

PORT FORWARD

Envisioning possible futures for the Greater Vancouver gateway

Final report



PORT of
vancouver

Vancouver Fraser
Port Authority

**PORT
FORWARD**



04
Introduction

06
The scenarios

08
Scenario 01:
Squandered opportunities

12
Scenario 02:
Weather the storm

16
Scenario 03:
Everyone for themselves

20
Scenario 04:
Rising to the challenge

Contents

Navigating uncharted waters

Welcome to Port Forward: a collaborative initiative for envisioning possible futures of the Greater Vancouver gateway.

Port Forward is the latest chapter in the Vancouver Fraser Port Authority's original scenario planning process, Port 2050. We launched that process in 2010 to engage with industry, government, and community leaders to collectively imagine what the future of the Greater Vancouver gateway could look like over the next several decades. Through the Port 2050 work, we developed a set of four future scenarios—each describing a distinct yet plausible version of the gateway in 2050. Together, we built a shared understanding of what the future might hold for the gateway—which ultimately led to a new corporate vision at the port authority: for the Port of Vancouver to be the world's most sustainable port—and strengthened relationships among participants.

A lot has changed since 2010. Local and global factors beyond our control, such as the COVID-19 pandemic, geopolitical issues, extreme weather events, and supply chain congestion, to name a few, have impacted the gateway dramatically. We needed to better understand how these impacts could influence the future of the gateway so in 2022, building on our collective experiences, perspectives, and insights, we launched Port Forward—the next phase of scenario planning led by the port authority. Port Forward brought together a diverse group of senior leaders and key stakeholders from across the gateway to explore questions about our shared future, such as how the gateway might change over the next 40 years, what challenges, opportunities, and forces might drive those changes along the way, and what might be the critical drivers of that change.

To facilitate the process, we worked with Reos Partners—a strategic global consulting firm specializing in scenario planning—who used the insights gleaned from our discussions to develop four scenarios: Rising to the challenge, Squandered opportunities, Weather the storm, and Everyone for themselves. The relationships we've strengthened through the development of the scenarios will help us all further collaborate as we seek to adapt to or potentially shape our future. Collectively, we are better when we work together.

By tapping into the unique perspectives and expertise of participants, we considered both the challenges and opportunities ahead and gained a better understanding of the ways in which we can collaborate to achieve shared success. I would like to offer my thanks and appreciation to everyone who was involved in the creation of these scenarios, including the many customers, gateway leaders, stakeholders, and port authority employees who offered both their time and expertise throughout the process; Reos Partners for facilitating the experience; and the Port Forward team for leading the project and overseeing its many moving parts.

What I hope you'll glean from this report is that the gateway stands at a crossroads, with four distinct potential paths—the potential scenarios—ahead. Together, we've mapped out each of these scenarios considering where the paths might take us and what factors could influence our journey. And, while there will always be factors that we can't predict or control, this process has made one thing perfectly clear: for this gateway to thrive, collaboration is essential. We look forward to embarking on this journey forward and continuing our work together to better shape our collective future.

Victor Pang
Interim President and CEO, and CFO

Introduction

What is scenario planning?

Scenario planning is a well-established process that is used as a tool to not just adapt to but also shape the future. A scenario is a story about what could happen: an internally consistent hypothesis about the future that is relevant, challenging, plausible, and clear. These are stories that describe possible pathways into the future and intended to help people talk and think more deeply about their current reality. It is not a story about what will happen or what should happen. This process involves a diverse group of representatives to identify and understand key issues and related implications and to frame various scenarios for how those issues could play out in the future. As the federal agency responsible for the shared stewardship of the Port of Vancouver, the Vancouver Fraser Port Authority uses scenario planning to improve our understanding of key drivers of change that, over the long term, can affect the future success of the port.

Where we've been: Port 2050

In 2010, we embarked on Port 2050—a long-range, scenario planning process—with over 100 individuals and organizations with a stake in the future of the Port of Vancouver. The process identified four plausible scenarios for the future, including one we aspired to: the great transition. This scenario represented a shift to a low-carbon economy that balances economic, environmental, and social sustainability. Port 2050 was also an integral step in our journey to articulate our vision for the Port of Vancouver to be the world's most sustainable port.

Where we are: local and global factors influencing the gateway

The work we accomplished through Port 2050 proved to be a valuable forum for developing a shared understanding about possible futures for the gateway and strengthening relationships among participants. However, the world has changed dramatically since 2010. In the last few years alone, we've experienced several local and global factors beyond our control, including the COVID-19 pandemic, extreme weather events, supply chain disruptions, and Russia's ongoing invasion of Ukraine. These issues may not have been on our radar back in 2010 but have significant impacts on the world we live in today.

Where we're going: Port Forward

Amid this rapid change and an increasingly uncertain future, we launched Port Forward to build upon the gateway community's experiences, perspectives, and insights and create a new set of scenarios. To facilitate this journey, we engaged Reos Partners—an international social enterprise—to lead us through their transformative scenario planning process, which enables diverse participants to work together to construct a shared understanding of what is happening and what could happen in their system. This work builds a foundation for participants to then act based on this understanding. Unlike other scenario planning methodologies, the strength of a transformative scenario planning process is to help participants to not only understand or adapt to the future but also to shape it.

