

EMERGING ECONOMY TASK FORCE

FINAL REPORT – MARCH 2020



*EMERGING ECONOMY TASK FORCE | FINAL REPORT
MARCH 2020*

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*THE EMERGING ECONOMY TASK FORCE PRESENTS
THIS FINAL REPORT TO THE GOVERNMENT OF B.C.*

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Letter from the Chair to the Minister



March 2020

The Honourable Michelle Mungall

Minister of Jobs, Economic Development and Competitiveness

Parliament Buildings

Victoria, British Columbia

Dear Minister Mungall,

The creation of the Emerging Economy Task Force was a bold and important initiative to explore future opportunities and challenges for British Columbia. We committed to deliver made-in-B.C. solutions that will help keep the province on the cutting edge of the emerging economy in order to make life better for people in British Columbia, respect the environment and grow a resilient economy.

We would like to acknowledge the B.C. Government for the foresight to encourage a look into the future — while we live in curious and unprecedented economic times, focusing on short-term economic cycles to drive planning will not set our province up for success over the long term. While mindful of the current state of affairs, we kept our focus on the foundational actions required today to create long-term opportunity tomorrow.

During our consultation process, we heard from domestic and international industry representatives, thought leaders, youth, senior officials within the British Columbia Public Service, academics, and Indigenous and non-Indigenous community leaders. We considered how other jurisdictions are planning for global disrupters and enablers. We met with business owners, managers and workers in Vancouver, Prince George, Trail, Castlegar, Kelowna, Victoria and Surrey, and witnessed innovation first-hand.

British Columbia entrepreneurs, industries and community champions are already adapting to global trends and realizing the benefits in doing so. As an example, Retriev, a business that is part of Metal Tech Alley in Trail evolved from recycling traditional acid batteries to now recycling EV batteries from Tesla, with end products repurposed and re-introduced into the supply chain. Another is Victoria-based LlamaZoo, whose visualization tool uses data about planned logging sites from satellite and aerial imagery, geographic information and infrared surveys to create a 1:1 digital replica of the area down to the placement and height of an individual red cedar. These are but two of the many examples of people in B.C. innovating.

The Task Force considered existing government initiatives while thinking about the longer-term trajectory of our province. Your government has already started forward-looking initiatives with the potential for significant future benefit, including CleanBC and the introduction of the B.C. Declaration on the Rights of Indigenous Peoples Act. We believe the recommendations in this report will complement and build on these initiatives.

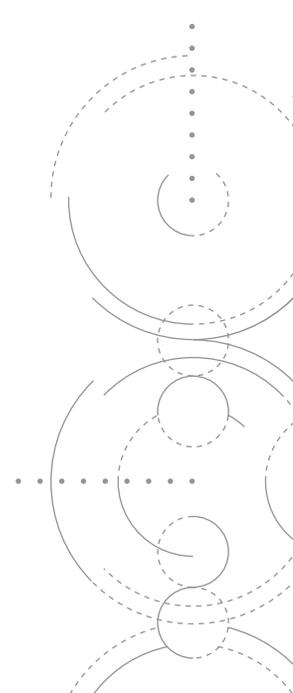
We cannot predict what the future will look like in 25 years, but we do know that collaboration among the private and public sectors and civil society leaders will be vital for success, given the breadth and pace of change across our economy.

On behalf of the members of the Emerging Economy Task Force, I would like to thank you and your government for the opportunity to give voice to the aspirations of people in British Columbia, to engage in healthy debate, and to offer recommendations that help position our province for future success, sustainability and prosperity.

Yours sincerely,



KATHY KINLOCH
CHAIR, EMERGING ECONOMY TASK FORCE



Preface

B.C.'s economy is influenced by global trends, emerging technological advancements, changing business processes, climate change and a variety of other factors. In order to better understand how these dynamics will shape the future economy and to take advantage of emerging opportunities, the B.C. Government established the Emerging Economy Task Force under the Confidence and Supply Agreement with the B.C. Green Caucus.

We were given a unique mandate to examine the current state of B.C.'s economy and provide analysis and advice on trends that will change the nature of business and society over the next 10 to 25 years and propose recommendations to ensure B.C. stays at the forefront of emerging economic developments. Through our work, we collected and analyzed data and information from a range of sources on important trends, issues and opportunities that may shape the future economy in B.C. These included:

- » Informational meetings and site visits, conducted in various economic development regions around the province, engaging a range of industry and thought leaders;
- » Interviews with domestic and international innovators;
- » A survey reaching out to the B.C. business community that explored key issues, trends and opportunities;
- » A summary of insights from secondary reports and articles, as well as independent research and jurisdictional scans; and
- » A summary of current government strategies and initiatives.

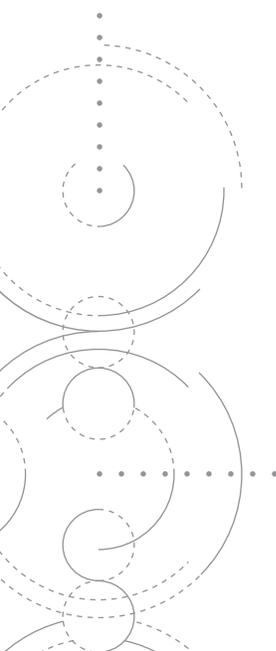
We used this information, and the expertise of each Task Force member, to articulate a vision for B.C. in 25 years and a set of recommendations to help get us there.

EMERGING ECONOMY TASK FORCE MEMBERS

The Task Force is composed of 14 members, appointed for their expertise, experience, and demonstrated ability to contribute to the discussion and delivery of the mandate. Task Force members include:

- » Kathy Kinloch, BC Institute of Technology (Chair)
- » Kevin Campbell, Haywood Securities
- » Peter Elkins, Royal Roads University
- » Jock Finlayson, Business Council of BC
- » Raghwa Gopal, Innovate BC
- » Carol Anne Hilton, The Indigenomics Institute
- » Iglika Ivanova, Canadian Centre for Policy Alternatives
- » Daniel Pauly, Institute for the Oceans and Fisheries, University of BC
- » Coro Strandberg, Strandberg Consulting
- » Corinne Stavness, Independent Consultant
- » Eric Termuende, NoW Innovations Canada
- » Jill Tipping, BC Tech Association
- » Eric Werker, Professor, Beedie School of Business, Simon Fraser University (SFU)
- » Alan Winter, Former BC Innovation Commissioner (Ex-Officio)

The Emerging Economy Task Force presents its final report to government with recommendations that address the future of B.C.'s economy, to stimulate discussion and advance made-in-B.C. solutions. Task Force members reached consensus on the collection of ideas in this report but may have their own individual views on specific statements and recommendations. Members served in an individual capacity and this report should not be taken as representing the views of their affiliate organizations.



Executive Summary

British Columbia's economy is ever evolving, shaped by emerging technology and innovation and influenced by broader macro trends and forces such as global economic performance and climate change. Our future economy will have access to new business, investment and employment opportunities, many of which have yet to unfold.

In the course of our work, we considered B.C.'s current economic structure and recent industry trends, the uniqueness of our province's regional variation and differentiators, as well as strengths and structural weaknesses impacting economic growth. We were asked to look beyond traditional planning cycles and consider what needs to be put into place to ensure future prosperity for all people in British Columbia. We cannot stress enough the need to make the changes now in order to have a diversified and resilient future.

THE EMERGING ECONOMY

We believe that British Columbia can create its own prosperous future, with the public, private and non-profit sectors working together. The province will continue to be subject to global trends and market shifts, but we can work to create our own economic reality by setting aspirational goals, investing in innovation and adopting best practices from other jurisdictions. To this extent, we characterize the emerging economy as follows:

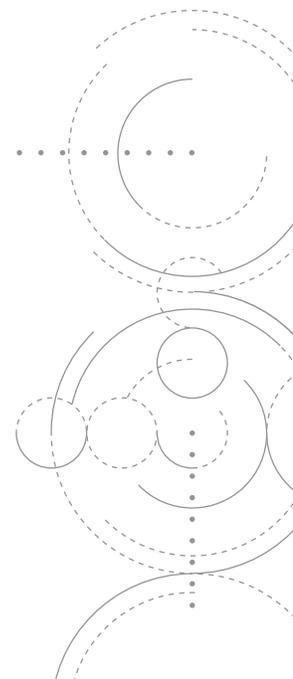
- » **Rapidly evolving:** The economy of the future will experience regular disruption and uncertainty, creating a need for nimble, adaptive and flexible business practices and policy, as well as continuous learning in order to remain globally relevant and competitive.
- » **Innovation-driven:** The economy of the future, where people increasingly trade in ideas and services, will be progressively information-based and underpinned by digital technology, with ingenuity required for developing and harnessing intangible capital, intellectual property and to enhance productivity.
- » **Diverse and inclusive:** The economy of the future will be one that embraces diversity and inclusion, recognizing the value of social capital, creativity and problem-solving, enabling purpose-based leadership and harnessing the full economic potential of people through increased workforce participation.
- » **Low-carbon, circular and sustainable:** The economy of the future is one where society exists within its ecological means, avoiding the excessive depletion of natural resources while extracting their maximum value and minimizing pollution and environmental degradation in all its forms.

OUR VISION OF A SUSTAINABLE AND INCLUSIVE FUTURE FOR B.C.

We were asked to develop a set of recommendations to help B.C. thrive over the next quarter century. In our mandate, the B.C. Government put forward the need for a vision that includes a flourishing future economy that provides opportunities for everyone to participate and benefit in sustainable and shared prosperity.

What we learned in our conversations throughout the province and with a range of leaders is that the vision of success is rooted in our overall quality of life, which includes the strength of our inclusive communities, the opportunity to live and play in a healthy environment, the potential to achieve financial well-being, including access to meaningful employment and the overall ability to achieve our aspirations.

To understand what it means to thrive 25 years from now, we need to imagine and articulate this vision.



“In 2045, people in British Columbia enjoy living in a strong, healthy, inclusive, cohesive, innovative and productive society. Economic opportunities are widely distributed around regions, are globally competitive and integrated, are purpose driven and inclusive to all segments of the population and embrace economic reconciliation with Indigenous peoples.

People in British Columbia are confident, well-educated, adaptable and have access to the skills and training opportunities that enable innovation and entrepreneurship, as well as the training (and social safety net) needed to support transitions within and between industries.

Building off British Columbia's abundant natural resources, the environment is conserved with every opportunity realized to reduce pollution and greenhouse gas emissions, waste is considered a resource and the value of our materials and resources are maximized and resilience is built into the connections between the natural world and human activity.

Finally, the British Columbia Government and public sector agencies are nimble. They collaborate with business and all groups in society to provide efficient, high-quality services, building on the province's strong and vibrant democratic institutions and are role models for innovation and sustainability.”

The future, of course, is impossible to know. The next 25 years will be subject to a range of forces — most external to the province and some internal, some predictable and others less so. But we know that the emerging economy will largely be market driven, so there is an important role for government and other partners to act strategically to maximize our opportunities.

TRENDS INFLUENCING B.C.'S ECONOMY

Understanding the future economy and its underlying trends and drivers, in line with B.C.'s current realities, will be essential for businesses, workers and communities as they look to manage risks while growing economic opportunities. The macro trends impacting B.C.'s economy include technology and innovation, environmental degradation and climate change, social and demographic shifts and economic inequality.

- » **Technology and Innovation:** The economy of the future will be increasingly information-based, requiring ingenuity for developing and harnessing intangible capital and intellectual property - an economy where people increasingly trade in ideas and services. The rise of new digital technology is underpinning an industrial transformation that makes it possible to gather and analyze data across platforms, enabling faster, more flexible and more efficient processes to produce higher-quality goods and services at reduced costs while concurrently impacting the focus and composition of the labour market.
- » **Environmental Degradation and Climate Change:** The global economy has benefited from the extraction and processing of natural resources into useful products, improving the lives of billions of people. However, this extraction of natural capital, accelerated by population growth, has resulted in significant ecosystem decline. Further, human-caused climate change, due to the addition of greenhouse gas (GHG) emissions into our atmosphere from land-use changes and the burning of fossil fuels, is disrupting economic stability and trade. These challenges bring with them new business and employment opportunities for British Columbia's emerging economy.

- » **Social and Demographic Shifts:** Population growth, urbanization and aging demographics are important trends impacting economies around the world. Their impact will be widely felt in the type and magnitude of goods and services demanded globally, with particular application to B.C. natural resource sectors. These social and demographic realities support the need for workforce inclusion, as well as underscore the importance of diversity, in order to fill systemic gaps that are currently preventing our economy from fully utilizing available workforce potential.
- » **Economic Inequality:** Rising income and wealth polarization are key risks influencing socio-economic stability and prosperity through an inefficient concentration of wealth at the top strata of society. Too many people face low wages, inadequate or no job security, few if any benefits, and too little time available for family and community. With growing inequality in wages, certain groups, including women, Indigenous peoples, recent immigrants and people with disabilities, are at risk of becoming further marginalized.

ACHIEVING THE VISION: OUR RECOMMENDATIONS

British Columbia is a small, open-market economy. What *should* set British Columbia apart from other jurisdictions is our relentless focus on delivering quality of life, a healthy environment and economic success.

B.C. exists in a dynamic economic landscape, as a province within the broader national economic framework that can attract talent and investment from around the world by leveraging its natural beauty, global trade connections, well-educated and culturally diverse population, world-class institutions, stable and well-regulated financial system, competitive taxes and fiscally responsible government.

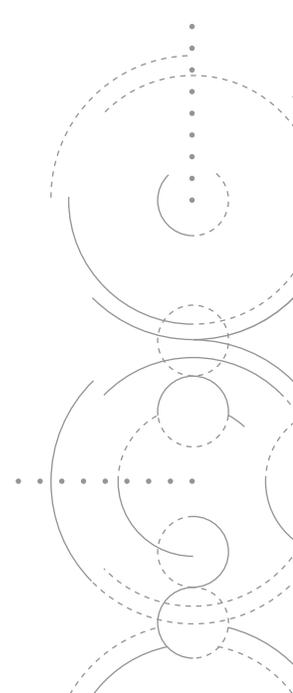
We established five strategic priorities, designed to capitalize on the current trends and opportunities for B.C.'s economy while mitigating risks. Our recommendations recognize and build on B.C.'s existing strengths and capacity in order to enhance well-being, sustainability and shared economic prosperity for the province and its residents. Reconciliation with Indigenous peoples, social inclusion and environmental sustainability are cross-cutting themes, vital and necessary for a prosperous future economy and, as such, are reflected across the recommendations.

RECONCILIATION AND THE EMERGING ECONOMY

Reconciliation includes the need to establish baseline information on the size and impact of the B.C. Indigenous economy to begin closing the socio-economic gap between Indigenous and non-Indigenous communities in British Columbia. This goal aligns with the principles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Truth and Reconciliation Commission of Canada's Calls to Action.

The B.C. Government recently adopted the *Declaration on the Rights of Indigenous Peoples Act* as a framework for reconciliation with Indigenous peoples in British Columbia. The Act aims to create a path forward that respects the human rights of Indigenous peoples while introducing better transparency and predictability in the work we do together.

We recognize that reconciliation means supporting the levers of Indigenous economic growth. It means working with Indigenous peoples, communities, organizations and governments to improve Indigenous peoples' quality of life, including through new economic partnerships, natural resource benefits sharing, and closing gaps in health, education, skills training and employment outcomes. The recommendations in this report incorporate considerations that are in line with reconciliation goals and recognize the importance of B.C.'s Indigenous peoples to the province's emerging economy.



