, dedicated stream inside each program that will pay 50% of the extra costs a company faces when it:

1. **Qualifies a second supplier** for a part (dual-sourcing)
2. **Moves/duplicates production** in Canada, the U.S.-Mexico corridor, or another CPTPP market (near-shoring).

Think of this as a “**resilience top-up.**”

3. EO Micro-Loan Consortium

What: Create a tiny, fast-acting pool of money—think of it as an “industrial overdraft.” Recommend Community Futures deliver program through FedDev Ontario

- Ticket size: C\$10k – C\$25k per loan.
- Decision time: 2-4 weeks from application to funds in the bank.
- Purpose: bridge cash flow for tariff deposits, rush freight, quick tooling, or wage float until grants or insurance arrive.

Why Now? Tariff spikes, surprise border delays, or a broken machine can drain an SME’s cash in days. Traditional grants take months; commercial banks don’t bother with a C\$15 k stop-gap loan; factoring is expensive. Result: otherwise healthy manufacturers miss payroll, can’t buy emergency inventory, or default on a U.S. order.

4 . Rapid-Response Logistics Voucher Program

What: A standing pool of “**emergency coupons**” (up to C\$15 k each) that SMEs can cash in when a border delay, strike, or new tariff suddenly spikes their shipping or compliance costs.

Expected Impact

- Keep tens of vulnerable firms alive during shocks.
- Prevent an estimated millions in cancelled export orders.

Why Now? The survey responses show border friction and surprise tariffs are the **#1 cost shock** for SMEs, and existing grants arrive too late. Speed, not size, is the gap.

Core Design Features:

- **Trigger-based:** vouchers activate only after an official CBSA/GAC disruption alert.
- **Fast cash:** 80 % reimbursed within 10 days on proof of invoice; final 20 % after shipment clears.
- **Fraud guardrails:** require third-party freight or customs invoices plus shipment tracking ID.

5. “Go Global” Diversification Grants (Australia-style)

What: Advocate for a “Go Global” grant pool that mirrors Australia’s A\$198 M Export Diversification Package: 50 % cost-share for trade missions, in-market reps, and first-order compliance in non-U.S. markets.

Why (from the case study): Our report shows Australia used legal/diplomatic action + A\$198M grants to quickly shift exports to new buyers (e.g., cotton to Vietnam; barley to MENA feed markets) while tariffs were active—i.e., diversify first, then negotiate.

Expected Impact:

- Reduce average U.S. export share by **8–10 percentage points** among hundreds of firms—mirroring Australia’s 6 p.p. drop in China dependence during 2020-23.

6. Elevate the Role of Economic Development Offices (EDOs)

What: Position regional economic development organizations as champions for raising awareness of local EDOs. Their role would be to ensure manufacturers know where to turn for help, whether that’s navigating funding programs, finding export support, or connecting to training opportunities. Local EDOs are key connectors for business and programs.

Why Now? Pilot interviews revealed that respondents rarely mentioned their local EDOs as a resource. This indicates a gap in awareness rather than a lack of services. Local EDOs are well-placed to support manufacturers, but they remain underutilized unless businesses are clearly directed to them.

Core Design Features:

- Regional economic development organizations highlight and promote the services of local EDOs in communications, workshops, and programming.
- Emphasize EDOs as a “first stop” for navigating recommendations and resources identified in this report.
- Encourage greater collaboration between regional entities and local EDOs to ensure consistent visibility across Eastern Ontario.
- Local EDOs need access to on-going learning to ensure they can assist with export development, advise on supports available locally, regionally, and at upper government levels, and make effective referrals to the right resources. Ontario East and other

Canadian regional entities can provide this training and access to programs and partners through ongoing engagement with EDOs via meetings, webinars, conferences, and networking events.

Expected Impact:

- Strengthen the link between regional and local business support ecosystems.
- Improve manufacturers' awareness of where to access immediate guidance.
- Boost uptake of both local and federal/provincial programs by funneling firms through trusted local EDOs.

10. Conclusion

Canada's manufacturing economy sits on a fault line: 76% of goods exports — and more than 90% in key sectors like autos, steel, and aluminum — depend on the U.S. market. Recent tariffs, bridge blockades, and strike threats have shown how quickly that overconcentration can vaporize billions in sales and idle plants, hitting SMEs and Indigenous producers first and hardest.

The pilot's findings and international case studies show there is a path forward. With targeted investment in diversification supports, dual-sourcing incentives, and early-warning tools — as outlined in the five recommendations above — Canadian manufacturers can reduce overexposure, maintain operations during shocks, and access new global markets. These aren't long-shot reforms. They're actionable, proven strategies already being deployed in peer jurisdictions like Australia and Japan. The window to act is narrow, but the return is high: stronger supply chain resilience, more competitive exports, and a safer future for workers and communities that depend on manufacturing.

11. Citations

Export Development Canada. 2025. "U.S. Steel and Aluminum Tariffs: Navigating a Volatile Situation." <https://www.edc.ca/en/blog/us-steel-and-aluminum-tariffs.html>.

