A FRAMEWORK FOR IMPROVING BRITISH COLUMBIANS’ STANDARD OF LIVING

Economic Plan 2019-2020
Our economic framework provides the pathway for British Columbia to be successful in the world; able to build on the strength of our people and our geographic location at the crossroads of Asia and North America to grow a clean and vibrant future.

Our government takes a sustainable approach to growth, making sure that it fits within our CleanBC plan and can lever the competitive advantage of our legacy of clean, affordable, firm hydroelectricity to decarbonize British Columbia's economy without sacrificing our standard of living.

A growing economy provides the opportunity to address inequities, leading to a fairer, more inclusive and more prosperous society. We will ensure that businesses can succeed, and that the benefits of growth are fairly shared amongst our people, including Indigenous British Columbians.
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Since coming into office in July of 2017, the Government has implemented a wide range of initiatives consistent with its election platform. I am grateful to the entire public service for the hard work, collaboration and creativity it has brought to supporting the Premier and Cabinet in implementing a very ambitious agenda.

As we have done this, I hope that my presentations to the public service – at Deputy Ministers’ Council, Quarterly Corporate Executive meetings, discussions with individual ministries – have been consistent about defining why the programs we are implementing are important. For me, it is about building a “good society” based on quality economic growth that will allow all families to experience a rising standard of living over time, let us build things together which we could not build by ourselves, and give us the collective generosity to assist those among us who need help.

While the many initiatives we have implemented across government over the past two-plus years all contribute to quality economic growth, it became clear that we needed a comprehensive organizing framework for the complementary work of government’s many strategies and plans, including our Procurement Strategy, Connectivity Strategy, Poverty Reduction Strategy, Mental Health and Addictions Strategy, Childcare BC Strategy, Active Transportation, Digital Strategy and others that work together to provide a better life for people and support a healthy, resilient economy in all parts of our province.

This document is intended to provide that framework. It provides some context for what we are trying to achieve, references some key initiatives already set in motion, and outlines a series of actions that government ministries will pursue over 2019-2020 to support quality economic growth that fits within our CleanBC climate plan and legislated greenhouse gas (GHG) emission targets. It is intended to be the first in a series of annual plans that would identify priority economic actions for the year ahead.

Government is committed to building a sustainable economy that will create good-paying jobs, help businesses succeed, and ensure that our society can supply the programs and services needed by our diverse and growing population. Our objective is to increase the standard of living for all British Columbians, including through supporting business conditions that will enable higher wages, providing skills training to equip people for the jobs of the future and carefully managing affordability pressures affecting B.C. families.
Quality economic growth is necessary to generate the capacity for the economic elements of reconciliation with Indigenous people, support decarbonizing our economy and continue to scale necessary services to the size of our growing population. Generating these new revenues will involve expanding our traditional manufacturing sectors and seeking opportunities to grow complementary sectors such as technology, tourism and creative industries.

In B.C.’s forest products industry – parts of which are going through transition from high-volume to high-value production in the wake of the devastating Mountain Pine Beetle infestation of the early 2000s – government is taking steps to encourage higher-value production, ensure that more of our wood is processed domestically and establishing conditions to use more of it in public construction. We implemented a competitiveness framework for liquified natural gas that allowed the $40 billion LNG Canada project – the single largest private sector investment project in Canadian history – to proceed, while still meeting our CleanBC commitments. Growth in our foundational industries flows new opportunities to the professional services sector and to the small and medium-sized businesses that support industries and families in all our communities. We have also adopted a new framework for engaging B.C. technology providers in solving today’s scientific, industrial and environmental challenges, and established a framework for fostering growth in our tourism sector.

Government is also making investments in education – from early childhood to post-secondary – to enable more skilled workers to enter and re-enter the workforce. We are developing new electricity capacity to allow our industries and our economy to grow without increasing our GHG emissions. We are expanding transportation and transit networks to remove congestion so that export goods can move efficiently to international customers, and we are implementing high-speed internet connectivity to link rural and Indigenous communities to economic development opportunities.

Government has also undertaken the important work of reviewing labour laws and systems to ensure a fair and balanced system that reflects the realities of working today. This work has involved reviews and consultations related to the Workers’ Compensation Act, the Employment Standards Act, and the Labour Relations Code. Government also appointed the Fair Wages Commission, which brought forward recommendations for implementing a minimum wage of at least $15-per-hour by 2021 and continues work on recommendations to close the gap between the minimum wage and livable wages.

Growing our standard of living includes all sectors of British Columbia’s economy and all parts of our province. As it would not be practical to reference every business sector in a document of this type, this introductory plan features some business sectors, while others would be highlighted in future versions or addressed through sector-specific plans such as our Strategic Framework for Tourism, our Integrated Transportation and Development Strategy, or our Northern Strategy.

This framework is based on comprehensive ongoing engagement with large and small businesses, business associations, local and Indigenous governments, non-government organizations and individual British Columbians. This is meant to be an iterative process, and we look forward to continuing our engagement with stakeholders across B.C.’s key economic sectors over the coming months to help inform and build plans for the 2020/2021 iteration of this plan.

Any good plan needs to be a “living plan” – it will evolve and adapt as circumstances change, as new opportunities emerge, and we become collectively smarter. Please join in this process.

Don Wright
Deputy Minister
OUR VISION

Our vision for British Columbia’s economy is one where business and people are mutually successful, and where our diverse, well educated people, rich endowment of natural resources and exceptional location on the Pacific side of North America provide the foundation for sustainable prosperity that is shared by all British Columbians.

This economic framework takes a systematic, whole-province approach to growing our economy and increasing the standard of living for all British Columbians. It provides the blueprint for how and where we will prioritize growth, how we will equip our people to take advantage of quality growth, and how we will grow our economy without sacrificing the natural wealth of our environment.
Our 2019-20 Economic Framework provides the pathway for British Columbia to be successful in the world – building on the strength of our people and our geographic location at the crossroads of Asia and North America to grow a clean and vibrant future.

We are implementing a sustainable approach to what we call quality economic growth. This means growth that fits within our CleanBC plan and can lever the competitive advantage of our legacy of clean, affordable, firm hydroelectricity to decarbonize British Columbia’s economy without sacrificing our standard of living.

“Quality economic growth” is shorthand for growth that generates steady increases in real wages, healthy increases in per capita real government revenue without raising tax rates, shares the benefits broadly across the province and across the population and cares for our natural environment.

A growing economy provides the opportunity to address inequities, leading to a fairer, more inclusive and more prosperous society. Our framework will provide the conditions for business to succeed, and the framework to ensure that the benefits of growth are fairly shared among our people, including Indigenous people 1.

1. References to Indigenous people in this framework are meant to be inclusive of First Nations, Metis and Inuit people.
WHY WE NEED A FRAMEWORK
We recognize capital is mobile and has no sentimental attachment to British Columbia or any other location. We will work with business to retain, grow and attract investment that meets our criteria of good jobs, healthy net government revenues, and opportunities in all corners of the province, while meeting our legislated GHG targets. We will ensure businesses have an enduring reason to stay anchored in British Columbia.

/ WHY WE NEED A FRAMEWORK

British Columbia is a small, open economy that relies on international trade to support our standard of living. We sell our resources and manufactured goods into dynamic, competitive markets around the world, and use the proceeds of trade to buy goods from outside B.C. In 2017, B.C. exported $111 billion in goods and services:

- $48 billion in goods to other countries;
- $15 billion in goods to other provinces;
- $19 billion in services to other countries; and,
- $29 billion in services to other provinces.

Our five million people represent just 0.06 percent of the world’s population. We are subject to protectionist international trade policies, globally-set commodity prices, and the rise and fall of the Canadian dollar. Our economic plan needs to manage the factors within our control: ensuring a competitive business environment for companies that produce export goods; deriving the highest value from our diverse manufacturing industries; developing diversified markets for our natural resource products; and, implementing programs to allow British Columbians to benefit fairly from economic growth.

Changing global and investment patterns have challenged the standard of living in developed economies for the last 40 years. B.C. is no exception. While gains have been made in our per capita Gross Domestic Product, these have not translated into widespread benefits for B.C. workers and families. Real median wages have decreased, and there is significant wage inequity between those in the middle and those at the top.
Over the past decade, these challenges were compounded by growth occurring disproportionately in urban centres, which contributed to strained urban infrastructure, higher housing costs, overburdened public services, and longer commutes producing higher GHG emissions. Even though this created affordability issues for existing residents and the established business community in B.C.’s urban centres, economic policy continued to promote directing more and more people into cities, at the expense of our urban trade-supporting workforce and those with limited or fixed incomes.

Significant near-term sources of incremental government revenue are needed to reverse these trends and to address the historic inequities of our society and meet the needs of our people. Our economic framework relies on making informed decisions about the industries and growth opportunities that we want to pursue, focusing on those that will contribute the most to our economy through good jobs and net government revenues and directing government effort to areas that will deliver the greatest benefit for our people.

This economic framework recognizes B.C.’s reliance on natural resource exports and the cyclical nature of commodity industries. It emphasizes value-added manufacturing to increase revenue from our export goods and provides a framework for growth in creative and high-tech businesses where these generate net government revenue. Most of all, it recognizes the fundamentally interlinked nature of rural and urban British Columbia and emphasizes growth that will benefit all parts of our province.

British Columbia’s economic base continues to rely on our natural resources. Increasingly, this is complemented by the emergence of a new range of high-tech providers that are helping natural resource sectors boost their productivity, treat their waste products, and optimize their environmental performance.
BRITISH COLUMBIA’S ECONOMIC BASE

A population of 5 million could not efficiently produce all the products that are standard features of a modern standard of living – computers, smart phones, automobiles, medical imaging equipment, a wide range of books, movies and music, fresh year-round foods and more. There are also experiences – such as international travel – that would be impossible under a self-sufficiency model.

British Columbia’s standard of living depends on the value of the goods and services we sell to people and businesses living outside our province. Exports bring dollars into British Columbia that form the “economic base” of our province, and those dollars circulate through the economy as businesses and citizens purchase services from each other. Money flows back out of the province to purchase goods and services that we cannot efficiently produce for ourselves.

An economic base represents the dollars brought into the economy through the export of goods and services. Defining the major components of our economic base is important, because changes in the competitive health of any sector will have different impacts on our society depending on how much of our economic base that sector represents. The chart on the next page illustrates that B.C.’s international goods exports are still heavily weighted to our natural resource sectors. In 2018,

IN 2017, B.C. EXPORTED $111 BILLION IN GOODS AND SERVICES:

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• $19 billion in services to other countries;
• $29 billion in services to other provinces.
British Columbia’s Origin Exports by Industry 2018

Forestry Product Manufacturing 31%

Machinery Manufacturing 5%

Other Manufacturing 13%

Oil & Gas Extraction 7%

Fishing, Hunting & Trapping 0%

Agriculture 3%

Forestry & Logging 2%

Mining 24%

Utilities 1%

Other Manufacturing 13%

Food & Beverage Manufacturing 6%

Primary & Fabricated Metal Product Manufacturing 8%

Food & Beverage Manufacturing 6%

Source: Government of Canada – Trade data online

WHY WE NEED A FRAMEWORK
74 percent of international goods exports were natural resource based. Exports of goods to other provinces would follow a similar pattern.

Attributing service exports by sector is more difficult. Some service exports – such as money spent by out-of-province tourists – is easily assigned to the tourism sector. Other services – such as the transportation, financial, insurance, legal and other professional services purchased to support the manufacturing of exported B.C. goods – need to be assigned to the goods-producing sector they support. This is achieved using data from BC Stats’ Input-Output model, with some assumptions about how to assign values among the major sectors. On that basis, our best estimate of the relative size of the major components of B.C.’s economic base is provided in the following pie chart.

The data illustrates several key points:

• Considering service exports in addition to goods exports reduces the percentage attributed to the natural resource sectors, but it should still be clear that our endowment of natural resources remains a primary source of B.C.’s wealth. Neglecting the health of these industries would come at the cost of our standard of living, impacting all British Columbians.

• “Gateway Services” are those that are involved in moving people and goods not originating from B.C. into and out of North America. Our location on the Pacific has made the Port of Vancouver and Port of Prince Rupert significant North American trading centres and have made Vancouver International Airport an important North American flight hub. The activities associated with these “gateway services” as well as the rail and road connections to them, account for a significant portion of B.C.’s economic base;

• Other manufacturing (excluding natural resources and hi-tech manufacturing) also represents a significant portion of our economic base;
A final point should be made about real estate. Some people may be surprised at how small a portion of the economic base is accounted for by real estate. BC Stats data do show that real estate and home construction account for approximately 20 percent of BC’s GDP. The concept of the economic base, however, is different from GDP. GDP measures the output of the entire economy; the economic base measures the dollars brought into the economy through exports of goods and services. Real estate and construction, while a significant part of the domestic economy, is primarily the result of the incomes generated from the economic base and the dollars circulating within the domestic economy.2

2. There is one qualification to this which is discussed in the housing discussion on page 88.
WHAT HAPPENED TO THE BRITISH COLUMBIA DREAM?

The first 35 years after World War II saw continuous growth in prosperity in Western economies. Government policies stabilized the business cycle, promoted full employment, encouraged investment in productivity improvement, and invested in infrastructure, public education, health and other public services. This resulted in a steady increase in real incomes which was broadly shared across all income levels. The healthy growth in incomes led to healthy growth in government revenues so that the investments in infrastructure and human capital could continue to grow – creating a “virtuous circle.”
British Columbia participated in this to a major degree. The yellow line in the figure below charts the average compensation per employee in 2016 dollars between 1950 and 1980 in British Columbia. Over that period, the average growth in compensation was 2.6% per year. This may not sound like a lot, but compounded year after year, workers’ compensation was doubling every 27 years. This allowed each generation to have double the standard of living of its parents’ generation. The “British Columbia Dream” was that each generation’s children would experience a better life, both in terms of its material standard of living and in terms of more support for public goods such as better health care, cultural and recreational opportunities, protection of the environment and looking after those who had not been able to directly benefit from the growing prosperity.

An economic environment where a “rising tide is lifting all boats” will facilitate more trust and generosity in society – among different groups and between citizens and their government. People are less prone to resent taxes paid to government if they see that their disposable real income is steadily rising and that they are benefiting from the investment in public goods.

In the late 1970s and early 1980s several factors brought this optimistic outlook to a halt. Productivity increases slowed, the distribution of income became more inequitable and the increase in the standard of living of the typical British Columbian slowed dramatically.