Futures Group workshops

In alignment with the transformative scenario process, senior leaders from across the Greater Vancouver gateway—including Indigenous groups and other levels of government, industry and trade associations, labour, community groups, emerging leaders, and NGOs—were brought together to act as the Futures Group. Throughout the Port Forward scenario planning process, the Futures Group participated in three workshops to make observations about the current state of the gateway and to construct scenarios about what could happen in the future.

Employee roundtables

Parallel to the Futures Group workshops, employees of the Vancouver Fraser Port Authority were invited to engage in the scenario development work through two employee roundtable sessions. In these sessions, employees had the opportunity to review the findings of the Futures Group workshops and provide valuable feedback informed by their unique perspectives from inside the port authority environment.

Building scenarios

The input, insight, and diversity of perspectives shared by both the Futures Group participants and port authority employees were used to create four distinct stories about what could happen in the future. These stories were developed throughout the Port Forward process, with the project team and facilitators using the discussions and feedback shared in each workshop and roundtable session to further refine the draft scenarios along the way.

Critical uncertainties

Eight critical uncertainties about the gateway's future were identified through interviews with key stakeholders and senior leaders from across the gateway, which form the building blocks for the scenarios. They are:

- Climate change impacts
- Global economy, trade, and geopolitics
- Environmental impacts
- Energy transition
- Land use and affordability
- Technology, data, and automation
- Governance, democracy, and Reconciliation
- Relationships and trust

Key takeaways

- Although we cannot influence what is happening globally, we can collectively influence how we collaborate; this will be critical to thrive in the future
- Across the gateway, there is a high level of interest to engage in conversations about our collective future
- A diversity of perspectives is critical to enrich our collective understanding about the complexity of the gateway system
- Local and global factors beyond our control are more prevalent today than they were during the original Port 2050 planning process, adding a layer of complexity and consideration to our scenario planning with Port Forward
- Under any scenario, we all do better if we work together

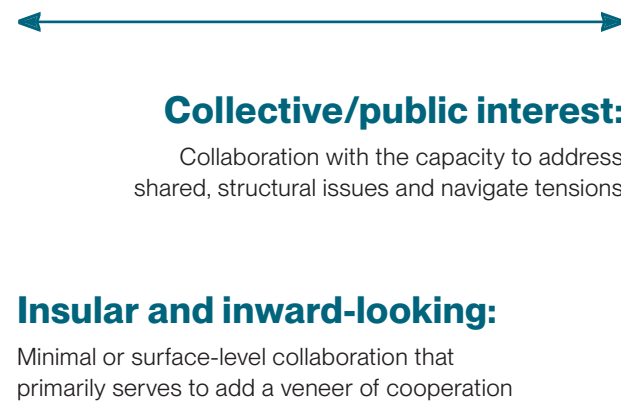
The scenarios

At the highest level, each scenario considers how the future could unfold based on two key drivers, represented as axes. Each scenario is represented as an arrow that shows how the future is evolving.

The state of the global order axis describes the conditions that dominate the gateway's global context. Each scenario is on a spectrum between:



The focus of our collaboration axis describes how people in the gateway—and in Canada more broadly—work together to address shared challenges and capture opportunities. Each scenario is on a spectrum between:



Squandered opportunities

In Squandered opportunities, the world is increasingly connected and globalized. New, multilateral trade agreements with emerging and strengthening democracies result in shifting trade routes and related economic opportunities. Greater adherence to climate agreements by key nations helps limit the global impacts of climate change. However, Canada struggles to develop a clear strategy for navigating the transition to the new economic and political paradigm, lagging competitors in pivoting to meet the realities of this shifting landscape. In the Greater Vancouver gateway, regulatory agencies, customers, and community and environmental groups are at odds with one another, as divergent visions for the port's trajectory and a lack of cohesive federal strategy slows investment. Growth in the age of global climate collaboration looks different than growth in the 20th century, and Canada and the gateway do not adapt quickly enough to fully capitalize on the potential in the new economic and political reality.



➤ Near future: 2023 to 2040

Global Stability, some growth, shifting centres

Globally, the coming decades see relative stability and growth. The backsliding of democratic norms experienced early in the century reverses. An Indo-Pacific economic boom strengthens the region as a trade centre. Economic cooperation between the Organization for Economic Development (OECD) and non-OECD countries accelerates, and new multilateral agreements foster migration flows to meet growing demand at all skill levels. New multilateral trade agreements with emerging democracies result in shifting trade flows and open new economic opportunities. China's economic growth falters as the country sees civil unrest and stalling export growth. The U.S. economy advances technologically and rapidly grows. Changing climate conditions shift centres of agriculture and manufacturing, and India grows as a centre of agricultural and resource trade. The Indo-Pacific region continues to expand as other countries gain trade market share from China.