STRATEGIC PRIORITY ONE: EMBRACING TECHNOLOGY AND INNOVATION

B.C. must build on its strengths in the technology sector and invest further in innovation, as well as facilitate the widespread adoption of innovation and technology across all sectors of the economy, in order to improve overall business productivity, increase incomes and enable workers to thrive. In line with this strategic priority, we offer the following recommendations:

1. Strengthen the ecosystem for innovation, commercialization and scale-up of companies.
2. Foster technology adoption to generate economic, environmental and social benefit.
3. Enhance the financing options available in the emerging economy.
4. Use B.C.'s open data platforms to leverage emerging economy opportunities.
5. Become a world leader in "smart" regulation.



STRATEGIC PRIORITY TWO: LEVERAGING B.C.'S GREEN ECONOMY

The emergence of the green and circular economy, one that is low-carbon, resource efficient and socially inclusive, presents opportunities for B.C. given its existing strengths. Investments in green infrastructure and climate adaptation planning will ensure B.C.'s economy remains resilient. In line with this strategic priority, we offer the following recommendations:

6. Capitalize on B.C.'s vertically integrated, clean power advantage.
7. Take advantage of growing global demand for green economy products and services.
8. Capitalize on opportunities presented by the circular economy.
9. Address the risks and opportunities associated with climate and sustainability trends that will affect B.C.'s economy and communities.
10. Ensure the British Columbia Government and its public sector organizations are leaders in sustainable operations.



STRATEGIC PRIORITY THREE: BUILDING A HIGHLY SKILLED AND ADAPTABLE WORKFORCE

B.C.'s future workforce must be resilient, with the right skills in the right areas at the right time to be successful in the emerging economy. This requires new and different investments in and approaches to training and re-skilling as part of lifelong learning for workers with support from employers for work-integrated learning opportunities. Enabling workforce participation of under-represented groups will continue to be a critical issue, both for ensuring equity and addressing labour shortages. In line with this strategic priority, we offer the following recommendations:

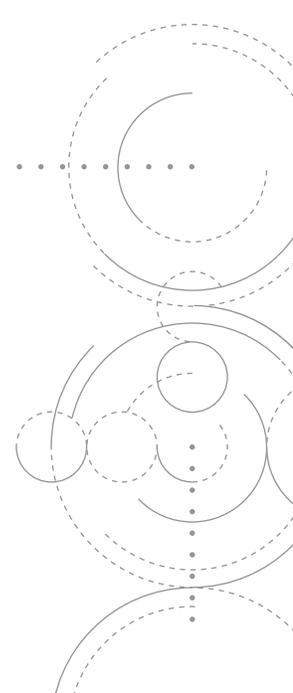
11. Focus investment in B.C.'s higher education system to be a leader in Canada, producing and attracting globally competitive talent.
12. Ensure B.C.'s education system equips people with the tools to participate in and adapt to a rapidly changing labour market.
13. Enable broader workforce participation to meet labour supply challenges and realize the full economic potential of people in British Columbia.
14. Ensure B.C.'s social safety net and our system of workplace rights are quick to respond to economic shifts.
15. Support the success of new immigrants into the B.C. labour market.



STRATEGIC PRIORITY FOUR: ENSURING AN EFFECTIVE ENABLING ECOSYSTEM

Creating an enabling ecosystem for B.C.'s economy that allows for the efficient flow of products, people, technology and ideas within the province and with the rest of the world is essential. Enabling regional economic development, supporting economic hubs and equipping residents with access to the latest technology are all keys to success. In line with this strategic priority, we offer the following recommendations:

16. Support an integrated planning approach to future economic, environmental and social trends, with a focus on B.C.'s major economic hubs.
17. Accelerate investment in connectivity (broadband and cellular) to reduce regional economic inequities.
18. Continue to invest in trade, transportation and economic growth corridors to maintain Canada's and B.C.'s global competitive advantage.
19. Capitalize on regional competitive advantages by building capacity to identify and promote economic opportunities.
20. Ensure the security of B.C.'s future food supply in the face of climate change impacts.



STRATEGIC PRIORITY FIVE: DEMONSTRATING PUBLIC SECTOR LEADERSHIP

Given the accelerated pace of change, flexible solutions must go hand-in-hand with a new level of public sector responsiveness. In order to capitalize on the opportunities presented by this change, government and public sector agencies will need to be nimble and a catalyst for enabling the future economy by establishing best practices, stimulating innovation and mitigating risks.

In line with this strategic priority, we offer the following recommendations:

- 21.** Redefine how economic performance is measured in British Columbia.
- 22.** Establish data and metrics of the Indigenous economic impact to the broader B.C. economy and set growth targets for Indigenous economic inclusion.
- 23.** Capitalize on projected demographic change while providing quality care to B.C.'s population.
- 24.** Leverage public sector strategic procurement to drive B.C.'s emerging economy.
- 25.** Use the leadership of the public sector to continuously assess and prepare for B.C.'s future economy.

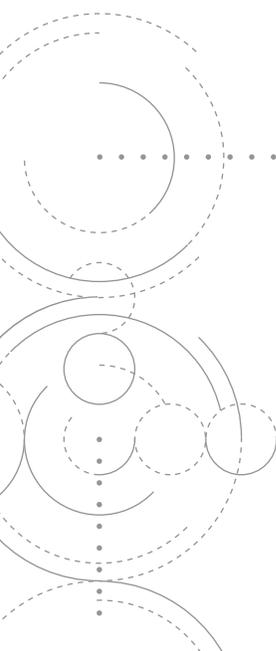


IN SUMMARY

While global trends will inevitably continue to shape B.C.'s future economy, it is important for the public sector and other organizations to act strategically and position the province for success, maximize our opportunities and actively mitigate risks.

British Columbia's public sector must be agile to anticipate trends and ensure a policy and regulatory environment that is responsive to emerging economic opportunities, placing people first, supporting our industries for success and ensuring a healthy environment.

If the recommendations in this report are successfully implemented, we are confident that B.C.'s economy will become more innovative, responsive to change, diverse, productive and sustainable, providing benefits to residents, businesses and communities provincewide.



The Emerging Economy

Throughout history, innovation has allowed for new products and services as well as increasing productivity and efficiencies in how we combine human labour, technology, energy and materials to satisfy society's needs and wants. While the economy is constantly evolving, we believe the pace of that change has quickened with the advancement of modern technology. Today, B.C. stands at the crossroads of these changes, where global trends of technology and innovation, climate change and the degrading environment, an aging population, rising income and wealth disparity and societal polarization, will present significant opportunities and risks for businesses, industries and people in British Columbia.¹

WHAT DOES SUCCESS LOOK LIKE?

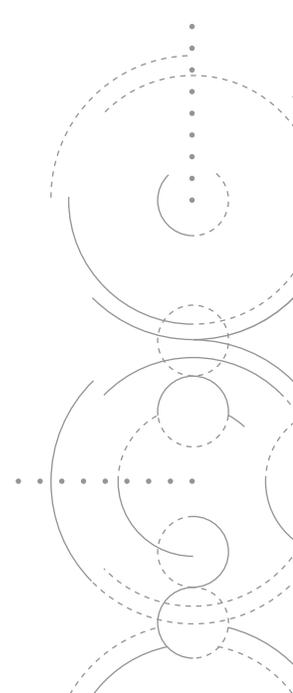
We were asked to develop a set of recommendations to help B.C. thrive over the next quarter century. In our mandate, the British Columbia Government put forward the need for a vision that includes a flourishing provincial economy that provides opportunities for everyone to participate and benefit in sustainable and shared prosperity.

What we learned in our conversations throughout the province is that people's vision of success is rooted in our overall quality of life, which includes the strength of our inclusive communities, the opportunity to live and play in a healthy environment, the potential to achieve financial well-being, including access to meaningful employment, and the overall ability to achieve our aspirations. To understand what it means to thrive 25 years from now, we need to imagine what success looks like and articulate this vision.

EMERGING ECONOMY KEY CHARACTERISTICS

These drivers and aspirational characteristics will define our economy over the next decade and beyond:

- » **Rapidly Evolving:** The economy of the future will experience regular disruption and uncertainty, creating a need for nimble, adaptive and flexible business practices and policy, as well as continuous learning in order to remain globally relevant and competitive.
- » **Innovation-driven:** The economy of the future, where people increasingly trade in ideas and services, will be progressively information-based and underpinned by digital technology, with ingenuity required for developing and harnessing intangible capital, intellectual property and to enhance productivity.
- » **Diverse and Inclusive:** The economy of the future will be one that embraces diversity and inclusion, recognizing the value of social capital, creativity and problem-solving, enabling purpose-based leadership and harnessing the full economic potential of people in this province through increased workforce participation.
- » **Low-carbon, Circular and Sustainable:** The economy of the future is one where society exists within its ecological means, avoiding the excessive depletion of natural resources while extracting their maximum value and minimizing pollution and environmental degradation in all its forms.



NEW MEASURES OF PROSPERITY FOR B.C.

A society's economy has historically been defined to include only its produced output, with individual prosperity defined by monetary income and wealth. In the future, a truly prosperous and sustainable economy will need to integrate broader, more inclusive measures of individual and societal wealth, income and well-being, such as natural, human and social capital, that go beyond traditional metrics like gross domestic product (GDP), consumption and productivity.

The Organization for Economic Co-operation and Development's (OECD) Framework for Policy Action on Inclusive Growth considers well-being indicators that go beyond GDP to include three focus areas: supporting business dynamism and labour markets; investing in people and places left behind, providing equal opportunities; and building efficient and responsive governments. The OECD Better Life Index measures well-being using indicators for quality of life and material conditions, including work and life balance, education and skills, income and wealth, jobs and earnings, environmental quality and housing.²

These broader measures align with the United Nations' Sustainable Development Goals (SDGs), which were designed as a blueprint for addressing global challenges including poverty, inequality, climate change, environmental degradation, prosperity, and peace and justice.³ Successfully addressing these challenges will underpin a healthy, sustainable and stable economy. Iceland, Scotland and New Zealand are jurisdictions that have already begun to move in this direction, using similar broad-based measures of well-being to guide policy priorities and develop government budgets.

In Canada, a number of measures of socio-economic well-being have been developed; for example, Statistics Canada's Community Well-Being Index⁴ or the more recent Business Council of British Columbia's framework for a broader measure of progress for B.C. (and Canada).⁵ However, these are generally less comprehensive than OECD's Better Life Index and have not been commonly used to monitor, evaluate or design government policy to date.

The recommendations included in this report have been developed with these broader measures of economic prosperity and well-being in mind.

SNAPSHOT: B.C.'S REGIONAL VARIATION

While regional economies in B.C. are inter-connected and inter-dependent, there are large regional differences based on factors that include the presence of key industries, incomes and relative affordability, education levels and demographics. For example, rural regions see approximately 30% of employment in the goods-producing sectors which is up to 50% more than in the service economy based Mainland/Southwest.

While jobs in the more rural regions of B.C. can be well-paid and generate a large proportion of B.C.'s economic wealth and export base, they are also subject to commodity cycles and other factors which increase vulnerability. The diversity of industries in urban centres allows for more adaptability and greater employment opportunities, although population growth and land availability pressures are creating challenges with respect to housing and affordability.

Trends Influencing B.C.'s Emerging Economy

Understanding the future economy and its underlying trends and drivers, in line with B.C.'s current realities, will be essential for businesses, workers and communities as they look to manage risks while growing economic opportunities.

These major trends are described in more detail below. They are not specific to British Columbia; however, staying abreast of evolving trends will allow B.C. to remain competitive and prosperous, while becoming more sustainable and providing economic and social benefits to residents throughout the province.

SNAPSHOT: B.C.'S NATURAL RESOURCE SECTOR

The province's natural resource industries supply three-quarters of our international merchandise exports and a majority of the value of the province's total manufacturing shipments. This share will likely rise once LNG is produced in British Columbia. The overall resource sector is made up of the following components:

- » Energy (all forms);
- » Logging plus lumber and pulp/paper manufacturing;
- » Mineral exploration, mining and smelting;
- » Wood pellet manufacturing; and
- » Agriculture and seafood production.

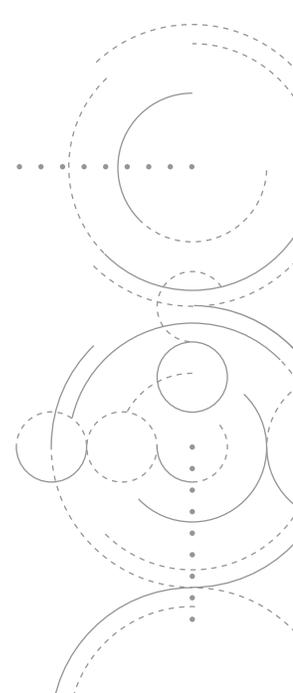
Resource industries have been historic profit centres and are the leading private sector employer in many communities. Metals mined in B.C. also help build the global renewable-energy infrastructure. British Columbia's natural resource industries are world leaders in adopting technology and investing in innovation. We saw first-hand examples of this in the mining and forestry sectors.

In alignment with our overall vision, the Task Force sees our natural resource industries as being a vital part of the province's emerging economy, accelerating innovation and supplying the world with essential products. This includes being a producer of low-carbon natural resource products, as benchmarked using global standards. It also means being at the frontier in using advanced technologies, other types of innovation and smart management to add value to our natural resources while minimizing the environmental impacts of resource extraction, processing and shipment.

TECHNOLOGY AND INNOVATION

The economy of the future is being shaped by accelerating technological change and innovation. The current technology transformation, which the World Economic Forum is calling the Fourth Industrial Revolution (4IR), is impacting all industries and business ecosystems, shifting business model economics, fostering growth in new industries and bringing enormous opportunities to increase productivity.

It is also enabling sustainable business solutions, making many people's work less dangerous and repetitive - ultimately changing the competitiveness of companies, industries and regions.⁶



Particular areas of growth that are likely to have transformative impacts on the economy include artificial intelligence or AI (including machine learning, cognitive computing, autonomous vehicles, and advanced robotics), immersive experiences (including virtual reality (VR) and augmented reality (AR)), additive manufacturing printing and connected homes and facilities), and digital platforms (including blockchain, the Internet of Things and quantum computing).^{7,8}

Biotechnology is another sector projected to undergo rapid growth due to its potential to improve human, animal and plant health in areas such as regenerative medicine and genetics.⁹

The rapid digitalization of systems also brings potential risks, including cyber security and privacy issues, as well as job displacement. While there is still a healthy debate about the full impact of automation, evidence suggests that the risk of labour displacement¹⁰ will be borne disproportionately by low-wage workers, whose skills cannot be easily adapted to the higher-paying jobs of the future.¹¹

Linked to the rise of digital technologies and the value of data is the growing importance of ‘intangible’ assets (e.g. knowledge-based intellectual property). According to the OECD, “intensified global competition, information and communication technology, new business models, and the growing importance of the services sector have all amplified the importance of intangible assets to firms, industries and national economies.”¹²

ENGAGEMENT HIGHLIGHTS: CEO ROUNDTABLE

At a roundtable discussion of senior industry executives, we heard about issues of importance, including future workforce needs. There was a strong consensus that industry and government need to support continuous learning and training (including more applied and work integrated opportunities), moving from a system that focuses on developing youth in the classroom to one that offers hands-on experience and retraining supports to adapt to the future social and technological needs of the workforce.