IndexBox. 2025. "Canadian Companies Diversify Trade Amid US Tariffs." https://www.indexbox.io/blog/canadian-companies-diversify-trade-amid-us-tariffs/?utm_source=

Reuters. 2022. "Truckers in Perfect Spot to Threaten Cross-Border Trade." February 11, 2022. <https://www.reuters.com/world/americas/truckers-ambassador-bridge-perfect-spot-threaten-us-canada-trade-2022-02-11>.

Reuters. 2025. "Canada Could Slap More Duties on US Steel and Aluminum, Says Carney." June 19, 2025.

https://www.reuters.com/world/americas/canada-address-unfair-trade-steel-aluminum-sectors-says-carney-2025-06-19/?utm_source= .

Statistics Canada. 2025a. "Canadian Imports in Millions of Current Dollars, Annual 2024." April 3, 2025. <https://www150.statcan.gc.ca/n1/daily-quotidien/250403/g-a002-eng.htm>.

Statistics Canada. 2025b. "Focus on Canada and the United States: Trade." https://www.statcan.gc.ca/en/topics-start/canada-united-states/trade?utm_source= .

Statistics Canada. 2025c. "Monthly Survey of Manufacturing, December 2024." February 14, 2025.

https://www150.statcan.gc.ca/n1/daily-quotidien/250214/dq250214a-eng.htm?utm_source= .

Statistics Canada. 2025d. "Trade in Goods by Exporter Characteristics, 2024." May 16, 2025.

https://www150.statcan.gc.ca/n1/daily-quotidien/250516/dq250516b-eng.htm?utm_source= .

The White House. 2025. "Fact Sheet: President Donald J. Trump Increases Section 232 Tariffs on Steel and Aluminum."

https://www.whitehouse.gov/fact-sheets/2025/06/fact-sheet-president-donald-j-trump-increases-section-232-tariffs-on-steel-and-aluminum/?utm_source= .

Axios. 2022. "Vaccine Mandate Protesters Block Main Border Crossing in Manitoba." February 10, 2022.

https://www.axios.com/2022/02/10/vaccine-mandate-protesters-canada-manitoba?utm_source=

.

FreightWaves. 2022. "Ambassador Bridge Blockade Enters 4th Day; Protesters Block New Border Crossing." February 2022.

https://www.freightwaves.com/news/ambassador-bridge-blockade-enters-4th-day-protesters-block-new-border-crossing?utm_source= .

Government of Canada. 2024. "The Buy American Act and Buy America Requirements."

https://www.tradecommissioner.gc.ca/en/market-industry-info/search-country-region/country/canada-united-states-export/u-s-government-procurement/buy-america-requirements.html?utm_source= .

Government of Canada. "Strategic Response Fund." Innovation, Science and Economic Development Canada. Accessed September 8, 2025.

<https://ised-isde.canada.ca/site/ised/en/programs-and-initiatives/strategic-response-fund>.

National Supply Chain Task Force. 2022. "Final Report of the National Supply Chain Task Force."

https://tc.canada.ca/sites/default/files/2022-10/supply-chain-task-force-report_2022.pdf?utm_source= .

Petersen, et al. 2020. "COVID-19 and the Agri-Food System in the United States and Canada." National Library of Medicine. <http://pmc.ncbi.nlm.nih.gov>.

Reuters. 2022a. "Truckers in Perfect Spot to Threaten Cross-Border Trade." February 11, 2022. <https://www.reuters.com/world/americas/truckers-ambassador-bridge-perfect-spot-threaten-us-canada-trade-2022-02-11>.

Reuters. 2022b. "Canadian Pacific Railway's Potential Lockout Would Leave Shippers Few Options." March 17, 2022. https://www.reuters.com/business/autos-transportation/canadian-pacific-railways-potential-lockout-would-leave-shippers-few-options-2022-03-17/?utm_source=.

Reuters. 2023. "Explainer: How Strained China-Australia Relations Hit Trade in Coal, Barley, Beef and Wine." <https://www.reuters.com/markets/commodities/how-strained-china-australia-relations-hit-trade-coal-barley-beef-wine-2023-01-06/>.

Reuters. 2025. "Canadian Companies Diversify Trade During US Tariff War but Experts See Limits." July 9, 2025. <https://www.reuters.com/world/americas/canadian-companies-diversify-trade-during-us-tariff-war-experts-see-limits-2025-07-09/>.

Statistics Canada. 2025. "Canadian Domestic Exports in Millions of Current Dollars, Annual 2024." <https://www150.statcan.gc.ca/n1/daily-quotidien/250403/g-a001-eng.htm>.

Transport Canada. 2022. "Economic Impact of the Blockades." https://tc.canada.ca/en/binder/16-economic-impact-blockades?utm_source=.

United States International Trade Commission. 2020. "The Impact of the COVID-19 Pandemic on Freight Transportation and Global Supply Chains." https://www.usitc.gov/research_and_analysis/tradeshifts/2020/special_topic.html?utm_source=.

Al Jazeera. 2024. "China Lifts Ban on Australian Beef Exporters in the Latest Sign of Thaw." May 30, 2024. <https://www.aljazeera.com/economy/2024/5/30/china-lifts-ban-on-australian-beef-exporters-in-the-latest-sign-of-thaw>.