National Fragmented goals, unstable leadership

In Canada, political and social environments are fragmented, and participation in new, multilateral trade and climate agreements is politically risky. Frequent leadership changes become the norm in Canadian politics. The resulting lack of consistent vision for Canadian trade, infrastructure, or environment means investment in new infrastructure is piecemeal. Demand for Canada's natural resources to fuel the global green infrastructure boom is high. Global "green trade" regulations, however, limit the degree to which Canadian industry can participate in the boom, as the country lacks mandates for low climate-impact extraction methods and green retrofits.

Local Struggles to upgrade and adapt

Greater Vancouver gateway infrastructure upgrades lag behind other major global ports, and much of the new development relies on outdated assumptions about energy, fuel, and global trade flows. Absent a coherent federal or local strategy, development projects at the port adopt green trade standards on a case-by-case basis, driven by the outlook of each project's primary developer. Competing visions for the trajectory of gateway development inflame tensions among key stakeholders. Legal action between the gateway, key stakeholders, and community groups increases. Conflicts over potential land use result in failure to address housing or industrial land shortages. Collaborative initiatives at the port are performative, political, and only able to address surface-level issues.

➤ Further along: 2041 to 2060

Global Widespread climate response hindered

Competing narratives about the economic case for climate action hinder more decisive action globally. Greater adherence to climate agreements helps limit the impact of climate change. A scarcity of green metals, fuels, and other resources needed to support energy transition hinders widespread implementation of global climate accords. Resource-rich countries benefit from higher prices on their exports.

National Protests, immigration impact, and tech lag

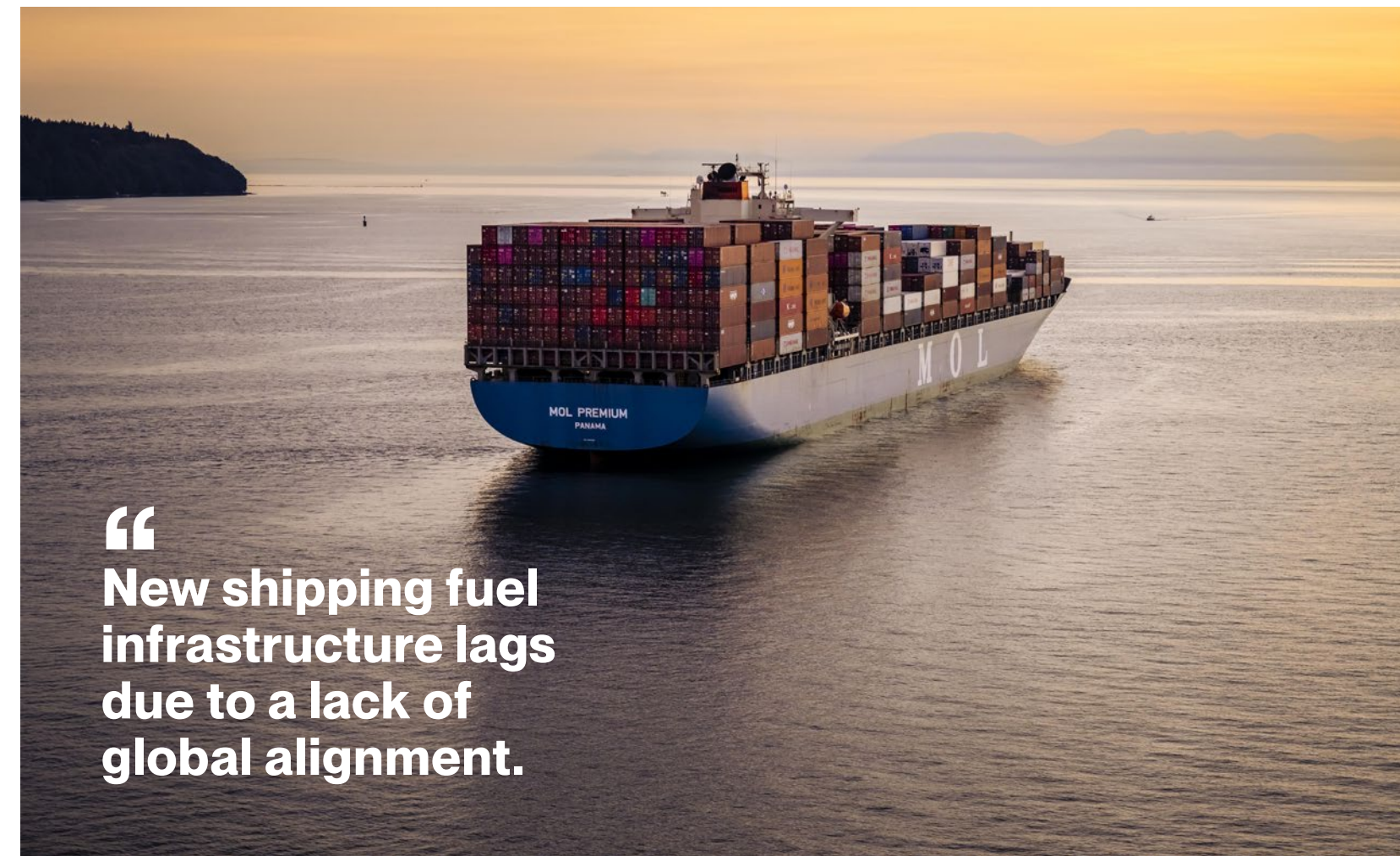
In Canada, protests and blockades are frequent and often succeed at disrupting new development and investment. Canada struggles to achieve its annual immigration goals due to unpredictable and unaligned policies between changes in leadership direction, and gateway organizations struggle to find skilled labour. Canada lags behind other countries in technology and artificial intelligence adoption. Competitors who leverage artificial intelligence and other technology draw investment away from Canada due to increased relative efficiency. Investment in new shipping fuel infrastructure lags due to a lack of global alignment on the future fuel mix. Demand for Canadian raw materials exports grows. Conflict among key stakeholders and interest groups prevents the gateway from addressing structural issues to meet the demand. Canada benefits from the price of resources but is unable to take full advantage of economic opportunities from shifting trade flows. Reconciliation is patchwork, with the urgency and earnestness of effort contingent on the commitment of regional and local political and business leaders.