The red line in the figure below extends the chart through 2016. Between 1980 and 2016 there was virtually no increase in average compensation in constant dollars. The average annual increase dropped to 0.05%. At that rate, it would take 1400 years for the standard of living to double.
Looking at the distribution of this average increase gives greater cause for concern. The figure below contrasts average real wages (using a slightly different measure than compensation per employee used above) with median real wages. The median wage represents what the middle of the middle class earns. In 2016, the median wage was 18% below what it was in 1976. This contrasts with essentially a flat performance for the average wage. This divergence happened because people with very high incomes saw a significant increase in their real wages, which brought the average up. So, while the upper income class saw an increase in their standard of living, the broad middle class saw a reduction.

Finally, the chart on the next page contrasts what happened to the median wage in B.C. with the median wage in Canada as a whole. As measured by the real median wage, B.C. went from being a “rich” province to a relatively “poor” province.

**Average vs. Median Wages**

1976-2016
The British Columbia Dream seems to have evaporated for B.C.’s middle class over the past 40 years. Turning that around is at the core of this economic plan. Doing so requires that we very explicitly focus on raising the standard of living of the middle class, which is why the concept of quality economic growth and our value-creating framework are so important to creating our intended outcomes.

Reversing the pattern of the last 40 years is the fundamental objective of this economic framework. Our “North Star” will be to constantly return to the same questions: Will any initiative raise the standard of living of the overwhelming majority of British Columbians? Will it deliver higher real wages for working people, healthy net revenue for government to invest in people, infrastructure, cultural programming and protecting the environment? Will these benefits be broadly spread to all segments of the population, in all parts of the province?
QUALITY ECONOMIC GROWTH

Our approach will emphasize growth supporting the financial success of our business community, while also raising the standard of living of British Columbians.
QUALITY ECONOMIC GROWTH

This means environmentally and fiscally sustainable growth fitting into our CleanBC climate plan and supplying good jobs in every corner of our province. We call this Quality Economic Growth.

This section outlines key actions in five areas related to supporting quality economic growth:

1. Maintaining a Competitive Business Climate
2. Supporting Reconciliation with Indigenous Peoples
3. Powering our CleanBC Future
4. Investing in Transportation and Infrastructure
5. Investing in Technology and Innovation

OUR VALUE CREATING FRAMEWORK

Not all growth opportunities are created equal. Where government facilitation or incentives are required, choosing which growth opportunities will provide the greatest benefit to British Columbians requires a clear understanding of costs, impacts and benefits. We undertake careful assessments of the value of all proposed government programming, and of the revenue benefits of the industries we choose to incubate and grow. From decisions made by operating-level staff to those of Cabinet, we apply a consistent lens to ensuring that government programs and services:

- Are practical and realistic in a B.C. context and in our fiscal environment;
- Contribute to raising the standard of living for British Columbians;
- Do not impose avoidable costs on business;
- Do not compound affordability challenges for British Columbians; and,
- Wherever possible, benefit all regions of B.C.
MAINTAINING A COMPETITIVE BUSINESS CLIMATE

A healthy economy relies on profitable, successful businesses producing goods and services the world wants at a price the world is prepared to pay. This provides the framework to support good jobs and generate strong net government revenues to support public services while protecting the natural wealth of our environment.

Our economy must provide opportunities for business to succeed, while generating benefits for people through good jobs, an improving standard of living, and government revenues that support public services.

The second section of this document – Benefiting British Columbians – addresses the people side of business competitiveness. Our consultations with business leaders have consistently referenced housing affordability, affordable childcare and workforce training that develops people for the jobs of tomorrow as essential to attracting the workforce they need to grow. Government’s historic investments in housing and childcare were a fundamental step in establishing the conditions for a labour force enabled to participate in economic growth.

The commitments of this economic framework will be implemented by government ministries over the course of 2019-20, within our fiscal plan. As is always the case, substantive ministry policy and program initiatives are brought before Cabinet or Treasury Board prior to implementation, and additional detail will be provided on each program as it is introduced.

To maintain a competitive business climate, we will:

1. Maintain B.C.’s reputation as an attractive investment destination for the sectors that contribute most to our prosperity, while also fitting within our CleanBC climate plan. Specifically, we will:
   i. Work with business to develop competitiveness frameworks to enable new investment in industries that provide good jobs, generate healthy net government revenues, and meet our CleanBC targets. Competitiveness frameworks developed for any project or sector will be multi-dimensional, reflecting a fair and complete analysis of factors including productivity, wages, exchange rates, synergies, regulation, permitting efficiency and rates of taxation.
   ii. Support quality economic growth through electrification, using clean and affordable hydroelectricity to reduce GHG emissions of major industries so new development can be accommodated within our legislated GHG emission targets.
   iii. Work across ministries to ensure permitting and regulatory efficiency, including coordination with our Environmental Assessment Office where an Environmental Assessment Certificate is required.
iv. For major industrial investments that meet our quality economic growth objectives, establish executive-level cross-ministry facilitation teams to provide single window “concierge” coordination of a project’s interface with government.

v. Manage business competitiveness across our economy, including through:

• Maintaining competitive tax conditions and being open to discussing these with the business community on regular intervals.
• Eliminating provincial sales tax on electricity, resulting in savings to business of approximately $160 million / year.
• Implementing a Clean Growth Fund that will provide industrial incentives of up to 100 percent of carbon tax paid beyond $30 / tonne to eligible B.C. facilities, based on how their GHG intensity compares to a global benchmark. 3
• Taking steps to address housing affordability and provide accessible, affordable childcare – responding to what business identified as their top priorities to attract the talent they need to grow.
• Developing a skilled workforce to fill the good jobs that will grow our economy.

vi. Require identification of economic impacts when new government policy or programs come to Cabinet for decision. This provision was implemented in 2018. No previous B.C. administration has required this as part of their decision-making process.

vii. Require that GBA+ analysis be completed for every Cabinet decision. This provision was also implemented in 2018, and it is used to assess how diverse groups of people may experience policies, programs and initiatives. Like the above, no previous B.C. administration has required this as part of their decision-making process.

3. Analysis carried out by the Province of British Columbia and B.C. Business Council demonstrates that most of B.C.’s major industrial sectors are already among the cleanest of their type in the world.
Focus B.C.'s technology investments and capacity of our innovators on developing made-in-B.C. solutions to industrial challenges, by supporting growth in the tech together with the industries that rely on it.

Assist industries to adapt to changing global market conditions, develop new opportunities and or transition from the incubation stage to self-sustaining operation.

Establish the capacity for government to make carefully-selected strategic contributions to support exceptional new investment opportunities where these provide a near-term return on investment for British Columbians and meet other criteria – including comprehensive competitiveness analysis – subject to available funding and Treasury Board approval.

We are pleased that British Columbia continues to attract investment across multiple economic sectors.

In just a few examples:

- LNG Canada announced on October 1, 2018 that it would be proceeding with the single-largest private sector investment in Canadian history.

- Fujitsu opened its “AIHQ” in Vancouver on November 21, 2018, choosing to locate in British Columbia because of our skilled workforce, high-quality academic institutions and opportunities for synergy with other technology companies working in artificial intelligence.

- Paper Excellence Canada completed the purchase of the former Catalyst mills in Crofton, Powell River and Port Alberni on March 18, 2019 – maintaining 1,500 good-paying jobs and providing a bright future for these communities.

- Pinnacle Renewable Energy proceeded with a $30 million expansion at its Williams Lake facility, adding a new drier that will improve air quality, increase production and allow the company to utilize a wider assortment of input fibre.
xi. Work with business associations, such as the Business Council of B.C., B.C. Chamber of Commerce and other sector-specific associations to support competitive conditions for their members. In just a few examples:

- We are working with the Business Council of B.C. to examine the regulatory, fiscal and operating issues that most directly affect trade-exposed industrial sectors. This process is collaborating on developing approaches that will encourage continued capital investment, support efficient operations, and brand B.C. as a preferred investment destination.

- We have modernized our engagement approach with B.C. Chamber of Commerce members across the province – providing real dialogue through face-to-face regional meetings and online policy discussion forum, replacing the time-consuming and impersonal process of responding in writing to policy requests. For 2019-20, eight regional sessions were held with B.C. Chamber members, with highly positive feedback received on the new engagement format.

- We’re working with the Business Coalition for a Clean Economy to gain their members’ advice on clean-tech innovations that can assist small- and medium-sized businesses, while keeping members informed on government initiatives that will increase demand for B.C.’s low-carbon goods and services.

The Government of Canada plays an important role in shaping the economies of all Canadian provinces and territories, including through federal jurisdiction for foreign affairs and international trade programming; banking, currency and competition law; the federal taxation system; establishing immigration levels and qualifying criteria and more. Canada also makes significant investments in trade-enabling infrastructure, telecommunications, innovation and industrial research and support programs, and supports vital services for British Columbians through the Canada Health Transfer and Canada Social Transfer. B.C. maintains ongoing engagement with Canada and our provincial and territorial counterparts on areas of economic priority. Among many examples, some current examples include electrification, GHG reduction initiatives, childcare programming, connectivity and telecommunications investments, forest industry transformation and forest worker support programming, salmon restoration, reconciliation with Indigenous communities, immigration programming and others.
2. We will update our approach to attracting international investment to British Columbia, introducing a greater emphasis on matching high-quality, regionally-distributed growth opportunities that fit within our CleanBC plan with investors that match our objectives and share our values. During 2019-20 we will:

i. Develop a sustainable investment strategy identifying high-potential opportunities for quality economic growth across British Columbia’s regions.

ii. Conduct a regional inventory of investment-ready opportunities, including transportation, energy, educational, internet connectivity, community and other infrastructure needed to support quality economic growth.

iii. Work with the Business Council of B.C. on competitiveness models to enable new investment in sectors that fit within our CleanBC plan and contribute the most to our economy through good jobs, healthy net government revenues and benefits to Indigenous communities.

iv. Introduce new investment attraction priorities, metrics and tools for our Trade and Investment Offices in Asia, Europe and the United States, providing a clear focus on new, purpose-driven investment that can lever economic growth across our province.

v. Provide all customer and investor-facing International Trade and Investment staff with on-ground training and detailed familiarization on B.C.’s regions and major export products, ensuring that they have firsthand familiarity with B.C.’s diverse economic regions, major economic sectors and the wide range of communities that they will be working to attract investment to or promote exports from. This commitment will be implemented over 2019-20 and 2020-21.

vi. Work with the Business Council of B.C. and Indigenous communities involved in major economic development projects to develop an introductory Guide to Major Project Investment. This guide will include an outline of B.C.’s regions and major economic sectors, the objectives of our CleanBC plan, a summary of our environmental assessment process and best practices for engaging with B.C.’s Indigenous communities and will be translated into major market languages.

vii. Work with the business community to promote B.C. industries as competitive suppliers of low-GHG exports. These can play an outsized role in reducing climate change impacts abroad, making B.C. the supplier of choice for products reducing global GHG emissions.

viii. Provide on-ground landing and facilitation services to help with getting new investment established and integrated into our regions and communities. Our regional network of Rural Development staff will provide the locally-knowledgeable community support to help new investment get started. Additional industry expertise will be provided as needed by the Ministry of Jobs, Trade and Technology, Ministry of Energy, Mines and Petroleum Resources, Ministry of Agriculture, or others.
3. We will prioritize distributed investment to ensure the benefits of growth reach suburban and rural communities, while supporting urban communities to grow at a measured pace that does not overload urban infrastructure or compromise urban affordability. In 2019/20 we will:

i. Promote Surrey as a Second Downtown for the Lower Mainland, encouraging new technology entrants, research facilities and other businesses to locate in the fast-growing, well-serviced Surrey Centre area. With a 35-minute rapid transit link to downtown Vancouver, Surrey offers affordable housing, affordable commercial rents, significant development potential and the prospect of a future high-speed rail link to Seattle, Portland and beyond.

ii. Prioritize distributed investment for our technology sector, helping to manage congestion and support affordability in heavily populated urban centres and encouraging new investment and work-near-home opportunities in suburban and regional communities. As part of this initiative, we will encourage new business entrants that want to access government incentive programs or B.C.-managed immigration programs to choose a suburban or regional location – helping new business to prosper and providing opportunities for new British Columbians to become established in an affordable, livable community.

SUBURBAN COMMUNITIES

Squamish, the Tri-Cities, Delta, Tsawwassen, Langford and others offer significant advantages for technology start-ups or satellite office locations, offering lower operating and housing costs, while providing employees the convenience of avoiding gridlock and the benefit of saving time and money while reducing their carbon footprint.

DIGITALLY-NEXT-DOOR COMMUNITIES

Kamloops, Rossland, Nelson, Canal Flats, Campbell River and many others are seeing transformational growth in the technology sector from businesses and workers purposefully seeking out the cost and lifestyle advantages of a smaller community, while staying connected to their B.C. and global customers through high-speed internet.

Our investments in high-speed internet connectivity for rural and Indigenous communities are creating new business opportunities for local innovators and facilitating access to a previously untapped workforce for technology companies and for other sectors where work can be done remotely.
While continuing to accommodate growth for technology businesses that have established a footprint in downtown Vancouver, we will configure government tools and programming to support an innovation growth corridor in Surrey Centre and the Fraser Valley, a model that follows the success of other major metropolitan regions that have grown their technology industries.

iii. On an ongoing basis, evaluate B.C.'s various tax credit and business incentive programs to confirm that these are continuing to generate intended outcomes, align with our quality growth objectives and generate a return on investment for British Columbians. This work will involve engagement with the relevant sectors of the business community. Where program updates are made, emphasis would go toward attracting new investment outside B.C.'s most heavily populated areas, allowing urban infrastructure to catch up with rates of growth.

iv. On an ongoing basis, evaluate and update B.C.'s skilled worker immigration and provincial nominee programs to align with our distributed development objectives, supporting new business entrants to attract the workforce they need for growth while providing a success pathway for newcomers to B.C.

In a recent article titled “It’s Time to Get Serious about Transportation, Housing, Regional Planning and Growth in the Lower Mainland” [https://bcbc.com/insights-and-opinions/opinion-bold-moves-needed-now-to-resolve-lower-mainland-livability-crisis](https://bcbc.com/insights-and-opinions/opinion-bold-moves-needed-now-to-resolve-lower-mainland-livability-crisis) the Business Council of B.C.‘s Jock Finlayson and Ken Peacock addressed the confluence of the lower mainland’s growing population and limited land supply and the need to address the challenges of housing affordability, congestion, longer commute times and pressures on the quality of life for residents. Finlayson and Peacock called for bold and strategic action, including several elements aligned with this economic framework.

• “Infrastructure that supports regional connectivity, provides workers with tolerable commutes and allows for a broader array of more affordable options for would-be homeowners.”

• “A new Fraser Valley innovation corridor anchored by a commuter rail system running from Chilliwack to the city of Vancouver [to] help address many of the region’s most pressing issues.”