DFAT. 2023. "Summary of Australia's Involvement in Disputes Currently before the World Trade Organization." <https://www.dfat.gov.au/trade/organisations/wto/wto-disputes/summary-of-australias-involvement-in-disputes-currently-before-the-world-trade-organization>.

Reuters. 2024. "China Lifts Tariffs on Australian Wine, Ends Three-Year Freeze in Trade." April 2, 2024. <https://www.reuters.com/markets/commodities/china-lifts-tariffs-australian-wine-ends-three-year-freeze-trade-2024-04-02/>.

Reuters. 2025a. "Canada Initiates WTO Dispute Complaint on U.S. Steel and Aluminium Duties." March 13, 2025. <https://www.reuters.com/world/canada-initiates-wto-dispute-complaint-us-steel-aluminium-duties-2025-03-13/>.

Reuters. 2025b. "Backseat Driver Throws GM into Lower Gear." July 22, 2025. <https://www.reuters.com/commentary/breakingviews/backseat-driver-throws-gm-into-lower-gear-2025-07-22/>.

RUSI. 2021. "Australia's Answer to China's Coercive Challenge." <https://www.rusi.org/explore-our-research/publications/commentary/australias-answer-chinas-coercive-challenge>.

Statistics Canada. 2025a. "Canadian International Merchandise Trade, December 2024." February 5, 2025. <https://www150.statcan.gc.ca/n1/daily-quotidien/250205/dq250205a-eng.htm>.

Statistics Canada. 2025b. "Focus on Canada and the United States: Trade." <https://www.statcan.gc.ca/en/topics-start/canada-united-states/trade>.

Transport Canada. 2021. "Transportation in Canada: Statistical Addendum 2020. Table EC6." <http://tc.canada.ca>.

United States Studies Centre. 2024. "China's Trade Restrictions on Australian Exports." <https://www.ussc.edu.au/chinas-trade-restrictions-on-australian-exports>.

University of New South Wales. 2024. "China Has Finally Removed Crushing Tariffs on Australian Wine." <https://www.unsw.edu.au/newsroom/news/2024/04/china-finally-removed-crushing-tariffs-Australian-wine>.

Canada Border Services Agency. 2025. "Customs Notice 25-19 'United States Surtax Remission Order (2025).'" <https://www.cbsa-asfc.gc.ca/publications/cn-ad/cn25-19-eng.html>.

Economist Impact. 2025. *Trade in Transition 2025 Global Report*. https://impact.economist.com/projects/trade-in-transition/pdfs/Trade_in_Transition_Global_Report_2025.pdf.

Export Development Canada. 2025. "EDC Ready to Support Canadian Exporters Impacted by Market Uncertainty." <https://www.edc.ca/en/about-us/newsroom/edc-trade-impact-program.html>.

Export Development Canada. 2025. "About Us." <https://www.edc.ca/en/about-us.html>.

Packaging Dive. 2025. "Packaging Manufacturers Worried by 50% Tariffs on Steel, Aluminum." <https://www.packagingdive.com/news/packaging-manufacturers-tariffs-steel-aluminum-doubled/749544/>.

Reuters. 2025a. "Canada to Spend \$6.5 bn to Help Businesses Mitigate Impact of US Tariffs." March 7, 2025.

<https://www.reuters.com/markets/canada-launches-c5-billion-program-help-exporters-reach-new-markets-2025-03-07/>.

Reuters. 2025b. "Ontario Announces C\$11 Billion Tariff Support." April 7, 2025.

<https://www.reuters.com/markets/ontario-announces-c11-billion-tariff-support-2025-04-07/>.

Reuters. 2025c. "RTX Cuts 2025 Profit Forecast as Tariff Costs Weigh." July 22, 2025.

<https://www.reuters.com/business/aerospace-defense/rtx-cuts-2025-profit-forecast-tariff-costs-weigh-2025-07-22/>.

Reuters. 2025d. "Trump's Tariffs on Steel, Aluminum to Raise Costs for US Energy Firms, Experts Say." March 11, 2025.

<https://www.reuters.com/business/energy/trumps-tariffs-steel-aluminum-raise-costs-us-energy-firms-experts-say-2025-03-11/>.

Statistics Canada. 2025. "Focus on Canada and the United States: Trade."

<https://www.statcan.gc.ca/en/topics-start/canada-united-states/trade>.

United States Studies Centre. 2024. "China's Trade Restrictions on Australian Exports."

<https://www.ussc.edu.au/chinas-trade-restrictions-on-australian-exports>.

The Wall Street Journal. 2025a. "Alcoa Says U.S. Aluminum Buyers Not Paying Full Cost for Tariffs." July 17, 2025.

<https://www.wsj.com/livecoverage/stock-market-today-dow-sp-500-nasdaq-07-17-2025/card/alcoa-says-u-s-aluminum-buyers-not-paying-full-cost-for-tariffs-DjkRZqM7KzxZyBL09Zgl>.

