

British Columbia Regional Energy and Resource Table -

Framework for Collaboration on the Path to Net-Zero





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Introduction

Canada has the natural resources, talent, expertise, and technology to be a world-leading clean energy and technology supplier of choice in a net-zero world. Through the **Regional Energy and Resource Tables** (Regional Tables), each region of Canada will be better positioned to seize this historic opportunity to enable a prosperous net-zero future. The Regional Tables are intended to be a collaborative process that defines how governments work together, in partnership with Indigenous peoples, to build a prosperous and resilient net-zero economy.

With the participation of key partners – including regional labour, industry groups, and others – the Regional Tables seek to pursue the highest potential energy and resource opportunities for economic growth, accelerate energy transformation, and support the creation of sustainable jobs in every region across Canada.

The **British Columbia Regional Energy and Resource Table** was launched in June 2022. Through this Regional Table, the Government of Canada, the Government of British Columbia, and the First Nations Leadership Council (FNLC) are committed to an inclusive dialogue to develop a shared understanding among governments and First Nations in British Columbia on regional growth opportunities and potential actions to advance them. The FNLC is comprised of the political executive of the British Columbia Assembly of First Nations, First Nations Summit, and the Union of British Columbia Indian Chiefs, which work together to develop coordinated approaches to issues relevant to First Nations communities throughout the province.

In May of 2016, Canada committed to implementing and supporting the United Nations Declaration on the Rights of Indigenous Peoples (UN Declaration) without qualification. Both Canada and British Columbia have since established the UN Declaration as a framework for recognition and reconciliation, including by aligning laws and decision-making to create a path forward that respects the human rights of Indigenous Peoples while introducing more transparency and predictability. The UN Declaration is the guiding document to ensure that the initiative is informed by free, prior, and informed consent, with rightsholders as decision-makers. The *Declaration on the Rights of Indigenous Peoples Act* (British Columbia) and the *United Nations Declaration on the Rights of Indigenous Peoples Act* (Canada) are laws within Canada, which also help support this initiative.

To date, <u>six opportunity areas</u> have been identified in British Columbia that have the potential to significantly contribute to building or expanding British Columbia's competitive advantage:



Critical

minerals



Electrification



Clean fuels / hydrogen



Forest sector



Carbon management technology and systems



Regulatory efficiency

Long-term vision

Notable alignment and shared interests exist between the Government of Canada, the Government of British Columbia, and First Nations in British Columbia on economic, clean growth, and environmental goals on the path towards a strong low-carbon economy. The Regional Table will help British Columbia build on its competitive advantage in developing clean energy and resources and remain a competitive jurisdiction for clean investments. The Regional Table can help advance the goals of *Canada's 2030 Emissions Reduction Plan*, the *CleanBC Roadmap to 2030*, the recently announced British Columbia Energy Action Framework, and the *BC First Nations Climate Strategy and Action Plan*, in addition to both governments' commitments to achieve net-zero emissions by 2050. While the Regional Tables are not a rights recognition nor determination process, the approach taken will be aligned with Canada and British Columbia's adoption of the UN Declaration.

Labour and industry organizations and key stakeholders have also contributed to a framework for collaboration to inform and align collective efforts to develop a prosperous net-zero economy and position British Columbia's future competitiveness in clean energy and resource sectors. This framework sets the stage for an ongoing partnership between governments and First Nation partners to advance the British Columbia Regional Table towards a longer-term vision defined by the following desired outcomes:

- British Columbia's energy and resource sectors are globally competitive and drive clean and inclusive growth, job creation, and new investment in the province and Canada
- British Columbia produces clean energy and resources that support decarbonization and the achievement of Canada and British Columbia's climate goals
- British Columbians have the skills and training they need to support competitive energy and resource sectors and to secure well-paying jobs in a net-zero emissions economy
- The laws, stewardship, values, priorities, knowledge, and perspectives of First Nations in British Columbia are reflected in the long-term vision of a net-zero future, which have contributed to the establishment of an inclusive net-zero economy where First Nations in British Columbia are full participants and economically prosperous

These desired outcomes will guide collaboration through the Regional Table and are a central focus of this ongoing initiative's work. A series of initial actions under each opportunity area have been developed leveraging federal and provincial resources and tools, as well as an initial focus on sustainable jobs. Initial engagement has also taken place with a number of experts, labour and industry groups, and regional stakeholders to gain early perspectives on these opportunities and potential actions. These actions and discussions will help advance near-term low-carbon growth opportunities in British Columbia.

As this process continues, governments and the FNLC will engage with title- and rights- holders, as needed, to ensure their perspectives and insights are reflected. The expertise of industry, labour groups, and others will also be mobilized to shape how we can work together to align resources and actions to advance regional opportunities and realize the longer-term vision of the British Columbia Regional Table.

