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Letter from the Premier

British Columbians know just what climate change costs – not just in terms of money to respond to and prevent emergencies, but also in terms of lives lost, communities evacuated and special places changed forever.

Likely because of these first-hand impacts, British Columbians have long been leaders in climate action, no matter if the comparator is in Canada or around the world. And far from climate action hurting our competitiveness, we continue to have one of the strongest economies in Canada, reducing emissions while growing our GDP and population. We've been creating good jobs, attracting new businesses and establishing new industries.

Despite these positive results, and despite punching well above our weight in the global climate fight, British Columbia is one fish in vast international waters. The impacts of climate change in British Columbia, driven by pollution in other jurisdictions, confront us and our wallets every year. Our province spent more than a billion dollars fighting forest fires just last summer.

But the international reality of carbon pollution isn't a threat to our climate strategy. In fact, it is a generational economic opportunity that we can seize thanks to increasing global recognition that our future is low carbon. Our technologies and resources are needed, and it's now or never for our province – the EU, China, Japan, Korea, the UK and the United States are just a few of the jurisdictions moving quickly because they see the opportunity too.

We can help make a brighter future not just by driving our own emissions down, but also by being on the front lines of climate and clean technology solutions that can be used in other places around

the world. We can grow our economy here at home while reducing emissions worldwide.

For a long time in B.C. we've had a tendency to see the word "industry" and imagine mines, mills and smelters. Those are important industrial projects – but they don't encompass the full spectrum of industrial opportunity available today. B.C. is positioned to unlock tremendous opportunities in growing sectors like life sciences and technology, for many of the same reasons that make the province a good place to invest in resource development.

By setting out our advantages in clean growth industries and identifying sectors that will receive additional provincial focus, this blueprint sets out our vision for attracting new jobs and opportunities to B.C. It is designed to help internal and external audiences alike in their decision and policy-making by showing what we are emphasizing, and why, so we can all coordinate better.

All our partners, including federal, local and First Nations governments; Indigenous leadership organizations; businesses big and small; foundations and pension funds; non-profits; labour and community organizations; and those with capital to invest, will benefit from the increased coordination facilitated by this blueprint. So will the planet, and the provincial economy.

It isn't hyperbole to emphasize the global impact that our province has today and can have in the future.

Thanks to the history and ongoing presence of Ballard Fuel Cells, Burnaby, British Columbia is the Silicon Valley for hydrogen technology, the critical fuel needed for hard-to-decarbonize industries. Key elements of the Pfizer-BioNTech covid vaccine used lipid nanoparticle technology developed at UBC. One of the world's biggest carbon capture initiatives

being constructed right now in the United States is using technology developed right here in B.C. by Carbon Engineering. B.C. resources, like aluminum from Kitimat, are literally the lowest-carbon resources in the world thanks to our clean electricity.

Our efforts to make B.C. a good place to live also make it a good place to invest. As a stable, science-minded, open, diverse and welcoming jurisdiction, B.C. checks a number of investment decision boxes that other places struggle to match in these uncertain times.

Right now, the rest of the world is making clear commitments to lower emissions, discourage high-carbon products with additional tariffs, decarbonize industries and shift to powering the global economy with clean energy. Our trade partners couldn't design a better program to advantage B.C. if they tried. Now we need to take them up on the offer.

If we keep moving in the direction of enabling and expanding clean industries in our province, we have the potential to power our growth for a generation. We can get there if we work together. This is the blueprint to help us ensure Team BC leads the pack for the race we were born to run.



A handwritten signature in black ink, appearing to read 'D. Eby', written in a cursive style.

David Eby
Premier



Letter from the Minister

Working together has been a strength of British Columbians that has helped us succeed in the past. It is also helping us create successes for the future. StrongerBC, our government's economic plan, is working to deliver results for people, and we know they are looking for what's next in building a clean and inclusive economy. Our investments are creating opportunities for businesses at a time when we know businesses are navigating a changing world and changing markets.

This blueprint outlines some of the key opportunities B.C. has to develop new industries and attract good jobs and new businesses to communities. It shows how supercharging investment in the development of clean energy and other climate solutions is not just key to attracting green industry to B.C., but also to compete for investment from other growing sectors of the global economy, especially in advanced manufacturing and knowledge-based industries.

Even as countries commit to carbon emission reduction targets, major global companies are adopting their own carbon policies, with some working to remove carbon pollution throughout their entire value chain.

These considerations are altering the economic calculus for investment to favour jurisdictions like British Columbia, with abundant clean energy, political stability and a commitment to climate action.

With actions like the Inflation Reduction Act in the neighbouring United States that aims to boost investments in clean energy, it is even more important for B.C. to be competitive in these sectors.

This blueprint is a snapshot of where we are today, and where we are headed as government looks to take swift and sensible action to spur innovation and investment, and create new private sector jobs and opportunities in key industries in B.C.

A key component of this work is recognizing First Nations economic self-determination and working together in partnership to attract investments that meet our shared economic and environmental goals.

The blueprint is built on the strong foundation of successful partnerships, collaboration and hard work between government, industry and First Nations with the aim of driving B.C.'s economic growth and creating good jobs for people, together.

British Columbians expect government to harness the innovation and productivity that built our economy to deliver a better quality of life and more opportunities for people today and generations to come. We're working hard to deliver on that expectation by rapidly increasing clean energy production, making targeted investments to land anchor companies and attract new industries in the province, and continuing our efforts to improve the services and infrastructure that both businesses and people rely on.



A handwritten signature in black ink, appearing to read 'Brenda Bailey'.

Brenda Bailey
Minister of Jobs,
Economic Development
and Innovation

Introduction

B.C. has a diverse and growing economy. Communities across the province rely on a mix of industries, from farming, to tourism, to life sciences, to resource development. But the B.C. economy is small, and even the most place-based and local industries, are heavily influenced by global forces from outside the province's borders.

The global economy is changing dramatically, and British Columbia can't afford to be left behind. Thankfully, we have significant advantages in our favour. This blueprint for B.C.'s industrial future sets out how we've been working to enhance these strong fundamentals while outlining clear goals for our province to continue our economic momentum and deliver jobs and opportunities to people throughout B.C.

While British Columbia's performance has been relatively strong, we are not immune from the headwinds and transformational shifts taking place in the global economy. Global conflict, labour shortages, high interest rates and persistently high inflation have made supply chain disruptions a critical concern for global companies, and rising costs a critical concern for people. At the same time, businesses and countries representing more than 90 per cent of global GDP have adopted net-zero targets, creating a major outcome that is here to stay – the global shift to a clean economy.

According to BloombergNEF, 2023 saw record-breaking investment in the energy transition. Nearly \$1.8 trillion USD of capital flowed into the global clean energy transition, up 17 per cent relative to 2022 and nearly triple what it was in 2019. Investment in new renewable energy projects, which includes wind, solar, biofuels and other renewables, grew 8 per cent to \$623 billion USD in 2023.

“Many countries and an increasing number of businesses are committed to reaching net zero emissions. As of September 2023, net zero emissions pledges cover more than 85 per cent of global energy-related emissions and nearly 90 per cent of global GDP.

Ninety-three countries and the European Union have pledged to meet a net zero emissions target. Moreover, governments around the world, especially in advanced economies, have responded to the pandemic and the global energy crisis by putting forward new measures designed to promote the uptake of renewables.”

International Energy Agency, World Energy Outlook 2023

Investment by globally listed companies in research and development in the energy sector grew by 25 per cent between 2020 and 2022, when it reached over \$130 billion USD.

This transition is happening because governments, companies and people are all doing their part to put us on the path to a net-zero future.

At the national level, the European Union's “Carbon Border Adjustment Mechanism” will impose additional tariffs on carbon intensive resource products – a mechanism that British Columbia's resources developed with clean electricity could easily avoid, giving market advantage to our products.

In business, the private sector is leading the charge towards decarbonization, recognizing the value of being ahead of the curve in a carbon-conscious future – and has made strong commitments to sustainable practices. For example, Siemens, which is involved in the production of much of the infrastructure and technology we use every day, has set a goal of establishing an emission-free supply

chain by 2050. This single company has some 65,000 suppliers worldwide, all of whom need to work to bring their practices into line to compete for contracts in the future.