The Wall Street Journal. 2025b. "One of the Biggest Victims of Trump's Metals Tariffs: The Ford F-150." <https://www.wsj.com/business/autos/trump-metal-tariffs-auto-industry-c964a59a>.

Benjamin, Daniel. 1999. "Voluntary Export Restraints on Automobiles." PERC.

<https://www.perc.org/1999/09/01/voluntary-export-restraints-on-automobiles/>.

Canadian Manufacturers & Exporters. 2023. "What 'Buy American' Really Means for Canada."

<https://cme-mec.ca/blog/policy-insight-what-buy-american-really-means-for-canada/>.

DFAT. 2023. "Summary of Australia's Involvement in Disputes Currently before the World Trade Organization."

<https://www.dfat.gov.au/trade/organisations/wto/wto-disputes/summary-of-australias-involvement-in-disputes-currently-before-the-world-trade-organization>.

Global Affairs Canada. 2020. "Vulnerability of Canadian Industries to Disruptions."

<https://international.canada.ca/en/global-affairs/corporate/transparency/reports-publications/chief-economist/global-value-chains/2020-06-vulnerability>.

Government of Canada. 2025. "Trade Commissioner Service."
<https://www.tradecommissioner.gc.ca/en.html>.

Government of Canada. 2025. "Southern Ontario Businesses Facing Trade Challenges Can Now Apply for Funding." Federal Economic Development Agency for Southern Ontario.
<https://www.canada.ca/en/economic-development-southern-ontario/news/2025/08/southern-ontario-businesses-facing-trade-challenges-can-now-apply-for-funding.html>.

JAMA. 2025. "Japanese Brand Automobile and Motorcycle Trends in Japan & the U.S."
<https://www.jama.org/00-japan-industry-auto-data-trends/>.

King, Wells, and Dan Vaughn Jr. 2022. "The Import Quota That Remade the Auto Industry."
American Compass.
<https://americancompass.org/the-import-quota-that-remade-the-auto-industry/>.

RBC Economics. 2024. "A Playbook for How to Measure a Tariff Shock in Canada."
<https://www.rbc.com/en/thought-leadership/economics/featured-insights/a-playbook-for-how-to-measure-a-tariff-shock-in-canada/>.

Reuters. 2023. "Australia Says It Reached Agreement with China on Barley Dispute." April 11, 2023.
<https://www.reuters.com/world/asia-pacific/australia-says-reached-agreement-with-china-resolution-dispute-over-barley-2023-04-11/>.

Reuters. 2025. "How One of the Largest Auto Suppliers in the World Is Preparing for Trump's Tariffs." April 2, 2025.
<https://www.reuters.com/business/autos-transportation/how-one-largest-auto-suppliers-world-is-preparing-trumps-tariffs-2025-04-02/>.

Statistics Canada. 2025a. "Canadian International Merchandise Trade, February 2025."
<https://www150.statcan.gc.ca/n1/daily-quotidien/250403/dq250403a-eng.htm>.

Statistics Canada. 2025b. "Gross Domestic Product by Industry, November 2024."
<https://www150.statcan.gc.ca/n1/daily-quotidien/250131/dq250131a-eng.htm>.

Time. 1980. "How Japan Does It." <https://time.com/archive/6856395/how-japan-does-it/>.

U.S. Department of Commerce. 1985. "The U.S. Motor Vehicle and Equipment Industry Since 1958." <https://www.ebhsoc.org/journal/index.php/ebhs/article/download/127/108/255>.

United States Studies Centre. 2024. "China's Trade Restrictions on Australian Exports."
<https://www.ussc.edu.au/chinas-trade-restrictions-on-australian-exports>.

University of New South Wales. 2024. "China Has Finally Removed Crushing Tariffs on Australian Wine."

<https://www.unsw.edu.au/newsroom/news/2024/04/china-finally-removed-crushing-tariffs-Australian-wine>.

Wikipedia. 2024. "Marysville Auto Plant." https://en.wikipedia.org/wiki/Marysville_Auto_Plant.

Wikipedia. 2025a. "Amati Cars." https://en.wikipedia.org/wiki/Amati_Cars.

Wikipedia. 2025b. "Japan–United States Relations." Accessed August 2025. https://en.wikipedia.org/wiki/Japan–United_States_relations.

Wikipedia. 2025c. "Toyota Motor North America." https://en.wikipedia.org/wiki/Toyota_Motor_North_America.

Wikipedia. 2025d. "Voluntary Export Restraint." https://en.wikipedia.org/wiki/Voluntary_export_restraint.

BizTech Magazine. 2016. "BlackBerry to Stop Developing Phone Hardware Internally." <https://biztechmagazine.com/article/2016/09/blackberry-stop-developing-phone-hardware-internally>.

Business Development Bank of Canada. n.d. "Business Diversification in Alberta and Saskatchewan." <https://www.bdc.ca/en/articles-tools/blog/diversification-key-recovery-alberta-saskatchewan-businesses>.

Business Development Bank of Canada. 2025. "Financing and Advisory Services." <https://www.bdc.ca/en/financing>.