“
High demand for goods insulates existing interests from a need to change, as do a lack of political will and coordination.”

Local Local protests, opportunities lost

In the gateway, high costs and constrained capacity contribute to a feedback loop of lost opportunity. Insufficient investment in supply chains protects vulnerable infrastructure, lowers capacity, and raises costs. The resulting loss of competitiveness further diminishes investment. Environmental impact mitigation efforts are largely box-checking activities. Reconciliation is talked about often but does not see concrete progress. Gateway customers who were early adopters of new global climate and energy standards capture a larger share of trade through the port. The gateway and Greater Vancouver's climate mitigation projects are not strategically aligned, and some community groups perceive the port's climate projects as detrimental to their well-being. Influential community groups protest development projects that encroach upon preferred residential and recreational areas. The geographic and economic profiles of Greater Vancouver insulate the area from the most profound impacts of the changes in the world. For most people in Vancouver, life looks much the same as in the early 21st century.

In Squandered opportunities, global collaboration in the face of climate change shifts trade and resource flows and creates new opportunities for economic growth. High demand for goods insulates existing interests from a need to change, as do a lack of political will and coordination in Canada and the gateway. The gateway's overall competitiveness declines.



“
New shipping fuel infrastructure lags due to a lack of global alignment.”

Weather the storm

In Weather the storm, the world grows increasingly fragmented and polarized, and economies drift toward protectionism as a result of political isolation. Frequent, large-scale climate, health, and political crises disrupt trade and slow global economic growth. In the absence of strong multilateral climate agreements, Canada is slow to invest in new climate and energy technologies and in protecting vulnerable transport infrastructure, compounding the impacts of climate events across the country. The Greater Vancouver gateway is also slow to upgrade critical infrastructure in the face of a changing climate. After prolonged inaction, new leadership in government and civil society embraces the need for a coherent approach to addressing climate resilience. Growth in an era of global polarization and isolation means Canada must forge its own path. A prolonged period of political tumult and economic stagnation forces the nation and the gateway to shift toward a more collaborative approach to addressing shared challenges.



➤ Near future: 2023 to 2040

Global Persistent disruptions and protectionism

Globally, multiple drawn-out crises create a context of economic uncertainty and disrupt global cooperation. Frequent climate change “tipping point” events strain economies, infrastructure, supply chains, and ecosystems. Global trade is dominated by these persistent disruptions. The U.S. and China pursue protectionist policies that further destabilize trade. Damage to critical infrastructure from climate change also disrupts trade, triggering a period of sustained stagnation in many sectors of the economy. Economic uncertainty leads many countries to embrace protectionism and onshoring of manufacturing. The shipping industry does not align on a future fuel mix. Food costs rise. Economic and environmental crises hit developing countries hardest, and a growing wage gap between developing and advanced economies increases pressure for migration. Cybersecurity threats grow. Innovation in digital technology is applied to address areas of high need, including national security, health, and communications.

“
You can be the best port in the world, but if the overall gateway doesn’t have connectivity to move goods, it won’t matter.”

National Reactive policies and stagnant Reconciliation

In the face of frequent crises, Canada’s policy environment becomes increasingly reactive. Supply chains are disrupted, hindering long-term planning. Canadian manufacturing and industries reliant on imports struggle to cope with supply chain shocks. Absent is a coordinated global strategy to mitigate the impacts of climate change, Canada does not invest heavily in next-generation green tech. Canada’s geography insulates the country from the worst impacts of the climate crises. An influx of climate refugees boosts Canada’s immigration flows, and newcomers struggle to find housing and employment. Government and business leaders do not sense an urgency around Reconciliation, instead diverting attention to economic and political challenges. In the absence of meaningful Reconciliation efforts, many First Nations re-invest heavily in land stewardship efforts and climate mitigation on their lands.