• “The development of a second urban business centre, something the region desperately needs if it is going to remain competitive as downtown Vancouver becomes increasingly cost-prohibitive for more businesses.”
4. Beginning in 2019-20, we will initiate the development of a Northern Strategy, working with business leaders, Indigenous leaders and municipalities, all appropriate government ministries and others to develop a dedicated strategy focused on the needs, economic development opportunities and priorities of B.C.’s North. The process will ensure that the North is a central feature of efforts to attract new investment to B.C. and will identify the infrastructure and services needed for Northern B.C. to thrive.

Advancing B.C.’s northern economy relies on connectivity: to high-speed internet, to efficient transportation networks, and to B.C.’s clean, affordable hydroelectric grid that can power industrial development within the context of our CleanBC climate plan. Our Northern Strategy will be the result of a collaborative process focused on attracting new investment, create new revenues or partnership opportunities that can be shared with Indigenous communities and scaling infrastructure and public services across northern municipalities to keep pace with growth.

Our Northern Strategy will address Northern B.C.’s wide range of economic sectors and will incorporate initiatives aimed at:

- Restoring wild salmon populations, strengthening fisheries businesses and protecting biodiversity while maintaining stable and healthy local economies.
- Electrifying existing and new industrial operations to enable quality economic growth within our CleanBC plan and legislated GHG targets.
- Transitioning the B.C. Interior forest sector from the high-volume production of Mountain Pine Beetle salvage to a focus on realizing the highest value from B.C.’s post-beetle fibre base – including high-value lumber grades, engineered forest products, industrial wood pellets and biofuels made from wood waste.

LIVABLE COMMUNITIES

Distributed growth works in conjunction with urban planning visions, such as Metro Vancouver 2040, and aligns with the intent of the regional economic development agency recently established by the Metro Vancouver Board.

Establishing growth corridors and planning for affordable, livable communities helps to create a sustainable economic future. The process identifies those areas that have the greatest capacity to absorb business and population growth, guides new business development to those areas and supports the development of live-near-work opportunities to improve our climate footprint – enabling growth while protecting our natural environment and improving quality of life. Attracting new businesses and employees who want to live near their work will, in turn, attract new small businesses seeking to provide the services that ultimately build the character of communities through retail, restaurants, recreational and cultural services.
• Implementing recommendations from the Mining Jobs Task Force and supporting the development of new mines.

• Advancing quality economic growth opportunities in nature tourism, Indigenous tourism, agriculture and other sectors.

• Identifying the role that technology is playing in supporting economic base industries in B.C.’s North and highlighting new opportunities to align the capacities of our technology sector with the needs of B.C. businesses.

Success in any region of B.C. depends on success in other parts of the province. Economic growth in the North requires efficient trade corridors, seamless access to ports and other exporting infrastructure, and the ability to scale public services to keep pace with the needs of the workforce that will enable that growth.

5. We will support our primary exporting industries to increase high-value secondary manufacturing encouraging revenue growth from manufactured goods that command a price premium over commodity exports.

i. We will encourage higher-value and secondary manufacturing to increase the value of B.C.’s export goods, allowing them to sell at a higher price. While increasing revenue for producers, this also creates sustainable, increasingly high-tech jobs for British Columbians, while enhancing our global reputation for quality and innovation.

WILL GOVERNMENT BE PRODUCING STRATEGIES FOR OTHER REGIONS?

All regions of B.C. are the focus of our overall economic plan. The Regional Growth Strategies listed below are already underway with local government. We would look to align geographically linked Regional Growth Strategies wherever possible and would anticipate introducing other broad regional strategy exercises in future fiscal years.

• Metro Vancouver
• Fraser Valley Regional District
• Squamish Lil’wot Regional District
• Capital Regional District
• Comox Valley Regional District
• Regional District of Nanaimo
• Regional District of Central Okanagan
• Regional District of North Okanagan
• Okanagan-Similkameen Regional District
• Thompson-Nicola Regional District

Our Integrated Transportation and Development Strategy will also be an all-of-B.C. exercise that will include regions in an overall plan to develop the transportation systems and public infrastructure needed to grow our economy.
Forest products are central to B.C.’s economy. Lumber, pulp and paper, panel, bioenergy and other wood-based products represented 32 percent of our province’s international goods exports in 2018, with exports to other countries valued at $14.89 billion out of B.C.’s total exports of $46.504 billion. Log exports represented $0.744 billion, or about five percent of 2018 total forest products exports.

Our sustainably sourced structural and appearance wood products are part of creating a cleaner, greener built environment at home and in markets around the world, while also supporting our economy. The forest industry is the economic base for vibrant forest communities and provides good jobs for tens of thousands of workers across the province. Forest companies purchase billions of dollars each year in domestically-sourced financial services, transportation, technology, equipment, and much more to supply their network of high-tech, high-volume, capital-intensive manufacturing facilities.

Despite its economic importance, forestry is at a crossroads. Companies are dealing with the competitiveness challenges of cyclical pricing and demand conditions, the longstanding softwood lumber trade dispute with the United States, a need for revitalization on the B.C. Coast, and the fibre supply consequences of the devastating Mountain Pine Beetle (MPB) epidemic and subsequent severe wildfire seasons of 2017 and 2018 in the B.C. Interior.

With B.C.’s timber harvesting land base already fully allocated, forest companies can no longer grow through expanded production. Their path to increased revenue is through growing the value of their products instead. This includes manufacturing higher-value grades of lumber, engineered wood products, new bioenergy products, wood composite products and more.

Government is working with the forest industry to chart a new future, through policy reform initiatives that will enhance industry competitiveness, encourage investment in new manufacturing technologies and higher-value forest products, support resilient
Communities, companies and post secondary institutions have already started to work together on future models for success, such as the Forestry Think Tank in Quesnel. Ideas generated by parties collaborating on policy initiatives are more likely to generate informed policy that will achieve its intentions. The ideas of the Forestry Think Tank will inform future policy deliberations.

Forestry communities and stable forestry employment, and provide opportunities for greater Indigenous participation in forest management and manufacturing operations.

The shift to engineered wood products will be part of growing our economy, reducing the carbon footprint of the built environment and creating healthier buildings – providing a blueprint for the world to follow. This transition is also vital to shifting B.C.’s forest sector to the next phase of its global competitiveness, and to creating more economic value from our existing fibre base. Some B.C. forest companies are already working to increase the value of dimension lumber by using it to make cross-laminated timber – panels of glued, layered lumber that are as strong as steel and that can be used safely in tall buildings, while sequestering carbon and contributing to a cleaner planet. Other companies are turning the wood waste remaining after harvesting and manufacturing into renewable energy and next-generation pulp products to supply fast-growing global demand. Pulp and paper companies are exploring the high-demand needs of the emerging economy, where products like boxboard to supply online shopping are replacing the printing and writing papers of earlier decades. Still others are starting the work to produce renewable natural gas and bio-crude oils from wood waste, products that can reduce greenhouse gas emissions while also growing our economy.

Placing the power of government’s capital procurement behind CleanBC and engineered wood products, in 2019 we specified that government building projects must incorporate full lifecycle analysis, minimize greenhouse gas emissions, consider wood as the primary building material and include a description of the use of wood in the project business case. On April 5, 2019, Premier Horgan announced that government would be using mass timber construction wherever possible in major capital projects, including the renewal of the Royal B.C. Museum in Victoria and the new St. Paul’s Hospital in Vancouver. These projects are just the start of a transition to using engineered wood products in B.C. capital projects, including schools, hospitals, housing developments and other buildings.
B.C. INTERIOR

Over the past decade, sawmill capacity in the B.C. Interior was scaled up to recover value from the extensive tracts of beetle-killed timber before it decayed or burned. Now, as these beetle harvests end, some of the least competitive or most fibre-compromised mills must close. This difficult but long-anticipated adjustment has begun, and companies have announced permanent closures of sawmills in Quesnel, Vavenby and Clinton, as well as multiple indefinite closures of other facilities. We are working closely with the industry, labour leaders and communities on effective transition for workers and contractors, and on alternative economic development opportunities for impacted communities.

In July 2019, we initiated industry and stakeholder engagement on Interior policy reforms focused on maximizing efficiency in the mid-term timber supply, addressing post-beetle harvest levels, responding to climate change and addressing forest carbon, increasing opportunities for Indigenous participation in the forest sector and beginning the transition to higher-value products.

Earlier in 2019 we introduced a Timber Supply Area competitiveness vision process – a platform for forest company CEOs, First Nations chiefs, mayors and union leaders to come together to develop positive and forward-looking approaches for the future of the industry within their local area. By engaging those with a direct economic interest in forestry, these tables will be able to consider the mid-term timber supply, collaboratively manage constraints on the land base, seek

The combination of declining Mountain Pine Beetle harvests and low United States lumber prices resulted in a series of temporary curtailments, shift reductions, indefinite closures and permanent closures at sawmills in the B.C. interior, with a significant impact on workers, contractors, suppliers, small businesses and communities. In October 2019 government implemented new programming to help workers, contractors and communities. Programming includes:

- Retirement bridging opportunities to extend the eligibility of industry retirement programs to more of the impacted workforce;
- Placement coordination services to connect workers to services offered by government agencies and community programs and connect workers to training and employment opportunities;
- Dedicated funding for worker training programs;
- Interim work opportunities for logging contractors; and,
- Funding to support impacted communities in providing support to workers, families and contractors.
best approaches to maintaining employment and community economic stability and address First Nations interests while contributing to a healthy B.C. economy. As the work gets underway, we anticipate that it will help to provide the basis for companies to invest in higher-value production, including engineered products.

The Council of Forest Industries recently issued a forward-looking vision for the industry, identifying that members “believe there is a bright future for the forest industry in B.C. – a future that secures jobs, delivers value, and sustains economic benefits across the province.” COFI’s vision is aligned with many of the elements of this framework and with concepts being considered in the Interior forest policy review.

B.C. COAST

In January 2019 we introduced new forest policies on the B.C. Coast which will reduce log exports, increase log and lumber availability for domestic manufacturing, reduce exports of minimally processed lumber and improve waste utilization – making sure that waste fiber is available for the pulp and paper sector and other users. A renewed focus on domestic manufacturing will ensure the jobs and economic benefits of forestry operations take place at home – providing good jobs to support the rebuilding of vibrant forestry communities along our Coast. The new policies and regulations are being phased in, so forest companies can adapt their operations, while secondary users gain time to scale their operations to increase production of higher-value products.

Following the policy phase-in period, these changes will lead to investment in secondary manufacturing, partnerships with First Nations, and new approaches to utilizing B.C.’s coastal hemlock and balsam in engineered wood products. Paper Excellence Canada’s purchase of the former Catalyst Paper mills in Powell River, Crofton and Port Alberni is an example of how providing the fibre base to support B.C. manufacturing operations can draw investments and provide secure jobs in forestry communities.
UNLEASHING ECONOMIC GROWTH THROUGH AGRICULTURE

The B.C. agrifood and seafood sector is a significant contributor to our economy, supporting over 61,000 jobs throughout the province. In 2017, B.C. exported a record $3.9 billion in agriculture and food products to 157 markets. As demand for B.C. commodities is expected to grow, the sector is poised to contribute greater returns to B.C.’s export economy and support good jobs across rural and urban areas of B.C. The Ministry of Agriculture’s Grow BC, Feed BC and Buy BC strategy will strengthen the Province’s agriculture and food sector by expanding local production and domestic markets and promoting B.C. as an internationally recognized brand.

The demand for sustainably produced, traceable food products is growing in developed nations, and consumption of speciality meat products, fresh produce, processed food products, vegetarian and vegan specialties, health foods and nutraceuticals is expected to grow with the rise of the middle class in developing nations. B.C. products such as blueberries, baked goods and cereal products, mushrooms, natural health products, cherries, salmon and geoduck are high-value commodities that can command a price premium in overseas markets.

The future competitiveness and economic growth of the agricultural industry will be enhanced by B.C.’s focus on the development and application of technology and innovation. New food technologies and innovation in food processing is expected to drive continued growth in B.C.’s agriculture and agrifood sector, expanding B.C.’s production capacity, our ability to supply the needs of our growing population with lower-carbon B.C.-grown products, and our capacity as an exporter of high-quality fresh and processed agricultural products. In addition to the growing capacity of our agricultural sector, waste-to-resource technologies are also monetizing agricultural by-products or residues that would otherwise have no value.
Technology and innovation are key to adding value to our diverse production lineup – which includes over 200 land-based products and 100 fish, shellfish and marine plant products. In a focused effort to unlock greater value from our commodities, the Ministry of Agriculture is developing the B.C. Food Hub Network to establish regional sites across the province to foster innovation in production, processing and packaging to create higher value out of B.C.-grown products. These regional hubs will create capacity for small processing companies to access specialized equipment that they would normally have to access outside of the province. This supports innovation and new product development and access supports for growing their business, and encourages the growth and grounding of food businesses in B.C.

The regional model for the Food Hub Network recognizes that the diversity of the B.C. sector creates opportunities for different types of product development in our unique growing regions. From canola and wheat in the Peace, the ranching industry in the Cariboo, high value fruit production and growing wine economy in the Okanagan, seafood and niche processed products from Vancouver Island, and the significant intensive agriculture that occurs in the Fraser Valley, the B.C. agriculture sector provides widespread opportunity to support thriving economies throughout the province. Since many agricultural products from other provinces, such as Alberta and Saskatchewan, pass through British Columbia on their way to export position at our ports, there is also future opportunity to determine whether value can be added in terms of processing and niche product development along the supply chain in B.C.
In June 2019, the Premier appointed a three-member Food Security Task Force, to develop a report containing strategic recommendations about how to grow the agrifood sector through technology and innovation, as well as how to grow the agri-tech sector as a standalone economic sector. The Food Security Task Force will determine how B.C. can be a major player as agriculture, agrifood and agritech become an increasingly prominent part of our economic vision for the Province.

B.C. is already demonstrating early success in our agri-tech sector:

• B.C. company Semios was named in the 2019 Global Cleantech Top 100. Semios offers a precision farming platform that provides real-time crop data and pest management tools for tree fruit and nut growers. Leveraging a proprietary, in-orchard IoT wireless network, machine learning, and data analytics, Semios helps growers manage insect pests, disease, frost and irrigation.

• Following considerable early success and support in B.C., North-Vancouver’s Ecoation received the 2018 Greentech Innovation Concept Award in Amsterdam. The company’s autonomous scout robot monitors the health of plants, assesses and forecasts yields and has the capability to perform spot treatments when required. Ecoation closed a successful seed financing round in December 2018.

• Vancouver-based TerraMerra recently announced that they have raised $45M USD in a Series B financing round for their Actigate technology, which significantly improves the performance of active ingredients used in crop protection products, radically reducing the amount required. The result is higher-performing organic biopesticides and a reduced need for synthetic chemicals in farming. This lowers costs across the system, improves farm productivity and profitability, reduces waste and minimizes environmental impact.
Technology and innovation have demonstrated how agricultural companies can diversify and grow – within the scope of our CleanBC goals – while establishing value-from-waste products that support the growth of a sustainable circular economy.