Business Insider. 2016. "BlackBerry to Stop Making Its Own Phones." <https://www.businessinsider.com/blackberry-to-stop-making-its-own-phones-2016-9>.

Grand View Research. 2030. "Canada Pharmaceutical Packaging Market Size & Outlook, 2030." <https://www.grandviewresearch.com/horizon/outlook/pharmaceutical-packaging-market/canada>.

Kruger Inc. n.d.-a. "The FiloCell Advantage – Biomaterials." <https://biomaterials.kruger.com/products/the-filocell-advantage/>.

Kruger Inc. n.d.-b. "Kruger Creates a New Entity." <https://www.kruger.com/news/kruger-creates-a-new-entity-2/>.

Kruger Inc. n.d.-c. "Kruger Innovates and Diversifies Production at Its Wayagamack Mill." <https://www.kruger.com/news/wayagamack-diversifies-production/>.

Kruger Inc. n.d.-d. "Kruger Packaging Announces Important Transformation Project That Will Make Its Place Turcot Mill the First in North America to Manufacture 100% Recycled Saturating Kraft."

<https://www.kruger.com/news/kruger-packaging-announces-important-transformation-project-that-will-make-its-place-turcot-mill-the-first-in-north-america-to-manufacture-100-recycled-saturating-kraft>.

Mordor Intelligence. n.d. "Canada Foodservice Packaging Market Size & Share Analysis." <https://www.mordorintelligence.com/industry-reports/canada-foodservice-packaging-market>.

Natural Resources Canada. 2025. "Canada Announces Support for Quebec's Forest Sector." <https://www.canada.ca/en/natural-resources-canada/news/2025/03/canada-announces-support-for-quebecs-forest-sector.html>.

Newswire. n.d. "Quebec and Canada Invest in Energy Efficiency in Industrial Facilities." <https://www.newswire.ca/news-releases/quebec-and-canada-invest-in-energy-efficiency-in-industrial-facilities-811654635.html>.

Ortec Finance. n.d. "Are Canadian Financial Institutions Sufficiently Prepared for Their Climate Risks." <https://www.ortecfinance.com/en/insights/blog/are-canadian-financial-institutions-sufficiently-prepared-for-their-climate-risks>.

Reuters. 2025. "World Oil Demand to Keep Growing This Decade Despite 2027 China Peak, IEA Says." June 17, 2025. <https://www.reuters.com/business/energy/world-oil-demand-keep-growing-this-decade-despite-2027-china-peak-iea-says-2025-06-17>.

Wikipedia. 2025. "BlackBerry Limited." https://en.wikipedia.org/wiki/BlackBerry_Limited.

Ashbridge, Emily. 2022. "Semiconductor Industry Needs More Than CHIPS Act to Succeed." *National Defense Magazine*. <https://www.nationaldefensemagazine.org/articles/2022/10/5/semiconductor-industry-needs-more-than-chips-act-to-succeed>.

Council of the European Union. 2020. "Communication COM(2020)474: Critical Raw Materials Resilience." <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52020DC0474>.

Council of the European Union. 2023. "Critical Raw Materials Act Infographic." <https://www.consilium.europa.eu/en/infographics/critical-raw-materials>.

Denyer, Simon. 2020. "Japan Helps 87 Companies to Break from China After Pandemic Exposed Overreliance." *The Washington Post*. https://www.washingtonpost.com/world/asia_pacific/japan-helps-87-companies-to-exit-china-after-pandemic-exposed-overreliance/2020/07/21/4889abd2-cb2f-11ea-99b0-8426e26d203b_story.html.

Tokyo Review. 2020. “No, Japan Is Not Decoupling from China.”
<https://www.tokyoreview.net/2020/08/no-japan-is-not-decoupling-from-china>.

TransAlta Corporation. 2016. “TransAlta Reaches Agreement with the Government of Alberta on Transition Payments and Executes Memorandum of Understanding.”
<https://www.globenewswire.com/news-release/2016/11/25/1275335/0/en/TransAlta-Reaches-Agreement-with-the-Government-of-Alberta-on-Transition-Payments-and-Executes-Memorandum-of-Understanding.html>.

TransAlta Corporation. 2021. “TransAlta Achieves Full Phase-Out of Coal in Canada.”
https://transalta.com/newsroom/transalta-achieves-full-phase-out-of-coal-in-canada/?utm_source=.

TransAlta Corporation. 2022. “Accelerating Clean: 2021 Integrated Report.”
https://www.transalta.com/wp-content/uploads/2022/09/TransAlta-Corporation-CDP-Climate-Change-2022.pdf?utm_source=.

Toronto Region Board of Trade. 2025. “Trade Accelerator Program (TAP).”
<https://bot.com/Programs-Networks/trade-accelerator-program>.

Western Energy Institute. 2024. “Transforming to a Cleaner Future.”
https://www.westernenergy.org/resource/transforming-to-a-cleaner-future/?utm_source=.

Wikipedia. 2021. “The Supply Chain Resilience Initiative.”
https://en.wikipedia.org/wiki/The_Supply_Chain_Resilience_Initiative.