Local Adaptive focus and infrastructure decay

In the gateway, stakeholders are forced to focus resources on adaptation to immediate economic, political, and climate crises in an effort to avert losses. No coordinated effort is undertaken to develop a shared, long-term strategic vision for the port. Unpredictable trade flows and periods of stagnation create an environment of economic scarcity. Some key stakeholders are unable to secure financing or otherwise adapt to the crises, and the port’s core customer base shrinks. Demand for industrial land eases as overall demand on the gateway declines, opening land for construction of affordable housing. Digital technology advances are adopted by many gateway stakeholders. Efficiency increases, and employment declines. Greater Vancouver stakeholders’ relationship with the gateway tends toward adversarial. Infrastructure falls into disrepair, as does community cohesion and much of Vancouver’s civil society.

➤ Further along: 2041 to 2060

Global **Climate action and technological advancement**

The impacts of multiple prolonged crises on economies, the environment, and public health and well-being are significant. Globally, the rapidly escalating costs of inaction on climate change force action, and investment in decarbonization ramp up substantially in an effort to avoid a worst-case scenario. The long-term effects of earlier economic damage reduce global consumption. By mid-century, a relatively high level of warming is already certain, however new climate investment and shifting consumption patterns are expected to reduce the rate of increase over the longer term. Technological advancements have a profound impact on how people interact and consume goods and services. Advances in virtual reality and artificial intelligence lead to systemic changes in how people create relationships, consume media, and form opinions. More consumer activity takes place in the “metaverse”. Transparent, decentralized data contributes to a decline in the political polarization and misinformation seen earlier in the century.

National **Economic reshaping and Indigenous Reconciliation**

In Canada, vulnerable communities bear the brunt of the harm done by multiple crises. Two decades of economic collapse and general disruption exposes the inequities perpetuated by previous economic and political paradigms. A combination of technological change and a generation frustrated with the failures of the past leads to a change in Canadian leadership culture and values. The next generation of leaders embrace a new, niche export economy that leverages Canada’s unique assets. The need for rapid decarbonization creates new opportunities for Canada to lead in agricultural technology, green energy, and carbon capture, storage, and sequestration. The government develops national trade and transportation strategies aligned with this shift in its economic focus, while new policies incentivize collaboration and cross-sector alliances. The success of First Nations stewardship efforts is recognized by many political and climate groups, and the desire to ground climate strategy in Indigenous practice re-starts a movement for Reconciliation.

“
Two decades of economic collapse and general disruption expose the inequities perpetuated by previous economic and political paradigms.



“
Technological advancements have a profound impact on how people interact and consume goods and services.

Local **Collaborative adaptation and Indigenous influence**

In the gateway, the prolonged period of stagnation forces organizations to collaborate to adapt to an environment of low growth. Cross-sector alliances and partnerships are formalized. Early successes resulting from new partnerships encourages collaboration more broadly. As a new generation of leaders takes over, gateway organizations build a shared strategy that assumes low growth and prioritizes optimization. Communities and environmental groups increase their power to influence strategy, and the gateway adopts a nature net-nature positive approach to environmental protection, leading to a revitalization of the gateway’s environment. Indigenous Nations gain power in the gateway and play a leading role in economic development and environmental stewardship and innovation. Technological advances and sophisticated artificial intelligence technologies optimize operations, contributing to high capacity in spite of lagging growth in trade volume. Greater Vancouver begins to rebound after decades of economic and social decline.

In Weather the storm, a disjointed global response to shifting political, economic, and climate emergencies sees many nations reacting to crises, rather than developing strategies to mitigate the worst outcomes. Following protracted economic stagnation brought about by multiple overlapping global and national crises, a new generation of business, community, and political leadership in Canada and the gateway embrace a collaborative approach to policy and development, to turn the corner.

Everyone for themselves

In Everyone for themselves, the world grows increasingly fragmented and polarized, and economies drift toward protectionism as a result of political isolation. Frequent large-scale climate, health, and political crises disrupt trade and slow global economic growth. Democratic institutions are on the decline globally, and Canada's autonomy is diminished in a world destabilized by climate change and clashing global powers. Canada's politics are increasingly influenced by those of the U.S. At the same time, scarcity drives strong demand for Canada's resources, bringing opportunity. The Greater Vancouver gateway pursues this opportunity by increasing capacity through rapid development of new projects with little regard to environmental or community impacts, enabled by deregulation. As a result, relationships across different facets of the gateway are strained and volatile. Growth in an era of global polarization and weak domestic collaboration sees actors in Canada and the gateway pursuing their own interests, with disparate economic outcomes for people and organizations.



➤ Near future: 2023 to 2040

Global Fragmented politics, fragmented purpose

Globally, the coming decades see an increasingly fragmented world order. Multiple, drawn-out crises create a context of economic uncertainty and disrupted global cooperation. Climate-driven disruptions and scarcity drive a rise in inward-looking politics and short-term thinking. Democratic institutions are weak, authoritarian regimes proliferate, and economic nationalism is the prevailing order. Trade wars are normalized and escalate, most notably between the U.S. and China. China's economy grows through increased exports and expanding its influence in Africa and Asia, and its military ambition grows. The integrity of U.S. democracy declines. Global cooperation for climate change declines, with the biggest emitters adopting an "economy first, climate last" stance on the issue.