Corporate policies, together with legislation and initiatives being adopted by governments to limit emissions, are creating a strong economic imperative for companies to invest in jurisdictions that can deliver affordable, clean, renewable energy to power their production.

The shift to a cleaner economy isn't just driving industries connected to renewable energy but also

factoring into investment decisions for a whole host of competitive industries in sectors like life sciences, technology and advanced manufacturing.

Companies in these competitive industries are looking to invest in jurisdictions with stable governance, good services, access to clean electricity and proximity to the global capital that is flowing to markets that are secure, climate resilient and powered by green energy.

That sounds a lot like British Columbia.





The Fundamentals: Our Foundation for Success

British Columbia has a strong set of fundamentals that are entrenched in the fabric of our province. These fundamental assets and values – some circumstantial like geography, some developed over years like strong public services – are some of the province's biggest advantages. The very same fundamentals that make B.C. a good place to live –

and a global tourism destination, make the province a good place to invest.

These fundamentals provide the foundation for our growth opportunities and our ability to attract leading edge industries and new jobs and economic activity to communities in every part of B.C.

Reconciliation with First Nations

For too long, the Province and the federal government operated in a way that denied the rights and title of First Nations and the rights of Indigenous Peoples. This legacy of colonialism created conflict, uncertainty and distrust that discouraged investment on the land base, and hampered efforts to develop the economy of the province. Addressing this legacy is a big undertaking, and we're making big changes to move past this old dynamic. In November 2019, the B.C. Legislative Assembly voted unanimously in favour of the *Declaration on the Rights of Indigenous Peoples Act* (the *Declaration Act*), becoming the first province in Canada to formally adopt the United Nations Declaration on the Rights of Indigenous Peoples (UN Declaration), and starting a new chapter in the Province's ongoing work on reconciliation with Indigenous Peoples.

As mandated by the *Declaration Act*, an action plan was developed to guide government's work to reform existing legislation, policy and practices to bring them in line with the principles laid out in the UN Declaration. But reconciliation also has a key economic component.

A new one billion dollar guaranteed borrowing facility in the 2024 budget for First Nations

"Since time immemorial, the 'Namgis people have relied on the natural bounty of our territory to sustain our communities. A Section 7 agreement will establish joint decision-making and enable our Nation to fulfil its stewardship responsibilities for resources in our territory. By managing lands in partnership with the Province and Western Forest Products Inc., the intent is to take care of the unique ecosystems within the Nimpkish Valley for the long term, while advancing reconciliation and bringing more jobs and prosperity to the north Island."

Victor Isaac, 'Namgis Chief Councillor

creates, for the first time in our province's history, a meaningful opportunity to reverse the dynamic of economic impacts happening "to" First Nations people instead of "with" First Nations people. It opens new economic opportunities, particularly in rural British Columbia.

This work to develop economic partnerships, and the larger commitment to reconciliation, is critical to the present and the future of B.C. It underpins all proposals to develop new projects, industries and electricity generation capacity in First Nations' territories.

NAMGIS FORESTRY AGREEMENT

Section 7 of the *Declaration on the Rights of Indigenous Peoples Act* (*Declaration Act*) enables the Province and Indigenous governing bodies to enter into agreements that recognize Indigenous decision-making within the provincial statutory decision-making framework. Using this tool, 'Namgis First Nation, the Province and Western Forest Products Inc. are working together toward

sustainable forest management that will support forest health, benefit local jobs and advance reconciliation in the Tree Farm Licence 37 area. Section 7 agreements are one of many approaches the Province is using to increase certainty on the landbase in collaboration with First Nations.

THE CENTRE OF EXCELLENCE IN FIRST NATIONS ECONOMIC DEVELOPMENT

The Centre of Excellence in First Nations Economic Development launched in October 2023. This First Nations-led economic development agency was established, in part, with \$1.2 million in funding through StrongerBC.

The centre, whose first CEO is Harlan Schilling, Deputy Chief of Daylu Dena Council, will increase

the capacity of First Nations in B.C. to engage in economic priorities and initiatives highlighted in the Declaration on the Rights of Indigenous Peoples Act Action Plan, distribute best practices and policy papers about economic development to First Nations, and provide consulting services on opportunities such as joint ventures and impact benefit agreements.

Strong services supporting people

The core of any successful economy, or any successful business, is people. And the best way to attract and keep people is to deliver good public services and a high quality of life. There's a reason why a recent independent ranking by the Globe and Mail found the top two best cities to live in Canada are both in British Columbia. In fact, they found that six of the top ten most livable cities in 2024 are in British Columbia.

Why are 60 per cent of Canada's most livable cities in a province that is home to just over 12 per cent of the country's population? Good public services like childcare, health care, public transit, education and skills training, set in a remarkable natural environment, make B.C. one of the best places in the world to live. We believe that if we work to support people, we also support strong and sustainable economic growth.

But we can't take our position for granted: our strengths have led us to set population growth records for the last three years in a row. Associated pressures are straining our public services like schools and health care. That's why to support people and preserve our quality of life, B.C. has deployed one of Canada's most significant capital programs.

From an accelerated homebuilding program leveraging private and public initiatives, to new expanded and upgraded schools, hospitals, health centres, roads and transit infrastructure, we're strengthening key public services for people and positioning communities to accommodate record-setting growth.

We're also continuing to build up an affordable, high-quality childcare program that lets parents, especially mothers, continue to work, learn and build their careers, and it helps companies find and keep the skilled workers they need to expand.

By supporting our people, we're supporting a strong future for our province.

CONNECTING ALL BRITISH COLUMBIANS TO HIGH-SPEED INTERNET

Access to the internet is critical to economic development. Provincially and federally funded connectivity projects will benefit more than 95,000 households when complete. We're working together with all levels of government to connect every household to high-speed internet services by 2027.

Since 2017, B.C. has contributed \$584 million to connecting rural and remote households to high-speed internet services and expanding cellular services along highways, bringing economic opportunity to every corner of the province.

LEADING WITH HOMES FOR PEOPLE

British Columbia is implementing Canada's most ambitious housing strategy to respond to historic population growth levels and historic underinvestment in attainable and affordable housing.

From sweeping away red tape that made duplexes and triplexes illegal in single-family zoned areas,

to using public land to build attainable middle-income housing, our approach to address housing challenges has resulted in lessons that are helping speed up permits and reduce bureaucracy for industries across the province. We're proud that B.C. leads Canada in housing starts, affordable housing starts and rental housing starts, but we've got more to do.

A skilled workforce

Skilled workers are one of the foundational building blocks of a competitive economy. Government has been working to make education and skills training more affordable and accessible for people by eliminating interest on student loans, opening seats in high-demand programs and providing direct support for people in most need of opportunity, like young adults leaving the foster care system. We've also been working directly with First Nations to deliver training that meets the needs of their communities and looking for ways across government to open more pathways for Indigenous Peoples, including urban Indigenous Peoples and Métis, to access skills training and connect with opportunities.

To support improved training opportunities in rural and remote areas, we've created a Community Workforce Response Grant that provides funding for communities, sectors and organizations to deliver trades-related training according to community-identified needs.

With 85,000 new skilled trades job openings expected through 2033, the Province is investing in trades education and support for workers. Since 2017, the Province has increased funding to SkilledTradesBC to more than \$106 million annually to support an inclusive, world-class training and apprenticeship system that meets the needs of the B.C. economy.

And we are connecting our new green economic opportunities like mass timber, a value-added new opportunity for the forest sector, with our efforts to build more homes and make housing more affordable, by investing \$3.3 million in a

new mass-timber training hub at the BC Institute of Technology. This will complement BCIT's new \$177.6 million Trades and Technology Complex that will teach 1,200 people a year in over 20 programs, including construction trades.

INNOVATOR SKILLS INITIATIVE

The Innovator Skills Initiative provides employers with up to \$10,000 to help with the costs of hiring and training employees, with a focus on helping Indigenous people and people from other under-represented communities get their first job in the tech sector.