- Vitalus Nutrition of Abbotsford has found new ways to monetize the innovative extraction of milk proteins from whey. This former dairy waste by-product is creating new revenue opportunities and 60 new jobs from milk protein concentrates and isolates.

- B.C. based WithinUS has developed the TRUMarine collagen skincare products line, that uses wild-caught fish scales to produce a select, high-grade collagen skin care brand, adding value to a by-product, and aligning with the B.C. brand of pure and clean natural products.

- Food and agricultural waste are being turned into renewable energy at multiple sites in B.C. Landfills in Salmon Arm and Glenmore are generating biogas to be injected into the local natural gas distribution system, creating enough renewable natural gas (RNG) to power over 600 homes for a year.

- At the Surrey Biofuel Facility, a closed-loop organics processing operation collects and processes curbside organic waste, generating biogas that is being upgraded into RNG. Plans are being developed to use this gas to power Surrey’s waste collection trucks, as well as the city’s growing fleet of natural gas-fuelled vehicles. At Fraser Valley Biogas, anaerobic digestion and a biogas upgrading plant are producing RNG from agricultural waste and commercial food-processing waste. As well as producing 90,000 gigajoules of RNG, this operation creates a nutrient-rich fertilizer for use on surrounding farms.

These examples and others illustrate the creativity and potential of B.C.’s agricultural sector, and the emphasis being placed on sustainable production to meet domestic needs and support a growing export economy.
Clean-Tech in Mining

Saltworks has created new energy-efficient and lower-cost systems to make fresh water from contaminated waters needed for resource extraction. The Richmond company has developed systems using ion-exchange membranes, crystallization and other technologies to treat the by-products of fracking, oil sands, landfill leachate, reverse osmosis brine, ammonia and spent acids. Saltworks’ technology has been adopted by major companies in B.C., including Teck Resources Inc. In 2018, Saltworks entered the Chinese market, opening a national headquarters at the International Water Hub in Nanjing. Saltworks’ Flex EDR Selective membrane technology, a proprietary advanced material, solves a critical challenge in China and other markets in dealing with coal-fired power plants and flue gas desulfurization wastewater treatment.

MINING - ELEMENTAL TO THE ECONOMY OF TOMORROW

Modern high-tech economies rely on responsible mineral extraction, including the aluminum that makes our laptops, tablets and smart phones light enough to be portable. Electric vehicles are a critical part of decarbonizing modern cities but require four times as much copper as conventional vehicles. Metallurgical coal is an essential input to the steel used in residential and office towers, transportation systems and vehicles. With environmentally-conscious consumers increasingly seeking reassurance that the raw materials used in the products they purchase are coming from responsibly-managed sources, minerals from British Columbia have a global advantage over competing jurisdictions.

B.C. is home to a mining sector that supports more than 30,000 good jobs in communities across B.C., purchases a wide range of professional services – such as accounting, legal, technology and geology services – from local suppliers and accounts for more than 15 percent of B.C.’s economic base. Our high-potential exploration sites offer significant future opportunity to create high-wage jobs in rural communities. The industry is at the forefront of advancing reconciliation with Indigenous communities and has the potential to provide net new government revenues over the near, medium and long-term horizon.
The Mining Jobs Task Force reported in December 2018, and action has been taken on or is in progress on many of their recommendations.

Some of these actions include:

• In 2019-20, we made the Mining Flow-Through Share Tax Credit and B.C. Mining Exploration Tax Credit permanent, providing certainty for the industry and investors, adding to the strong, competitive climate for their investments in B.C. mining.

• Recognizing the importance of minerals to our lives and our economy, in 2019-20 we are working with the Mining Association of British Columbia on an innovation roadmap, focused on supporting competitiveness, growth and sustainability through a seamless, cross-government approach to the industry’s innovation, technology and workforce development needs.

• With provincial support, the B.C. Regional Mining Alliance – a landmark partnership of First Nations governments, mining companies and the Association for Mineral Exploration – is showing international customers, investors and shareholders that First Nations welcome mineral exploration. B.C. is a positive place to do business.

• We are supporting Indigenous stewardship and monitoring initiatives, such as guardianship programs, to enhance environmental performance and increase Indigenous involvement in environmental monitoring at mineral exploration and mining projects.

• In a wider, cross-sector initiative, we are taking steps to ensure that neighbouring municipalities and Indigenous communities are strengthened by the presence of natural resource operations, and are collaborating with industry, local and Indigenous governments and other stakeholders focused on community health and well-being.

British Columbia’s world-class copper, steelmaking coal, zinc and other mineral deposits will be included in the low-carbon technologies that will support an increasingly sustainable future. Building from the work of the Mining Jobs Task Force, government will continue to engage with the mining sector to pinpoint barriers to investment, improve permitting efficiency, continue to expand collaboration with Indigenous communities, advance GHG reduction initiatives and develop new international brand efforts to inform customers and investors of the GHG advantages and environmental credentials of sustainably-produced natural resources from B.C.
THE INDUSTRIAL CAMP EXPERIENCE – INCORPORATING MODERN STANDARDS OF GENDER AND CULTURAL INCLUSIVENESS

Quality economic growth is needed to generate the fiscal capacity to support the needs of our growing population. Responsible resource development is a key driver of economic growth and in many cases industrial camps will be a necessary component of those developments. Government is working with local and Indigenous governments, industry and other stakeholders to support the health, safety and resiliency of communities and workers in association to industrial camps. New programs are expected to build on positive examples of coordination between communities, camp employers and government, supporting resiliency, safety and economic outcomes for area residents, neighbouring communities and workers employed in camp settings.

Quality economic growth includes requiring modern standards of gender and cultural inclusiveness in all work environments, including industrial camps. We acknowledge the challenging history of industrial camp settings and are working to collaborate with employers and stakeholders and implement new programs and improved coordination services to help camp employers prepare for and operate camps as a good neighbour and desirable employer.

As new programs are developed, these would be expected to formalize requirements for:

- Information sharing and ongoing engagement with local and Indigenous governments.
- Coordination of employment opportunities for residents, procurement opportunities for local businesses and other benefits for neighbouring communities.
- Coordination of issues such as:
  - Increased demand on local services and amenities.
  - Safe living and working conditions in camps and nearby communities, including for women and Indigenous employees.
  - Access to training and employment opportunities.
  - Support programs for workers.
British Columbia’s Top 10 Export Destinations (2018)

1. United States
2. China
3. Japan
4. South Korea
5. Taiwan
6. We will encourage the growth and diversification of our export markets, ensuring we are responsive to global market conditions and that we continue to position B.C. exports for growth. In 2019-20 we will:

i. Develop a new International Engagement Framework to ensure that our trade resources are focused on the right markets, the right mix of services, and the right customers to optimize trade opportunities for B.C.’s key exporting industries.

Our B.C. Trade and Investment Offices provide a range of services for exporting sectors, including engaging with existing and potential customers, providing market intelligence, representing B.C.’s export goods at meeting and events, and working with the Government of Canada to resolve trade disputes and trade barriers. As we develop our framework, we will identify countries offering growth potential for B.C. exporters and engage with key exporting industries to determine how B.C.’s Trade and Investment Offices can best serve their needs. We will also engage with Crown Corporations such as Forestry Innovation Investment Ltd. and Destination BC that have extensive in-market experience.

ii. Expand the Export Navigator Program to additional communities across B.C. to help small and medium-sized businesses prepare for global trade. The program provides personalized, step-by-step approaches to help businesses prepare to become exporters, navigate the services available to them and tackle the logistics of customs certifications and other export requirements. Growing our exporting industries helps build economically diverse and sustainable communities across B.C.

iii. Work with the business community and federal government partners to establish a model to independently validate that B.C.’s major export products are the cleanest of their type in the world and assist exporting industries to develop a market-facing brand to demonstrate that purchasing from and investing in B.C. is a positive choice for the environment.

iv. Continue to work with Canada and other provinces and territories in negotiating trade agreements, while vigorously defending B.C.’s industries against protectionist trade actions, including the long-running softwood lumber trade dispute with the United States.
7. **We will encourage sales and revenue growth from B.C.’s services industry, including professional services, technology and tourism.**

   i. **We will support the continued development of specialized skills in B.C.’s high-value professional services exports, such as those provided by our creative, design and engineering sectors.**

   Wherever possible, we will build on existing linkages between industries. Choosing to use mass timber in a unique setting, such as portions of the building envelope for St. Paul’s Hospital, uses more wood products while supporting the development of new tradable skills for B.C. designers, architects, engineers and other providers. It helps to reinforce B.C.’s reputation as one of the world’s most innovative jurisdictions for designing with wood. While repeatability is important to high-volume sales (such as in tall buildings designed with mass timber), first-time projects require new design or engineering solutions, creating specialist expertise to be applied across a range of future building projects. They also lead to advancements in green building knowledge and in engineering software, which can be sold around the world. The benefits to our forest sector coupled with carbon sequestration make this a win-win-win for British Columbians.

   ii. **We will accelerate the development of B.C.’s expertise in mass timber design and engineering through the development of a Centre for Excellence in Advanced Timber to coordinate product research and development, education, skills training and demonstration projects.**

   During 2019-20, we will develop the concept case for the Centre of Excellence, consulting with academic, industry and other partners on a collaborative vision to include:

   - Coordinating advanced wood design training programs, including engineering, architecture, building technology, building science and carpentry;
   - Providing capacity to help builders, designers and building owners recognize advanced timber products as competitively viable alternatives to traditional building materials;
   - Supporting industry research, development and testing of advanced timber products;
   - Developing capacity and tools to support the economic pricing and assembly of advanced timber structures without an associated risk premium.

   iii. **We will encourage revenue growth from service business transacted in B.C., including by encouraging visitors to stay longer, spend time in additional communities and attractions, and by increasing the amount spent during a visit.**

   In March 2019, the Ministry of Tourism, Arts and Culture launched a strategic framework for B.C.’s tourism sector, focusing on improving visitor numbers and revenues through destination development, tourism marketing, responsible nature tourism, and by supporting Indigenous communities and businesses in preserving and promoting their living culture and rich heritage through tourism.

   Across B.C., tourism offers the potential for revenue growth that works in harmony with our economic base industries and for investment in facilities and attractions that benefit British Columbians while drawing visitors from around the world.
COMMUNITY RESILIENCE AND DIVERSIFICATION

The Canal Flats sawmill closed in 2015, taking 80 jobs out of a small community of about 600 people. The community’s economic base was gone, leaving a skilled workforce, an affordable lifestyle, a large tract of land with industrial power supply and a municipal government willing to roll up sleeves to explore opportunities for the future. Today, Canal Flats is thriving, due to an entrepreneur that saw the capacity to utilize the mill site and the area’s high-speed internet connection as the basis for Columbia Valley Technological Park – a secure data storage, data centre and fabrication facility with as many employees as the old sawmill. Plans for new residential developments are in the works to provide homes for a growing workforce.

The municipality of Chemainus on Vancouver Island became a pioneer in reinventing forestry-dependent communities after their sawmill closed in 1983, impacting 600 workers. The town council commissioned the largest mural-painting project in Canada, which has since grown to include 53 murals depicting the area’s history. Although a modern sawmill exists in the community today, Chemainus achieved an endurinly successful diversification of their economy as a retirement community and a tourist destination that includes a dinner theatre, and an old-town arts and shopping area.
8. We will take steps to build an innovative and resilient economy for the future. In 2019-20 this includes:

i. Supporting a successful transition for workers and a resilient future economy for forestry communities impacted by sawmill closures in the aftermath of the devastating Mountain Pine Beetle epidemic of the early 2000s and the subsequent extreme wildfire seasons of 2017-18 and 2018-19. Until new forests grow to replace those lost to insects and fire, aligning sawmill capacity with available timber supply is difficult but necessary. Mills in Quesnel, Vavenby and Chasm (Clinton) have closed permanently, while others have announced shift reductions. At the same time, low United States lumber prices triggered indefinite closures and temporary curtailments of lumber, OSB and pulp mills across the Interior.

Addressing permanent closures across multiple communities requires a clear response putting the immediate needs of impacted people first. B.C. brings a coordinated, cross-ministry response to closure events by ensuring necessary government and community services are in place, that effective re-employment, retraining and early retirement processes are established, and by encouraging programs to explore economic alternatives for communities.

ii. Implementing an Interim Recovery Framework to provide a consistent, predictable process to support communities after events such as wildfires, floods and other natural emergencies. The framework will include a deliberate focus on the economy. This follows the recommendations of the Auditor General’s Report on Climate Adaptation and the findings of the Abbott-Chapman review of the 2017-18 wildfire and flood season.

iii. Preparing a climate change adaptation strategy to ensure B.C. anticipates and prepares for a range of possible impacts caused by climate change. We will work closely with local and Indigenous communities as the strategy is developed and will ensure generations of traditional experience on the land are considered in the plan.

GROWTH OPPORTUNITIES IN INDUSTRIAL WOOD PELLETS

Significant opportunity exists to grow B.C.’s industrial wood pellet sector, which transforms the wood waste remaining after harvesting into feedstock for large-scale thermal power producers around the world. The sector currently contributes $400 million per year to our economy. In addition to providing green, reliable energy, pellet manufacturers consume wood waste and help reduce wildfire risk in our forests and communities. Japan, currently our largest customer, is considering a large-scale increase in industrial wood pellet purchases from B.C.

Pinnacle Renewable Energy – the third-largest pellet producer in the world, and the largest supplier to the Japanese market – announced a significant new sales agreement with Japan on September 30, 2019. At a time when B.C.’s lumber industry is adjusting its sawmilling capacity to align with post-Mountain Pine Beetle timber supply, our industrial wood pellet sector is growing, investing in new and expanded facilities and creating stable new jobs in forestry communities.
iv. Establishing a Food Security Task Force with a focus on technology, innovation and production methods to increase high-value agricultural output and support a competitive agricultural and agrifoods industry into the future.

v. Implementing recommendations from the Premier's Wild Salmon Advisory Council and making investments in partnership with the Government of Canada to restore B.C.’s wild salmon stocks and rebuild our fisheries economy through work that includes:

- Funding community-based watershed restoration initiatives to support rebuilding salmon stocks, including through the Pacific Salmon Foundation’s Endowment Fund.
- Driving innovation and sustainability in B.C.’s seafood sector through the BC Salmon Restoration and Innovation Fund, a five-year federal-provincial program launched in 2019-20.
- Working with BC’s sportfishing industry to implement their Vision 2021 plan, which aims to maximize the social and economic benefits of sportfishing.
- Implementing the recommendations of the government-to-government negotiation process with First Nations in the Broughton Archipelago, including investing in Indigenous guardianship and monitoring programs that support socio-economic and ecological objectives in First Nations territories.