National Cooperation declines, Canada is vulnerable

International cooperation becomes fragmented as the World Trade Organization (WTO), the North Atlantic Treaty Organization (NATO), and other global institutions dissolve or decline in influence. In Canada, regulations are relaxed, foreign investment increases, and corporate profits rise. Lack of compelling multinational trade agreements leaves Canada's economy vulnerable to the demands of large neighbours and trade partners, such as the U.S. and China. Policy mirrors the fossil-fuel heavy regimes championed by the U.S., and investment in green technology is middling. Climate impacts affect Arctic, Indigenous, and rural coastal communities more severely than major metropolitan areas. Migration from rural Canada to urban centres rises. Reconciliation loses momentum as policy and decision-making shift focus to addressing the increasingly competitive global marketplace.

Local Takeovers and tensions

In the gateway, loosening of regulations leads some critical infrastructure to deteriorate. Projects to expand and upgrade the port's capacity are not subject to stringent environmental controls, and new facilities have a material negative impact on marine and coastal habitats. Corporate takeovers begin to consolidate the number of businesses operating within the gateway. Increased port capacity supports increasing trade volumes resulting from global demand for Canada's raw materials. Port expansion further constrains land available for new housing. The gateway's footprint grows, and tensions between the port and the Greater Vancouver community run high.

➤ Further along: 2041 to 2060

Global Green fuel efforts stagnate

Efforts to cultivate global supply chains based on green hydrogen and other green fuels never gain momentum, and the proportion of fossil fuels in the energy mix grows. Climate change impacts drive extreme weather-related infrastructure damage and lead to mass migration, armed conflict, and global food and water scarcity.

National Foreign investment steers economy, stokes tension

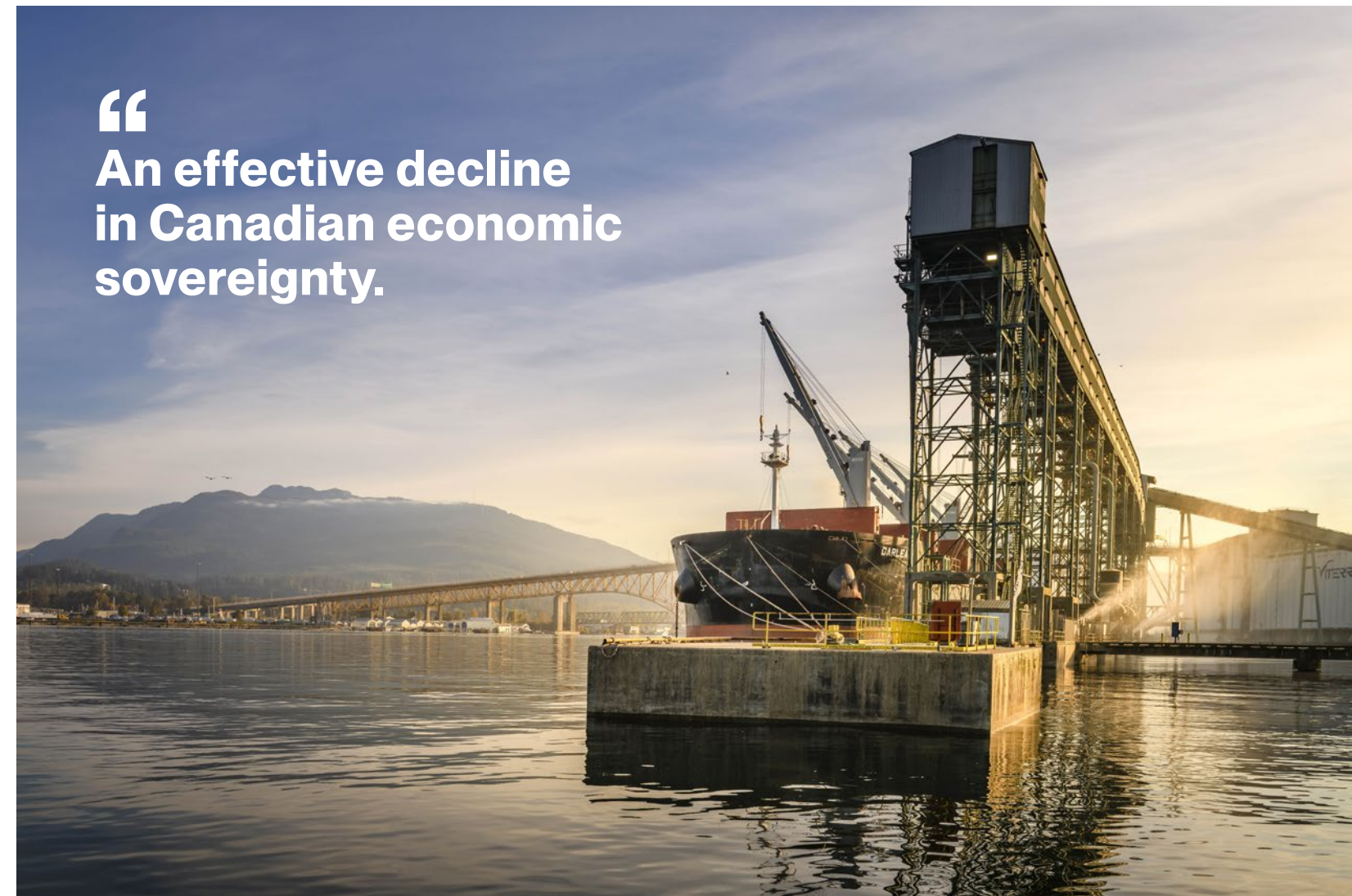
In Canada, deregulation contributes to a significant uptick in foreign investment and ownership in Canadian industries, particularly from the U.S. and its allies. Large foreign investment accelerates growth in Canada, resulting in an effective decline in Canadian economic sovereignty. Some politicians and industry groups oppose the increase in foreign ownership, and advocate for policies that exert more control over Canada's resources. Many Canadian sectors see high growth due to high demand abroad and increased foreign investment from overseas. Canada's relationship with China deteriorates as a proxy in the China-U.S. trade war. The immigration rate increases to meet the needs of growing industries. Economic inequality in Canada deepens significantly. Immigrants are routinely scapegoated for challenging circumstances experienced in communities and industries across the country. Indigenous communities often receive the same vitriol, and Reconciliation is effectively abandoned.