Wikipedia. 2025a. “Electricity Sector in Canada.”
https://en.wikipedia.org/wiki/Electricity_sector_in_Canada?utm_source=.

Wikipedia. 2025b. “TransAlta.” https://en.wikipedia.org/wiki/TransAlta?utm_source=.

Boston Consulting Group. 2024. “The Shifting Dynamics of Nearshoring in Mexico.”
<https://www.bcg.com/publications/2024/shifting-dynamics-of-nearshoring-in-mexico>.

Brookings Institution. 2023. “Broad Support for Prioritizing Responsible Critical Minerals Development.”
<https://www.brookings.edu/articles/broad-support-for-prioritizing-responsible-critical-minerals-development>.

Intel Corporation. 2024. “Intel Invests in Ohio – Newsroom.”
<https://newsroom.intel.com/press-kit/intel-invests-ohio>.

MacMillan Supply Chain Group. 2025. “How Nearshoring Is Reshaping Canadian Supply Chains in 2025.”
<https://www.macmillanscg.com/blog/how-nearshoring-is-reshaping-canadian-supply-chains-in-2025>.

RBC Wealth Management. 2023. "The New Great Game: How the Race for Critical Minerals Is Shaping Tech Supremacy."

<https://ca.rbcwealthmanagement.com/xiangzhou-kong/blog/4512911-The-New-Great-Game-How-the-race-for-critical-minerals-is-shaping-tech-supremacy>.

Reuters. 2022. "Apple May Move a Quarter of iPhone Production to India by 2025 – JPM."

<https://www.reuters.com/technology/apple-may-move-quarter-iphone-production-india-by-2025-jpm-2022-09-21>.

Semiconductor Industry Association. 2022. "Strengthening the Global Semiconductor Supply Chain in an Uncertain Era."

<https://www.semiconductors.org/strengthening-the-global-semiconductor-supply-chain-in-an-uncertain-era>.

TechNode. 2023. "China Continues to Produce over 95% of Apple's Products."

<https://technode.com/2023/10/23/china-continues-to-produce-over-95-of-apples-products>.

TSMC. 2025. "Fab 21." <https://www.tsmc.com/static/abouttsmcaz/index.htm>.

U.S. Department of Energy. 2023. "Li-Bridge Report: Building a Robust and Resilient U.S. Lithium Battery Supply Chain."

<https://netl.doe.gov/sites/default/files/2023-03/Li-Bridge%20-%20Building%20a%20Robust%20and%20Resilient%20U.S.%20Lithium%20Battery%20Supply%20Chain.pdf>.

Veridion. 2024. "7 Examples of Successful Supplier Sourcing Strategies."

<https://veridion.com/blog-posts/successful-supplier-sourcing-strategies-examples>.

Wikipedia. 2022. "CHIPS and Science Act."

https://en.wikipedia.org/wiki/CHIPS_and_Science_Act.

ABC News. 2021. "Australia's Deteriorating China Relationship Had Silent Influence Over Budget."

<https://www.abc.net.au/news/2021-05-13/australia-china-relationship-silent-influence-over-budget/100134288>.

CME. n.d. "Stuff Made and Built." <https://cme-mec.ca/>.

CME-MEC. n.d. "EMC Canada." <https://cme-mec.ca/emc-canada/>.

EMC Canada. n.d. "Member Associations." <https://emccanada.org/>.

Government of Ontario. n.d. "Ontario Together Fund."

<https://www.ontario.ca/page/ontario-together-trade-fund>.

Government of Ontario. 2025. "Regional Economic Development."

<https://www.ontario.ca/page/economic-development>.

Government of Ontario Newsroom. 2024. "Province Launching Protect Ontario Financing Program to Support Sectors Impacted by U.S. Tariffs."
<https://news.ontario.ca/en/release/1006305/province-launching-protect-ontario-financing-program-to-support-sectors-impacted-by-us-tariffs>.

HelloDarwin. n.d. "Northumberland Manufacturers' Association."
<https://hellodarwin.com/ca/company/northumberland-manufacturers-association>.

IKEA Global. 2024. "The Wood We Use."
<https://www.ikea.com/global/en/our-business/sustainability/wood-we-use/>.

IKEA Global. n.d. "Let's Grow Together: Become an IKEA Supplier."
<https://www.ikea.com/global/en/our-business/how-we-work/for-suppliers/>.

Indigenous Prosperity Foundation. 2023. *Closing the Prosperity Gap: Indigenous Economic Reconciliation in Canada*.
<https://indigenousprosperity.ca/wp-content/uploads/2023/10/IPF-Final-Prosperity-Report-2023.pdf>.

LMA Consulting Group. 2022. "Diversify to Thrive in Manufacturing Supply Chain."
<https://www.lma-consultinggroup.com/diversify-to-thrive-in-manufacturing-supply-chain>.

NGen. n.d. "About." <https://www.ngen.ca/>.

NMA. n.d. "NMA." <https://nmaontario.ca/>.

Ontario Centre of Innovation. n.d. "OCI Programs (Critical Industry Technologies)."
<https://www.oc-innovation.ca/programs/cit/>.