9. We will help small and medium-sized B.C. businesses scale up.

i. During 2019-20, we will review and renew B.C.’s business mentoring and business planning support programs to guide companies through the growth process. This includes the mentoring supports of programs like Export Navigator and the accelerator programs provided through Innovate B.C.

Mentoring supports and accelerator programs are an important part of growing small businesses, particularly in technology start-ups where the skills required to develop a new application can be different than the skills needed to grow the enterprise, and mentoring can help companies work through individualized plans to identify the capacities needed to grow and succeed.

ii. In Budget 2019 we expanded the Small Business Venture Tax Credit program to help small businesses grow and develop by encouraging investors to make equity capital investments in business start-up and commercialization efforts. These changes will double the amount that individuals can claim and that businesses can raise through the program.

As of February 2018, for the 2018 tax budget year, the Small Business Venture Capital Tax Credit helped to raise $96 million in early-stage funding for over 200 small businesses.

FISHERIES

More than 30 percent of all commercial fishing jobs (including processing) are held by Indigenous people. Recognizing the economic and cultural significance of salmon to First Nations and our economy overall, we are developing a made-in-B.C. Wild Salmon Strategy to protect and restore wild salmon stocks.
For thousands of years Indigenous people have lived in what is now British Columbia. With more than 200 communities speaking more than 34 languages and 61 dialects, B.C. has the greatest diversity of Indigenous cultures in Canada.

As this framework focuses on British Columbia’s economy, it describes economic aspects of reconciliation including new business, economic development and employment opportunities for Indigenous people and includes initiatives aimed at generating new government revenues that will enable support for benefit agreements, revenue-sharing agreements, reconciliation agreements and other instruments as part of a new fiscal relationship. We recognize that reconciliation is a holistic, ongoing process of establishing unity and equity as a society, and includes treaty provisions, rights and title provisions, recognition of the right to self-determination and respect for and recognition of Indigenous culture, language and history that are beyond the scope of an economic framework.
Shortly after forming government, we worked with the First Nations Leadership Council on the *Draft Principles that Guide the Province of British Columbia’s Relationship with Indigenous Peoples*. These principles include a renewed fiscal relationship between the province, federal government and Indigenous nations, recognizing fair and ongoing access to their lands, territories and resources as fundamental to supporting First Nations traditional economies, as well as sharing in the wealth generated from those lands and resources as part of the broader provincial economy.

As part of our commitment to true and lasting reconciliation, government will introduce legislation to recognize Indigenous people as full partners and participants in our economy, with established rights to participate in and benefit from land and resource activities within their territories. Achieving reconciliation is part of unlocking B.C.’s growth potential and will provide benefits for Indigenous and non-Indigenous people.

Although recent history has brought profound change in the ways industries engage with Indigenous communities, discussions about reconciliation still tend to emphasize obligations to Indigenous communities ahead of the opportunities to achieve common interests. While respecting and fully complying with the hard-won rights of First Nations that have been established through court decisions, we see reconciliation as an opportunity to acknowledge the past and develop a shared vision for an inclusive and mutually successful future.

As current provincial revenues are almost fully deployed on providing health, education, transportation and other services for B.C.’s Indigenous and non-Indigenous population, the resources to support the economic aspects of reconciliation must come through new revenues, new business partnerships, and a framework for sharing revenues from new resource development.

Reconciliation offers opportunities to move beyond conflict in land and resource decision-making. Reconciliation also offers a pathway to drive economic growth by involving Indigenous groups as participants, respected partners and financial beneficiaries in development. Stronger cooperation and collaboration between industry and Indigenous communities will lead to better decisions, greater certainty, and healthier communities and business partnerships, leading to economic stability and shared prosperity to strengthen profitability for B.C. industries and benefit all British Columbians. With these objectives in mind, in 2019-20:

1. We required all Cabinet decision materials to summarize impacts of policy or program decisions on Indigenous communities, ensuring that these are considered in all significant government decisions.

2. On October 24, 2019 we introduced the *Declaration on the Rights of Indigenous Peoples Act* and begin implementing these provisions in other regulatory processes.
   i. We will consult with Indigenous and business leaders to explore opportunities to enhance shared decision-making and recognize the jurisdiction of Indigenous communities, where the circumstances are appropriate.
   ii. We will support the right to self-determination and provide capacity to assist Indigenous people to freely pursue their economic, social and cultural development.
SHARED DECISION-MAKING IN ACTION
OPEN NET PEN AQUACULTURE AND THE BROUGHTON ARCHIPELAGO

British Columbia introduced new guidelines for open-net pen fish farms in June 2018, making the issuance or renewal of provincial tenures contingent on confirmation from Fisheries and Oceans Canada that fish farm operations will not adversely impact wild salmon stocks. The farm(s) must also negotiate agreements with the First Nation(s) in whose territory they propose to operate.

In the Broughton Archipelago near the north end of Vancouver Island, Indigenous communities had been raising concerns for years about the impact densely-concentrated fish farm operations could have on wild salmon stocks. In January 2018, British Columbia entered government-to-government discussions with local First Nations. A commitment to ensuring the safety of wild salmon migration routes kept the Namgis, Kwikwasut'inuxw Haxwa'mis, and Mamalilikula First Nations at the table until agreement was reached between the Nations, B.C. and Canada almost a year later. The fish farm operators in the region – Cermaq and Marine Harvest Canada – were also central to the solution, agreeing to the immediate closure of some sites and the phased-in closure of others. By working together, listening and building trust, the parties developed a mutual solution including a farm-free migration route for wild salmon, agreement to work together on farms outside the migration route, and a First Nations-led monitoring and inspection program to lead the transition.

Although the provincial policy was initially perceived as a First Nations “veto” by some parts of the broader business community, the outcome in the Broughton illustrates how collaboration and shared decision-making can achieve mutual benefits, even in contested circumstances. Provincial officials must still make the final statutory decision about issuing or renewing fish farm tenures but will do so knowing that agreement with First Nations has been reached.
3. We will engage Indigenous leaders in economic development vision and planning exercises for land-based decisions that impact their traditional territories. We will work with businesses and Indigenous communities to change the culture of consultation and accommodation to a culture of cooperation and collaboration.

i. In April 2019, we invited major forest companies in the B.C. interior to work with willing Indigenous, municipal and union partners in Timber Supply Areas, with a focus on optimizing the utilization of the mid-term timber supply and begin a transition toward value-added production. First Nations would be full partners in this exercise, with capacity support from government to enable participation at the leadership level.

ii. We will initiate thirteen projects under the modernized land-use planning framework, a provincial/First Nation co-designed, co-developed framework comprised of joint vision, principles and best practices for success and alignment with principles of the United Nations Declaration on the Rights of Indigenous Peoples. This work will continue to build on the Area Based Approach which has resulted in the completion of three Area Plans and the establishment of eight Regional Management Committees.

iii. We will incorporate First Nations development lands in the inventory of investment opportunities described in the business competitiveness section and ensure that these opportunities are represented in international efforts to attract investment.

iv. As described in the business competitiveness section we will collaborate with Indigenous and business leaders to develop a Guide to Major Project Investment, highlighting investment opportunities in B.C., identifying the commercial and brand opportunity of working with Indigenous partners, countering the perception that obligations to consult and accommodate make it difficult for investors to do business in B.C.
4. In 2019-20, we will continue efforts to ensure Indigenous communities have the tools to support economic development. We will:

i. Continue work to bring high-speed digital connectivity to Indigenous and rural communities to help close the digital divide between rural and urban communities. This will create opportunities for new business ventures and expand markets for existing businesses. Access to reliable high-speed internet is critical to unlocking the short- and long-term economic potential of Indigenous and rural communities.

ii. Work with rural Indigenous communities using diesel generators for power to explore opportunities such as regional power authorities, ownership of transmission infrastructure, and construction of transmission lines through First Nation lands.

iii. Ensure opportunities for Indigenous enterprise are included in the expansion of B.C.’s Export Navigator program, which provides export-readiness tools for small- and medium-sized businesses. We will make these opportunities known to Indigenous communities in the program’s operating regions.

iv. Review criteria for government-offered business development programming to ensure it is inclusive and accessible to support the growth of Indigenous businesses. We will work with Indigenous business organizations to ensure they have a full understanding of the available programs. We will also review procurement policies to ensure opportunities are inclusive and accessible to Indigenous contractors.

v. Implement the 2019-20 elements of our 10-year, $550-million commitment to build 1,750 new units of social housing for Indigenous people. This investment will improve quality of life and opportunities for First Nations who have faced extraordinary housing challenges compared to other Canadians.
5. We will continue to develop the new fiscal relationship between the province and Indigenous communities, supporting First Nations to determine community priorities in which to invest:

i. In 2019-20, the province entered into a historic, 25-year, gaming revenue-sharing agreement with First Nations. This agreement will provide stable, long-term funding to support self-government and healthy communities by allowing First Nations to determine and invest in community priorities.

ii. We are committed to other revenue-sharing opportunities to ensure First Nations receive the benefits from new natural resource investments and development in their territories. Partnering with and including Indigenous communities in new industrial development will provide new revenues to support reconciliation, new business opportunities for Indigenous people, and benefits that will support both Indigenous and non-Indigenous people. Forecasts for 2019-20 include revenue sharing payments of up to $108 million.

6. We will work with Indigenous organizations to provide foundational access and support for Indigenous youth and citizens to realize positive outcomes from the new business partnerships and opportunities arising through reconciliation. In 2019-20 we will:

i. Continue to work with the First Nations Education Steering Committee to implement the commitments made in the BC Tripartite Education Agreement to recognize that First Nations people have the right to make educational decisions affecting their students, and to control their own education institutions, consistent with their unique needs, experiences, beliefs and values.

ii. Embed the First Peoples Principles of Learning into the new curriculum for all students. This includes extending Aboriginal perspectives into the entire learning journey, rather than into specific courses or grade levels, allowing students to experience Aboriginal perspectives and knowledge as part of what they are learning.

iii. Continue support for the Indigenous Youth Internship Program and Co-Op placements that help Indigenous youth build professional skills and networks and awaken their leadership potential. In 2019-20, a cohort of almost 30 participants will join 242 alumni who have completed the program between 2007 and 2018.

iv. Work with Indigenous communities to ensure Indigenous K-12 students can access specialized learning opportunities to help fill the high-paying technology and innovation jobs expected in the years ahead.

v. Provide a Premier’s Award for Excellence in Education for Indigenous education for educators who promote Indigenous languages, cultures and histories within their classrooms and communities.
While our lifestyle, clean air and healthy natural environment owe much to hydroelectricity, we should acknowledge the sacrifices made by those who live in the areas where generating capacity was developed.

The Williston Reservoir – a flooded, 1,800-square-kilometre area created by the 1968 completion of the W.A.C. Bennet Dam – permanently isolated the Tsey Keh Dene and Kwadacha First Nations. Nine people died while attempting to navigate the new reservoir in flat-bottomed boats intended for river travel. The flood waters also consumed paleontological and Indigenous history, wildlife habitat, livelihoods, farms and harvestable timber across an area 15 times the size of Vancouver.

Similarly, the Columbia River Treaty of the 1960s resulted in the in reservoirs of the Duncan, Keenleyside, Mica and Libby dams. Together with the non-treaty Revelstoke Dam, these facilities flooded approximately 598 square kilometres, displacing more than 2,300 people and permanently impacting Indigenous cultural sites, farms, forestry, recreation and tourism and species habitat.

/ POWERING OUR CLEANBC FUTURE

British Columbia has vast energy resources from oil and gas reserves, heritage hydroelectric facilities, biomass energy facilities and a range of intermittent renewable energy sources including solar and wind.

Clean, reliable, affordable hydroelectricity has been powering B.C.’s economic development for 115 years, since the Lake Buntzen #1 hydroelectric generating facility went into service in 1904. Between 1904 and 1968, generating capacity was built on Vancouver Island, on B.C.’s south coast, on the Columbia River in the Kootenays and on the Peace River in northeastern B.C. These heritage assets supply 90 per cent of today’s power needs, leave no waste, emit almost no greenhouse gasses and deliver energy to residential and industrial customers at some of the lowest rates in North America.

Our economy and lifestyle are based on reliable, clean and inexpensive energy being available as needed. In periods of extraordinary demand, energy systems must be able to deliver immediately. They must be able to sustain that level of delivery for extended periods. This is called “firm power” — the energy capacity that is guaranteed to be available at the period of highest demand.

Capacity matters. Capacity ensures our demand needs will be met during a -40C cold snap, a sustained summer heat wave or when other energy sources, such as intermittent generation, encounter disruptions.

Firm power is necessary to meet our household and industrial needs, keep our food refrigerated at safe temperatures, and maintain reliable supply for hospitals, financial institutions, emergency call centres, and more.
CLEANBC

In 2018, we introduced CleanBC, our path to reducing GHG emissions while growing our economy. We intend to drive innovation in clean growth technologies. We will use our competitive advantage of clean, affordable firm hydroelectricity to decarbonize our economy without sacrificing our standard of living.

Our CleanBC plan uses clean hydroelectric and other renewable energy sources to replace transportation fuels, support home heating and cooling, and power industrial processes. The plan delivers 75 percent (or 18.9 Mt) of our legislated GHG reduction targets of 25.4 Mt by 2030. The remaining 25 percent (or 6.5 Mt) will be identified through innovative technologies and additional reductions across additional sectors of our economy.

We have committed $902 million to fund CleanBC initiatives over the next three years to electrify our industrial and transportation sectors while making our buildings more efficient. By 2032, every new building constructed in B.C. will be “net-zero energy ready” and, by 2040, every new car sold in B.C. will be a zero-emission vehicle.

Our Innovative Clean Energy (ICE) Fund will provide $3.24 million in 2019-20 to support pre-commercial clean energy technology products.

Using revenues from B.C.’s carbon tax, in 2019-20 we established a CleanBC Program for Industry to support industrial operations in becoming the cleanest of their type in the world. As programming is finalized, eligible B.C. facilities will be able to apply for an industrial incentive of up to 100 percent of carbon tax paid beyond $30 per tonne, based on how their GHG intensity compares to a global benchmark. Eligible B.C. facilities will also be able to apply for incentives to transition to the cleanest technology in the world.

B.C. is developing and deploying leading edge technologies that enable the production and use of renewable fuels from waste materials. Combined with our innovative economy and a culture of reducing waste, B.C. has some of the world’s most progressive policy that incents and encourages the development of clean technologies.
CleanBC expands the Province's Renewable and Low Carbon Fuel Standard. Low carbon fuels are created by blending fuels from renewable sources such as vegetable oils, waste cooking oil, and forest and municipal organic waste. CleanBC elevated the requirement to a 20 percent reduction in the carbon intensity of motor fuels by 2030 and established a minimum requirement of 15 per cent renewable content in natural gas by 2030.