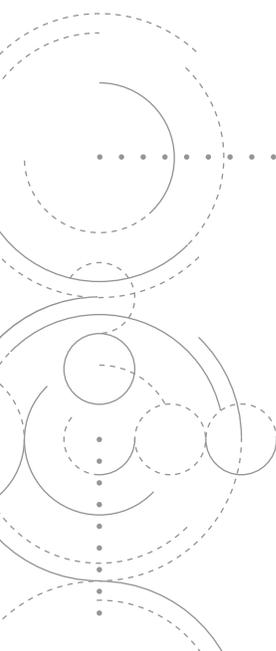
“A new set of policies is needed to help Canada thrive in a world where intangibles (including data) will increasingly become the primary source of economic competitiveness and a major creator of economic wealth.”

ASSELIN AND SPEER, A NEW NORTH STAR – CANADIAN COMPETITIVENESS IN AN INTANGIBLES ECONOMY

B.C.'S CURRENT STATE: TECHNOLOGY AND INNOVATION

B.C. has a growing high-technology sector, generating approximately 7% of the province's GDP in 2018.¹³ The tech-enabled economy is many times larger. B.C. is a leader in emerging areas of research and development, including AI and machine learning (ML), quantum computing, additive manufacturing and digital fabrication, VR / AR, software and digital / multi-media. In fact, Metro Vancouver is home to the second-largest number of AI / ML companies in Canada. B.C. also has niche strengths in agritech, marine/ocean, aerospace, cleantech and genomics, among others.

These high-potential industries are supported by a healthy innovation ecosystem that includes technology accelerators, industry associations, post-secondary institutions, government agencies and corporate leaders. As an example, in 2018 the Federal Government announced \$153 million to support the Digital Technology Supercluster located in B.C., which is leveraging private sector investment to focus on pressing challenges and opportunities in health care, natural resources and other industrial sectors.



ENVIRONMENTAL DEGRADATION AND CLIMATE CHANGE

Our global economy has long benefited from the extraction and processing of natural resources into useful products, improving the lives of billions of people. This extraction of natural capital, accelerated by population growth, has also resulted in significant ecosystem decline. Biodiversity loss, which many scientists suggest has now crossed crucial thresholds, has negative implications for socio-economic development, productivity, health and regional food security.¹⁴ Climate change is disrupting economic stability and trade in many parts of the world. Extreme weather events have been growing in impact, with more than \$1 billion per year worth of insured losses over the past five years in Canada and payouts reaching nearly \$2 billion in 2018.¹⁵

Global agriculture production is threatened as a result of water scarcity and desertification, and global fisheries could collapse due to ocean acidification.¹⁶ Scientists have estimated that inaction on climate change could cause temperatures to rise by four degrees Celsius or greater by 2100, which would result in global GDP declining by more than 30% from 2010 levels.¹⁷ The International Labour Organization estimates that climate change threatens 1.2 billion jobs globally.¹⁸ As a result of these climate change and environmental risks, governments and businesses are starting to adopt a “circular” systems approach, where the value of materials and resources is maximized throughout the lifetime of their usage and reincorporated into the economy for reuse whenever possible, decreasing demand for new, raw resources and reducing GHG emissions.¹⁹

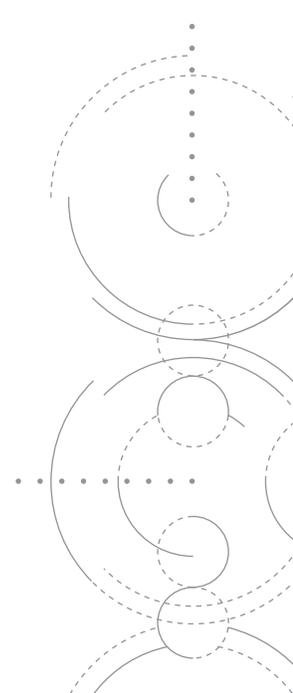
ENGAGEMENT HIGHLIGHTS: OCEAN NETWORKS CANADA

We toured Ocean Networks Canada — based in Victoria — to learn about the work this organization is undertaking to collect real-time oceanographic data through its global network of sensors. They are generating data products to help coastal communities, governments and industry make informed decisions for future planning in areas including ocean management, disaster mitigation and environmental protection.

B.C.’S CURRENT STATE: ENVIRONMENT AND CLIMATE

Impacts of climate change are affecting communities throughout B.C. and having major impacts on local economies, whether it be from timber die-off due to pine beetle infestations, increasing damage from forest fires, extreme weather events, or coastal erosion from spring tides and sea level rise. The B.C. Ministry of Environment and Climate Change Strategy released the Preliminary Strategic Climate Risk Assessment for British Columbia²⁰ in July 2019, an important tool to monitor and prepare for the risk impacts of climate change now and in the years ahead. Other impacts of climate change include the global shift to a low-carbon economy, driving new government regulations, changing capital allocations, evolving customer expectations and emerging technologies.

B.C. has long been recognized as a leader in policy focused on addressing climate change, including North America’s first broad-based carbon tax. This has contributed to green economy investment and an innovation ecosystem that is one of the strongest in North America, including a high portion of Canadian cleantech companies. The province is also fortunate to have clean and affordable power from hydroelectricity, which means that many of B.C.’s industries have a lower carbon footprint than their competitors in other jurisdictions. The B.C. Government’s recently launched CleanBC Strategy²¹ puts a new emphasis on climate action, including targets focused on net zero energy ready buildings, the adoption of electric vehicles, and industrial energy and process efficiency. Improved recycling and composting programs have helped significantly reduce the average per-person municipal solid waste in B.C. since the 1990s. However, many of the current materials entering landfills have the potential to be recovered as resources through increased reuse and repurposing, composting or recycling.



SOCIAL AND DEMOGRAPHIC SHIFTS

Some of the most profound impacts on the emerging economy are social and demographic shifts. The global population continues to grow, adding an average of 82 million people, greater than two Canadas, per year after having doubled between 1960 and 2000.²² The latest projections indicate that the world population will reach 10 billion in the year 2055, placing greater pressures on global resources while potentially increasing demand for B.C.'s sustainable products, particularly natural resource exports and services. Emerging market economies are expected to account for 57% of global GDP by 2030, with a long-term global economic power shift away from established, advanced economies. By 2050, six of the seven largest economies in the world are expected to be countries that are emerging markets today, including China (1st), India (2nd) and Indonesia (4th).²³

The world's population is also becoming increasingly urbanized, with 68% expected to live in cities by 2050, up from 55% today.²⁴ Major cities in Canada, for example, have been responsible for most net new job creation and, in recent years, are seeing the largest economic gains.

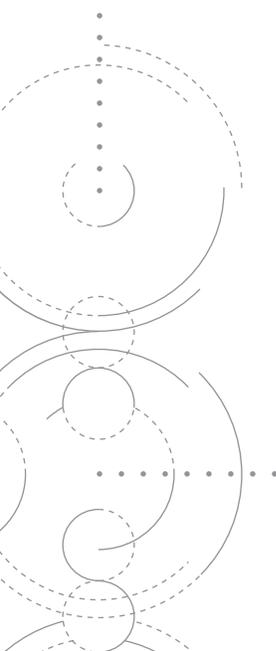
At the same time, aging populations are poised to cause one of the most significant social transformations of the 21st century. According to the World Population Prospects 2019, by 2050 the number of people over 65 will be almost double that of today.²⁵ In Canada, seniors now outnumber children for the first time²⁶ and are expected to comprise up to 25% of the population by 2036, up from 14% in 2009.²⁷ This shift has implications for nearly all sectors of society, including labour and financial markets, business succession planning, public service provision and infrastructure investment, as well as for the demand for goods and services such as healthcare, housing, transportation and social protection. These social and demographic realities suggest that a focus on workforce inclusion and diversity is needed to provide opportunities for everyone and fully utilize available workforce potential. They also support Canada's current trend of increased immigration levels, with over 320,000 new immigrants coming to the country in 2018.²⁸

B.C.'S CURRENT STATE: SOCIAL AND DEMOGRAPHIC SHIFTS

British Columbia's population is projected to grow from 5 million in 2019 to 6.3 million by 2041, a 25% overall growth over the next 20 years.²⁹ The Indigenous population in B.C. is forecast to grow at more than double that rate over the same period, from 303,500 to 465,200 by 2041.³⁰ The proportion of the population over 65 years will increase from 23% today to 36% by 2041, which is expected to bring an array of challenges for our healthcare system but also opportunities for innovation in healthcare services.

British Columbia has seen a gradual urbanization of its population in line with global trends. In 1951, 68% of B.C. residents were urbanites, which has increased to 86% today.³¹ Metro Vancouver and the Fraser Valley are home to nearly 60% of all people in B.C., up from 55% in 1994, while many smaller, rural communities are losing population.³² At the same time, the last few years has seen a migration of residents from the Lower Mainland to Vancouver Island and the Thompson-Okanagan region. The province also has an aging labour force with a median age of 42 that is expected to increase to 46 by 2038.³³ Employment of workers 55+ grew by 3.5% in 2018, while core working age (25-54) employment grew by only 1.1%.³⁴

Further, 68% of the 903,000 job openings predicted for B.C. from 2018 to 2028 are projected to come from workers retiring. At the same time, many workers are needing to transition to new jobs as employers adapt to changing job requirements and adopt new technologies and ways of working.³⁵ Job openings in B.C. due to attrition are, in part, being filled through immigration.³⁶ As the number of immigrants to Canada has increased, so has the number of immigrants coming to B.C., with 43,151 in 2018/19³⁷ contributing to the diversity of B.C.'s workforce.



ECONOMIC INEQUALITY

Rising income and wealth polarization are key risks influencing socio-economic stability and prosperity. In many OECD countries, inequalities are at their highest levels in 30 years and are widening. The top 10% of income earners take home over 10 times more pay than the bottom 10%.³⁸

A new body of research, including from the International Monetary Fund (IMF)³⁹ and the OECD⁴⁰, has found that countries with less equal distribution of income and wealth tend to have weaker and less stable paths of economic growth than those with lower inequality, partly as a result of eroding household finances and over-concentration of disposable income into a smaller segment of the population. In addition, high levels of income inequality have also been linked to a loss of trust in institutions (public and private) as people excluded from the benefits of prosperity see themselves as economically disenfranchised.

By 2028, almost 80% of all job openings will require post-secondary education. Increased education levels will be required for future jobs in addition to a higher level of skills.”

B.C. MINISTRY OF ADVANCED EDUCATION, SKILLS AND TRAINING

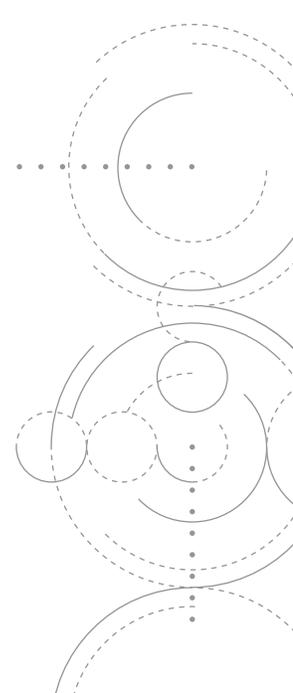
While income inequality in Canada, as measured by the Gini co-efficient, which assesses statistical distribution of wealth or income, has been relatively stable since 1995, incomes have largely been boosted by higher working hours and as a result of being linked to commodity prices, which have benefited some provinces more than others. The 40% of the population with the lowest incomes now has a much smaller share of the total, while the income share going to the top 10% has risen sharply. Indigenous peoples and women continue to be significantly under-represented among top earners and have lower average incomes than men.

Wages have also stagnated, growing at an average of 1.1% annually between 2007 and 2017⁴¹ compared to inflation estimates closer to 2% per year over the last decade (based on the Consumer Price Index).⁴² This is having a negative influence on living standards and affordability for the majority of Canadians, who have responded by taking on increased levels of household debt relative to income.⁴³

Changes in the labour market are also exacerbating existing inequalities. For example, 8.2% of Canadians did some form of “gig” work in 2016 and that number is growing.⁴⁴ Gig work lacks the social safety net from which those in traditional employment tend to benefit such as Employment Insurance, vacation pay and health insurance.⁴⁵

In response to economic and social inequalities, there has been increasing attention given to “social purpose” organizations. According to a report published by the Conference Board of Canada,⁴⁶ “businesses with a sustainable or social purpose at their core will lead the way and not only survive, but thrive”, in the emerging economy.

In August 2019, the US Business Roundtable⁴⁷ — representing nearly 200 CEOs of many of the world’s largest companies — issued a statement on the purpose of the corporation, committing to deliver value to all of their stakeholders, not simply shareholders, for the future success of their companies, their communities and their country.



B.C.'S CURRENT STATE: ECONOMIC INEQUALITY

While traditional economic indicators suggest that, overall, B.C.'s economy is doing well, incomes have not kept up with economic growth over the last 35 years.⁴⁸

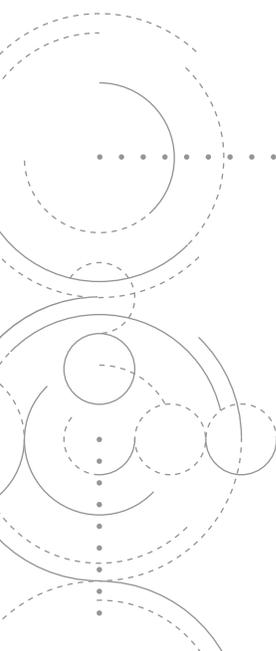
Average income from wages is growing faster than the median, indicating that those at the top are gaining relatively more from economic growth than those in the middle. Real median income from wages has remained relatively stagnant for the last three decades, with growing inequality in wages, an increasing household debt-to-income ratio and more economically marginalized populations.

While B.C. has seen provincial poverty rates decrease from 16% in 2007 to 10% in 2017⁴⁹, the household debt-to-income ratio has been increasing, particularly in the major urban centres of Metro Vancouver and the Capital Region due to inflationary factors and the rising cost of real estate.⁵⁰ This trend also contributes to wealth inequality.

While the B.C. labour market offers rewarding and family-supporting jobs with benefits for some, others face low wages, poor working conditions, little security, few if any benefits and too little time for commitments to family and community. Certain equity-seeking groups, including women, Indigenous peoples, recent immigrants, racialized people, LGBTQ2S+ and people with disabilities are more likely to find themselves in these jobs.

B.C. has a gender pay gap that has not changed significantly in the last 20 years, with women earning \$0.82 for every dollar earned by men. In 2018, B.C.'s gender pay gap was among the highest of Canadian provinces.⁵¹

B.C. also has an income gap between Indigenous and non-Indigenous people, with the median total income in 2015 for Indigenous people being 72% of the overall figure for the province.



Evaluating the Opportunities and Risks

To make recommendations that will help the province thrive in the emerging economy, we need to consider our current state and then better understand how B.C. can aspire to have high levels of economic and social well-being without exceeding our environmental thresholds and while navigating the macro trends identified in this report.

ENGAGEMENT HIGHLIGHTS: HEALTHCARE INNOVATION

Innovation in healthcare contributes to improved patient outcomes and can also be a significant economic driver. We had the opportunity to learn about advances in healthcare technology and innovation including:

Telus Health – By partnering with global digital health provider Babylon, Telus Health has brought an innovative virtual care solution to Canada. Canadians can now download the smartphone application and use the AI chatbot Symptom Checker, which asks patients questions about their symptoms and provides information on possible causes or recommended courses of action. Users can access the app’s one-on-one virtual consultation feature allowing them to speak directly with a B.C.-licensed doctor.

Surrey’s Health and Technology District – This collaboration between entrepreneurs, educational institutions, medical and technology experts has attracted leading talent from all over the world, resulting in advanced technologies and knowledge that support quicker adoption of healthcare innovations and increased speed of medical solutions brought to market.