First Nations inclusion

The first phase of the British Columbia Regional Table's work focused on defining how the federal and provincial governments would work together to better align current objectives and actions, as well as build partnerships with First Nations organizations. The integration of First Nation perspectives in the Regional Table process is critical to realizing an inclusive net-zero economy that is grounded in respect, recognition, and reconciliation. To advance this collaboration, the First Nations Energy and Mining Council (FNEMC) and the First Nations Forestry Council (FNFC) are the primary technical supports, under the direction of the FNLC, for engagement on the British Columbia Regional Table initiative with Canada and British Columbia.

To date, FNEMC and FNFC have provided early feedback and perspectives on the Regional Table process and opportunity areas, as well as sought guidance and perspectives of First Nations rights-holders. The results of dialogue with First Nations leaders on May 2, 2023 have been captured in the <u>What we heard: Summary of May 2nd presentations</u>. Perspectives shared included the importance of free, prior, and informed consent, economic inclusion and prosperity, including modernization of agreements, equity, and benefitsharing; the importance of balancing, protecting, and managing resources and water systems in the province and First Nation-led stewardship (e.g., First Nation guardians); and the importance of adhering to the UN Declaration as it relates to the energy and resource sectors.

Initial successes

British Columbia commits to providing up to \$2.5 million to the First Nations Energy and Mining Council to support implementation of the province's *Declaration on the Rights of Indigenous Peoples Act*

Opportunity areas

Critical minerals

Enhance foundational knowledge to target increased investment, critical minerals exports, and value-added production to enable growth of the value chain



Critical minerals represent an important opportunity for Canada's workers, economy, and net-zero future. British Columbia already produces metals and minerals essential for a low-carbon economy, including as Canada's largest producer of copper and only producer of molybdenum. British Columbia also hosts mineral exploration projects advancing significant nickel opportunities as well as cobalt, graphite, rare earth elements, niobium, platinum group minerals, tantalum, vanadium, and zinc. British Columbia has a nascent ecosystem of 40 to 50 actors in different parts of the critical minerals value chain, including companies and innovators in exploration and extraction, advanced materials, battery technology and assembly, software and electronics, and critical mineral reuse and recycling.

In the short term, a key objective is to build systematic geological inventories and evaluations for these emerging natural resources. The province, in collaboration with First Nations, will address this geoscience knowledge gap, assessing downstream processing, refining, manufacturing, and recycling potential.

Given British Columbia's ambitious adoption targets for zeroemission vehicles, there is merit in further exploring backend value-chain opportunities presented by recycling metals and minerals from batteries at end-of-life. This will require addressing regulatory barriers, processing challenges and liabilities to mining waste, improving regulatory efficiency for new mines, collaborating to understand interests and address barriers for First Nations, supporting access to clean electricity through transmission and broader infrastructure, and attracting investment with an aim to develop innovation and processing hubs.

As part of the Regional Table, partners will look at opportunities to address challenges and build new relationships to increase the domestic supply of responsibly sourced critical minerals. They will help develop value chains for the green and digital economy, in line with the <u>Canadian Critical Minerals Strategy</u>, the <u>Canadian</u> <u>Minerals and Metals Plan</u> (Action Plan 2021), British Columbia's planned Critical Mineral Strategy, a First Nations' Critical Minerals Strategy currently under development as well as others, including the First Nations Major Projects Coalition's Critical Mineral Roundtables Overview. British Columbia's experience in building consentbased partnerships with First Nations on critical mineral exploration and development is a global competitive advantage for both British Columbia and Canada. First Nations are seeking assurances that all marketing initiatives – domestic and international – will include First Nations participation and associated resourcing. Canada and British Columbia will continue discussions with First Nations to advance this objective.

Initial successes

Promote **increased First Nation participation** in decision-making and economic development opportunities related to critical minerals by investing over \$700,000 in funding in the BC First Nations Energy and Mining Council through the Indigenous Natural Resource Partnerships program to support **a critical minerals literacy project** and build capacity in this priority area

Provide up to \$2.3 million through Regional Innovation Ecosystems to **upgrade the University of British Columbia's Mining Lab Centre** to produce high-precision data and enable the recovery of critical mineral by-products

Commit \$6 million over three years to develop **the British Columbia Critical Minerals Strategy**, as announced in British Columbia's Budget 2023. The strategy aims to drive potential future clean economic development through increased access to geoscience to facilitate critical mineral exploration and assess potential for critical minerals processing and manufacturing

Unearthing geoscience potential

Areas with critical mineral potential in British Columbia require increased foundational geoscience to help identify exploration targets and to de-risk investment. British Columbia will examine options to incentivize industry's critical mineral exploration and geoscience activities in a manner that is sustainable and creates nature-forward outcomes with minimal environmental footprint and leading-edge conservation and reclamation practices.