The program supports people in developing new skills and pursuing new opportunities while increasing diversity in the tech sector, while also supporting businesses with shortages in skilled workers so they can continue growing and expanding.

THE BC EMPLOYER TRAINING GRANT

The BC Employer Training Grant provides employers throughout B.C. with skills-training funding for their workforces, including prospective new hires in construction and trades. The grant funding helps employers respond to their changing labour needs

and helps develop a skilled workforce with the right mix of skills. In turn, this helps British Columbians access the skills training needed to succeed in the labour market, while increasing job security and supporting career advancement.

THE CENTRE FOR CLEAN ENERGY AND AUTOMOTIVE INNOVATION

Since 2016, the number of light-duty EVs in B.C. has risen from 5,000 to more than 100,000 today. B.C. is leading the way in the adoption of electric vehicles and clean energy transportation, creating strong demand for workers in modern automotive trades.

To support the continued growth of the industry, government has funded the creation of a new

Centre for Clean Energy and Automotive Innovation at Vancouver Community College, expected to open in 2027. This state-of-the-art training facility will accommodate as many as 1,400 students each year with new programs in clean-energy technology, light rail and zero-emissions vehicle repair and technology.



STRONGERBC: FUTURE READY ACTION PLAN

The Future Ready Action Plan is helping thousands of people get the skills they need to succeed in the changing economy and help close the skills gap many businesses are facing. The action plan includes a future skills grant of up to \$3,500 available to all British Columbians to cover the cost of short-term training for in-demand jobs. It also

includes rapid response training, to quickly respond to labour market needs and the evolving economy, and a TradeUpBC education hub for in-demand jobs in the trades. Over three years, we expect up to 6,000 people will benefit from short-term training and TradeUpBC and be ready to use their new skills in industries seeking new workers every day.

Location, location, location

B.C. is Canada's gateway to the Pacific. The province has two major ports, national and international railheads, and international and regional air passenger and air freight access. Situated right next door to the west coast of the United States and the I-5 highway corridor, British Columbia is strategically located for growth-oriented companies wanting solid transportation linkages to the United States and the rest of the world. Our location and infrastructure keep us connected to all major

markets, and our time zone advantage makes it easier to do business with Europe and Asia on the same day.

The Province also has 23 globally located trade and investment offices that work to turn our infrastructure and location advantages into investments. These offices, together with our work to develop preferential market access through 14 different trade agreements with 49 countries, give us front-of-the-line access for B.C. products to some of the fastest growing economies in the world.

Cheap, clean energy

B.C. is a clean energy leader in North America – 98 per cent of the power generated in our province comes from clean or renewable resources, and we offer the third-lowest commercial and industrial electricity rates in North America. Clean energy is one of our greatest economic strengths, and we are continuing to invest in our clean energy capacity to attract investment, sustain high levels of job creation and keep B.C. competitive in a global economy that is increasingly prioritizing investment in low-carbon jurisdictions.

Government is working with the energy sector to understand what has been working and what has not, and to remove those barriers and unlock more investment in the clean energy we need.

Innovation

B.C. technology companies are on the leading edge of innovation and are developing solutions to today's challenges while working to build a better tomorrow. Our public universities rank internationally for innovation and research, valuing close partnerships with industry and government. B.C. is an established hub of innovation, with many dynamic and growing

companies in areas as diverse as robotics, enterprise software, digital media, life sciences, agritech and advanced manufacturing.

British Columbia's information and communications technology industry is a thriving and diverse sector that encompasses software, information technology and electronics manufacturing. With over 11,000 businesses and more than 131,000 employees, these companies are creating cutting-edge solutions and game-changing platforms by collaborating with world-class research facilities and top-ranked universities.

The information and communications technology sector has been growing faster and more steadily than the overall economy of B.C., and many other industries, including natural resources, stand to benefit from the talent pool being developed by this industry as businesses accelerate digital adoption and explore new technologies.

Government initiatives, like Innovate BC's Integrated Marketplace, are an example of how government support of innovation makes the entire B.C. economy more competitive. By working with large industrial customers, the program creates "test beds" where B.C. companies can work together to solve the challenges facing industry today.

BRINGING LIFE SCIENCE INNOVATION TO THE HOSPITAL FLOOR

The new St. Paul's Hospital and health campus will include the Clinical Support and Research Centre, a \$600 million state-of-the-art research and medical complex for discovery, research and innovation. The research centre aims to keep B.C. at the forefront of medical breakthroughs that have global impact. It will turn exciting research breakthroughs in medical science like bioengineering, nanotechnology, virtual reality, augmented reality and simulation

into practical tools for doctors and life-changing treatments for patients.

At the building's nexus, the Innovation Centre will bring medical staff and researchers together – along with academic, industry and other partners – to prototype ideas and bring preventions, treatments and cures from the lab to the bedside and, eventually, to the world.

PARTNERING LOCAL INNOVATORS WITH A GLOBAL PORT

As part of B.C.'s Integrated Marketplace, the Province and the federal government have joined together to fund the Port of Vancouver's efforts to create digital tools to enhance the reliability and efficiency of trade through the port.

By creating tools to better anticipate demands on the busy North Shore marine rail corridor, leveraging data and predictive analytics to provide longer-horizon cargo forecasts and using data capture tools to deliver near real-time visibility into

how containers are moving through the port system, this project will lower climate-changing emissions while helping the port use its infrastructure to the fullest to support trade.

This partnership with B.C. tech companies will help them win business with other major industrial customers. A win for the Province, the port and small B.C. businesses, and a demonstration of why the Integrated Marketplace is such an important tool for economic development and innovation.

ONEFEATHER

OneFeather is a technology company that serves First Nations, Métis and Inuit Peoples across Canada. The company's flagship product offers Nations access to digital voting, payments and status card services from a single login. With the support of InnovateBC's Venture Acceleration Program and ScaleUp program, as of 2022 the company was managing more than 370,000 memberships on its platform, offering secure digital sovereign identity and data solutions for Indigenous Peoples.

The Venture Acceleration Program helps small- to medium-sized tech companies with 500 or fewer employees grow and establish themselves by helping entrepreneurs accelerate the process of defining and refining their business models. The ScaleUp program supports companies that have completed product market validation and are ready to scale up their organizations and ramp up product development, manufacturing, marketing and sales.

Diversity as a strength

British Columbia is one of the most ethnically diverse provinces in Canada. In the 2021 census, more than 34 per cent of people in B.C. identified as a visible minority and almost six per cent as Indigenous. People come from all over the world to visit B.C., and the diversity in our communities and province makes us stronger.

In recent years, people are coming to B.C. in record numbers from across the world and that's not

surprising. B.C. has a beautiful natural environment, a strong economy, good public services and some of the most livable cities. We need people to help fill growing demand in key sectors to deliver the services we rely on and keep our economy strong. The BC Provincial Nominee Program, the *International Credentials Recognition Act*, and the StrongerBC Future Ready Action Plan further mean businesses and employers can find the people with skills and training they need to keep driving our economy forward.

Mining leaders with a critical mineral advantage

Today, British Columbia has 3,700 companies in the mining industry, delivering over 35,000 good jobs for families and contributing over \$1 billion in royalties and taxes annually, with more growth on the horizon.

As home to four of the top 50 most valuable mining companies in the world, British Columbia is a hub of mining investment and expertise. The province is also Canada's top producer of copper, a critical mineral needed to create powerlines and components of solar cells and electric vehicles.

We also have many of the critical minerals needed to build the components needed for low-carbon and net-zero technologies. Sixteen of the 31 critical minerals identified in Canada's national critical mineral strategy are located in B.C. Our province is Canada's only molybdenum producer.

Stable, open, predictable governance

The province is known for high standards, good governance, leadership on reconciliation and diverse, inclusive, tolerant communities. In a world that is increasingly looking for investment opportunities in safe and sustainable communities, B.C. has a lot to offer. We're known worldwide for our stable democratic governance and prudent fiscal management, which has led to us consistently having one of Canada's best credit ratings and lowest debt-to-GDP ratios.

Foreign direct and domestic capital investment, GDP, jobs and exports in B.C. are all going up, and people are benefiting. Despite global headwinds, our economic outlook remains good, and with the right investments and policies, we have the potential to make it even better for people.