B.C.’s major exports have a significant GHG advantage over competing suppliers, and global demand for resources originating from B.C. is expected to grow. To achieve Paris targets, global consumers will need to get resources from jurisdictions that produce them sustainably. As B.C. produces natural resource products with a very low GHG footprint compared to the rest of the world, there is an environmental advantage for global markets to purchase from B.C ahead of other suppliers. Being the first-choice supplier of low-carbon products is a tremendous economic and environmental opportunity for B.C.

Squamish Based “Carbon Engineering” is commercializing “Direct Air Capture” technology that takes carbon dioxide from the atmosphere, which can then be converted into a carbon-neutral fuel using the company’s AIR to FUELS technology. Carbon Engineering has been converting CO2 into fuels since December 2017, and in part through support from the ICE Fund ($3.75 million), the technology has advanced to a point where initial synthetic fuel has been produced and validated. The company received a $90 million private equity investment earlier this year, which will allow them to significantly scale up employment at the Squamish pilot plant and prepare for commercial deployment of industrial carbon capture facilities with the capacity to remove up to one million tonnes of CO2 from the air each year.
We believe that CleanBC will be a catalyst for innovators with clean technology ideas to connect with industries that want to lower their emissions, create the capacity to expand their businesses within CleanBC targets and to offer low-carbon products to their customers. In addition to the start up ecosystem supports detailed on page 76 that help B.C. technology and innovation providers become established and grow their profile, our approach to technology clusters will facilitate connections between technology innovators and industries that are looking to lower their emissions.

## SITE C – SUPPORTING SUSTAINABLE ECONOMIC GROWTH WITHIN OUR CLEANBC PLAN

In December 2017, government decided to proceed with Site C, the third dam and hydroelectric generating station on the Peace River in Northeast B.C. Terminating the project would have left British Columbians with $4 billion in project debt, a cost that would have needed to be paid through higher B.C. Hydro rates or by displacement of other spending on public infrastructure. A decision to terminate the project would also have reduced B.C.’s unique capacity to use hydroelectricity as a path to powering economic growth while meeting our climate commitments.

We are committed to achieving our legislated GHG reduction targets while growing our economy. Proceeding with Site C was a difficult choice made after weighing local impacts, job impacts, debt impacts, and the role that large-scale electrification would play in accommodating industrial growth within the CleanBC framework. The government respects the divided public views on Site C and understands the significance of the contribution area residents are making to B.C.’s prosperity and clean growth future – today and into the future.

### Estimated GHG Advantage of British Columbia Products
(tonnes CO\textsubscript{2}e per year)

<table>
<thead>
<tr>
<th>Product</th>
<th>B.C. Emissions \textsuperscript{1}</th>
<th>Average of Competing Jurisdictions \textsuperscript{2}</th>
<th>Estimated B.C. GHG Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>3,300,000</td>
<td>6,600,000</td>
<td>3,300,000</td>
</tr>
<tr>
<td>Copper</td>
<td>476,000</td>
<td>614,000 to 1,156,000 \textsuperscript{3}</td>
<td>138,000 to 680,000</td>
</tr>
<tr>
<td>LNG</td>
<td>3,800,000</td>
<td>7,100,000</td>
<td>3,300,000</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>13,100,000</td>
<td>16,800,000</td>
<td>3,700,000 \textsuperscript{4}</td>
</tr>
<tr>
<td>Lumber</td>
<td>1,357,000</td>
<td>1,899,000</td>
<td>542,000</td>
</tr>
<tr>
<td>Pulp and Paper</td>
<td>TBC</td>
<td>TBC</td>
<td>TBC</td>
</tr>
<tr>
<td>Aluminum</td>
<td>990,000</td>
<td>4,800,000 to 5,600,000 \textsuperscript{5}</td>
<td>3,800,000 to 4,600,000</td>
</tr>
</tbody>
</table>

\textsuperscript{1} Lifecycle GHG emissions intensity of BC facilities multiplied by BC production volume.

\textsuperscript{2} Average lifecycle GHG intensity of key competing jurisdictions multiplied by BC production volume.

\textsuperscript{3} Based on average emissions data from ICMM study (Scope 1 and Scope 2 only)

\textsuperscript{4} Based on a scenario that includes growth in natural gas production and retirement of older facilities by 2022.

\textsuperscript{5} Range based on comparison with Russia and Middle East (key competing jurisdictions in U.S. market) versus China. (largest producer of aluminum)
When complete, the project will provide more than a century of firm, clean, affordable power to support clean industrial growth, while also ensuring affordable energy, our quality of life, and that the natural environment will be available for future generations.

Government is also undertaking a comprehensive review of BC Hydro which includes a detailed analysis of how our clean electricity can power our economy and reduce emissions in B.C. This includes exploring how B.C. electricity can replace fossil fuel energy in other jurisdictions, thus bringing additional revenue to the province and reducing global emissions.

**Pathway to Meeting Our Climate Goals**

**GHG Emission Reductions**
NATURAL GAS
Captured in shale rock formations, British Columbia’s Montney, Liard and Horn River basins of the Northeast could ultimately produce up to 532 trillion cubic feet of natural gas. B.C. produces 5.3 billion cubic feet of natural gas every day, generating $2.68 billion per year in export activity, including primary natural gas exports of $1.13 billion, value-added exports of $781 million, and $613 million in related transportation services.

While B.C.’s natural gas deposits require the “unconventional” extraction method of horizontal drilling and hydraulic fracturing, natural gas offers development potential for B.C. As the cleanest-burning hydrocarbon, natural gas produces 40 percent fewer GHG emissions than coal. The demand for natural gas in place of coal for electricity generation and industrial processes, particularly in Asia, is driven by this significantly lower emissions profile. Also, B.C.’s upstream production is managed in such a way that the lifecycle of emissions is lower than other sources of natural gas.

LIQUEFIED NATURAL GAS
B.C. is closer to Asian markets than other gas-producing regions. This gives us a geographic cost advantage in supplying growing energy demand in Japan, China, South Korea and other Asian nations. Natural gas from B.C. is a substitute for coal-fired power plants, reducing overall GHG emissions and creating a healthier environment, both locally and around the world. B.C.’s natural gas burns cleaner than gas from some other parts of the world. Being closer to market also limits the GHG impacts of transportation.

Transporting gas to global markets requires it first be reduced substantially in volume from a gaseous state to a liquid. Liquified natural gas (LNG) is produced in manufacturing facilities that cool natural gas to the point at which it becomes a liquid. As a liquid, the gas is pumped into carriers that maintain it in liquid form during transportation. On arrival at its market destination, the LNG is warmed before delivery to industrial, commercial and residential customers.

As Asian countries seek cleaner energy sources to support economic growth, B.C.’s natural gas can play a significant role in reducing global GHG emissions, while also improving the health and quality of life for millions of people. LNG offers opportunities beyond Asia as well, including the means to significantly reduce GHG emissions in marine and other transportation.
LNG CANADA

On October 1, 2018, joint venture partners Shell, PETRONAS, PetroChina, Mitsubishi Corporation and KOGAS made a final investment decision to proceed with the $40 billion LNG Canada’s Kitimat LNG project – the first project of its kind in Canada and the largest such investment in Canadian history. LNG Canada establishes a new export industry in partnership with Indigenous communities and will create a legacy of skills and economic benefits reaching from the gas fields of the northeast to the LNG facility in Kitimat.

Based on revenue projections estimated at $23 billion with significant benefits for Northern and Indigenous communities and under clear terms of needing to fit within the CleanBC climate plan, the B.C. government adopted a competitiveness framework for LNG projects.

Construction is currently underway on the estimated $6.2 billion Coastal GasLink pipeline, part of the first phase of the project. Construction activities at the LNG Canada facility site are also underway, with the facility estimated to be in-service by 2025.
GLOBAL GHG CONTEXT

Our CleanBC plan and the changes it brings about at the government, business and individual level will drive important changes in fossil fuel use.

Climate change is a global problem requiring a global solution. GHG emissions don’t stay in the jurisdiction that produces them. While B.C.’s steps to address climate change are important, our environment will continue to be impacted by decisions in other parts of the world. Global GHG emissions are continuing to rise at a rate many times higher than British Columbia’s entire annual output. On a global basis, total GHG emissions rose by 565 Mt in 2018, on top of growth of 527 Mt in 2017. In just two years, the world has increased GHG emissions at a rate 18 times B.C.’s entire annual output. This year, the global increase in GHGs is forecast to be 10 times B.C.’s annual output. Significant and sustained global interventions will be needed to change this trend.

The developing world’s need for energy, much of it from coal-fired power generation, is outstripping the GHG reduction potential of developed jurisdictions. Increased coal use is responsible for approximately one-third of the predicted growth in global GHG emissions in 2019. To address the impacts global emissions have on B.C.’s environment, we need to consider how our capacity, innovation and resources can help address GHG impacts that come from growing energy use in other parts of the world.

Genuine efforts are being made in Asia to switch from coal to natural gas for electricity production. China’s “Three Year Action Plan for Winning the Blue-Sky War” has resulted in coal-to-gas switching that so far has delivered an annual reduction of 176 million tonnes of CO2. Coal continues to represent 53 per cent of China’s energy supply, and there are significant opportunities for natural gas to displace coal-fired electricity, reduce GHG and particulate emissions, and reduce premature deaths from air pollution.

We are working to make our natural gas sector the world’s cleanest in terms of GHG emissions intensity. Our CleanBC plan estimates that emissions from natural gas, including LNG Canada and pipelines, will be 11.1 Mt in 2030. This number will be adjusted as the CleanBC model is updated. Increasing our production, or establishing further LNG facilities, would need to take place within the sector’s net GHG emissions limit. Creating the space for growth will come through gasfield electrification, fugitive emissions reduction measures, increasing the percentage of renewable natural gas used domestically, electricity-powered LNG facilities, new technology and innovation and other initiatives. We will continue to engage with the industry on this and other opportunities in the coming years. The Ministry of Environment and Climate Change Strategy will be initiating a study during 2019-20 to independently verify the contribution that B.C. industries could make to global GHG reductions.
/ INVESTMENTS IN TRANSPORTATION AND INFRASTRUCTURE

For our economy to keep pace with projected population and trade growth, British Columbia needs an integrated transportation strategy that will be aligned across regions, able to address congestion on our trade corridors, enable the seamless movement of people and goods and encourage development of diverse, affordable, connected communities.

Today, 2.9 million people – more than 60 percent of British Columbia’s total population – are concentrated in Metro Vancouver and the Fraser Valley; an area that represents 2 percent of our total land base.

Since 2001, Metro Vancouver’s population has grown by 27 percent, and the population of the Fraser Valley has grown by 28 percent. This has led to increasing congestion costs on our transportation corridors, creating a constraint on business competitiveness. Vancouver had the 36th highest congestion out of 403 global cities in 2018, costing our economy an estimated $1.5 billion per year. With congestion forecast to increase by 40 percent by 2030 and our population expected to grow by another million people by 2050, comprehensive integrated transportation and development planning will be necessary to accommodate growth, optimize business competitiveness, further enable trade, limit GHG emissions and provide for the livability of our communities – today and into the future.

British Columbia’s export goods - ranging from lumber and pulp products, minerals, machinery and equipment, medical technology, wine, agrifoods and a wide array of other goods - have to move through a complex, multi-modal transportation system to reach our network of sea ports, border crossings, rail hubs and commercial air carriers.
Vancouver had the 36th highest congestion of 403 global cities in 2018, costing our economy an estimated $1.5 billion.

The competitiveness of our business community and our standard of living rely on trade corridors that can efficiently transport goods to international customers.

More than 85 percent of our $46.508 billion (2018) in international goods exports are manufactured outside Metro Vancouver, while much of our exporting infrastructure sits at the centre of the most populated region of our province.

To welcome another million people by 2050, B.C. will need a bold new approach to plan for and invest in the transportation systems and community infrastructure of the future. This will include planning across regional boundaries and making deliberate decisions about how and where B.C. can grow without increasing congestion on our trade corridors, impacting affordability or creating additional GHG emissions through longer commutes.

Indexed Growth: 2016-2045
Base year = 2016

Chart Source: Metro Vancouver growth.
Source: Mobility Pricing Independent Commission, “Phase 1 Project Update Full Report,” January 2018
During 2019-20, we will introduce a broad-scope integrated transportation and development planning process, engaging municipal governments, Indigenous leaders, the business community, transportation providers and others to build a 30-year strategy for growth and to plan for the transportation systems and community infrastructure that our province will need for the future.

This will include:

**Building on Existing Plans, But Expanding Their Geographic Scope and Time Horizon**

Building from the knowledge and expertise behind plans such as Metro Vancouver 2030 and TransLink 2040, we will expand integrated transportation and development planning to a wider area including the Fraser Valley and Sea-to-Sky corridors, as well as integrating the movement of goods and people with Vancouver Island and the Interior. Working across regional planning boundaries will support efficient transportation linkages, make life more affordable for people and support continued progress on our CleanBC targets.
Distributed Growth

While effective urban density initiatives will continue to enhance livability of the urban core, population and trade growth will mean that we need to make decisions about where B.C. can accommodate significant population, trade and business growth without compromising affordability or further congesting our trade corridors. A key deliverable of integrated transportation and development planning will be the ability to support decisions on where to build for future growth, while recognizing that people will continue to make individual choices based on their lifestyle goals and preferences. By bringing land use, transportation and regional growth planning together, we will be able to focus government policy and coordinate economic development initiatives around distributing some of the anticipated growth of future decades, building affordable, livable communities and supplying convenient, efficient and comfortable transportation systems as a realistic alternative to driving.

Affordable Livable Communities

In 2050 – much like today – people will need to be able to access rental or market housing within their means, be able to live reasonably close to their work and to have a full range of public services and cultural amenities available near to home. Planning and building for future growth will involve further urban density initiatives as well as growth in affordable, livable communities in Surrey and the Fraser Valley, the Sea to Sky Corridor and across other regions of B.C.

By integrating regional planning processes, we will be able to support effective transportation planning, encourage housing affordability along transit routes and shape economic development planning to provide good jobs within an estimated 20-minute commute from people’s homes, including through a range of comfortable, convenient low-carbon transportation options – ranging from transit, biking and walking trails and efficient road access for those that need to drive.

Developers will continue to be an important part of building the communities and housing options we need for the future. As the strategy work proceeds, we would work with developers to support them in aligning their planning processes and future building projects with the communities and housing types that B.C. families will grow into in the years ahead.
Efficient Transportation Networks

Integrated Transportation and Development Planning will support efficient trade corridors and transportation networks capable of reducing current congestion while being scalable to the trade and population growth of the future. B.C.’s current and planned transportation investments are the foundation for our future, but there will be a range of additional investments needed as part of a comprehensive 30-year growth strategy.