TECHNOLOGY AND INNOVATION

CAN’T MISS OPPORTUNITIES

British Columbia has an opportunity to lead in the area of developing and deploying emerging technology, harnessing our knowledge-based economy to address societal needs and solve pressing challenges. A more technology literate society can help to ensure that no one is left behind, so long as strategies are developed to mitigate the potential negative consequences of technology. There is also an opportunity to use technology from outside B.C. to address our needs and to further encourage the adoption of innovation and technology across the public, private and non-profit sectors in order to improve productivity and competitiveness.

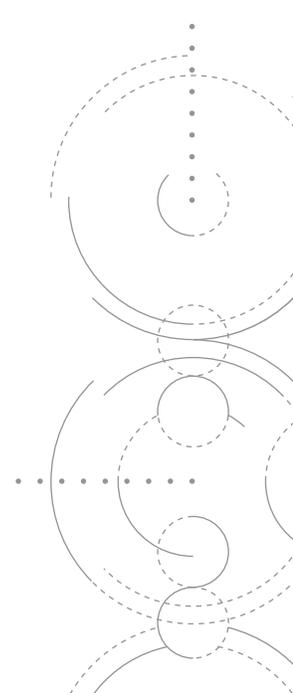
KEY RISKS AND CONSTRAINTS

Without a strategic approach and greater support for innovation, B.C.’s economy risks falling behind other jurisdictions. B.C. will need investment in research and development by industry to remain competitive, as well as a focus on commercializing innovation. Without effective consideration for, or protection of, our intellectual property, we lose the opportunity to build on the inherent value of our innovation and capital investments.

ENVIRONMENTAL DEGRADATION AND CLIMATE CHANGE

CAN’T MISS OPPORTUNITIES

Building on B.C.’s historical strengths and global positioning in the natural resource industries, for example in forestry, there is an opportunity to capitalize on renewable resource, green building material and value-added sectors. As a low-carbon electricity producer, B.C. is well-positioned to lead on decarbonizing industry and transportation. Further leveraging our policy leadership can drive new business and export opportunities in cleantech and the broader environmental goods and services sector, as well as in new markets such as carbon finance and sequestration. Multi-sector collaboration can support the growing opportunities in the circular economy, with new business models that create more value from each unit of resource.



KEY RISKS AND CONSTRAINTS

The costs for mitigating and adapting to climate change, as well as addressing environmental risks, will increase exponentially over time. Impacts range from losses due to extreme weather events and disrupted supply chains, to food insecurity, resource scarcity, stranded assets due to reliance on burning fossil fuels and broader impacts on human and ecosystem health. We need to ensure that being a leader and early adopter of climate change policies does not put B.C. businesses at a competitive disadvantage in the near term.

A FURTHER NOTE ON CLIMATE CHANGE

At the time of this report writing in late 2019, we saw significant and devastating forests fires in California and Australia impacting not only human life, property and wildlife, but also adding immense quantities of carbon dioxide (CO²) into the atmosphere. To the north, Alaska's permafrost is thawing, releasing thousands of tonnes of methane, a far more potent greenhouse gas than CO².

It is increasingly apparent that the scenarios and predictions of the Intergovernmental Panel on Climate Change (IPCC) tend to be overly optimistic, although they already predict changes in climate and sea levels that will strongly impact B.C.'s economy.

Whether we are dealing with future storm surges in low-lying parts of the Lower Mainland, our dwindling salmon stocks, or our forests and regional communities being increasingly impacted by fires, global warming will greatly affect our economy. The science is clear: without massive intervention to reduce our emissions of greenhouse gases, we are heading toward a catastrophe. We found in our consultations with industry that while awareness of climate change is increasing and companies are prepared to be part of the solution, the climate change impacts on business are not well understood in B.C. and, as a result, B.C. companies are ill-equipped to adapt to these realities. We recognize that addressing climate change will be essential to our future economic success. B.C. has taken a leadership role and that role should continue, working with partners across Canada and internationally.

SOCIAL AND DEMOGRAPHIC SHIFTS

CAN'T MISS OPPORTUNITIES

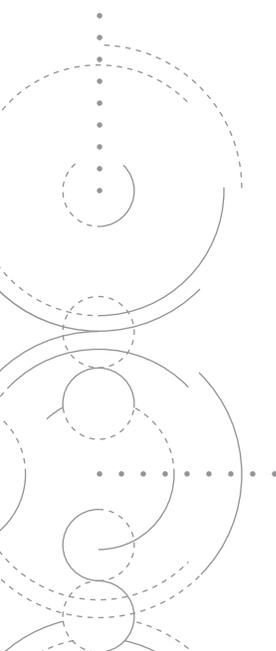
B.C.'s diverse population and workforce is one of our greatest assets, supporting the province's participation in global markets. Strategically responding to social and demographic trends will help unlock societal and economic value from our diversity and fully utilize the talents of our people.

During a roundtable discussion held with a group of young people in the early stage of their careers, reframing livability, consideration of the precarity and purpose of work, and addressing climate change through a just transition were priorities.

KEY RISKS AND CONSTRAINTS

The demographic shift B.C. is experiencing will impact labour supply for the foreseeable future, despite high levels of immigration. Furthermore, the workforce participation of many people in British Columbia may be limited due to caregiver responsibilities for young and old.

Failure to strategically address social and demographic shifts could also result in social fragmentation. Urban centres could become increasingly overcrowded and expensive, with transportation bottlenecks impacting the movement of goods and people throughout the province. Unequal distribution of resources and people may also exacerbate the urban-rural divide.



SNAPSHOT: B.C.'S WORKFORCE

British Columbia's diverse, skilled, and adaptable workforce is one of our greatest assets. B.C.'s workforce is highly educated, with 71% having some post-secondary education and well over a quarter possessing a university degree. More than a quarter of people in British Columbia are born outside Canada. In the future, an ever-growing portion of the B.C. workforce will consist of first- and second-generation immigrants.

Students enrolled in science, technology, engineering and mathematics (STEM) programs in B.C. post-secondary institutions represented 16.5% of the student headcount in 2017/18, an increase from 14.3% in 2013/14.

ECONOMIC INEQUALITY

CAN'T MISS OPPORTUNITIES

By addressing economic inequality, B.C. can open up new opportunities for economic development, entrepreneurship, innovation and Indigenous reconciliation throughout the province. In turn, this will result in more regional and social equity and inclusion, including more opportunities for Indigenous peoples. B.C. can continue to lead in quality education and skills training, while looking to promote fair wages, create high-paying jobs, and ensure distributed and inclusive growth opportunities for upward mobility provincewide.

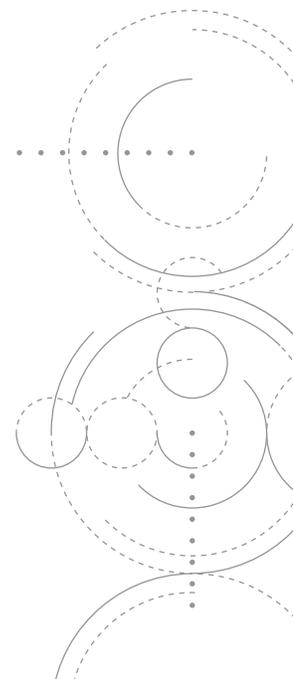
KEY RISKS AND CONSTRAINTS

Increasing economic inequality has negative ripple effects on B.C.'s economy, from the erosion of the consumer base, to the inability of workers to afford housing within the community they work, to the lost potential of young people due to lack of access and opportunity. It prevents the right workers from being matched to the right employment opportunities due to a lack of affordable access to education, resources and flexible workforce participation models.

These global trends, opportunities and risks suggest that the factors and the systems supporting the success of B.C.'s economy to date will not be enough to ensure our future success.

Deliberate action is needed to ensure all people in British Columbia are participating in a prosperous economy, one that is underpinned by continuous innovation and learning, enhanced value in B.C. products and services, a healthy environment and nimble and effective public policy.

It is with these realities in mind that we make our recommendations to the B.C. Government.



Recommendations

To realize the vision, we have focused our recommendations across five strategic priorities:

- 1. Embracing Technology and Innovation:** B.C. must build on its strengths in the technology sector and invest further in innovation, as well as facilitate the widespread adoption of innovation and technology across all sectors of the economy in order to improve overall business productivity, increase incomes and enable workers to thrive.
- 2. Leveraging B.C.'s Green Economy:** The emergence of the green and circular economy, one that is low-carbon, resource efficient and socially inclusive, presents opportunities for B.C. given its existing strengths. Investments in green infrastructure and climate adaptation planning will ensure B.C.'s economy remains resilient.
- 3. Building a Highly Skilled and Adaptable Workforce:** B.C.'s future workforce must be resilient, with the right skills in the right areas at the right time to be successful in the emerging economy. This requires new and different investments in and approaches to training and re-skilling as part of lifelong learning for workers with support from employers for work-integrated learning opportunities. Enabling workforce participation of under-represented groups will continue to be a critical issue, both for ensuring equity and addressing labour shortages.
- 4. Ensuring an Effective Enabling Ecosystem:** Creating an enabling ecosystem for B.C.'s economy that allows for the efficient flow of products, people, technology and ideas within the province and with the rest of the world is essential. Enabling regional economic development, supporting economic hubs and equipping residents with access to the latest technology are all keys to success.
- 5. Demonstrating Public Sector Leadership:** Given the accelerated pace of change, flexible solutions must go hand-in-hand with a new level of public sector responsiveness. In order to capitalize on the opportunities presented by this change, government and public sector agencies will need to be nimble and a catalyst for enabling the future economy by establishing best practices, stimulating innovation and mitigating risks.

“B.C. has a competitive advantage because of its relatively stable political climate and significant endowment of resources — both natural and human — leading to high quality products. By focusing on key export areas and leveraging success factors like proximity to market and local knowledge, B.C. can be a sustainable business leader. B.C.'s economy also provides a good starting point for less resource intensive emerging economic opportunities in healthcare, high-end computing, VR / AR, automation, the circular economy and clean tech.”

DOMINIC BARTON, PREVIOUSLY GLOBAL MANAGING PARTNER
EMERITUS AT MCKINSEY & COMPANY AND CANADA'S AMBASSADOR TO CHINA

Wherever possible, our recommendations are designed to align with existing government strategies and initiatives. Reconciliation and new political, business and legal relationships with Indigenous peoples, social inclusion, and environmental sustainability are cross-cutting themes in the recommendations. They must be considered and addressed in order to ensure a prosperous and sustainable economy in the future.

Setting a goal for the long run must allow for constant iteration and course correction. To achieve the vision of success over a long period amid such complexity, we recommend this pursuit with “moving goalposts.” In this report, we suggest a set of initial recommendations, acknowledging that these will not be enough to reach the vision, and that some may need to be modified or updated as time passes and circumstances change.

STRATEGIC PRIORITY ONE: EMBRACING TECHNOLOGY AND INNOVATION

Economies with strong home-grown technology and innovation industries have higher rates of technology adoption and capture more of the economic benefit than economies that rely on importing technology from elsewhere.

At the same time, rapid technological change requires businesses, the public sector, and the workforce to be increasingly entrepreneurial, nimble and flexible, able to adjust and adapt quickly to economic shifts in order to remain relevant and competitive. Where made-in-B.C. technology is not available, B.C. must look to new technology, innovative practices and advanced knowledge from other jurisdictions. British Columbia will benefit from greater adoption of technology across all industries, including increased productivity, long-term competitiveness, and sustainability with respect to business operations.

The importance of entrepreneurship cannot be understated as 98% of B.C.’s businesses are small (those with fewer than 50 employees).⁵² Smaller businesses tend to have fewer resources to spend on research and development, as well as on workforce development and training, which limits their potential for scaling-up and commercializing technology.

These realities, in turn, affect the overall productivity of our economy. While historically B.C. has been able to maintain a high standard of living despite relatively weak business innovation performance, to thrive in the emerging economy B.C. businesses will need to invest more in productivity-enhancing innovation.

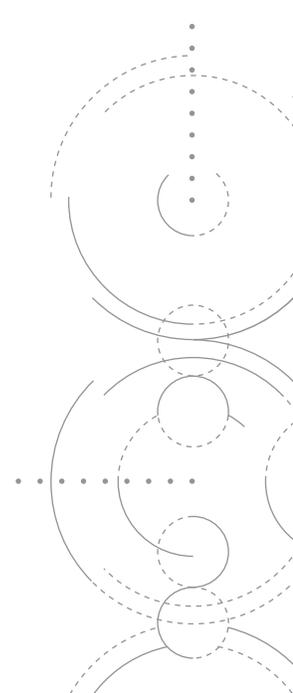
“For British Columbia to maintain economic prosperity, we must continuously expand our innovation capacity, generate new ideas and create new technologies. Innovation is a precondition to B.C.’s participation in the global economy.”

JONATHAN RHONE, CEO, AXINE WATER TECHNOLOGIES AND
CHAIR OF THE BC CLEANTECH CEO ALLIANCE

Many of B.C.’s technology and innovation companies are part of the service sector, which accounts for more than 70% of the province’s GDP as well as some 80% of all jobs. Service industries are increasingly diverse, with many exporting in addition to meeting domestic needs.

Globally, services represent almost one-quarter of all international trade, a share that is expected to grow over time. British Columbia has a competitive base and strategic advantage to expand industries in this sector, due in part to B.C.’s strong education system and a location that is a desirable destination for immigrants.

We must also seek to leverage and protect our intellectual property, as well as improve access to open data and information in a secure fashion, enabling businesses and civil society to benefit from the value of these assets. As such, our recommendations seek to strengthen B.C.’s innovation ecosystem and leverage the opportunities from evolving technology.



RECOMMENDATION 1: STRENGTHEN THE ECOSYSTEM FOR INNOVATION, COMMERCIALIZATION AND SCALE-UP OF COMPANIES.

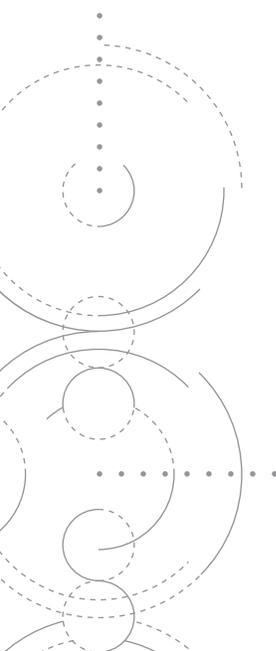
In addition to talent, there are three elements needed to build a strong technology ecosystem: innovation, commercialization and the building of strong industry clusters that support companies to grow and stay in the province. Small companies often struggle to scale into medium and large companies that remain anchored in British Columbia and retain their intellectual property.

- ▶ **HOW TO GET THERE:** Work with industry to identify priority sector clusters where an existing critical mass of high-potential businesses exists and establish the infrastructure and regulatory environment that best supports cluster growth and sustainability.
- ▶ **HOW TO GET THERE:** Align with federal initiatives to develop a framework that addresses communication, education and tools to support the creation, commercialization and retention of intellectual capital in B.C.
- ▶ **HOW TO GET THERE:** Develop a strategy that leverages B.C.'s strengths — in talent, technology, research, education, clean energy, and geographic position as Canada's gateway to the Asia-Pacific — to promote and increase the province's exports of services, resulting in the scale-up of more B.C.-based internationally competitive companies.

RECOMMENDATION 2: FOSTER TECHNOLOGY ADOPTION TO GENERATE ECONOMIC, ENVIRONMENTAL AND SOCIAL BENEFIT.

B.C. is well-positioned to be a technology leader and, as an economy of small and medium enterprises (SMEs), there is also a need to capitalize on technology developed outside of B.C.'s borders. To bolster competitiveness of SMEs and non-profit organizations, opportunities to encourage the adoption and integration of the best available technology across all B.C.'s industries should be created.