A strong and reliable permit system

Certainty and social licence are key for project proponents. It's important to know that once you have a permit in B.C., you can move forward with confidence, knowing that your investment is secure. While maintaining high standards, we're doing work to improve the permitting process in our province, with an aim to achieve the twin goals of efficiency and predictability.

So-called "low-cost" jurisdictions are often actually just low-standard jurisdictions, bringing with them catastrophic challenges that can quickly upend any supposed efficiencies they promise project proponents. A strong regulatory environment like ours prevents situations like the one at the Cobre Panamá mine, which under public and political pressure was shut down by Panama's Supreme Court when it ruled the contract with the mine was unconstitutional.

Despite our strengths, government recognizes that in too many cases, an inefficient regulatory environment is one of the principal barriers to our goals for clean economic development. This includes inefficiencies in the regulatory environment that don't add to protection for people or the environment, but instead threaten timelines to build energy generation capacity and establish the province as a key link in the world's secure, stable, clean energy supply chains, or drive investment and opportunity for B.C. communities.

We've already started on solutions, with work to decrease duplication and delay in mining permitting which is already improving turnaround, easing the burden on project developers, and promoting deeper engagement and participation with First Nations.

A North America leading climate plan reducing emissions

Our CleanBC 2030 roadmap is guiding the province towards achieving 100 per cent of our Paris emissions reduction targets for 2030 and reaching net zero by 2050. We're already seeing emissions reductions even with record-setting population growth and nationally leading GDP growth.

Doing this work is the right thing to do – both economically, and for future generations.

Companies looking to invest in jurisdictions with strong environmental, social and governance fundamentals, where significant action is being taken to meet the challenge of climate change and reduce emissions, can find a great home in British Columbia. By working with companies to lower the carbon intensity of their products and support the decarbonization of their operations, we're not just building our economy, we're helping create the technologies and the tools to reduce carbon pollution globally.

PARTNERING WITH INDUSTRY TO REDUCE EMISSIONS

No matter the sector, British Columbia works with industry to reduce pollution while protecting and promoting good-paying jobs. From the lowest carbon intensity Liquefied Natural Gas (LNG) and aluminum on the planet, to Canada's first fully renewable bio-diesel refinery in Prince George, and a new agreement with Vancouver's International Airport (YVR) to establish and expand sustainable aviation fuel supply and production in

the province, the oil and gas sector is not excluded from our efforts to cut carbon. Partnering to use major projects to establish new technologies, like zero-emissions electric tugboats and methane leak prevention, means we can meet our climate targets and fast-track transition away from carbon-intensive fuels and pollution here at home, and around the world.





Clean Growth Initiatives: Areas of remarkable potential

British Columbia's economy is exceptional for its breadth and diversity. This diversity makes it strong, and has been a recipe for our success to date. No strategy for the province could hope to cover every aspect of the creativity of British Columbians and our unique economy.

That's why instead of trying to incorporate every aspect of our economy, this clean industry blueprint instead seeks to identify areas with unique growth potential across the province; areas of remarkable potential that build on our existing foundations and respond to the global context and unique

opportunity of this moment of change and low-carbon growth. By setting out specific goals, we can hold government accountable while showing the private sector that we're strong partners in investment, and looking to support them in creating good jobs and opportunities in B.C. communities.

The following Growth Initiatives will be areas of unique focus for government as we move forward to ensure British Columbia not only retains, but builds on our economic and climate leadership goals well into the future.

CLEAN GROWTH INITIATIVE:

Electrifying the economy

B.C. is one of only a small handful of jurisdictions with an electricity system that is both cheap and clean, with 98 per cent of our grid running on zero-carbon, renewable energy. This means that our electricity offers an unbeatable advantage to project proponents concerned about pollution. From green hydrogen to major mines to data centres, clean electricity is in demand – we can sell as much as we can produce here at home or to export markets, all while creating jobs and reducing emissions.

Our reliable, firm power grid backstops the west coast of the United States and our neighbours in Alberta and the Yukon, letting us buy at low-cost periods to sell back into the market at times of high demand. Through this arbitrage, B.C.'s Crown corporation PowerEx ensures a fair return to British Columbians for all of our electricity generation and transmission investments each time we send electrons over a border.

While we know there's great potential if we can expand our clean electricity delivery, it's not just potential. We're already seeing the beginnings of a new wave of clean-energy interested investors making firm commitments to the province. In November 2023, E-One Moli announced plans to build a \$1.05 billion lithium-ion battery cell production plant in Maple Ridge, in part based on the ability to power their operations with affordable renewable energy. The plant will be Western Canada's first high-performance lithium-ion battery plant and provide some 450 good, family-supporting jobs.

Building our clean generation capacity

Because of our clean energy heritage, unlike other jurisdictions, we can focus efforts on expanding existing clean energy capacity instead of replacing fossil fuel generation.

And that's just what we're doing.

To support the continued clean growth of B.C.'s economy, BC Hydro issued a Call for Power – the first in 15 years, to establish new sources of electricity, with a focus on larger, utility-scale projects. As part of this Call for Power, BC Hydro is seeking partners to help add 3,000 GWh of new clean or renewable energy generation capability to our grid, starting as early as Fall 2028.

Domestic electricity demand is expected to increase by 15 per cent between now and 2030. This is due to economic and population growth, and more homes, businesses and industries switching from fossil fuels to clean electricity. In the past six years, the number of electric vehicles on B.C.'s roads have increased by nearly 2,000 per cent. B.C. is in the top two jurisdictions in North America for electric car adoption.

That's why this year's call for power is just the beginning. Going forward, BC Hydro plans to issue rolling calls for power, anticipating that we will need to continuously scale up clean electricity production to meet the needs of a growing, low-carbon economy.

This approach to electricity, with expected major new investments in wind and solar, along with BC Hydro's updated 10-year capital plan with \$36 billion in capital investment to upgrade and expand existing generation and transmission

assets, positions the province to grow new industries while meeting the demand from existing industrial customers to decarbonize their operations now and into the future.

ELECTRIFYING EXISTING INDUSTRY

The Province contributed \$440,000 to help install an overhead powerline from Mount Milligan Mine, located north of Vanderhoof, to a nearby pumping facility at Phillips Lake.

This replaced diesel-powered generators and pumps with grid-connected electric equipment,

reducing local air pollutants at the mine. It is expected that over a decade this electrification project will cut roughly 48,000 tonnes of carbon dioxide from the mine's operations.

ELECTRIFYING MINING TRUCKS AT COPPER MOUNTAIN

By working with industrial partners, the province is leading the way in the electrification of mining operations. One example of this partnership at work is the Province's \$2 million contribution toward the installation of an electric trolley system for mine-haul trucks at Copper Mountain Mining Corporation's copper, gold and silver mine near Princeton, B.C.

This funding, provided through the CleanBC Industry Fund, supported upgrades to four of

the company's trucks to be compatible with an overhead trolley system that replaces diesel used by the haul trucks to transport mine material to a surface processing facility with clean electricity, significantly reducing emissions.

The Copper Mountain pilot project is key to proving the effectiveness of this trolley technology and refining it to help drive wider adoption of similar solutions across the industry.



ELECTRIFICATION: BY AIR AND WATER

In December 2019, Harbour Air, a B.C. company, made world history when they landed in Pat Bay, just outside of Victoria, B.C., having completed the world's first fully electric commercial aircraft flight. The company, which received support for the conversion of an existing aircraft to be fully electrically powered through the CleanBC Electric ARC program, is continuing work to develop and certify an all-electric commercial passenger plane.

In October 2023, British Columbia's Helijet, North America's largest helicopter airline, announced a firm order with Beta Technologies to purchase zero emission electric ALIA eVTOL aircraft for

deployment in 2026, first with cargo and eventually with passengers.

Both airlines are Canadian leaders in zero emission flight, and both are located in British Columbia.

In April 2024, Vancouver saw its first fully electric, zero-emission tug boats. SAAM Towage launched two electric tug boats in the Port of Vancouver that will service local clients starting in Spring 2024 marking a significant step in reducing pollution. With support from the B.C. government, and various other private and public partners. B.C. technology from Corvus Energy supplied 3,616 kWh of Corvus Orca Energy Storage Systems for each vessel.