Ontario Vehicle Innovation Network (OVIN). n.d. "Programs and Resources."
<https://www.ovinhub.ca/>.

SOFII – Southern Ontario Fund for Investment in Innovation. n.d. "Program Overview."
Community Futures Eastern Ontario. <https://www.cfeasternontario.ca/sofii/program-overview>.

Statistics Canada. 2023. *Key Small Business Statistics 2023*. ISED Canada.
<https://ised-isde.canada.ca/site/sme-research-statistics/en/key-small-business-statistics/key-small-business-statistics-2023>.

Statistics Canada. 2025. "Table 14-10-0215-01: Employment for All Employees by Enterprise Size, Annual." ISED Canada.
<https://ised-isde.canada.ca/site/sme-research-statistics/en/key-small-business-statistics/key-small-business-statistics-2024>.

Tanase, Auras. 2024. "7 Examples of Successful Supplier Sourcing Strategies." Veridion.
<https://veridion.com/blog-posts/successful-supplier-sourcing-strategies-examples>.

12. Appendices

- **A. Full Survey Instrument Stakeholder** (all 17 questions)

Your Full Name

Short answer

Your Organization

Short answer

Your Role / Title

Short answer

Email Address

Short answer (Required)

What type of organization do you represent?

Multiple choice

- *Manufacturing Association*
- *Economic Development Office*
- *Chamber of Commerce*
- *Industry Group or Consortium*
- *Post-secondary or Research Institution*
- *Government Agency*
- *Other: [Short answer]*

Which community or region(s) does your organization primarily serve?

Short answer or Dropdown

Section 3: Understanding Trade Exposure & Ecosystem Needs

To your knowledge, how reliant are manufacturers in your region on U.S. markets or supply chains?

Multiple choice

- *Very dependent (over 75%)*
- *Moderately dependent (25–75%)*
- *Minimally dependent (under 25%)*
- *Not sure*

What trade-related challenges have you noticed manufacturers encountering?

Checkboxes

- *Tariffs and cross-border taxes*
- *Border delays or customs issues*
- *Transportation or logistics problems*
- *Loss of suppliers or customers*
- *Currency or market volatility*
- *Interprovincial trade barriers*
- *Confusion between local vs. provincial and national programs (e.g., “Made in Quinte” vs. “Made in Canada”)*
- *Lack of consistency across regions: different programs, different levels of support*
- *Manufacturers unsure who to go to for help (locally vs. provincially vs. federally)*
- *Other: [Short answer]*

What types of support have been offered in your region to help manufacturers with trade or supply chain resilience?

Checkboxes

- *Job fairs or employment training*
 - *Business expansion or site selection support*
 - *Export marketing assistance*
 - *International trade or export training*
 - *Supplier matchmaking*
 - *Promotional programs (e.g., “Made in X” branding)*
 - *Other: [Short answer]*
-

 **Section 4: Available Programs & Gaps**

Which of the following supports or agencies do manufacturers in your region currently use or benefit from?

Checkboxes

- *Trade Commissioner Service*
- *Export Development Canada (EDC)*
- *Global Affairs Canada*
- *NGen (Next Generation Manufacturing Canada)*
- *Invest Ontario*
- *Local economic development office*
- *Sector-specific grants (e.g., FedDev, OMAFRA)*
- *None that I’m aware of*

- *Other: [Short answer]*

Where do you see the biggest gaps in current support for manufacturers?
Checkboxes

- *Not enough awareness of existing programs*
- *Funding is hard to access or not aligned with local needs*
- *No support to find alternative markets or suppliers*
- *Gaps in logistics and site readiness*
- *Coordination between local, provincial, federal programs is poor*
- *Export intelligence/tools are missing or underutilized*
- *Other: [Short answer]*

What's missing from your ecosystem that could improve regional trade resilience or export growth?
Checkboxes

- *Supplier matchmaking tools*
- *Export readiness programs*
- *Coordinated site selection data*
- *Peer learning forums*
- *Government collaboration/integration*
- *International business intelligence*
- *Other: [Short answer]*

Have you done or reviewed any reports or research on manufacturing trade challenges or programs in your region?
Multiple choice

- *Yes, my organization produced something*
 - *Yes, I've reviewed external research*
 - *No, but I'd like to see more*
 - *Not applicable*
(If yes:)
Please upload or share a link:
File upload or Short answer
-

Section 5: Regional Readiness & Collaboration

Which of the following would be valuable in your region over the next 12–18 months?

(Check all that apply)

- *Regional supplier forums*
- *Export planning workshops*
- *Industry-specific job fairs*
- *Trade show participation*
- *Shared site selection tools*
- *Asset mapping (infrastructure, workforce, etc.)*
- *Collaboration with international partners*
- *All of the above*
- *Other: [Short answer]*

Which of these activities would your organization support or help deliver?