The future will involve expanded trade through the Port of Prince Rupert, as well as growing trade volumes in the Lower Mainland. We will need additional rail capacity to move people and goods, designated commercial corridors and expanded transit systems. As technology continues to shape our future, our transportation networks will also need to incorporate digitally enabled infrastructure such as goods pre-clearance for U.S.-destined exports, digital traffic and transit volume monitoring and efficient digital linkages for multimodal carriers.

Meeting GHG Targets and Aligning with CleanBC

Our planning approaches must be aligned with meeting our CleanBC commitments, reducing our GHG emissions and supporting B.C.’s future environmental wellbeing while addressing the pressures of population and trade growth. Transportation systems and the built environment are significant contributors to GHG emissions. As we prepare to house and move a growing population over the next 30 years, our transportation systems must incorporate zero emission vehicles, provide electric vehicle charging stations, and provide convenient, efficient transit options that service the destinations people need to get to.
Incorporating Innovation Suited to B.C. Conditions

Our planning process must incorporate current and future innovation that will apply across all regions of B.C. The variable weather, road and connectivity conditions of B.C.’s regions will require careful adoption of technology that is developed for safe use in all parts of our province. Technologies suited to immediate application include innovations in low carbon fuels and zero-emissions vehicle technology, expanded high-speed internet and cellular connectivity across B.C. to connect people and goods, building codes that accommodate low-carbon building materials such as Mass Timber and the use of intelligent transportation systems ranging from dynamic traffic light integration, digital traffic enforcement, traffic detecting navigation systems, goods pre-clearance and more.

We believe that an integrated strategy must include a proactive approach to developing the roads, bridges, tunnels, railways, sea ports, airports, transit facilities and other systems to move goods and people. It must be linked to a robust policy and planning framework to develop affordable, livable communities including important public amenities such as housing, schools, child care, elder care, universities, libraries, hospitals, recreation facilities and other amenities to serve a growing population. All of this must be developed through an inclusive all-of-B.C. approach to planning effectively across jurisdictional boundaries, and that recognizes the important contributions that all regions of our province make to our export-reliant economy.
INVESTMENTS IN TECHNOLOGY AND INNOVATION

Around the world, innovation continues to unlock new opportunity, increase productivity and drive competition at an ever-increasing pace. Technology enables progress cutting across economic sectors, making manufacturing processes, supply logistics, marketing, international shipping and communication more efficient.

Technology and innovation include a suite of vastly different enterprises that provide computer-enabled products or services ranging from entertainment and digital production, augmented and virtual reality, life sciences, quantum computing, and sector-specific technology development such as clean-tech, agri-tech, and technologies focused on natural resource operations such as mining, energy and forestry. While some technology enterprises are truly new, the telecommunications industry is a modern version of one of Canada’s foundation sectors.

The government’s support for the technology sector is structured to work across these many segments, supporting B.C. business in becoming established, in scaling-up and succeeding.

GOVERNMENT’S INNOVATION STRUCTURE

- **B.C. TRADE AND INVESTMENT OFFICES**: Promote B.C. products and investment in B.C. industries through a network of international trade offices in Asia, Europe and the United States.

- **MINISTRY OF JOBS, TRADE AND TECHNOLOGY**: Coordinates government’s innovation presence and interfaces with the sector.

- **INNOVATION COMMISSIONER**: The Innovation Commissioner champions innovation uptake across B.C.’s economy, advocates for B.C.’s share of federal innovation funding and connects B.C. companies with partners to expand market opportunities.

- **EMERGING ECONOMY TASK FORCE (EETF)**: An external advisory panel charged with examining emerging trends that may impact business and society in the years ahead, the EETF will propose options to ensure that B.C. stays at the forefront of emerging economic developments.

- **B.C. IMMIGRANT INVESTMENT FUND / BC RENAISSANCE CAPITAL FUND**: A Crown Corporation that makes venture capital investments in the technology sector through the $100 million BC Tech Fund, helping companies access the capital they need to grow.

- **INNOVATE BC**: A Crown Corporation that provides tools, resources and expert guidance to technology start-ups from across B.C. to help them establish, grow and become successful.

Our proximity to the technology hubs of Washington, Oregon and California provides a considerable business opportunity. While scaling our ambitions to the capacity of our smaller population, we want B.C. innovators to be able to develop their ideas, contribute to the competitiveness and clean credentials of other sectors of our economy, and to develop technology solutions to be marketed in B.C. and around the globe.
THE EMERGING ECONOMY

- Printing press: 1439
- Textile revolution: 1733
- Vaccines: 1798
- Internal combustion engine: 1807
- Charles Babbage’s computer: 1822
- Telegraph: 1830-40 (the first “internet”)
- First oil well: 1859
- Electric light bulb: 1880
- Aluminum: 1886
- Wind turbine: 1887
- Airplane: 1903
- Television: 1928
- Jet engine: 1928
- Transistor: 1947
- Satellites: 1957
- Integrated circuits: 1958
- Cell phone: 1984
- 1997 First quantum computer built
- 2014 Neural network face recognition

- Agriculture revolution: 1700s
- Steam engine: 1712-1765
- Electric battery: 1800
- Steam powered trains: 1814
- Refrigeration: 1839
- Steel: 1850s
- Telephone: 1876
- Steam turbine: 1884
- Automobiles: 1886
- Radio: 1895
- Gas turbine: 1903
- Penicillin: 1928
- Television: 1928
- Shipping containers: 1955
- Microprocessors: 1971
- Lasers: 1960
- Internet: 1990
- 1999 - Internet of things
Government invests more than $700 million per year in technology and innovation programming and is focused on ensuring this significant investment provides a positive return for British Columbians through concentrating our innovation capacity on solving B.C. problems that may have global applications, encouraging collaboration between technology providers and B.C.’s major industrial customers, and taking steps to anchor B.C.-created “intangible assets” (such as intellectual property) here for the long term benefit of our province and our economy.

Government is also committed to ensuring the benefits of our growing technology economy are felt in all regions of the province. Much of B.C.’s technology sector is currently concentrated in downtown Vancouver. This constrains growth, as technology investments in B.C. often require significant immigration or temporary foreign workers, which adds to pressures on the availability and cost of housing in Vancouver. Much as Redmond serves as the technology suburb of Seattle and Silicon Valley houses San Francisco’s technology enterprise, B.C. will be engaging with the industry in the implementation of new policy approaches to encourage distributed technology sector investment in Surrey and the Fraser Valley.

We are also focusing on developing made-in-B.C. technology solutions, including through technology clusters. During 2019-20, we will be developing our capacity to anchor B.C.-grown companies and exploring new ways to retain B.C. intellectual property by supporting the scale-up of companies that contribute the most to our economy.

To provide the workforce for future growth of the technology sector, we are also focusing on embedding technology in our educational system from early learning, through the K-12 years and into post-secondary programming. Whether B.C. students go on to work directly in technology companies or in technology-enabled parts of our economy, their future will require the creativity and information technology skills to conceive of and develop new applications, the business acumen to scale B.C. technology companies from start-ups into profitable corporations, or the digital literacy to deploy and operate new technologies throughout our economy.
Specifically, in 2019-20 we:

1. Will contribute more than $700 million to technology programming, including in technology-focused educational programs, tax credit programming for technology companies, incubator and accelerator programs delivered by the Innovate B.C. Crown corporation, technology-focused procurement opportunities and the development of innovation clusters.

2. Introduced British Columbia’s Innovation Framework – an evergreen approach that will be reviewed annually to shape government’s technology programming with a view to driving prosperity and job creation throughout B.C. and optimizing the use of technology and innovation to increase competitiveness across industries. The framework included four priorities:
   • Increasing diversity, by encouraging suburban and regional participation in the technology sector and supporting a diverse and inclusive workforce;
   • Developing the talent needed for B.C. technology companies to grow and prosper;
   • Growing globally-competitive technology clusters to support government priorities; and,
   • Helping B.C. technology companies scale up and create good jobs.

3. Introduced our Surrey as a Second Downtown initiative, which will encourage distributed technology sector growth and new international entrants to B.C. to locate in Surrey, the Fraser Valley or other suburban locations. Our Surrey programming is also closely aligned with the Cascadia Innovation Corridor partnership, which involves government and industry representatives from B.C., Washington and Oregon in developing a collaborative approach to emerging technologies and innovation across the region. Surrey would also be the Canadian terminus station of the proposed Cascadia high-speed rail initiative.
4. Will continue to invest in education, ensuring British Columbians have the right training and education to fill high-paying technology jobs.

i. We introduced $19 million over 5 years for the establishment of a Quantum Algorithms Institute, based at the Simon Fraser University Campus in Surrey. The institute will create post-graduate studies in advanced computing technologies, provide all B.C.-based post-secondary institutions with access to cloud-based quantum computing platforms, advance commercialization efforts, and train our B.C.-based talent pool.

ii. In Budget 2019, we announced an additional $5M to support technology programming in post-secondary institutions, bringing the total annual funding commitment to $41M in 2021-22 to support 2,900 new post-secondary seats that include:

- 440 spaces in undergraduate and graduate-level sustainable-energy engineering degrees at SFU Surrey;
- 624 spaces in computer science, biomedical and manufacturing engineering degrees at the Vancouver campus of the University of British Columbia;
- 300 spaces in information-technology diplomas in cyber security, tech arts and new media at the British Columbia Institute of Technology;
- 40 spaces in a mechatronics and advanced manufacturing-technology diploma at Kwantlen Polytechnic University;
- 280 spaces at the University of Northern British Columbia for new civil and environmental engineering degree programs;
- 50 spaces at the College of New Caledonia for a new civil-engineering technologist program;
- 140 spaces at Thompson Rivers University for software engineering;
- 30 spaces at Okanagan College for animation;
- 96 spaces at UBC Okanagan for new manufacturing-engineering and computer-science programs;
- 500 spaces at the University of Victoria in undergraduate computer science and engineering, including electrical, computer, software, civil, mechanical and biomedical; and,
- A variety of new spaces in programs North Island College, Vancouver Island University, the University of the Fraser Valley, Selkirk College, Capilano University, Douglas College, Langara College, the Emily Carr University of Art and Design, Vancouver Community College, and Camosun College.

iii. We provide a range of other investments in technology-related education, including:

- $10 million over two years in Mitacs Internships
- $500,000 for Women in Technology Scholarships
- $1.5 million over two years in the Workforce Partnerships Project
- $10.5 million in Tech Co-op Grants and Innovative Skills Initiative
- $83.6 million in the BC Knowledge Development Fund
5. Will conduct an evaluation of our technology investments and tax credit programs, with the objective of focusing government spending on developing intangible assets anchored here, helping B.C. industries be more productive and more profitable, or solving provincial and global problems while producing innovations saleable to other parts of the world.

6. Will host an anchoring forum, inviting experts, the technology sector, academia, Innovate B.C. and government ministries to discuss approaches to keeping made-in-B.C. intellectual property here, rather than starting it here and then seeing it migrate to other jurisdictions.

7. Are enabling the development of innovation clusters that will provide the structure for technology companies, academics, government and industrial sectors to work synergistically to develop, test and implement technology solutions to address local scale opportunities, while providing global-scale sales potential. During 2019-20, we are focusing on early priorities that include emergency management, agri-tech, clean-tech, health sciences and natural resource innovation.

   i. Our Emergency Management Cluster is working to develop technologies to better predict the starting point of wildfires, which will allow us to fight fires more quickly, reducing risk to responders and citizens. The group is establishing a paperless system to expedite access to services when evacuations are necessary. While having immediate value at home, much of the world deals with wildfires, so technologies developed in B.C. might have application on a global basis.
ii. We are developing an Agritech Cluster to promote new opportunities for agritech to thrive as a key driver for economic development and food security, while meeting our obligations under CleanBC. Initiatives such as the Canadian Agricultural Partnership (CAP) will provide approximately $3.7M per year for innovation in agriculture between 2018-19 and 2022-23, including a $150,000 innovation challenge that was announced as part of the province's role in #BCTECH summit.

B.C.'s diverse bio-geoclimatic zones create a perfect living lab environment for the development, trial and refinement of technologies that can be tested in a range of climates and terrains. This creates a competitive advantage for those technologies developed here, and is another competitive advantage that B.C. has in attracting and fostering solutions-based technology advancement in agritech, as well as in technologies focused on B.C.'s natural resource industries.

iii. Our Clean Tech Cluster is building on our leadership in Clean Tech and will pursue new clean technologies that can help to achieve GHG reductions at home and around the world.

B.C. companies are a recognized force in Clean Tech. Six B.C. companies were included in the 2019 Global Clean Tech 100 listing. We salute Axine Water Technologies, CoolEdge Lighting, Inventys, Minesense Technologies, Semios and Terramera for being selected from among thousands of global companies.

iv. As members of Canada's Digital Supercluster, B.C. contributes $1.5 million per year over the anticipated five-year term of federal funding for the supercluster initiative. As the Digital Supercluster gets established and gains momentum, B.C. will assess project funding contributions on a case-by-case basis, depending on available resources and how the project aligns with provincial priorities.

8. As mentioned earlier, during 2019-20 we are working to bring high-speed internet access to 200 additional Indigenous and rural communities. In partnership with the Government of Canada, our connectivity strategy is creating economic development opportunities and providing access to e-services – unlocking the skills and talents of a previously-untapped workforce and supporting technology and technology-enabled businesses to establish and grow where lifestyle and the cost of living are a competitive advantage.

9. We are extending the momentum from our renowned start-up ecosystem to focus on scaling up B.C. companies with significant growth potential.

i. Innovate B.C. will provide $2.7 million during 2019-20 for a venture acceleration program to be delivered through the B.C. Acceleration Network. This program helps early-stage tech entrepreneurs from communities across B.C. commercialize their technology by using the venture growth model and providing 1-on-1 coaching from Executives-in-Residence, as well as access to their networks.

ii. Our B.C. Procurement Strategy is making it easier for technology companies of all sizes to access government procurement opportunities. For some B.C. start-up companies, this provides the experience and revenue stream of selling to their first major customer. For example:

- Sprint with Us allows government to procure technology services for contracts up to two years, or $2 million, in as little as 16 days.
- Code with Us allows government to acquire code enhancements to digital services with a cost of up to $70,000 within days.
iii. In 2019-20, we will be accepting a new cohort of tech companies as part of the Startup in Residence which combines the ideas and expertise of start-up tech companies with public servants to tackle challenges faced by government. Successful companies are given a 16-week residency in government to develop and test a solution that produces real benefits for the people of B.C.

iv. In 2019-20 we doubled the amount individuals can claim and that businesses can raise through the Small Business Venture Tax Credit, helping small businesses to grow while encouraging investors to make equity capital investments in business start-up and commercialization efforts.