NORTH COAST TRANSMISSION LINE

In January 2023, BC Hydro issued an Expression of Interest in the North Coast Region to gauge potential demand from industrial customers wanting to use clean electricity to power their operations instead of fossil fuels as it looked at developing a new 500-kilovolt transmission line infrastructure from Prince George to Terrace.

Twenty-nine submissions were made by both existing and prospective industrial customers, including by ports, mining companies, hydrogen

producers, liquified natural gas companies and others – with the hydrogen sector accounting for the largest number of individual submissions. This Expression of Interest highlighted B.C.'s status as a destination for new industrial investment and showed that existing industrial customers are eager to decarbonize their operations and will help optimize new potential transmission infrastructure and allow for meaningful engagement with First Nations and local governments.

Expanding the backbone of a clean energy system

BC Hydro's updated 10-year capital plan, Power Pathway: Building BC's energy future, provides for nearly \$36 billion in community and regional infrastructure investments throughout the province from 2024-25 to 2033-34 to ensure access to clean, affordable electricity for individuals, businesses and communities across B.C.

This investment will support the following objectives:

- \$21 billion of investments in existing assets across the system, ensuring it can handle the expansion and continue to serve future generations.
- Close to \$10 billion in new electrification and greenhouse gas reduction efforts – including supporting fuel switching to clean electricity and removing the reliance on diesel generators in remote communities.
- More than \$5 billion to support new customer connections, particularly in high growth areas of the province.

The new construction projects are also projected to support 10,500 to 12,500 jobs on average annually to build, expand and upgrade substations and to install new equipment to support residential housing growth, transportation and transit electrification. These new projects will support B.C.'s efforts to make our transmission system more resilient to extreme weather events caused by climate change and will maintain and increase opportunities for construction workers in B.C. as large projects like the 1,100MW Site C hydroelectric generation dam are completed.

Construction is the fourth largest industry in B.C. Technical training for jobs in the construction industry is offered through more than 60 trades programs at 15 public post-secondary institutions throughout B.C., as well as non-public post-secondary institutions.

In 2022, British Columbia's construction sector grew by 4.7 per cent to \$28.8 billion, accounting for 9.6 per cent of the province's GDP. The sector employed 234,700 people in 2023, representing 8.4 per cent of provincial employment, and is projected to be one of the fastest-growing sectors for employment over the next decade.

CLEAN GROWTH INITIATIVE:

Putting critical minerals to work

Critical minerals like copper, cobalt and nickel are vital building blocks for the green technologies required to decarbonize the global economy. The International Energy Agency predicts that we need to produce six times the amount of these critical minerals by 2040 to reach a goal of achieving net-zero emissions by 2050.

Specific minerals related to electric vehicles and battery storage are expected to see even greater demand. Demand for cobalt and nickel, found in B.C., could grow by 20 to 25 times what it is today over the coming decades as countries work to lower emissions.

There is no pathway to net-zero that doesn't start in a mine.

There are a lot of benefits to doing business in mining in B.C., including:

- rich mineral and metal deposits;
- a skilled and experienced workforce;
- high environmental, social and governance (ESG) standards;
- a commitment to reconciliation, with a clear path to seeking First Nations' consent on major projects; and
- a mining sector already powering operations with clean electricity instead of fossil fuels and having lower emissions intensity than other jurisdictions.

The rapid increase in demand for the last century's critical minerals and metals was accompanied by a rapid increase in jobs and opportunities in many communities.

Rising global demand for critical minerals has the potential to do the same for people, businesses and communities in B.C. today, but it requires doing things differently than they were done last century.

It requires consent, participation and real benefits for First Nations.

And it must be done in a way that protects the air and the water, and the special places that people and communities love.

Otherwise, it will create conflict in communities that drives investment away.

Critical minerals are needed to transition to a clean energy future. It's also important not to trade one environmental problem for another while we're doing it – and we don't have to.

The world's largest companies are working to build stable, secure and sustainable supply chains, which is driving investment in jurisdictions that are able to meet the highest environmental, social and governance standards. This is part of why Bloomberg Business named Canada as the number one global destination for companies looking to invest in lithium-ion battery supply chains.

Global markets for these foundational resources doubled over five years to \$320 billion USD in 2022. Recognizing the urgency of quickly establishing B.C. as a key supplier of these minerals, we've been working to build strong relationships with First Nations, improve regulation, forge international partnerships and remove unnecessary delays from the permitting process to better position the province for a cut of this investment.

Mining companies are taking notice, and they are bringing their investors to see what we have to offer.

Agreements like the statement of cooperation signed with the Korea Mine Rehabilitation and Mineral Resources Corporation (KOMIR) are creating stronger pathways to mining investment because of our strong climate goals, sustainable practices and potential to develop mineral resources.

First Nations participation is key to these projects. When government, First Nations and companies work together, it gives companies certainty about

"Canada is one of the key mineral-focused countries designated by the Korean government in February, and British Columbia, in particular, has the Korean top-10 strategic critical minerals, such as nickel, rare earth, graphite and manganese... KOMIR will actively support Korean private companies to enter Canada to secure critical minerals."

Mr. Kyu-Yearn Hwang, president, and CEO of KOMIR

how to proceed and bolsters First Nations' economic self-determination while also creating good jobs and opportunities for families and communities.

With a skilled workforce, a stable political environment, an abundance of identified mineral deposits and a proven track record of moving mines from concept to reality, the province is well-positioned to benefit from the global wave of investment in critical minerals.

MINING PERMITS

B.C. has made significant progress on exploration-permitting timelines, including a 52 per cent reduction in the backlog of permits. Budget 2024 reaffirms our commitment to a low carbon economy with \$24 million ensuring resources stay in place to continue to reduce permitting backlogs enabling access to the critical minerals needed to produce clean energy like electric vehicles, solar panels, wind turbines, electrical transmission lines and batteries. Some of the actions taken to achieve these improvements include:

- Ensuring timely and accurate communication with First Nations to facilitate high-quality consultation and engagement and build good relationships from the start.

- Introducing dedicated teams to help companies navigate processes and produce accurate and complete applications the first time.
- Adding specialized roles, including Mines Authorization Analysts to enhance and improve consultation and application processing.
- Investing \$6.6 million in technology to ensure that internal major mine permitting processes are coordinated and efficient.
- Holding permitting workshops around the province to provide training, to share knowledge and to remain accessible and transparent with industry.

We're taking action to maximize B.C.'s critical mineral advantage by:

- Reducing permitting timelines
- Fast-tracking critical mineral projects through a dedicated Project Advancement Office that offers a concierge service with support for issues resolution and funding opportunities and for help navigating regulatory processes
- Investing in public geoscience and publishing the BC Critical Minerals Atlas allows investors, the exploration sector and First Nations to access world-class geoscience
- Working with First Nations on establishing the governance, administrative and technical capacity needed for full and meaningful shared decision-making
- Creating a new framework to support Indigenous co-ownership and equity participation in critical mineral projects
- Planning improvements and expansions of the electrical grid to support and electrify mine extensions and new mines, so they can run on clean energy
- Updating regulation, legislation and policy governing mining to create the high environmental standards, certainty and stability needed to create partnerships and attract critical investment, including:
 - New water quality guidelines
 - Better protections for critical salmon habitat
 - Changing B.C.'s mining reclamation policies to require companies to pay more up front for cleaning up mines at end of life
 - Working to modernize the *Mineral Tenure Act* in consultation and cooperation with First Nations and First Nations organizations

TAHLTAN GOLDEN TRIANGLE

In 2013, the Province signed a shared decision-making agreement with the Tahltnan Nation to work collaboratively and engage across a spectrum of land and resource issues, to allow for improved business relationships and the pursuit of economic development opportunities without first settling questions of sovereignty, jurisdiction, title and ownership over the Tahltnan's traditional territories.

This agreement has allowed for the Province and the Tahltnan Nation to work together to establish business relationships and encourage economic development in the northwest region of the province. Following this agreement, mining investment in the region, which has a high potential for critical mineral development, has increased steadily over time. This agreement shows that when the Province works respectfully with First Nations, it produces better results for everyone.