(Check all that apply)

- *Hosting or facilitating supplier forums*

- *Organizing trade-readiness workshops*
 - *Coordinating job fairs or skills events*
 - *Supporting local site selection activities*
 - *Collecting and sharing asset mapping data*
 - *Helping manufacturers explore new markets*
 - *Leading or supporting promotional programs*
 - *I would like to collaborate on these*
 - *I'd be open to contributing expertise, space, or staff*
 - *Other: [Short answer]*
-

Section 6: Market Diversification & Insights

Which markets (besides the U.S.) should manufacturers in your region explore?
Dropdown (or Multi-select if enabled)

- *Europe*
- *Asia-Pacific*
- *Latin America*
- *Middle East & Africa*
- *Interprovincial (within Canada)*
- *Don't know*
- *Other: [Short answer]*

Do you know of any manufacturers or programs in your region that have successfully diversified or built trade resilience?
Paragraph

(Note: We may follow up with them to learn and share their stories.)

Section 7: Final Thoughts

What advice would you give to other communities trying to better support manufacturers with trade and supply chain challenges?

Paragraph

Would you be interested in participating in a follow-up roundtable or collaborative working session?

Yes / No / Maybe

- **B. Full Survey Instrument Manufacturers** (all 17 questions)

Form Intro

Form Title:

Ontario East Manufacturer Survey – Building Trade Resilience Together

Description:

Ontario East is investigating how manufacturers like yours are responding to trade disruptions, supply chain pressures, and opportunities to grow globally. This short survey is part of a pilot study with NGen and will help us design a larger regional support program.

Section 2: Company Profile

1. ***Company Name*** – Short answer
2. ***Your Name & Title*** – Short answer
3. ***Business Email*** – Short answer
4. ***Where is your primary facility located?*** – Short answer or dropdown
5. ***Which sectors best describe your business?*** – Checkboxes
 - *Advanced Manufacturing*

- *Agri-food Processing*
 - *Logistics & Distribution*
 - *Fabrication*
 - *Aerospace/Defense*
 - *Other: [Short answer]*
-

Section 3: Trade & Supply Chain Resilience

6. **How dependent is your business on U.S. markets or supply chains?** – Multiple choice

- *Very dependent (over 75%)*
- *Moderately dependent (25–75%)*
- *Minimally dependent (under 25%)*
- *Not at all*
- *Not sure*

7. **Which challenges have you experienced due to trade disruptions or U.S. policy shifts?** – Checkboxes

- *Tariffs*
- *Border delays*
- *Loss of suppliers/customers*
- *Cost volatility*
- *Logistics disruptions*
- *Interprovincial trade barriers*
- *Confusion around programs (e.g., “Made in Canada” vs. local branding)*

- *Unclear where to get help (local, provincial, federal)*
- *Other: [Short answer]*

8. Have you taken steps to reduce reliance on U.S. trade? – Yes / No / Planning to

8a. (If Yes or Planning to)

What actions have you taken or considered? – Checkboxes

- *Sourced new Canadian suppliers*
 - *Entered new international markets*
 - *Shifted logistics routes*
 - *Launched new product line*
 - *Other: [Short answer]*
-

Section 4: Supports, Gaps & Opportunities

9. Which of the following supports would help your business build resilience or expand exports? – Checkboxes

- *Local supplier directories or forums*
- *Access to new international markets*
- *Government funding or grants*
- *Help with site selection or expansion*
- *Workforce development*
- *Export planning & intelligence*
- *Trade show support*
- *Other: [Short answer]*

10. Which of the following supports or agencies have you heard of or used? – Checkboxes

- *Trade Commissioner Service*
- *Export Development Canada (EDC)*
- *Global Affairs Canada*
- *Invest Ontario*
- *Local economic development office*
- *NGen*
- *I don't know any of these*
- *Other: [Short answer]*

11. What is the biggest barrier holding your business back from growing or diversifying your markets? – Paragraph

12. Have you received any support or participated in a program that was particularly helpful?

Paragraph

(We may follow up to learn and share your story.)

13. Have you seen any helpful research or reports about manufacturing trade or supply chains? – Multiple choice

- *Yes, I've read something useful*
- *No, but I'd like access to more*
- *Not applicable*
- *If yes: please share or upload: [short answer / file upload]*

 **Section 5: Future Planning & Program Design**

14. Would you participate in any of the following initiatives if offered in your region? – Checkboxes

- *Local supplier networking events*
- *Trade or export readiness workshops*
- *Access to market data and intelligence*
- *Regional job fairs*
- *Site selection tools and support*
- *Partner-matching with international companies*
- *Participation in international trade shows*
- *Yes – and I'd like to help shape these*
- *Other: [short answer]*

15. What markets are you most interested in expanding into (besides the U.S.)? – Dropdown (multi-select if possible)

- *Europe*
- *Asia-Pacific*
- *Latin America*
- *Middle East & Africa*
- *Interprovincial (within Canada)*
- *Not looking to expand*
- *Other: [short answer]*

16. Would you be open to a follow-up conversation or workshop to explore these ideas? – Yes / No

 **Section 6: Final Insights**

17. What advice or insight would you want shared in a regional framework to support manufacturers like you across Canada? – Paragraph

- C. [Raw Survey Data Table Stakeholders](#)
 - D. [Raw Survey Data Table Manufacturers](#)
-