Local Fierce competition, zero cooperation

In the gateway, competition for land and housing is extreme, as immigration increases amidst a lack of coordinated land use planning. Economic opportunity is high due to increased foreign investment, high demand for Canada's exports, and more exports from the U.S. flowing through the gateway. Some stakeholders see robust revenue growth, others feel bullied by U.S. policies and boycott their goods. Where there is collaboration between gateway actors, it is driven by self-interest and maximizing economic benefit while deemphasizing Reconciliation, environment, and community relations. The gateway adopts automation focused on goals of profit maximization and workforce reduction. The removal of many environmental protections speeds up approval processes for new developments. The gateway's capacity expands to meet demand. The environmental impact of expansion is high. Benefits of high trade and economic growth are distributed unevenly across Greater Vancouver. Some neighbourhoods and communities thrive, others feel their lots becoming increasingly precarious.

The Everyone for themselves world is governed primarily by self-interest. Nations, industries, communities, and corporations choose not to work together to define shared visions or strategies for the future and tend toward a pugilistic approach to securing prosperity. Climate change is not embraced as a collective challenge. In Canada and the gateway, some actors gain influence and reap the benefits of high trade volumes, and others lose agency to foreign corporate and political interests.

“
**An effective decline
in Canadian economic
sovereignty.**



Rising to the challenge

In Rising to the challenge, the world becomes increasingly connected and globalized. Multilateral trade and climate agreements bring strong economic growth and meaningful collaboration to address climate change. Canada anticipates the emerging global climate order, and early adoption of green technology and manufacturing techniques leads to robust economic growth and a higher profile on the global economic stage. The Greater Vancouver gateway solidifies its position as the world's most sustainable port and leverages Canada's resource abundance and global stature in the age of climate awareness to capitalize on new trade opportunities in the Indo-Pacific. The rapid pace of development leads to tensions, as the benefits and impacts of the economic boom are initially unevenly distributed. However, effective collaboration across sectors, focusing on the greater good, enables the gateway community to carefully navigate these tensions. Growth in the age of climate collaboration looks different than growth in the 20th century, and Canada and the gateway are on the leading edge of this new economic and political paradigm.

➤ Near future: 2023 to 2040

Global **Stability, transformation, positive rivalry**

Globally, the coming decades see relative stability and growth. The backsliding of democratic norms experienced early in the century reverses. The U.S. sees continued inequality and political polarization, but its democratic governance institutions resist and recover from earlier threats, and its economic growth is steady. In China, technological advances drive a growing consumer economy and increased high-value exports. An Indo-Pacific economic boom strengthens the region as a trade centre. Economic cooperation between OECD and non-OECD countries accelerates, and new multilateral agreements foster migration flows to meet growing demand at all skill levels. The U.S. and China continue to compete for global hegemony while their economic interdependencies deepen.

National **Indo-Pacific boom boosts Canada's trade**

Growth in the Indo-Pacific creates opportunities for Canada to further diversify trade in the region. Canada agrees to new trade and immigration agreements with Indo-Pacific partners, helping Canada to meet its aggressive immigration targets. Demand skyrockets for raw materials required to manufacture emerging renewable energy technologies. The new global climate agreements mandate that extraction techniques for these resources are now greener than before, with increasingly stringent environmental protections. Canada becomes a global leader in the supply of low climate-impact natural resources, particularly to the U.S. and the Indo-Pacific. As older, inefficient infrastructure is retrofitted with more efficient technology, a "green-fitting" employment boom contributes to historically low unemployment levels, and demand for both skilled and unskilled labour soars.