- ▶ **HOW TO GET THERE:** Explore leading-edge approaches to accelerate the diffusion and adoption of technology, bringing together government, industry, academia and non-profit organizations in a collaborative effort.



RECOMMENDATION 3: ENHANCE THE FINANCING OPTIONS AVAILABLE IN THE EMERGING ECONOMY.

As knowledge and innovation drive our economy, intangible assets such as intellectual property, software and databases will become increasingly important for use as security to provide financial backing. Once at scale, businesses can access a wide variety of capital, but start-ups and small businesses grounded in intellectual property do not enjoy the same access to capital as those in traditional sectors. Likewise, it is important to note that small businesses not in the tech sector face challenges scaling-up, in part, as a result of a lack of available financing.

- ▶ **HOW TO GET THERE:** Work with partners to develop a full understanding of the capital needs of the future knowledge and innovation-based economy and for those businesses that need to adapt to rapid changes and address the gaps.
- ▶ **HOW TO GET THERE:** Create a provincial investment vehicle that is networked locally, drawing from tri-sector (private, public and not for profit) leadership and supported with professional business services to address the capital needs in the knowledge-based innovative economy and that accelerates entrepreneurship at the community level.

RECOMMENDATION 4: USE B.C.'S OPEN DATA PLATFORMS TO LEVERAGE EMERGING ECONOMY OPPORTUNITIES.

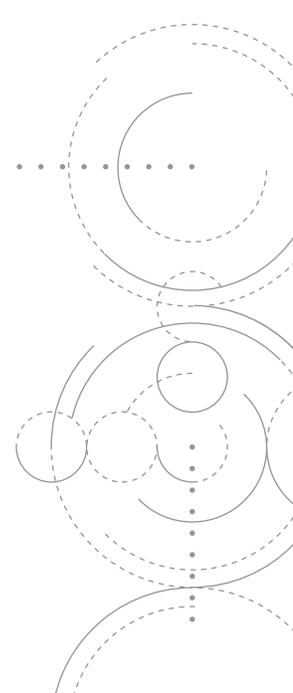
Access to high quality data and relevant technology (e.g., AI, machine learning, quantum computing) can advance B.C.'s economic, social and environmental objectives, as well as support public policy and strategic decision-making. Sustained public dialogue on trust and ethics related to data management and technology adoption will be critical.

- ▶ **HOW TO GET THERE:** Ensure that transparent and secure open data best practices are applied across all public sector organizations, building on existing government initiatives related to the digital economy. Explore and pursue opportunities to advance open data on a cross-sector basis.

RECOMMENDATION 5: BECOME A WORLD LEADER IN "SMART"⁵³ REGULATION.

Using best practices from other jurisdictions and new technologies will enable legislators and policy makers to identify areas to develop less prescriptive and more time-sensitive regulatory regimes for B.C. companies. The objective is to allow greater scope for good performers to innovate and experiment while maintaining high standards of environmental, community and worker protection.

- ▶ **HOW TO GET THERE:** Develop less prescriptive regulatory regimes, including exploring flexible regulations or "sandboxes" (temporary regulatory approaches for innovation testing under regulator oversight) designed to encourage innovation while creating appropriate safeguards, and collecting information and insights to help determine if further regulatory action is needed.



STRATEGIC PRIORITY TWO: LEVERAGING B.C.'S GREEN ECONOMY

The green and circular economy represents a growing opportunity for B.C. to build on its foundation of low-carbon electricity and policy leadership. CleanBC sets out a framework that will enable B.C. to attract investment and scale solutions that will benefit all regions of the province, while addressing climate change risks and setting the province on a path to meeting its global GHG emissions reduction commitments.

Adopting a climate change lens can offer B.C. businesses enhanced economic performance and improved global competitiveness, while building more resilient communities, enhancing food security and providing sustained investment and employment. Investments in climate adaptation and green infrastructure can enhance our long-term economic sustainability, the stability of our transportation and energy systems and our resiliency to extreme weather events and environmental shocks. British Columbia has strengths in areas like clean energy, energy management, green building and wood product innovation and environmental services. There are further untapped opportunities for exporting knowledge-based, low-carbon products and technologies to a global market for green economy goods and services that is estimated to be worth more than \$6 trillion.⁵⁴

ENGAGEMENT HIGHLIGHTS: METAL TECH ALLEY

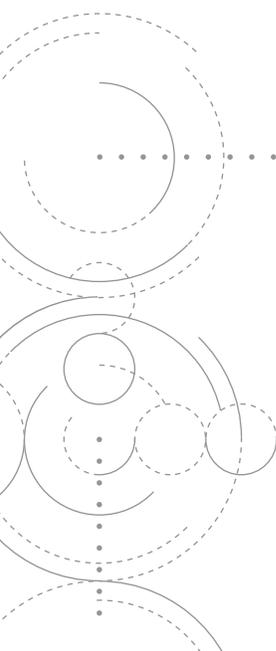
Task Force members visited Trail and saw first-hand collaboration between post-secondary institutions (Selkirk College), industry (Teck Resources), the technology sector (Kootenay Association for Science & Technology), and dozens of start-ups and established companies.

This collaboration supports the growth of the local innovation community and the Metal Tech Alley cluster, which is key to creating new business and investment opportunities in the region. As an example, Retriev Technologies, a business that is part of Metal Tech Alley, evolved from recycling traditional lead acid batteries to now recycling EV batteries from Tesla, with end products repurposed and reintroduced into the supply chain.

RECOMMENDATION 6: CAPITALIZE ON BRITISH COLUMBIA'S VERTICALLY INTEGRATED, CLEAN POWER ADVANTAGE.

B.C. is in an advantageous position of having an integrated low-carbon electricity grid with significant renewable electricity resources. Further electrification can reduce B.C.'s carbon footprint and catalyze innovation in electricity generation, storage and transmission technologies.

- ▶ **HOW TO GET THERE:** Mandate BC Hydro to capitalize on B.C.'s clean electricity generation assets and transmission infrastructure to make it the leading and most innovative jurisdiction in North America for clean energy, enabling it to play a key role in the decarbonization of B.C.'s economy and the catalyzation of new technology used in electricity generation and transmission. Building on existing strengths in electricity trading and hydropower facility management, incorporate distributed generation, storage and smart grids into BC Hydro's electrification planning.



RECOMMENDATION 7: TAKE ADVANTAGE OF GROWING GLOBAL DEMAND FOR GREEN ECONOMY PRODUCTS AND SERVICES.

CleanBC, our access to low-carbon electricity, and our global reputation for high regulatory standards and trustworthiness give B.C. an opportunity to meaningfully reduce GHG emissions and other environmental impacts. These factors position B.C. for the low-carbon future and provides B.C.'s growing low-carbon industrial sector and other environmental goods and service-producing sectors with opportunities to develop innovative products and services for export. As the global population increases, businesses will be looking for strategies to meet increased demand for these products and services.

► **HOW TO GET THERE:** Position B.C. to be among the world leaders in sustainable business including low-carbon exports, and green and cleantech. Grow B.C.'s capabilities in green products and services and move the province up the value chain in traditional product mix by creating a targeted sector development and export strategy, including appropriate policies and regulatory frameworks, that identifies leading products and services such as those addressing climate change mitigation and adaptation.

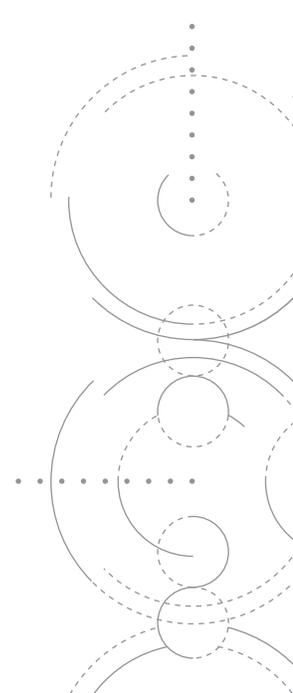
RECOMMENDATION 8: CAPITALIZE ON OPPORTUNITIES PRESENTED BY THE CIRCULAR ECONOMY.

Leading jurisdictions, including in Europe and Asia, are leveraging the circular economy model to drive innovation, growth, investment and export opportunities. With its vast natural resource base, British Columbia can capitalize on these opportunities by investing in initiatives that rethink material and product supply chains while extracting the most value from our resources and other inputs to the benefit of industry, the environment and consumers.

► **HOW TO GET THERE:** Ensure B.C. benefits from opportunities in the circular economy by developing a strategy that includes roadmaps and tools for industry, public sector and communities; accelerating existing extended producer responsibility mandates which encourage industry to take life-cycle responsibility for the products they produce; and enabling policy and regulation, including inter-jurisdictional policy harmonization.

“Historically, green economy conversations and actions have focused on specific sectors, supply chains and production — the supply side. To be more effective in the future, government needs to advance the green economy by also considering the demand side and the sustainability of our everyday lives. The key is adopting a systemic approach rooted in the evidence-base of ecological footprint analysis, while drawing on our understanding of social equity and wellbeing.”

VANESSA TIMMER, CO-FOUNDER AND EXECUTIVE DIRECTOR, ONE EARTH



RECOMMENDATION 9: ADDRESS THE RISKS AND OPPORTUNITIES ASSOCIATED WITH CLIMATE AND SUSTAINABILITY TRENDS THAT WILL AFFECT BRITISH COLUMBIA'S ECONOMY AND COMMUNITIES.

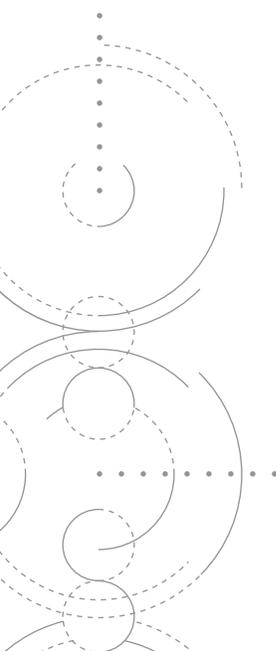
Throughout the economy and particularly in small- and medium-sized organizations and communities, greater knowledge and understanding about climate change and other sustainability risks, as well as the best practices for climate mitigation and resiliency, are required.

- ▶ **HOW TO GET THERE:** Designate a multi-stakeholder entity that can undertake research; develop educational tools and deliver professional development courses; facilitate cross-sectoral collaboration; and design public policies that identify and address climate change and sustainability trends that will affect and offer opportunities for British Columbia's economy and communities.
- ▶ **HOW TO GET THERE:** Develop tools, resources and other supports to allow small- and medium-sized enterprises to manage the risks and take advantage of opportunities from climate change and transition to low-carbon, purpose-led and sustainable business models.

RECOMMENDATION 10: ENSURE THE B.C. GOVERNMENT AND ITS PUBLIC SECTOR ORGANIZATIONS ARE LEADERS IN SUSTAINABLE OPERATIONS.

Public sector institutions must increasingly consider the current and long-term economic, social and environmental risks, opportunities and impacts of their operations and value chains. Putting a sustainability lens on government and the wider public sector can result in new business opportunities and investment attraction, as entrepreneurs scale-up to meet this new demand and export potential of their technologies and services to growing markets.

- ▶ **HOW TO GET THERE:** Mandate public sector organizations to develop or strengthen strategies that include goals and metrics to identify, manage, improve and disclose their immediate and long-term social, economic and environmental risks, opportunities and impacts. This should encompass their operations, business models, and supply chains adhering to global best practice standards; add this as a requirement to Government's Carbon Neutral Action reports.



STRATEGIC PRIORITY THREE: BUILDING A HIGHLY SKILLED AND ADAPTABLE WORKFORCE

Trends impacting the future workforce include the gig economy, immigration, income inequality, and changing demographics, including an aging population and a declining labour force. Technology and innovation will create new employment opportunities that will demand different skills and, in some cases, impact existing jobs.

People in B.C. can expect to move between jobs and employers more frequently and will have to adapt to rapidly evolving business and consumer requirements. Providing all workers with the skills and tools they need to capitalize on emerging opportunities will be essential to future success and will improve productivity and mitigate the risks of economic displacement for workers and communities.

It is also important to ensure that B.C.'s education system keeps pace with the rapidly evolving needs of the emerging economy, from K-12 through to post-secondary institutions, with access to the latest technology and equipment and modernizing curricula to ensure effective integration of concepts such as coding, collaboration, sustainability, entrepreneurship and creativity.

With an integrated system of top-ranked research universities, industry-linked polytechnics and regionally distributed teaching colleges and universities, B.C. is well positioned to build a highly skilled and adaptable workforce, recognizing the increasing importance of the role of human capital in the emerging economy.

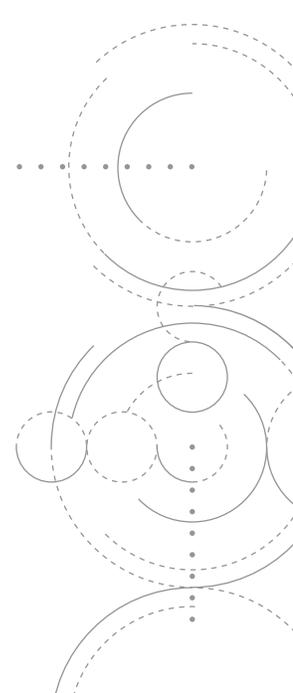
“Society, industry and government need to mobilize the research strengths and energy of the post-secondary system.”

ANDREW PETTER, PRESIDENT OF SIMON FRASER UNIVERSITY

RECOMMENDATION 11: FOCUS INVESTMENT IN B.C.'S HIGHER EDUCATION SYSTEM TO BE A LEADER IN CANADA, PRODUCING AND ATTRACTING GLOBALLY COMPETITIVE TALENT.

British Columbia's post-secondary education (PSE) system must train students to meet industry needs but it also must prepare them to be the next generations of leaders, innovators and entrepreneurs poised to invent and commercialize new businesses, creating employment opportunities, and solving local and global challenges, competing with and leading other jurisdictions. Educational institutions recognized for their excellence can also attract and retain global talent who can learn at British Columbia colleges, polytechnics and universities and go on to generate new businesses and business models in knowledge-intensive industries when they graduate, nurtured by PSE-linked innovation ecosystems.

- ▶ **HOW TO GET THERE:** Ensure PSE institutions and industry collaborate in research and development activity in the emerging economy. Where appropriate, associate new incubators, accelerators, hubs, institutes and labs with B.C. PSE institutions with the funding and mandate to drive innovation, training, and cross-business pollination among leading B.C. industries.
- ▶ **HOW TO GET THERE:** Collaborate with the Federal Government to increase focused investment at all levels of PSE delivery to ensure that B.C. continues to deliver world-class higher education.



RECOMMENDATION 12: ENSURE B.C.'S EDUCATION SYSTEM EQUIPS PEOPLE WITH THE TOOLS TO PARTICIPATE IN AND ADAPT TO A RAPIDLY CHANGING LABOUR MARKET.

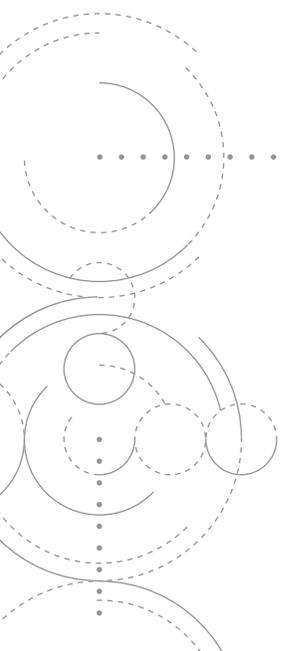
The future education ecosystem must aspire to excellence in educating, skilling and training world-class workers. The system must be accessible, affordable, relevant and apply to the spectrum of training, i.e., from training youth before they enter the workforce to adult skills development throughout the lifespan of a career. This involves collaborating with industry, and the public and non-profit sectors and exploring new ways to deliver post-secondary education to support workers as they re-skill and transition to new jobs.