CLEAN GROWTH INITIATIVE:

Hydrogen, Sustainable Aviation Fuels and Biofuels

Not all energy needs can be met through electricity and batteries. Liquid and gas fuels will remain important for the foreseeable future, especially in areas like shipping and flight where long distances are involved, and for operations in remote areas without grid connections.

To meet these requirements, we will need low-carbon and net-zero fuels. That's why B.C. has been working to support the development of hydrogen, biofuels and renewable natural gas. That's why the Province has put forward strong conditions for LNG development that ensures that any projects going forward support First Nations economic self-determination, create jobs and benefits for B.C. communities, and be the lowest emission LNG in the world.

Hydrogen

Hydrogen is a promising source of clean energy and clean jobs in B.C., and around the world a market for hydrogen is rapidly developing. To respond, the Province has established a first-in-Canada dedicated Clean Energy and Major Projects Office to facilitate major project proposals. Since establishment, 19 different major hydrogen project proponents have initiated discussions with the Office, including major resource and manufacturing companies like Australia's Fortescue.

Independent of any export opportunities, hydrogen will also play an important role in B.C.'s sustainable energy future by providing an opportunity for sectors that are hard to electrify to deliver safe and cost-effective emissions reductions. With support

from government, B.C. companies are developing innovative technologies and products for hydrogen production, transportation and storage.

As the first Canadian province to design and implement a hydrogen strategy, B.C. is committed to growing its hydrogen economy. We are well positioned to do so, with our abundant natural resources, renewable electrical grid and long history of innovation in hydrogen and fuel cell technology. For decades we have been creating the environment and making the investments necessary to attract researchers, entrepreneurs, innovative companies and investors to B.C.'s hydrogen ecosystem.

Since the release of this strategy, government has been taking action to advance the production, distribution and use of low carbon by working with partners to create regional hydrogen hubs where production and demand are co-located to lower costs and maximize benefits for local economies.

"Today, the building for the hydrogen processing is in place, and the infrastructure to capture and upgrade the hydrogen is in the works. While clean hydrogen is recognized as an important component in achieving a sustainable future, few projects have come to fruition. B.C has the potential to lead the world with its Hydrogen Strategy, and the success of this project will be the groundwork for future initiatives here and abroad."

Simon Pickup, CEO, Teralta



For example, in 2023, the Province provided \$150,000 to the City of Prince George to help kick-start the development of a regional hydrogen hub in collaboration with industry, First Nations and the public.

Unlike most other jurisdictions, B.C. has the resources to produce both green and blue hydrogen with low carbon intensity. More than 98 per cent of B.C.'s electricity is renewable, allowing us to leverage our clean electricity to produce green hydrogen. B.C. also has natural gas reserves, significant geological storage capacity and expertise in carbon capture and storage (CCS) technology, giving us the potential

to produce blue hydrogen from natural gas with adequate and permanent CCS. That's why last year, we amended legislation to clarify government's authority to regulate the safe and effective storage of carbon dioxide from any source, advancing a provincial approach to carbon capture, utilization and storage to support the production of low-carbon hydrogen and reduce emissions in hard-to-abate industrial sectors. The changes involve the establishment of the BC Energy Regulator, formerly known as the BC Oil and Gas Commission. It will have a modernized and inclusive board structure and expanded responsibilities, including over hydrogen.

INNOVATIVE HYDROGEN COMPANIES IN B.C.

- Ionorm Innovations has developed new technologies that improve the efficiency and performance of producing hydrogen and hydrogen fuel cells while lowering costs and minimizing environmental impact
- Ekona Power has developed a method of producing clean hydrogen from natural gas, with a by-product of solid carbon – not harmful CO₂
- Greenlight Innovations manufactures the tools needed to test clean energy batteries, fuel cells and other clean energy storage units
- Ballard Energy manufactures hydrogen fuel cells for heavy-duty vehicles such as trucks, trains, and busses, as well as marine vehicles

B.C. companies like Teralta, a Chilliwack-based company, and their partners Chemtrade and FortisBC that are planning a clean hydrogen system that will reduce natural gas use at Canfor's Prince George pulp mill by 25 per cent, are on the forefront of developing scalable hydrogen technologies that will help power the future.

More than 50 per cent of Canada's hydrogen and fuel-cell companies are in B.C., and the Province accounts for about 60 per cent of research investment in hydrogen and fuel-cell technology.

The province also offers significant opportunities to produce low-carbon hydrogen for local use and export, thanks to our low-cost, clean and renewable power, vast natural gas reserves and carbon sequestration potential.

B.C. is working to create conditions to support a growing hydrogen sector, from supportive provincial policies, significant government

"Through the Province's significant investment in zero-emission trucks in B.C., and the simultaneous development of robust infrastructure to enhance their operations, this pilot project symbolizes a remarkable leap toward a sustainable future. It marks the first-ever deployment of heavy-duty hydrogen fuel-cell electric trucks for a diverse range of fleet operators in the province, a historic moment for the trucking industry. We applaud the provincial government for their vision and support, and we are delighted to be the wheels on the ground and driving force behind this groundbreaking project."

Colin Armstrong, president, and CEO of HTEC

investments towards innovation, proximity and strong trading relationships with key export markets and a stable investment climate.

HYDROGEN TECHNOLOGY & ENERGY CORPORATION – HTEC

HTEC is a B.C.-based company that is on the forefront of advancing the deployment of hydrogen-electric transportation. They currently own five hydrogen refuelling stations across Metro Vancouver, Victoria and Kelowna.

In June 2023, the company broke ground on a hydrogen production facility in Burnaby. Once complete, the facility, which will be powered by BC Hydro, will be able to produce one tonne of low-carbon hydrogen every day through electrolysis.

Developing hydrogen-powered heavy-duty trucks is key to steeply cutting carbon emissions and air pollution, and HTEC is a key innovator and partner in this work. In November 2023, as part of advancing and commercializing this technology, the Province invested \$16.5 million through the Innovative Clean Energy Fund in a pilot project aimed at kick-starting the use of hydrogen-powered trucks for commercial transportation across the province. This pilot will see HTEC procure six different heavy-duty fuel-cell trucks and complete upgrades to a hydrogen-fuelling station in Tsawwassen and a maintenance facility in Abbotsford.



Biofuels

B.C. implemented a Low Carbon Fuel Standard (LCFS) in 2010, which has increased the province's demand for low-carbon fuels annually and gradually reduced its reliance on fossil fuels.

CleanBC has created a roadmap to accelerate the transition to clean fuels in the province. Biofuels play an important role in reducing carbon emissions in some of the most difficult sectors to address, including transportation and industrial process heating. In B.C., the carbon intensity of biofuels

decreased by 32 per cent between 2013 and 2023, making these organically derived fuels even better for our climate. The average carbon intensity of biofuels in British Columbia is only 25 per cent of similar fossil fuels.

We're already seeing results of our efforts to develop and attract investments in this sector, with Canada's first standalone renewable diesel plant refinery opening in Prince George in 2023. As other jurisdictions, such as the European Union, move to enhance their own low-carbon fuel standards, growth in this sector will only continue.

CANADA'S FIRST STANDALONE RENEWABLE DIESEL REFINERY

In June 2023, B.C. became home to another first step towards Canada's net-zero future when Tidewater Renewables opened the country's first-ever stand-alone renewable diesel refinery in Prince George.

The renewable diesel produced in this plant offers an 80-90 per cent reduction in emissions compared to fossil fuel diesel.

Tidewater Renewable's \$380 million renewable diesel refinery was built with government support through the Province's Low Carbon Fuel Standard.

Tidewater Renewable's facility is expected to produce more than 3,000 barrels of low-carbon fuel a day, or approximately 170 million litres a year. The facility will also produce renewable hydrogen, which will be used in the production of low-carbon fuel, with the potential to supply excess renewable hydrogen for other uses.

CLEAN GROWTH INITIATIVE: Life sciences

For decades B.C. has invested in health research that helps people live better, longer lives.