10. We are maintaining rigorous privacy protections for citizen data held by the government, modernizing our secure use of government-held data to inform the development of better government programs and services and providing “open” data (such as natural resource information) to entities outside government to support the growth of data-driven analysis.
BENEFITING BRITISH COLUMBIANS
We are addressing barriers to workforce participation, which increases the labour force, raises family income and supports quality economic growth.

**CHILD CARE:**
Investments in affordable, accessible, quality childcare allow parents of young children to continue their careers.

**HOUSING:**
Housing affordability measures, support for rent banks and investments in affordable and supportive housing provide a secure home for more British Columbians.

**SKILLS TRAINING:**
Free adult basic education, free English training, early childhood education, new post-secondary programming, new schools and expanded apprenticeship programs are all part of building the workforce of tomorrow.

**TRANSPORTATION:**
Investments in efficient, affordable transit and transportation systems allow more people to participate in the economy, without the time and GHG costs of lengthy commutes.

**GBA+:**
The Gender Based Analysis + program removes gender, race and ability-based barriers to employment and supports inclusive workplaces that welcome and can retain diverse candidates.

**CONNECTIVITY:**
Investments in high-speed internet connections in rural and remote communities are unlocking new digital employment opportunities for area residents.

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Quality economic growth is intended to benefit people, and to create the capacity to continue to develop the entrepreneurs and employees that fuel our economy. Investments in people – through child care, health care, lifelong learning and skills development, personal resilience, diversity and inclusion programming, supports for newcomers to B.C. and much more – are also investments in the future of our economy, and in our ability to consistently grow our standard of living.

This section of our framework speaks to the economic dimensions of “social programs” and to the essential relationship of building a good society as the foundation of building a healthy economy.

1. Investing in People
2. Supplying the Workforce of Tomorrow
3. Maintaining Affordable, Livable Communities
4. A Higher Standard of Living for British Columbians
INVESTING IN PEOPLE

Quality economic growth and a high standard of living rely on the contribution of people. Investments in the programs and services that enhance the skills and resilience of British Columbians, enable higher rates of workforce participation, improve our productivity and provide all parts of our society with the opportunity to contribute are also investments in our economy. We will ensure that quality economic growth translates into continuing investments in British Columbians, continuing the “virtuous circle” that benefits our society and benefits our economy. *This section is meant to provide an overview – rather than a comprehensive listing – of related initiatives.*

In 2019-20 we will:

1. Continue to implement our historic investments in ChildCareBC, providing targeted programs that reduce the cost of childcare, create new childcare spaces across the province and help parents find licensed childcare providers near them. Providing the opportunity for parents with young children to contribute to the economy is good for families, but also benefits employers.

2. Introduce ongoing improvements to B.C.’s health care system, address waiting lists, provide better, faster access to physicians and other medical professionals and increase our ability to provide for the physical and mental health needs of our growing population. Our health care system will advance preventative care, promote lifelong physical and mental wellbeing, support British Columbians to live well and age well, and provide comprehensive care for seniors.
3. Continue to implement our Poverty Reduction Strategy, supporting the complex, inter-agency needs of B.C.’s vulnerable citizens. In addition to providing income assistance and disability assistance for British Colombians that need it, our programs also provide pathways for those outside the economic mainstream to find opportunities for meaningful employment. Some elements of our poverty reduction programming include:

i. Expanding the number of WorkBC locations to 102, up from 84.

ii. Implementing the Single Parent Employment Initiative that provides up to 12 months of funded training or paid work experience, child care coverage, transit costs, supplementary health care and other supports to help single parents on either income or disability assistance secure a long-term job.

iii. Increasing the monthly earning exemption for citizens receiving income or disability assistance, providing an opportunity for those who are unable to work full time to pursue meaningful part-time or short-term employment opportunities. The monthly earning exemption allows people to gain meaningful job skills and experience, acknowledges their individual circumstances and provides uninterrupted access to the level of assistance they require.

4. Address barriers to workforce participation and barriers to employment, leading to a fairer and more inclusive society while growing labour availability for B.C. businesses. This commitment includes:

i. Implementing the Gender Based Analysis + program across government and government-funded projects and using the success of this program to demonstrate how other employers can use the framework to remove gender, race or ability-based barriers to employment.

ii. Supporting employers to implement modern standards of gender and cultural inclusiveness across all work environments, providing the opportunity for employers to attract, support and retain diverse candidates and opportunities for British Colombians to find secure employment opportunities.

iii. Developing comprehensive accessibility legislation. Government is committed to developing new laws, standards, and policies to better support people with disabilities to live with dignity and to meaningfully participate in their communities. B.C.’s accessibility legislation will complement federal efforts to promote inclusion and accessibility.
5. Continue to implement the graduated minimum wage increases recommended by the Fair Wages Commission, so that all hourly wage employees in B.C. will earn at least $15 per hour by 2021. The Fair Wages Commission is continuing its work to assess a living wage for British Columbians, recognizing that a living wage may be different based on the cost of living in different areas of B.C.

6. Place top priority on worker protection, safety and fairness, ensuring that people are recognized as a valued part of growing our economy. In 2019-20 this includes:

   i. Undertaking reviews of the Employment Standards Act, B.C. Labour Code and the Workers’ Compensation Act, based on the premise that these important statutes should provide a fair and balanced labour system, provide worker-centric programs and allow workers and employers to succeed together as part of growing our standard of living.

   ii. Eliminating the requirement to complete the Self-Help Kit before a worker can launch a complaint to the Employment Standards Office, making it possible to address infractions before they have detrimental worker impacts.

7. Carrying out a review to ensure that all possible lessons were learned and applied to contribute to safer workplaces following the tragic 2012 explosions at Babine Forest Products in Burns Lake and Lakeland Mills in Prince George. The recommendations of independent reviewer Lisa J. Helps will be released this fall, and government will proceed to consult on and implement them as appropriate.
Quality economic growth depends on a diversely skilled and productive workforce with the capacity for lifelong learning; a workforce that is flexible, innovative, and able to thrive in an environment of technological change, and one that adapts to the evolving needs of global trade, climate change and population growth.

This document is not intended to duplicate other plans and strategies addressing workforce development, but to highlight some of the important work being done to shape education and training programs, incorporate innovation and provide success pathways for new British Columbians. Government is training British Columbians for the high-demand trades, technology, professional and service occupations of the future, ensuring that our immigration programs are focused on recruiting newcomers to fill identified needs in our labour force, and focusing innovation capacity on helping businesses to address hard-to-fill labour categories.

In addition to workforce development initiatives mentioned elsewhere in this framework, in 2019-20 we will:

1. Work across B.C.’s K-12 system, post-secondary institutions and private training providers to tailor programming to graduate work-ready British Columbians with the skills needed in our high-demand occupations, as identified in the 2019 Labour Market Outlook.

2. Fully implement the new K-12 graduation program for secondary school students. This includes an expansion of course offerings that prepare students with problem-solving competencies needed in a 21st-century work environment, and two new additional career-development courses that feature hands-on, real-world learning.

3. Build on the success of the May 2019 Careers Summit by continuing to collaborate with business and post-secondary leaders on the launch of a careers strategy that will help ease students’ transition from high school.

4. Improve and expand dual credit programs for secondary school students to gain post-secondary, apprenticeship or training credits and credentials while they’re still in secondary school.

5. Develop and offer skills upgrading opportunities to help British Columbians succeed in an environment of rapid technological change.

6. Continue to implement our new apprenticeship-to-journeyperson ratio for major public infrastructure projects, requiring that 25 per cent of all hours be Red Seal apprenticeable. This establishes a legacy of trades skills and experience from public infrastructure development, ensuring that B.C. has the skills needed for the future.
Everyone has an important role to play in growing B.C.’s economy and increasing prosperity. The Labour Market Outlook is one tool that provides British Columbians with the knowledge required to make informed decisions on careers, hiring, training and education. Over the next ten years, over 900,000 job openings will be available throughout B.C. in occupations such as:

- Health care and social assistance
- Professional, scientific and technical services
- Retail trade
- Accommodation and food services
- Finance, insurance and real estate
- Technology
- Trades, including automotive service technicians, cooks and millwrights
7. Continue to enhance B.C.’s foundation training intake capacity for trades categories that are in highest demand, and promote trades as occupations that provide good-paying, durable and rewarding careers and the opportunity to live, work and build a comfortable life in locations across B.C.

8. Review the trades occupations that might benefit from mandatory certification – in cooperation with the Industry Training Authority and stakeholders – with the objective of improving long-term economic outcomes for apprentices and tradespeople and increasing the recognition of trades as highly-skilled occupations that are essential to continued growth for many of B.C.’s economic sectors.

9. Address labour shortages in a range of priority occupations, including establishing 513 new training spaces for health care occupations. This includes nurse practitioners (70 spaces), sonographers (32 spaces), health care assistants (100 spaces) and specialty nurses (311 spaces) at post-secondary institutions across the province. Focused efforts to address labour shortages, particularly in rural and remote areas, will support local economies by providing opportunities for people to live, learn and work in their home communities.

10. Ensure that British Columbians are first in line to benefit from the training, apprenticeship, employment and procurement opportunities associated with major project investments, including through the Community Benefits Agreement framework to provide a skills legacy from government infrastructure spending.
11. Develop thoughtful provincial immigration policies and advance British Columbia’s interests in the design of federal immigration programs, emphasizing our ability to meet the skilled workforce needs of quality economic growth and provide pathways to support the success of new British Columbians.

This includes:

i. Evaluating provincially-controlled or provincially-influenced immigration programs and policies with a view to providing a skilled workforce to support quality economic growth and meet labour needs beyond the capacity of B.C.’s domestic supply.

ii. Preparing for the renewal of Federal – Provincial immigration agreements, including a greater emphasis on creating success pathways for new entrants, and ensuring appropriate federal support for settlement services.

iii. Increasing the regional focus of our Immigrant Entrepreneur program.

iv. Enhancing our support services for new entrants, including providing information on the job opportunities, housing prices and community amenities for a range of British Columbia communities.

v. Supporting skilled immigrants to receive recognition for foreign credentials so they can work in provincially-regulated industries. By helping individuals navigate the credential recognition process we can support economic growth, bridge the gap in our domestic labour force and match skilled people with employment opportunities.

12. Evaluate opportunities for technology to address harder-to-fill roles, such as increased automation in seasonal crop harvesting work.
MAINTAINING AFFORDABLE, LIVABLE COMMUNITIES

Affordable, livable communities are a necessary part of quality economic growth. Growing our economy and increasing our standard of living will require that communities across B.C. are able to provide a high quality of life – including housing, public services, community amenities and the mix of retail, recreational and cultural offerings that make a place “home.” Achieving this will be the result of a thoughtful, collaborative process that anticipates how and where our province can accommodate the population, trade and business growth anticipated in the years ahead and that prepares for this growth in ways that will benefit current and future British Columbians.

The last twenty years provide important context in how we plan and build to for growth.

Over the 2001 - 2018 period, British Columbia’s population grew by close to a million people, with much of the population increase concentrated in the lower mainland.

British Columbia’s Population by Region
2001 - 2018

- **Lower Mainland**: 2001 - 2,342,327, 2018 - 4,991,687, +2,649,360
- **Southeast Vancouver Island**: 2001 - 154,473, 2018 - 208,952, +54,479
- **Central Okanagan**: 2001 - 599,981, 2018 - 742,731, +142,750
- **Rest of B.C.**: 2001 - 980,100, 2018 - 1,067,012, +86,912

/MAINTAINING AFFORDABLE, LIVABLE COMMUNITIES/
The region was unprepared for growth of this scale. Demand for housing, public services and infrastructure exceeded supply, with particularly acute impacts for housing affordability. Higher demand led to sharp increases in the cost of rental and market housing, and those with lower incomes were squeezed out – or sometimes forced out through “renoviction” – of housing they could no longer afford. Families moved farther away from their work in order to find housing within their means, resulting in longer commute times and growing congestion problems. Strained child care capacity made it more difficult and more expensive to find space, and accessing medical care became increasingly challenging.

“Given the steadily increasing population coupled with a constrained and limited land supply. . .the price of land in the Lower Mainland will continue to rise at a pace well ahead of inflation. Over the medium and longer term, land prices are going only one way: higher.”
Jock Finlayson, Business Council of B.C.

Between 2006 and 2016, B.C.’s real estate and development sector grew from 18 percent to 22 percent of GDP – a larger percentage than the oil and gas sector in Alberta. We estimate that offshore investment in B.C. residential real estate was approximately $16 billion (or 6 percent of GDP in 2016. On the fixed land base of the lower mainland and with limited time to “catch up” through urban densification planning, speculation in real estate became a key feature in driving housing prices out of the reach of typical British Columbians, undermining affordability and making it increasingly difficult for employers to attract and retain talent.
Growth of Incomes & House Prices  
Vancouver, 2004-2016 (index 2004 = 100)

The figure above illustrates how far the cost of housing in Vancouver became disconnected from the incomes of typical families. In 2004, the median cost of a house in Vancouver was 5.3 times median family income. In 2017, the median cost of that house had risen to 12.6 times median family income - a level out of the reach of all but extremely wealthy members of our society.

Looking forward, British Columbia will need a thoughtful, deliberate strategy to plan for business and population growth, and to guide investment, infrastructure, housing development and good jobs into affordable, livable communities – both urban and rural.

This framework speaks to a coordinated approach that will support quality economic growth and ensure a high quality of life for current and future British Columbians, in communities where they can live relatively near to their work, access high-quality, comfortable and affordable family homes, have necessary public services and amenities available to them – from child care to schools, medical facilities, elder care and more – and be able to choose from a range of low-carbon transportation options including efficient, convenient and comfortable transit, walking, biking and efficient road access for those that need to drive.

While this framework has not focused in detail on the development industry, it is important to note that developers will be an important part of building the communities and market, rental, student and seniors housing options we need for the future. We will engage with developers as the strategy work proceeds, ensuring that they are able to align their planning processes and future building projects with the housing that B.C. families will need in the years ahead.
A HIGHER STANDARD OF LIVING FOR BRITISH COLUMBIANS

This framework outlines priority 2019-20 actions to support our “good society” and improve the standard of living for all British Columbians.

It is not intended to be a complete inventory of all the important work that government ministries do to create a better life for people, respond to emergencies, care for the environment, assist parts of our society or support competitiveness for sectors of B.C.’s business community. Programming to protect children, uphold public safety, respond to British Columbians in crisis, provide new digital services and address unique challenges ranging from the opioid crisis to this year’s Big Bar Landslide are all part of the diverse array of government services that equip our society for a better future.

While this framework cannot fully reflect the many contributions that people or the business community make to our society and our economy, it should be understood that quality economic growth is a product of joint and sustained effort.

We look forward to broad engagement and recommendations on actions to be considered for our 2020-21 framework. The broad system of measures envisioned as part of Genuine Progress Indicators will also be part of future iterations of this annual document.