- ▶ **HOW TO GET THERE:** Ensure skills and competencies taught within the K-12 and post-secondary ecosystems include creativity, entrepreneurial and analytical skills, emotional intelligence, collaboration, and sustainability literacy. This should include setting goals for students to gain quality work experience to complement their academic studies by participating in work-integrated experiences in relevant fields.
- ▶ **HOW TO GET THERE:** Ensure the post-secondary education ecosystem is accessible, affordable and relevant. This can be done through the deployment of multiple levers that include the expanded use of modular education/training to acquire credentials via relatively short “laddered” programs that build on and augment one another.
- ▶ **HOW TO GET THERE:** Work collaboratively with industry and the non-profit sector to support work-integrated learning opportunities. Workers seeking to adapt to the changing needs of the future workforce need to understand available options and industry needs and will also require financial support during re-skilling such as enhanced income support programs.

RECOMMENDATION 13: ENABLE BROADER WORKFORCE PARTICIPATION TO MEET LABOUR SUPPLY CHALLENGES AND REALIZE THE FULL ECONOMIC POTENTIAL OF PEOPLE IN B.C.

While an aging population is undoubtedly putting pressure on B.C.'s available labour force, there remains significant economic potential from closing the gaps in workforce participation and employment of demographic groups that are currently under-represented in the workforce, including women with young children, Indigenous peoples, recent immigrants, those with disabilities and other underemployed adults.

- ▶ **HOW TO GET THERE:** Expand access to skills development training and re-skilling opportunities; increase the availability of quality, affordable family care programs, including child care, elder care and social care for children and adults with disabilities and serious illness to reduce the barriers caregivers face to accessing work or training; and engage with employers to enhance workplace flexibility and support more inclusive workplaces.
- ▶ **HOW TO GET THERE:** Set objectives for the labour market participation of under-represented groups and develop metrics to monitor and report progress on closing the gaps.



RECOMMENDATION 14: ENSURE B.C.'S SOCIAL SAFETY NET AND OUR SYSTEM OF WORK-PLACE RIGHTS ARE QUICK TO RESPOND TO ECONOMIC SHIFTS.

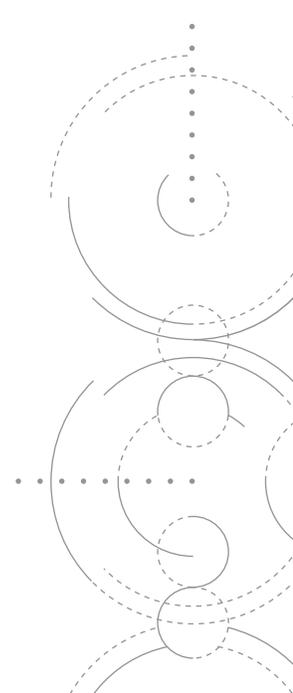
A periodic review of the policy framework is important against a backdrop of a changing economy and labour market while at the same time providing stability for employers. Technology and other factors are changing how paid employment is structured and the next 25 years are expected to bring an even faster pace of change, with large potential impacts on livelihoods and quality of life. Written at a time when a permanent, full-time job with a single employer was the norm, most of our workplace laws and social protection policies have been slow to respond to economic shifts, leaving vulnerable workers exposed to risk. Modernizing social protection programs to enable them to keep pace with the 21st-century economy is critical to promoting economic inclusion and preventing existing social inequities (across gender, race, Indigenous identity and others) from becoming entrenched in and harmful to the emerging economy.

- ▶ **HOW TO GET THERE:** Ensure workplace policy and legislation are forward-looking and enforceable rather than reactive in order to support the well-being of people in British Columbia. Draw on best practices of regulatory agility from other jurisdictions and leverage digital technology opportunities to become a leader in smart social policy regulation in Canada, including setting norms of collaborative cross-sectoral engagement, iterative innovation and a mechanism for regular reviews to monitor policy effectiveness.
- ▶ **HOW TO GET THERE:** Consider mechanisms to improve access and portability of benefits for workers in non-traditional forms of employment to respond to the new realities of frequent job changes and increasing prevalence of non-standard employment and gig work.

RECOMMENDATION 15: SUPPORT THE SUCCESS OF NEW IMMIGRANTS IN THE LABOUR MARKET.

A priority for the future economy will be enabling B.C. residents to acquire great jobs; however, it is recognized that immigration will be a major and increasing source of labour force growth in the coming decades. It is therefore critical that more be done to support the success of newcomers in the workforce, and that immigrant selection be more closely aligned with trends in labour force demand and geographic needs.

- ▶ **HOW TO GET THERE:** Explore new models of partnership with high-need industries for targeted immigration programming that includes built-in skills development and re-credentialing programs in collaboration with educational institutions and non-profit organizations through:
 - » Advocating with the Federal Government to give the province a larger role in immigrant selection; enhance the delivery of settlement services for immigrants, including increases to funding levels; and extend supports to temporary residents for accelerated integration towards permanent residency.
 - » Supporting provincial professional regulatory bodies to improve competency-based assessments and work with the post-secondary system where applicable to develop modular programs to place recent post-secondary school graduates and enable immigrants to secure the necessary qualifications without having to start over.



SNAPSHOT: TOURISM IN B.C.

The Tourism Industry Association of BC presented to the Task Force about the opportunities and competitive advantages for B.C. tourism in the face of changing demographics and significant growth.

B.C.'s natural environment, cultural experiences, and its reputation of being safe, diverse and wild are competitive advantages attractive to tourists. Tourism revenue is increasing year over year. In 2017, revenue was \$18.4 billion, an 8.4% increase from the previous year. This contributed over \$9 billion (3.6%) to provincial GDP and employed almost 138,000 people in over 19,000 tourism businesses.

Trends such as labour shortages and climate change continue to challenge B.C.'s tourism experiences, while opportunities exist to meet global demand for ecotourism and to support Indigenous peoples who want to promote unique cultural experiences worldwide.

STRATEGIC PRIORITY FOUR: ENSURING AN EFFECTIVE ENABLING ECOSYSTEM

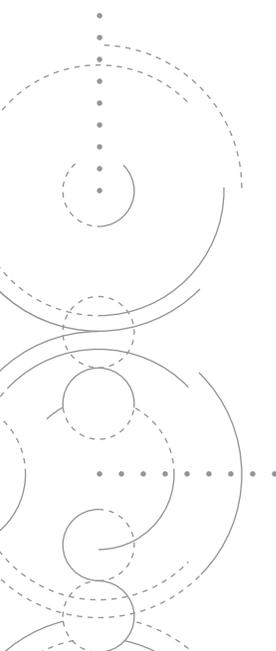
An enabling ecosystem that allows for the efficient flow of products, people and technology within the province and between B.C. and the rest of the world will be critically important to the future economy. Building toward investment and development throughout B.C., success on this front requires co-ordination and planning at all levels of the public sector and engagement with industry and Indigenous peoples.

Many of B.C.'s rural communities produce goods for export, requiring the infrastructure and labour force to do so. In order to ensure diversified regional economies, residents in many rural regions need access to infrastructure, capital, services, amenities and career opportunities that are more abundant in the urban centres. Advancements in technology and the rise of the digital economy, which is skills-based and tends to thrive in urban areas where industry clusters can more easily form, could further increase the opportunity divide.

While progress is being made to close the connectivity gap, through programs like Connected Communities and Connecting B.C., more can be done to enhance the enabling infrastructure required to promote economic diversity and prosperity. The Government of B.C. must continue to make strategic investments that contribute to a healthy, flourishing economy in every region of the province in order to keep B.C. globally competitive and foster cohesion within and between communities.

ENGAGEMENT HIGHLIGHTS: SMALL BUSINESS

In partnership with the BC Chamber of Commerce, we surveyed more than 700 Chamber of Commerce members from throughout B.C. We learned that for businesses, some of the key considerations needed when planning for the future economy include: regulatory competitiveness, responsiveness, strategic partnerships, flexibility and innovation, human capital development and deployment of technology.



RECOMMENDATION 16: SUPPORT AN INTEGRATED PLANNING APPROACH TO FUTURE ECONOMIC, ENVIRONMENTAL AND SOCIAL TRENDS, WITH A FOCUS ON B.C.'S MAJOR ECONOMIC HUBS.

Many businesses, groups, and other entities that we heard from are not engaged in long-term planning. Where longer-term planning does occur, plans are not necessarily developed in consideration of other activities happening within the same region. In addition, they may not be based on a similar understanding of future economic, environmental and social trends, risks and opportunities.

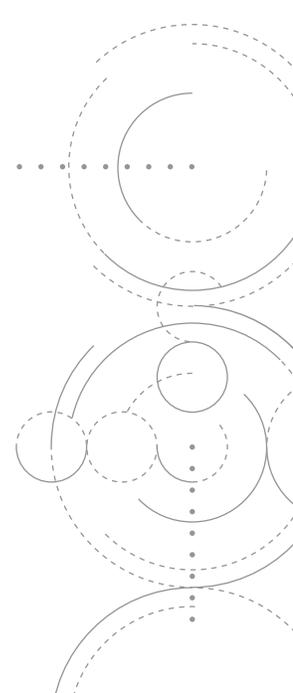
- ▶ **HOW TO GET THERE:** Work with other levels of government and key agencies, using legislation when necessary, to ensure long-term planning efforts are co-ordinated, particularly around major economic hubs. Considering indigenous partnerships, sector competitiveness and economic growth opportunities, build regional capacity to create a common baseline understanding of projected economic, environmental and social risks, opportunities and impacts from major emerging macro trends.
- ▶ **HOW TO GET THERE:** Seek feedback from business and industry in other jurisdictions and identify key enabling elements and how they can apply in the British Columbia context to better support business expansion, technology and value-added production.

RECOMMENDATION 17: ACCELERATE INVESTMENT IN CONNECTIVITY (BROADBAND AND CELLULAR) TO REDUCE REGIONAL ECONOMIC INEQUITIES.

The federal and provincial governments have announced unprecedented levels of funding for basic broadband infrastructure in addition to expanded cellular coverage for rural and Indigenous communities throughout the province.

Not only is connectivity a critical enabler for participation in the digital economy, it is now a crucial factor for any business or public sector endeavor. These same communities will require additional infrastructure, services, digital awareness, planning and leadership capacity in order to overcome barriers to attracting businesses and talent.

- ▶ **HOW TO GET THERE:** Focus future connectivity investments in economic and trade corridors that will accelerate the adoption of digital infrastructure and future high-speed networks and be poised to adapt to the next generation of communication technology.
- ▶ **HOW TO GET THERE:** Build on programs such as Connected Communities to further develop the business and investment tools municipalities and economic development practitioners will use to capitalize on broadband access, enhance digital literacy, and adopt emerging technology that can be leveraged to provide jobs and enhanced services.



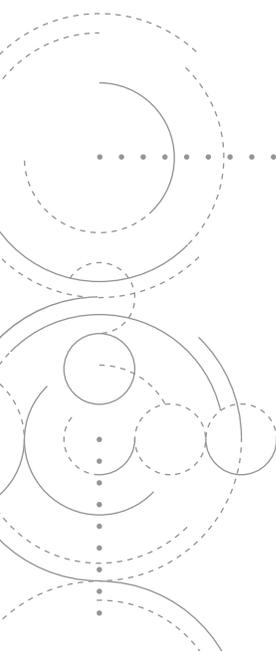
RECOMMENDATION 18: CONTINUE TO INVEST IN TRADE, TRANSPORTATION AND ECONOMIC GROWTH CORRIDORS TO MAINTAIN CANADA'S AND B.C.'S GLOBAL COMPETITIVE ADVANTAGE.

Transportation and trade corridors need sufficient capacity and reliable operations achieved through expanded infrastructure and system optimization in order to create globally competitive supply chains for B.C.'s importers and exporters. This can be accomplished through better planning and collaboration with industry, Indigenous and non-Indigenous communities along the trade corridors.

Growth corridors are critical for British Columbia's participation in the global economy and will need to evolve as new products and services are developed and new markets for existing products and services emerge.

It is important to grow B.C.'s competitive advantages in the Asia Pacific Gateway, which includes two significant ports (Prince Rupert and Vancouver), several international airports (Prince George, Kelowna, Victoria and Vancouver) and additional vital transportation infrastructure.

- ▶ **HOW TO GET THERE:** Work with key industry, Indigenous and non-Indigenous communities, local and Federal Government partners to ensure that B.C. capitalizes on its globally strategic and competitive advantage as Canada's gateway to Asia by developing a comprehensive, long-term, integrated strategy that results in a commitment to continued investments in ports, economic, transportation and communications corridors and community infrastructure.



RECOMMENDATION 19: CAPITALIZE ON REGIONAL COMPETITIVE ADVANTAGES BY BUILDING CAPACITY TO IDENTIFY AND PROMOTE ECONOMIC OPPORTUNITIES.

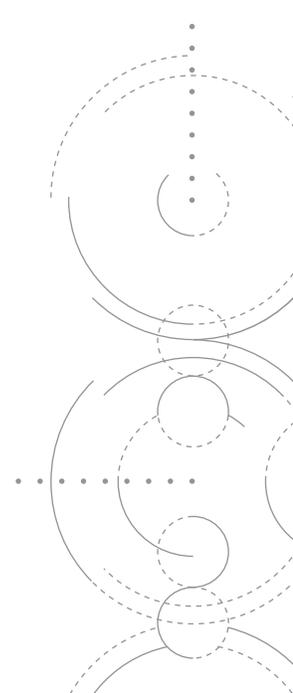
Support for developing economic hubs based on human and natural capital allows regions to build on their own unique strengths and competitive advantages in one or more sectors of the economy to further build the capacity of our regional economies. Regional economies rich in natural resources are diversifying but are susceptible to commodity price cycles which can exacerbate boom-and-bust cycles when local tax revenues follow the same fortunes. With B.C.'s vast coastline on the Pacific Ocean, potential exists to further develop the ocean-based economy and leverage B.C.'s marine and ocean research and technology capabilities in an environmentally sensitive way.

- ▶ **HOW TO GET THERE:** Facilitate collaboration between industry, communities and post-secondary institutions to evaluate and strengthen industry sectors to transform to a high-tech, low-carbon future, take advantage of place-based opportunities and support the challenges faced by regional economies. This could be initiated selectively throughout the province where existing economic clusters reside or potential exists.
- ▶ **HOW TO GET THERE:** Utilize the existing economic initiative trusts to deliver expanded economic development programming based on community economic development principles of local prioritization and long-term sustainability. Develop a mechanism to retain and capitalize a significant proportion of resource revenue in rural regions, in collaboration with Indigenous and non-Indigenous communities. Using regional investment funds, invest in infrastructure and economic diversification initiatives, foster local resilience and reduce inequities.
- ▶ **HOW TO GET THERE:** Increase provincial capacity and understanding of the land base by working with industry, Indigenous and non-Indigenous communities and post-secondary institutions to enhance and integrate digital land-use tools from multiple partners to optimally manage the land base and natural resources.
- ▶ **HOW TO GET THERE:** Work collaboratively with the federal government, post-secondary institutions, industry and Indigenous and non-Indigenous communities to create a strategy for developing the ocean-based economy while protecting B.C.'s coastal waters.

RECOMMENDATION 20: ENSURE THE SECURITY OF B.C.'S FUTURE FOOD SUPPLY IN THE FACE OF CLIMATE CHANGE IMPACTS.