Investments in organizations and initiatives like Michael Smith Health Research BC, Genome BC and the BC Knowledge Development Fund have helped build a life sciences sector that delivers good jobs for thousands of people in B.C. communities, and better health for people around the globe.

Our longstanding commitment to life sciences research has created a hub of expertise in the province. This, combined with strong fundamentals, has positioned the province to secure increasing investment from a global biomedical sector worth \$2.83 trillion USD.

The Province is already outpacing the rest of Canada in creating jobs and driving growth in this dynamic industry, but we're not resting in our efforts to secure more investments from anchor companies and lock in B.C.'s reputation as a world leader in health research and biotechnology development. To support these efforts, in 2023 the Province launched a Life Sciences and Biomanufacturing Strategy.

Developed in close consultation with researchers and life sciences companies, the strategy lays out the work the Province is doing to make B.C. a worldwide life sciences hub, by nurturing new talent, investing in new lab spaces and expanding the province's capacity to deliver clinical trials all while supporting economic growth and providing jobs and opportunities for people living in B.C.

One key need of the sector is skilled workers who have been trained on the specialized equipment used in industrial laboratory settings. Currently, these

skilled workers are in high demand and hard to find, slowing the pace of investment in the province.

As part of addressing this key need, government invested \$25 million in a new school of biomedical engineering at the University of British Columbia and \$2 million to create a new BC National Biomanufacturing Training Centre at the British Columbia Institute of Technology, which will support companies addressing some of the world's most pressing health-care challenges.

Investing in these training facilities unlocks opportunities for B.C. students to get good jobs in these industries while helping ensure that companies have the skilled B.C. workers they need to grow their businesses.

Biomedical engineering combines engineering principles with medical sciences to design, create and evaluate equipment, computer systems and software used in health care, including designing and building artificial internal organs and body parts; designing computer software to operate complex medical equipment such as 3-D X-ray machines; and developing new drug therapies to solve human sickness and diseases.

Doing this work is both capital and labour-intensive and requires good infrastructure and a supportive policy environment. Companies developing treatments and therapies to help people heal from injuries, recover from sickness and live full lives need to be able to conduct clinical trials to bring their work to market. For a long time, this opportunity was unavailable in B.C., and companies would leave to conduct clinical trials, and sometimes never return to the province.

As part of attracting companies developing new medicines to the province, and keeping them here, the Province is investing in funding for a clinical trials unit at Providence Health Care and giving people in B.C. more opportunities to access newly developed treatments and therapies by addressing regulatory barriers to conducting clinical trials in B.C.

Companies are already responding to the work the Province is doing, with companies like AbCellera and adMare BioInnovations expanding their operations and investing in new facilities with the backing of the Province.

“British Columbia researchers and companies demonstrated their remarkable innovative capacity during the pandemic. Literally billions of people around the world benefited from the strength of the B.C. life sciences ecosystem. This investment into new, flexible wet lab facilities will grow the life sciences sector, attract investment and help ensure that the globally relevant companies of tomorrow can launch and scale in British Columbia.”

Gordon C. McCauley, president and CEO, adMare BioInnovations



ABCELLERA BIOTECHNOLOGY CAMPUS

In May 2023, AbCellera announced it would be moving forward with the biggest private investment in life sciences in B.C. history, of \$701 million, which includes the building of a new biotechnology campus. This campus, which will create almost 400 good new jobs in B.C., will include a new preclinical

development facility, and will offer new training opportunities in life sciences and biomanufacturing. This important anchor investment was supported by up to \$75 million from the Province through the Life Sciences and Biomanufacturing Strategy, and by \$225 million from the Government of Canada.

CLEAN GROWTH INITIATIVE:

Advanced manufacturing

The history of manufacturing in B.C. is founded in resource industries like forestry and mining, and everyday industries such as food processing and textile production. Early industry drove an economy based on making the food, everyday items and tools people needed, as close to the end users as possible. As globalization has advanced, industries found lower-cost ways to get the goods and equipment needed from places far away, and moved the manufacturing economy offshore. This meant a loss of jobs and opportunities in many B.C. communities.

As clean technologies and new businesses based on world-leading research at B.C. universities enter the marketplace, we are seizing the opportunity to rebuild manufacturing industries in B.C. communities and find new ways to support our foundational industries to improve efficiency, increase productivity and lower emissions. We are feeding a resurgence of manufacturing, creating new jobs and new products for export, and in doing so, deriving additional economic value from our resources.

B.C. has the fourth largest manufacturing sector in Canada, providing good jobs to more than 171,000 people throughout the province. Traditional manufacturing is a strong driver of exports and a major contributor to B.C.'s strong economy. In 2022, the manufacturing sector contributed \$18 billion to B.C.'s economy, and manufactured products account for over half of B.C.'s \$65 billion of commodity exports.

B.C.'s thriving technology ecosystem is supplying made-in-B.C. technology solutions to the transformation of the manufacturing sector.

In 2021, B.C.'s high-technology manufacturing sector contributed \$1.8 billion to the economy, having expanded by 16 per cent over the last five years.

B.C. is emerging as a dynamic advanced manufacturing hub, characterized by a strong integration of technology, including automation, robotics, digitalization and data analytics enhancing efficiency. Precision aerospace and aviation companies in the province are on the leading edge of net-zero and low carbon flight solutions. In areas from agritech to robotics, and clean energy and life sciences, B.C. is attracting some of the most innovative and leading-edge businesses and new manufacturing facilities in Canada. B.C. had the fifth-highest growth in R&D investment in Canada in 2021, with a total of \$5.3 billion.

By adding value and creating additional jobs out of resources produced here and imported from abroad, attracting new investments in advanced manufacturing is key to providing more good, family-supporting jobs in B.C. communities.

An important way the Province is supporting advanced manufacturing in B.C. is through the Manufacturing Jobs Fund, a \$180 million initiative to help manufacturing companies modernize, innovate and grow by providing funding for capital projects in all regions in B.C.

The fund has a particular focus on helping the forestry sector retrofit and develop new, sustainable, value-added business lines that reduce dependency on old-growth logging and make innovative use of biomaterials.

InBC STRATEGIC INVESTMENT FUND

InBC is a strategic investment fund created by the B.C. government with \$500 million to invest in growing companies and venture funds to create jobs and opportunities for British Columbians. With a triple bottom line mandate that values people and the environment as well as profit, it's an investment

in B.C. communities. While high interest rates have reduced global capital investment opportunities for many promising ventures, InBC's focus on investments that anchor innovation in our province has continued to provide growth opportunities for companies across B.C.





Advanced timber manufacturing

Forestry is an important source of jobs and opportunity in B.C. In 2022, the forest sector (including manufacturing activity) added \$6.4 billion to the provincial economy and employed over 56,000 people who earned wages 20 per cent higher than the provincial average. In 2022, forest product exports to international markets totalled \$15.6 billion, or 24 per cent of total exports. However, the sector still heavily relies on the export of minimally processed materials. This limits the number of jobs and the kind of opportunities that are present in the industry and makes the industry much more volatile and sensitive to market conditions.

The mountain pine beetle epidemic has devastated mature pine stands throughout B.C., but especially in the southern and interior parts of the province. These stands provided fibre for most of the sawmills

in those regions, and their loss is a major factor in many mill closures. The loss of these jobs, many of them in small communities where the mill was the largest employer, hurt families and communities.

Encouraging and supporting the forest industry to move from the export of minimally processed timber, and towards advanced timber manufacturing, is one way that government is working to leverage our clean energy advantage and build on the strengths of our highly skilled workforce to create jobs and opportunities today and in the future.

Advanced timber manufacturing creates more jobs for people using less fibre than the traditional forest industry. It's also key to B.C.'s efforts to address the housing crisis. Manufactured wood panels allow for homes to be constructed much quicker on site, allowing for more efficient use of construction labour, and faster completion of buildings.

VALUE-ADDED WOOD MANUFACTURING: A SUCCESS STORY

The Value-Added Manufacturing Program, run by BC Timber Sales, provides a dedicated, open-market supply of fibre for small and medium-sized manufacturers, and the Value-Added Accelerators initiative brings together wood manufacturers, First Nations, forest licensees and the Province. Through these innovative programs, the Province is helping to drive success in value-added wood manufacturing.