Local **Climate focus transforms coastal infrastructure**

Increased focus on mitigating the effects of a warming climate leads to a surge in new infrastructure projects in coastal metropolitan areas, including in the Greater Vancouver gateway. The gateway works in conjunction with local, regional, and federal organizations on a holistic climate adaptation and modernization plan. Barriers to climate and green infrastructure investment are reduced. Many community organizations are unsatisfied with the perceived preference given to economic concerns. At the same time, protections for marine, coastal, and forest habitats—stemming from the elevation of the climate crisis—constrain the land available for expansion, both by the gateway and greater Vancouver. Gateway organizations are frustrated by the lack of available land for development. However, increased efficiencies satisfy some of the pent-up demand for increased capacity. The global transportation community increasingly relies on new applications of emerging artificial intelligence technologies. The gateway's embrace of artificial intelligence further integrates gateway operations with the global transportation network. While efficiency of port operations increases, some low-skill jobs are lost, and reskilling is required to benefit from the new jobs created.



➤ Further along: 2041 to 2060

Global Shipping industry embraces sustainability

The global shipping industry aligns on a future sustainable fuel mix and invests in new ships and ship technology as well as new infrastructure at ports. The alignment between Canada's transportation, trade, and climate strategies further improves efficient goods movement, accelerates decarbonization, and the aligned regulatory frameworks speed the adoption of new fuel technologies. Canada's early investments into green-fitting critical infrastructure pay off, as the demand for—and volume of—green trade increases dramatically. The tension between economic, community, and environmental interests is high. Some climate activists seek to capitalize on recent successes in climate advocacy by pushing for further restrictions on heavy industry.

National Immigration, climate, and Reconciliation dynamics

In Canada, immigration inflows exceed projections from early in the century, and urban areas face a housing crisis. High taxes to fund climate action and investment in developing countries deepen some political divides in Canadian society. A political movement hostile to Canada's embrace of the climate and economic shifts of the mid-21st century grows. The movement sees some electoral success, but the economic benefits and increasing interdependence of global economies temper the movement's ability to meaningfully disengage from the new trade and climate agreements. Indigenous sovereignty is a major theme in Reconciliation, and in British Columbia and across the country, Indigenous Nations enter into equitable partnerships and negotiations with governments and corporate entities.

“
Investments into green-fitting critical infrastructure pay off.



Local Responsible growth is broadly embraced

Many gateway organizations work together to build shared strategies for automation and land use optimization focused on safety and efficiency. Increases in efficiency alleviate some of the pent-up demand for increased capacity, but some remain. Transport technologies shift to include Canada-wide initiatives to reskill the workforce. Workforce development programs centred on applications of artificial intelligence in the automated economy gain traction, helping to meet the gateway's demand for skilled labour.

The gateway doubles down on its reputation as the world's most sustainable port and implements energy and efficiency standards that exceed national and international benchmarks. Some customers bristle at the new restrictions and seek to transfer their business elsewhere. Those who stay use their collaborative relationships within the port system to find mutually beneficial solutions to meet the standards. Large, better-capitalized businesses make the investments needed to keep pace with the changing global standards more easily than smaller businesses. Many smaller businesses are purchased by large corporations or seek ports with less stringent regulations. As a result, the gateway is characterized by fewer, but larger businesses.

As the gateway continues to grow to accommodate trade demand, substantial effort and investment are made by government and industry to ensure communities remain livable. Regardless, some remain dissatisfied with the rapid pace of development and continue to push for change. These tensions are viewed as healthy and provide the impetus for further collaboration on issues such as land use and environmental protection.

In Rising to the challenge, meaningful coordination at the global, national, and local levels in the face of climate change and a shifting economy bring prosperity through a transition away from the economic and climate paradigms of the previous half-century. While difficult, Canada and the gateway thrive by leveraging an all-hands-on-deck mentality to deepen collaboration in service of shaping a shared future.

“
The Port of Vancouver doubles down on its reputation as the world's most sustainable port.

Conclusion

The Greater Vancouver gateway is a dynamic and ever-changing system. Decisions made here have far-reaching implications for more than just the businesses that make up the Port of Vancouver—from local communities to the national economy—this gateway has a direct impact on the lives of all Canadians. As the last few years have proven, there are many factors that can influence the gateway's success, and not all of them are within any one entity's control.

In a fluid and unpredictable world, understanding the various levers at play—both within the gateway and around the world—gives us the best chance to anticipate and shape how the future unfolds. While no one can predict the future, scenario planning gives us an opportunity to prepare for a variety of possible pathways while identifying how we can work together to meet potential challenges from a position of strength.

Drawing on the collective knowledge of the gateway, we will use these scenarios in our strategic planning to challenge our assumptions about the external business environment and the ways in which the gateway may react, adapt to or even shape that environment. We hope others within the gateway will also find value in using these scenarios and the insights gained from this work in their own strategic planning.

If there is one key takeaway from the Port Forward experience it is this: collaboration is, and will be, the cornerstone of our collective success. While there will always be factors outside of our control that could disrupt even the best laid plans, the one thing we can always rely on is that this gateway is better when we work together. At the port authority, we look forward to working with the entire port community towards a strong shared future for the Port of Vancouver and for Canada.