British Columbia imports a significant portion of the food we consume, including from jurisdictions such as California and Mexico, which have seen agriculture disruptions from climate change. Rising temperatures and water scarcity raise the potential for disruption to traditional global food supply chains. Our food supply vulnerability should be regularly analyzed with a view to designing policies that ensure it can be secured at a manageable cost.

- ▶ **HOW TO GET THERE:** Develop a cohesive set of policies, in conjunction with direction from the Food Security Task Force, to ensure B.C. has access to adequate long-term and sustainable food supplies. Policies should include the promotion of environmentally responsible, technologically based agriculture and aquaculture productivity enhancements, appropriate land-use management and domestic production stimulus.



SNAPSHOT: THE IMPORTANCE OF TRADE AND INVESTMENT IN B.C.

As a relatively small jurisdiction representing less than 1% of North America's population and GDP, British Columbia exported \$104 billion worth of goods and services in 2018 to other countries and provinces combined (equal to 39% of B.C.'s GDP). Natural resource and manufacturing exports account for a significant majority of B.C.'s exports and will continue to do so into the foreseeable future. Service exports include communications, entertainment, professional, engineering and environmental services, digital technologies, transportation, finance, education and tourism.

British Columbia has seen rapid growth in trade with Asian countries over the last decade. China is now B.C.'s second-largest trading partner and accounts for 15.2% of the province's merchandise exports, with an average annual growth of 16% from 2008-2018. Other growing markets for B.C.'s trade include Japan, South Korea, India and Southeast Asia. The province's strategic location on Canada's Pacific coast places us at a major commercial nexus. Businesses using B.C. ports take advantage of the shortest sea route from Asia to North America and are seamlessly connected to all major U.S. and Canadian economic centres by secure, reliable road and rail networks.

STRATEGIC PRIORITY FIVE: DEMONSTRATING PUBLIC SECTOR LEADERSHIP

The economy of the future will involve rapid change and requires a new level of public sector leadership, responsiveness and accountability. In order to capitalize on the opportunities presented by this change, government and its public sector agencies will need to be nimble — leading with best practice regulatory structures that enable business, civil society and all residents to adapt and thrive under uncertain and rapidly changing market conditions.

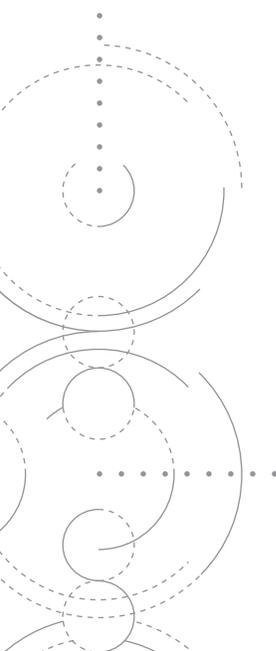
Removing barriers to business competitiveness will be important, as well as providing better access to information and open data that can inspire product and solution-focused innovation. Government and its public sector organizations can also drive B.C.'s economy, including the demand for sustainable products and services, through its procurement practices, enabling local industry and businesses to benefit by aligning with demand.

Quickly adapting social policy to emerging, unpredictable and changing circumstances will be vital to protecting workplace rights and other elements in B.C.'s social safety net. Expanding access to quality, affordable family care; improving access to workplace flexibility; implementing policies which close existing gender, race, and other wage gaps; and utilizing B.C.'s full economic potential by enabling broader workforce participation of Indigenous peoples, women and other under-represented groups will be absolutely vital to British Columbia's long-term economic development and people-centred well-being.

As a first priority, the B.C. Government can work with people in British Columbia to establish a new framework for measuring well-being and prosperity, enabling more inclusive economic growth, meaningful reconciliation with Indigenous peoples, and a thriving environment. The OECD is at the forefront of developing a 'people-centred growth model' in which well-being is the yardstick of success, not GDP per capita.⁵⁵

“True innovation requires a diversity of thought, and the world view of Indigenous peoples will challenge mainstream western ideology. This perspective will expand our collective understanding of what it means to be human in a time of artificial intelligence, machine learning, and virtual environments.”

DENISE WILLIAMS, CEO, FIRST NATIONS TECHNOLOGY COUNCIL



RECOMMENDATION 21: REDEFINE HOW ECONOMIC PERFORMANCE IS MEASURED IN BRITISH COLUMBIA

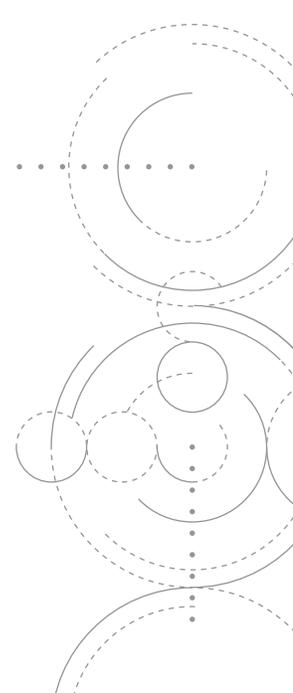
There is growing interest in broader measures of progress that go beyond traditional metrics such as GDP, income, consumption and productivity. Broader understandings of economic prosperity, including Indigenous perspectives, should be used to support government policy development and decision-making targeted at improving overall quality of life in B.C. and fostering inclusive and sustainable growth.

- ▶ **HOW TO GET THERE:** Engage people throughout British Columbia to better understand what well-being and prosperity means to them. Develop, collect, and make publicly available metrics and data using an accessible dashboard that includes broader measures of societal and environmental well-being based on leading work in other jurisdictions and reflecting the priorities of people living in British Columbia. The results will tie priorities to budgets, guide and inform legislators, the public and the media on how B.C. is performing.

RECOMMENDATION 22: ESTABLISH DATA AND METRICS OF THE INDIGENOUS ECONOMIC IMPACT TO THE BROADER BRITISH COLUMBIA ECONOMY AND SET GROWTH TARGETS FOR INDIGENOUS ECONOMIC INCLUSION.

The lack of data on Indigenous economic contributions to the British Columbia economy means it is difficult to set objectives and measure progress. Economic reconciliation requires enhancing and activating levers of economic growth such as capital, equity, clean energy, trade, procurement, and entrepreneurship facilitating economic growth and Indigenous prosperity.

- ▶ **HOW TO GET THERE:** Establish a B.C. Indigenous economic baseline study to be conducted every five years to inform policy and program responses that support Indigenous economic development.
- ▶ **HOW TO GET THERE:** Build on the current understanding of Indigenous contributions to the British Columbia economy, establish a framework for Indigenous economic growth, and develop an implementation plan to take an Indigenous-led sectoral approach to setting and achieving targets for economic inclusion.



RECOMMENDATION 23: CAPITALIZE ON PROJECTED DEMOGRAPHIC CHANGE WHILE PROVIDING QUALITY CARE TO B.C.'S POPULATION.

British Columbia's advantageous position of vertical ownership in the healthcare system should be leveraged. The Province owns much of the healthcare system (from public education to public hospitals and everything in between) permitting a level of integration that can accelerate innovation within the system, thereby capturing benefits and promoting investment within that public ownership framework.

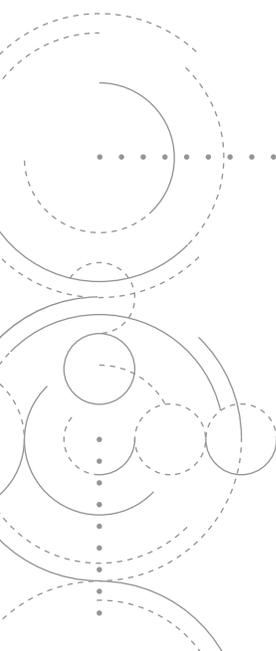
Innovation in healthcare impacts patient outcomes and is a key economic driver for the province with an aging population. As an attractive retirement destination for out-of-province seniors, some of whom will require increasing levels of care, B.C. can accelerate new approaches and technology that will be required here and globally to respond to an aging population.

- ▶ **HOW TO GET THERE:** Explore future opportunities and pilot models for innovation in healthcare, with an immediate focus on seniors' care, within the public healthcare system in collaboration with post-secondary institutions and the private sector. Healthcare innovation that leverages new technologies could provide a high quality of life that avoids hospitalization and supports new training and job opportunities in British Columbia.

RECOMMENDATION 24: LEVERAGE PUBLIC SECTOR STRATEGIC PROCUREMENT TO DRIVE B.C.'S EMERGING ECONOMY.

Public sector procurement is a lever used to achieve a range of objectives, from driving innovation and sector competitiveness, to improving the social and environmental impacts of products, services and supply chains. B.C.'s public sector can integrate social, environmental and innovation objectives into its procurement criteria, and engage and collaborate with its suppliers and vendors on these shared objectives, fostering new value propositions and business models from which both can benefit.

- ▶ **HOW TO GET THERE:** Expand the use of public sector procurement, in alignment with Canada's trade agreements, to support the innovation, environmental and social objectives of the province with respect to the emerging economy.

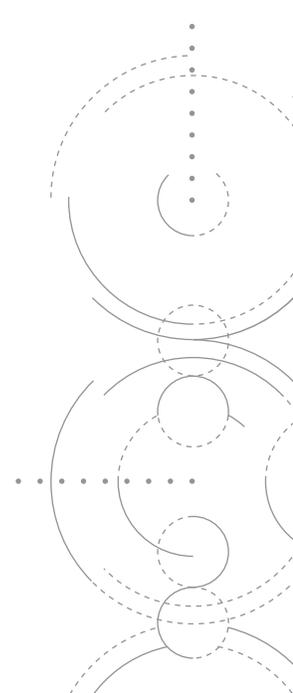


RECOMMENDATION 25: USE THE LEADERSHIP OF THE PUBLIC SECTOR TO CONTINUOUSLY ASSESS AND PREPARE FOR B.C.'S FUTURE ECONOMY.

Economic transition is continuing, and its pace will increase over the coming years. The structure of our economy, our educational sector and the social structures needed for every resident to thrive will need to evolve at the same pace. It is imperative that we anticipate, manage, mitigate, optimize and, where possible, influence the transition for the benefit of everyone in B.C.

An economic transition of this kind requires the public sector to use its convening power and be proactive, show continued leadership, identify future trends, seek expert advice, evolve policies, align resources and collaborate with other levels of government, industry and civil society to foster a thriving future for all.

▶ **HOW TO GET THERE:** Develop mechanisms to continue exploring how British Columbia can adapt to, influence and thrive in the emerging economy. This could include direction to key ministries and public sector agencies, providing venues to seek expert advice, and ongoing engagement and collaboration with Indigenous and non-Indigenous leaders among industry, academia, youth, civil society and other governments.



In Summary

B.C. can create its own prosperous future.

The province will be subject to global trends and market shifts, but we can also work to create our own economic reality by setting aspirational goals, aligned with the principles of UNDRIP, investing in innovation and adopting best practices from other jurisdictions.

Government has a powerful leadership and convening role to play, and the opportunity to work with the private and non-profit sectors to ensure B.C. has the tools and skills needed to adapt and lead.

We were asked to develop a set of recommendations to help B.C. thrive over the next quarter century. In our mandate, the British Columbia Government put forward the need for a vision that includes a flourishing future provincial economy that provides opportunities for everyone to participate in and benefit from sustainable and shared prosperity.

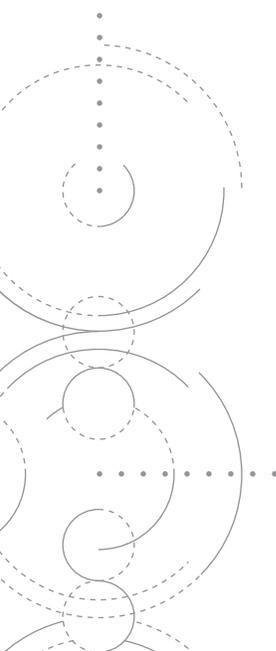
What we learned in our conversations throughout the province and with a range of leaders is that the vision of success is rooted in our overall quality of life, which includes the strength of our inclusive communities, the opportunity to live and play in a healthy environment, the potential to achieve financial well-being, including access to meaningful employment and the overall ability to achieve our aspirations. To understand what it means to thrive 25 years from now, we need to imagine what success looks like and articulate this vision.

“In 2045, people in British Columbia enjoy living in a strong, healthy, inclusive, cohesive, innovative and productive society. Economic opportunities are widely distributed around regions, are globally competitive and integrated, are purpose driven and inclusive to all segments of the population and embrace economic reconciliation with Indigenous peoples.

People in British Columbia are confident, well-educated, adaptable and have access to the skills and training opportunities that enable innovation and entrepreneurship, as well as the training (and social safety net) needed to support transitions within and between industries.

Building off British Columbia's abundant natural resources, the environment is conserved with every opportunity realized to reduce pollution and greenhouse gas emissions, waste is considered a resource and the value of our materials and resources are maximized and resilience is built into the connections between the natural world and human activity.

Finally, the British Columbia Government and public sector agencies are nimble. They collaborate with business and all groups in society to provide efficient, high-quality services, building on the province's strong and vibrant democratic institutions and are role models for innovation and sustainability.”

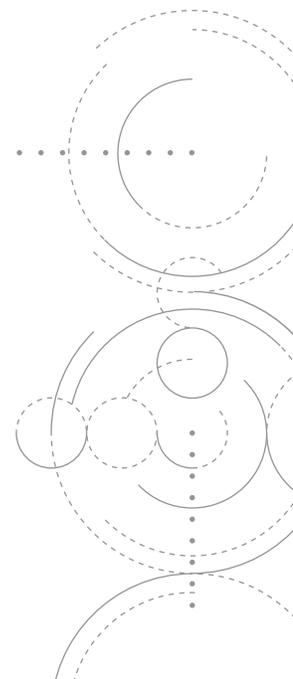


The future, of course, is impossible to know. The next 25 years will be subject to a range of forces — some external to the province and some internal, some predictable and others less so. But the emerging economy will largely be market driven, requiring an important role for government and other partners to act strategically to maximize our opportunities.

To realize the vision of a flourishing future economy that is based on a strong foundation of well-being and a healthy environment for everyone in British Columbia, we believe bold action is required across five strategic priorities:

- 1. Embracing Technology and Innovation**
- 2. Leveraging B.C.'s Green Economy**
- 3. Building a Highly Skilled and Adaptable Workforce**
- 4. Ensuring an Effective Enabling Ecosystem**
- 5. Demonstrating Public Sector Leadership**

We appreciate the opportunity that was given to us by the B.C. Government and we believe this is only the start of the conversation. The implementation of our recommendations should be accompanied by a mechanism to continually assess and address the changes ahead, both as a means of measuring impact and as a catalyst for further action in the pursuit of a sustainable and inclusive economy for British Columbia.



Appendix A: Task Force Biographies



Kathy Kinloch (Chair)

President, British Columbia Institute of Technology (BCIT)

Kinloch has been president of BCIT since January 2014. She is recognized for leading organizational renewal in complex environments. Through a number of senior leadership and executive roles, she has spearheaded change initiatives in the post-secondary, government and healthcare sectors. At BCIT, Kinloch is focusing on broadening and deepening partnerships with business, industry and communities in B.C., across Canada and globally. Her board positions include the Business Council of British Columbia, Polytechnics Canada, and Surrey Hospital and Outpatient Centre Foundation. She is also a member of the Business Council of Canada's Business/Higher Education Roundtable.