Kalesnikoff is a leader in construction innovation, creating new jobs at their manufacturing plants and mass timber construction sites across B.C. Kalesnikoff products are used for walls, flooring and full modular construction in mass timber projects through value-added wood manufacturing.

B.C.'s 21st Century Forest Products



MASS TIMBER CONSTRUCTION

With a low-carbon footprint Mass Timber is being used in buildings up to 18 storeys such as the Brock Commons at UBC, offering a sustainable alternative to traditional materials like concrete and steel. Mass timber provides comparable structural strength while potentially reducing carbon emissions by up to 45 per cent.



ENGINEERED WOOD PRODUCTS

Products such as plywood and oriented strand board are known for their lightweight yet strong characteristics. These engineered woods are used in various applications, including structural components and furniture, due to their durability and performance.



PULP AND PAPER INDUSTRY

The unique properties of British Columbia's softwood trees produce high-quality pulp, characterized by its tensile strength and stability. This pulp is the basis for a range of paper products, from newsprint to packaging materials, serving various market needs.



WOOD PELLETS AS BIOFUEL

Wood pellets are produced from the residuals of wood processing, offering a sustainable energy source. They are used in both domestic and industrial settings to reduce carbon emissions, particularly when used as a supplement or replacement for coal in power generation.



BIOPRODUCTS DEVELOPMENT

Bioproducts present a renewable alternative to traditional fossil-based materials in various sectors, including plastics and textiles. These products are biodegradable and are developed using resources like cellulose and lignin, leveraging existing pulp and paper production infrastructure.

CLEAN GROWTH INITIATIVE: Agriculture and Agritech

The cost of food has gone up dramatically for people around the world, leading in some countries to unrest and civil instability. In British Columbia and across Canada, higher costs at the grocery store are obvious to everyone who eats. While some costs are driven by “greedflation”, others are driven by food security interruptions ranging from human-created, like the war in Ukraine, to climate-driven, like drought in California, B.C. and Alberta. There’s no question that it’s more apparent than ever before that food security and strong food supply chains are critical to the health, safety and well-being of communities, right across B.C.

The agriculture industry is also an important economic driver for our province, and climate change is proving remarkably costly. To support farmers, government has provided direct investments like 2024’s enhanced replant program, which will provide up to \$70 million for farmers to replant and replace existing vineyards, farmland and orchards with fruit varieties that are more climate change-resistant, and by working to

strengthen supply chains and the budding B.C. agritech industry. Government is also delivering an additional \$80 million for the Agricultural Water Infrastructure Program in 2024 as part of helping farmers through drought. This additional funding, on top of the \$20 million invested last year, helps farmers buy equipment that reduces water usage and build infrastructure to retain water during the wet season to mitigate drought impacts.

Technology can assist in responding to these pressures by increasing the amount of food we can grow, on less land, using fewer resources, and ensuring that the food we eat is processed closer to home reducing emissions and costs associated with transportation. That’s why it’s good news that B.C. is home to over 150 agritech companies, which generate over \$500 million in revenue annually. In 2019, they contributed over \$400 million to GDP, a figure that is expected to grow 7.5 per cent by 2025. Export revenue totalled over \$176 million in 2019 and is expected to grow 8.4 per cent by 2025.

ON-FARM TECHNOLOGY

4AG Robotics develops and builds leading robotics solutions enabling agriculture producers to grow sustainably. Its mushroom harvesting robot is helping farmers to improve their yields and increase operational efficiencies, while addressing labour challenges and reducing food waste in the agriculture sector. This technology adoption is supported through a \$4 million investment by InBC.

“We’re taking on the task of building a globally leading robotics company in a small town, and InBC’s belief in our company means the world to our whole team. We’re thrilled to use this new injection of capital to scale our manufacturing capacity in Salmon Arm.”

– Sean O’Connor, Chief Executive Officer (CEO), 4AG Robotics

Government has been working to grow this promising industry and connect B.C. farmers and food producers to the innovations being developed by B.C. agritech companies through a number of programs and funding streams.

The BC On-Farm Technology Adoption Program, delivered through Innovate BC's Integrated Marketplace, invested \$3 million to support B.C. farmers with new technologies that enhance profitability, productivity and/or efficiency, including robotic and automated equipment, farm management software and digital sensors.

Another \$1.5 million invested in 2023 by the CleanBC Initiative is helping farmers learn about the latest techniques for adapting to and mitigating climate change, particularly drought.

There are opportunities for the agriculture industry to be an important contributor to climate action, through the development of resources like biomethane and through regenerative agriculture that can help sequester carbon in the soil.

Agritech companies are key to helping develop and bring to market the technologies needed to make these possibilities a reality. To support the growth of the sector and the future of sustainable agriculture in B.C., the Province is investing more than \$6.5 million in a new Centre for Agritech Innovation at Simon Fraser University's Surrey campus from 2022/23 to 2024/25.

The Centre is expected to create nearly 200 jobs and train over 700 workers, while adding 30 new agritech projects throughout B.C. by 2025.





CLEAN GROWTH INITIATIVE: Film, Television and Digital

British Columbia's film tax credit program supports 47,500 jobs in the province and generates \$3.3 billion in GDP through film, animation and special effects production. The combination of B.C.'s location in proximity to Hollywood, where actors can be cast one day and arrive on set in the same time zone the next day; our range of locations and climate relative to the rest of Canada; the low Canadian dollar; our world-class studio and crew infrastructure; and our cutting-edge innovation in areas like visual effects, animation and post-production, has earned us a global reputation for excellence through quality of production, and often significantly lower cost and greater convenience than producing film and television anywhere else.

Recently, the industry has struggled following labour unrest and shifting consumer behaviour in the transition to streaming from linear television. As a result, there is a more competitive environment than ever for the industry. By working in a focused way with industry through our Provincial Film Commission, we look for opportunities to collaborate with industry and across our government partners in order to be a service

hub for foreign productions, increase our Canadian content and welcome major studios and streamers to British Columbia.

Digital

The Interactive Digital Media Tax Credit helps hundreds of companies annually to reduce their costs, with a 17.5 per cent tax credit on eligible salaries and wages. The program is just one way we have helped this industry grow to over 19,700 people and generate \$1.9 billion in GDP. The credit benefits companies, which range from video-game creators to those developing the next iteration of the internet, by lowering the cost of talent and freeing up funds for them to grow. The tax credit was extended in 2023 for another five years to provide stability to the sector, including continued support for a strong and creative workforce. Digital and video game development is an important entry point for talent that might not otherwise think of tech as a career, and is critical to the future growth of the B.C. economy. With government support these jobs are growing and our talent supply is growing along with it.

A strong start towards a secure future

We're working to power up the B.C. economy:

By renewing B.C.'s regulatory environment to reflect First Nations' rights and title, make it more responsive and timely for industry, more accessible and understandable to the public, and capable of sustaining the trust needed to rapidly build the industrial and energy infrastructure needed to power a net-zero economy.

By continuing work on the implementation of the Declaration Act Action Plan, especially on areas relating to resource permitting and land use decisions. This will provide the bedrock for regulatory renewal, and put the conditions in place to build respectful and mutually beneficial economic partnerships with First Nations.

By working to rapidly increase B.C.'s energy generation capacity, so we can electrify existing industrial projects and power up new ones while keeping energy affordable and reliable for people and businesses.

And we're going to continue our work to attract anchor companies in leading industries to create good jobs and opportunities in B.C. communities in every part of the province. We're already seeing success – in 2023 alone government secured major investments like E-One Moli's new lithium-ion battery production plant in Maple Ridge, and AbCellera's \$701 million biotechnology campus, the biggest life sciences investment in B.C. history.

Our efforts are already creating new jobs in leading industries throughout the province. B.C. workers and B.C. companies are advancing the leading edge of growing industries like hydrogen, biofuels and zero-carbon aviation today, and with swift action and a steady hand, there are only more opportunities on the horizon.

Together, we have the power to build a better, cleaner future – for people here and around the globe, for today and for generations to come, while strengthening the economy, creating good jobs and opening up opportunities for people around the province.









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