Kevin Campbell

Managing Director, Investment Banking, Haywood Securities

Campbell provides strategic advisory services and arranges capital financings for corporate clients, primarily in the global mining sector. He was named Business in Vancouver's 40 under 40 of top young business professionals in 2014 and sits on the Provincial Child Care Council and the board of the Vancouver International Film Festival Society. He is an active philanthropist through the Lochmaddy Foundation.



Peter Elkins

CEO, Impactmic.ca

Elkins is an accomplished serial entrepreneur and community economic development thought leader bringing a dynamic and insightful mind to tough social and economic issues. A pioneering voice in the tri-sector leadership space, supporting government, enterprise and the social sector to develop workable solutions that improve or resolve large-scale problems that cannot be solved by one sector alone. Elkins is driven by finding ways to direct investment toward meaningful solutions for social issues so that we can foster human and environmental betterment.



Jock Finlayson

Executive Vice-President and Chief Policy Officer, Business Council of British Columbia (BCBC)

Finlayson directs the BCBC's work on economic, fiscal tax, environmental, regulatory and human capital issues of interest to the province's business community. He previously served as vice-president of research at the Canadian Council of Chief Executives, a leading business association based in Ottawa. From 2007 through 2013, he served on the board of directors of the Bank of Canada.



Raghwa Gopal

President and CEO, Innovate BC

Gopal is a serial entrepreneur who joined Innovate BC from Accelerate Okanagan, where he was Chief Executive Officer and was a driving force in the development of the Okanagan's tech sector into a \$1.6-billion economic contributor. A graduate of New Zealand's Central Institute of Technology in information technology, Gopal has lectured in the Faculty of Management (Business) at UBC Okanagan and the School of Arts and Sciences (Computer Science) and serves on the boards of multiple organizations.



Carol Anne Hilton

CEO and Founder of The Indigenomics Institute

Hilton is leading the foundation and narrative of the emerging \$100-billion national Indigenous economy. Carol Anne is a senior business and economic leader and brings extensive experience in business investment, growth organization and strengthening Indigenous economies. She is recognized as a leading business advisor with a master's degree in business management from the University of Hertfordshire, England. Hilton is also the author of 'Indigenomics-Taking a Seat at the Economic Table'.



Iglia Ivanova

Senior Economist, Canadian Centre for Policy Alternatives

Ivanova is a senior economist and public interest researcher at the B.C. office of the Canadian Centre for Policy Alternatives, with over 10 years of experience in research and policy analysis. She is an active volunteer and has served on a number of non-profit boards and committees, and in various community advisory roles, often in support of promoting equity and empowering women and other marginalized people. Ivanova is currently Chair of the Progressive Economics Forum and a volunteer advisor on the Vancouver Foundation Systems Change Advisory Committee.



Daniel Pauly

Professor, Institute for the Oceans and Fisheries, University of British Columbia

Pauly joined the Fisheries Centre at UBC as a professor in 1994 and was its director from 2003 to 2008. Since 1999, he has been principal investigator of the Sea Around Us research initiative, which is devoted to studying, documenting and promoting policies to mitigate the impact of fisheries on the world's marine ecosystems.



Corinne Stavness

Independent Consultant

Stavness has an extensive forestry background, which includes receiving a master's degree in Forest Economics and Policy from the University of Helsinki. She spent eight years at Canfor Corporation as head of External Affairs and seven years as Manager of Market Affairs for Forestry Innovation Investment, leading the marketing efforts to position British Columbia as a global supplier of world-class, environmentally friendly forest products, by expanding into global markets like China and India.



Coro Strandberg

President, Strandberg Consulting

Strandberg works with businesses, government and industry associations to envision and innovate a sustainable future. Strandberg is an expert on sustainability leadership, governance and transformational business practices and relationships. She has 20 years of experience as a corporate director, three as board chairperson, and six years of industry association experience. She trains corporate secretaries and directors on sustainability governance for both the Governance Professionals of Canada and Directors College. In 2020 she was appointed to the Senior Advisory Panel of the Federal Office of the Auditor General. Strandberg was named the top corporate social responsibility consultant in Canada by the 2015 Clean50 for her leadership and impact in sustainability consulting.



Eric Termuende

Co-founder, NoW Innovations Canada

Termuende is a globally recognized thought leader, author and keynote speaker on the future of work. As co-founder of NoW of Work, Termuende advises industry-leading organizations, institutions, and associations on future-proofing their teams, talent management, and building community in the workplace. Recognized as one of the Top 100 Emerging Innovators under 35 by American Express, his ideas have been featured in Forbes, Thrive Global, The Huffington Post, The Globe and Mail, and more.



Jill Tipping

CEO of BC Tech Association

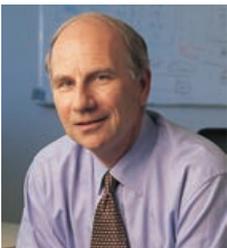
Tipping is a passionate advocate for the tech industry — having spent most of her career working with, and for tech companies, she is no stranger to the challenges and needs of the sector. As BC Tech’s President and CEO, she is determined to make B.C. a top start-up ecosystem and a place where companies are supported to grow, export and scale. Her focus is strengthening connections through collaboration, building a strong home team of anchor companies and learning from what works globally. She is unapologetically ambitious for B.C. and for Canada.



Eric Werker

Professor, Beedie School of Business, Simon Fraser University (SFU)

Werker is a Non-resident Fellow at the Center for Global Development and Advisor at the International Growth Centre. He researches how less-developed countries can build more thriving and inclusive private sectors, particularly when they are rich in natural resources. He provides a globalist perspective, with expertise in economics and emerging markets.



Alan Winter

(Ex-officio member), Former B.C. Innovation Commissioner

Winter has a breadth of experience at senior levels in the technology sector and in government, including as the president and CEO of Genome BC, from 2001 to 2016. He was also the founding president and CEO of the New Media Innovation Centre in Vancouver, president of the ComDev Space Group in Ontario, and president and CEO of MPR Teltech Ltd. in Vancouver.

Appendix B: Acknowledgements

Thank you to the many individuals that informed the work of the Emerging Economy Task Force. The individuals noted below presented to the members, participated in roundtable discussions with members, and/or were interviewed by Ministry staff to support our work. The names and titles were current at the time of presenting, noting that some of those listed have moved to new positions. They are listed alphabetically.

Between November 2018 and June of 2019, we received significant insight and commentary from a wide variety of individuals and industries from around British Columbia and internationally. We acknowledge and thank all partners, experts, and staff who helped prepare B.C. to be successful in the emerging economy. This work would not have been possible without your valuable contributions.

In addition, while not included here, we would like to acknowledge and thank the many colleagues who discussed and offered ideas and thoughts that supported this report.

As well, thanks to the contractors who were retained to support our work: Berlineaton, FERENCE and Company, Delphi Group and the BC Chamber of Commerce.

Thank you also to Ministry of Jobs, Economic Development and Competitiveness staff for their support, and their government colleagues who provided valuable insights and contributions.

PRESENTATIONS:

Dominic Barton, previously Global Managing Partner Emeritus at McKinsey & Company and Canada's Ambassador to China; Bryan Cox, President and CEO of the Mining Association of British Columbia; Dr. Ryan D'Arcy, Head of Health Sciences and Innovation, Surrey Memorial Hospital and SFU's B.C. Leadership Chair in Medical Technologies; Jeremy Hewitt, Assistant Deputy Minister, Climate Action Secretariat; Jeremy Higgs, Chief Labour Market Economist, Ministry of Advanced Education, Skills and Training; Walt Judas, CEO, Tourism Industry Association of B.C.; Christine Kennedy, Associate Deputy Minister to the Premier; Handol Kim, an expert in the field of Artificial Intelligence and Machine Learning; Hayden Lansdell, Chief Data Officer; Charles Lavigne, Co-founder and CEO, LlamaZOO; Les MacLaren, Assistant Deputy Minister, Energy, Mines and Petroleum Resources; Karn Manhas, Founder and CEO, Terramera; Dr. Kate Moran President, Ocean Networks Canada and her executive team; Andrew Petter, President, Simon Fraser University; Alex Rueben, Executive Director, Association of BC Marine Industries; Bindi Sawchuk, Assistant Deputy Minister; Mischa Steiner, CEO, Awesense; Tom Syer, Head of Government Affairs, Teck Resources; Terry Teegee, Regional Chief of the BC Association of First Nations and member of Takla Lake First Nation; David Williams, VP of Policy, with the Business Council of BC; Denise Williams, CEO, First Nations Tech Council; Don Wright, Deputy Minister to the Premier; Andrew Wynn-Williams, Divisional Vice President for B.C., Canadian Manufacturing and Exporters; Susan Yurkovich, President and CEO of the Council of Forest Industries.

SURVEY RESPONDENTS:

BC Chamber of Commerce and the 735 B.C. businesses for their participation with the MindReader Survey.

ROUNDTABLE DISCUSSIONS:

Indigenous Business and Investment Council Roundtable: Lee Anne Cameron, Director of Lands, Okanagan Indian Band; Chief Michelle Edwards, Chief Economic Strategist, Cayoose Creek Development Corporation; Lennard Joe, Administrative Advisor, Shackan Indian Band and General Manager, Stuwix Resources Joint Venture; Sid Peltier, Owner and President, White River Helicopters Inc and Pelair Helicopters; Vince Prince, Executive Director, Prince George Aboriginal Business Development Centre; Aaron Sumexheltza, Councillor, Lower Nicola Indian Band; Denise Williams, Executive Director, First Nations Technology Council.

CEO Roundtable: Josh Blair, Group President and CCO, Telus; Greg D'Avignon, President and CEO, Business Council of British Columbia; Linda Delli Santi, Executive Director, BC Greenhouse Growers Association; Jeremy Dunn, Director, Community Relations and Public Affairs, Mowi Canada West; Bill Kessels, Partner, Ernst & Young; Lincoln Kyne, VPGM, Greater Vancouver, Lafarge; David Labistour, CEO, Mountain Equipment Co-op; Patrick Nangle, CEO, Modo; Allan Russell, President and CEO, McElhanney; Todd Shewfelt, Regional VP, Business Financial Services, RBC; Paul Tournier, President, TPD; Bill Tucker, CEO, Omicron; Atul Varde, Senior VP, Digital Solutions and Business Technology, Vancity; Catherine Warren, CEO, Vancouver Economic Commission; Brian Yates, VP, Regional Leader (BC), Stantec.

Kootenay Region Roundtable hosted by Columbia Basin Trust: Rhys Andrews, Vice President, Selkirk College; Brian Fry, Co-Founder & Director, Columbia Lake Technology Center; Angus Graeme, President & CEO, Selkirk College; Dan Salekin, President/CEO, Columbia Networks Inc.; Johnny Strilaeff, President & CEO, Columbia Basin Trust; Terry Van Horn, Executive Director, Lower Columbia Initiatives Corporation.

Kootenay Region Roundtable hosted by Metallurgical Industrial Development Acceleration and Studies (MIDAS): Mary Austin, Director of Business Development, Austin Engineering Ltd.; Roger Austin, Owner and Principal Engineer, Austin Engineering Ltd.; Shawn Curran, Acting Lab Director, MIDAS Metallurgical Industrial Development Acceleration and Studies; Don Freschi, CEO, Fenix Advanced Materials; Darrel Fry, CEO, Advanced BioCarbon 3D; Dan Manaig, R&D Metallurgist, Fenix Advanced Materials; Ben Marken, Lab Assistant, MIDAS Metallurgical Industrial Development Acceleration and Studies; Brad Pommen, Founder and President, SMRT1 Technologies Ltd.; Dr. Cam Whitehead, Executive Director, Kootenay Association for Science & Technology.

Kelowna Industry Representatives Roundtable hosted by Accelerate Okanagan: Rob Bartlett, CEO/Founder, wtfast (What The Fast); Matthew Bertulli, CEO, Pela Case; Sam Fisher, Chief Executive Officer, Hyper Hippo Entertainment; Doug Gilchrist, Chief, Administrative Officer, City of Kelowna; Corie Griffiths, Director, Regional District of Central Okanagan, Economic Development, Economic Development Commission; Jim Hamilton, President, Okanagan College; Mike Jacobs, Chairman, Emil Anderson Construction; Brea Lake, Chief Executive Officer, Accelerate Okanagan; Larry Widmer, General Manger, Community Futures.

Transportation Roundtable: Neal Carley, GM, Parks, Planning and Environment, Metro Vancouver; Marko Dekovic, VP, Public Affairs, GCT Global Container Terminals Inc.; Kevin Desmond, CEO, TransLink; Brad Eshleman, President, Western Stevedoring; Michael Henderson, Managing Director, Greater Vancouver Gateway Society; Bart Reynolds, President – Marine, Seaspan ULC; Craig Richmond, President and CEO, Vancouver Airport Authority; Ken Veldman, VP, Public Affairs & Sustainability, Prince Rupert Port Authority; Peter Xotta, VP, Planning & Operations, Port Metro Vancouver

Youth Roundtable: George Benson, Consultant, Green Building Market Acceleration and Co-Founder of the Climate Migrants and Refugees Project; Veronika Bylicki, Co-Founder & Co-Director, CityHive; Jennah Dohms, TEDx Speaker; Joel Hansen, Business Development Manager, TEDx Speaker, and LinkedIn Youth Editor; Bruno Lam, Research Manager, UBC Sauder Centre for Social Innovation and Impact Investing; Morris Prosser, Senior Program Developer, B.C. Government, & Youth Representative for the St'at'imc Nation; Tesicca Truong, Co-Founder & Co-Director, CityHive; Andrea Welling, Regional Director, BC & Yukon, Futurpreneur.

INTERVIEW PARTICIPANTS:

Alejandro Adem, CEO and Scientific Director of Mathematics of Information Technology and Complex Systems; BC Federation of Labour representatives: Brynn Bourke, Laird Cronk, Denise Moffatt, Sussanne Skidmore; Rob Bernhardt, CEO of Passive House Canada; Kate Branch, President of British Columbia Environmental Industry Association; John Coyne, Vice President, Legal & External Affairs and Sustainability at Unilever Canada; David Eaves, Public Policy Entrepreneur and Lecturer of Public Policy at the Harvard Kennedy School of Government; Dr. Ché Elkin, Associate Professor within the Mixedwood Forestry Ecology Lab at the University of Northern BC; Ari Kobb, Director of Energy & Sustainability Solutions at Siemens; Dr. Bryn Kulmatycki, President and CEO, Northern Lights College; Gerd Leonhard, Futurist, Author, and Keynote Speaker; Patrick MacKenzie, CEO of Immigrant Employment Council of BC; Joel Mahoney, Founder and CEO of OpenCounter; Colin Mayer, Professor of Management Studies at Saïd Business School; Joel McKay, CEO of Northern Development Initiative Trust; Angela Nahikian, Director of Global Sustainability at Steelcase; Dave Porter, CEO of the BC First Nations Energy and Mining Council; Tom Ranken, CEO of the CleanTech Alliance in Seattle; Marty Reed, CEO of Evok Innovations and a member of the BC Clean Tech CEO Alliance; Jonathan Rhone, CEO of Axine Water Technologies and a member of the BC CleanTech CEO Alliance; Miles Richardson, Director of the National Consortium for Indigenous Economic Development; Line Robert, CEO of the Island Coastal Economic Trust; Arjun Singh, President of Union of B.C. Municipalities; Michael Shuman, Economist; Dr. Rashid Sumaila, Professor of Ocean and Fisheries Economics at the University of British Columbia, and Director at the UBC Institute for the Oceans and Fisheries; Vanessa Timmer, Co-Founder and Executive Director of One Earth; Michael Toye, Executive Director of the Canadian Community Economic Development Network; Vancouver Economic Commission representatives: Bryan Buggy, James Raymond and Meg O'Shea.

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