Provincial geological mapping, using existing and newly collected data, will facilitate exploration for copper and molybdenum deposits and will encourage responsible exploration to discover new types of critical minerals within British Columbia. This early-stage work contributes to the identification of high-potential projects, attractive investment opportunities, and the possibility to expand the types of critical minerals produced by British Columbia.

First Nation communities' participation and contributions to foundational geoscience can support greater collaboration between governments to facilitate the delivery of accessible geoscience data and knowledge. First Nations access and input into baseline knowledge increases opportunities for the participation of Nations in decision-making, exploration activities, and economic development related to critical minerals projects within their territories. First Nations partners have expressed an interest in further exploring a First Nations-led geoscience organization.

Focused collaboration in the short-term

Initiate discussions on integrated and inclusive geoscience and exploration opportunities with First Nation representatives and leaders, Indigenous geoscientists, and knowledge keepers. Establish how geoscience data will be managed in partnership with Nations and explore opportunities for supporting First Nations geoscience and mineral literacy training Identify and deliver collaborative geoscience training and critical minerals programming

Partner to prioritize airborne geophysical coverage and geochemical surveys targeted at detecting new critical mineral opportunities in British Columbia

Value chain assessment and maximization

Undertaking detailed value chain and comparative advantage assessments are key to securing British Columbia's regional position in shifting critical minerals supply chains. Better understanding the province's current state of play and potential will help focus efforts in areas of the value chain that leverage the province's strengths and natural advantage. The assessment will explore British Columbia's potential for innovation clusters, mid-stream materials processing facilities, and an advanced (battery) materials research centre.

Focused collaboration in the short-term:

Undertake a battery critical mineral value chain assessment

Conduct analysis of workforce availability and suitability for critical minerals mining and processing activities

Circular economy opportunities

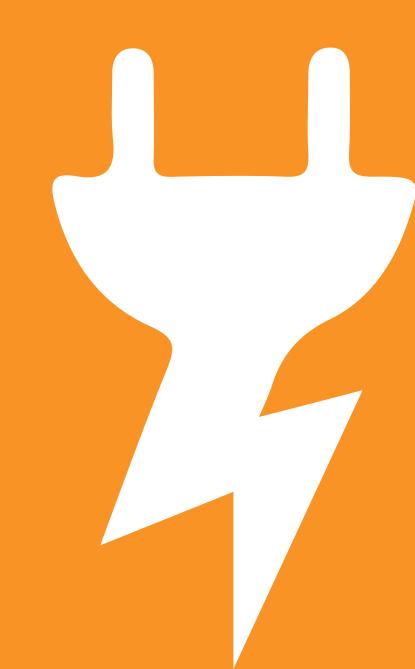
Accelerating British Columbia's circular economy approaches requires support of both environmental and economic goals and is an interest shared by governments and First Nations in British Columbia. Achieving the province's ambitious zero-emission vehicle targets presents opportunities to become a leader in building approaches to recycling and reusing critical materials throughout the lifecycle of a battery as well as adopting circular economy and innovative waste approaches.

Focused collaboration in the short-term

Conduct an analysis of end-oflife challenges and opportunities related to re-use, dismantling, and reprocessing/critical mineral recovery from batteries (including provincial flows and capacities) Undertake a regional case study to assess sampling requirements for tailings/abandoned mines to understand viability of mine waste disposal sites in partnership with potentially impacted First Nations Identify and explore removal of regionally specific regulatory and legislative barriers linked to mining from waste

Electrification

Pursue cross-sectoral electrification opportunities that support the achievement of climate targets and accelerate economic growth



The CleanBC Roadmap to 2030, in alignment with Canada's climate targets, identifies industrial electrification as a way to decarbonize, create good jobs, and advance pathways to achieving 2030 targets. While approximately 98 per cent of British Columbia's electricity generation comes from clean or renewable resources, nearly 70 per cent of the province's end-use energy demand is currently met through fossil fuels such as gasoline, diesel, and natural gas. As the demand for energy continues to grow, availability of and access to clean electricity, including from renewables, is central to supporting a competitive low-carbon economy, now and into the future. This is why both governments are making substantive investments in this area, including most recently in federal Budget 2023, where the Government of Canada announced a federal investment tax credit projected to cost \$6.3 billion over four years and over \$3 billion in targeted programming to support clean electricity. British Columbia is working to maximize the benefits from this investment tax credit.

Expanding access to clean electricity can support opportunities for decarbonization, improve community and First Nations' wellbeing, and help attract investments that can drive exports and sustainable job creation. Building the transmission infrastructure and clean electricity projects needed, however, cannot be done without strong partnerships with First Nations. Ongoing dialogue will continue on ways to ensure First Nations participation, building on BC Hydro's mandate to consider options for Indigenous ownership and/or equity interest in infrastructure and Indigenous partnership in clean energy projects. Federal tools can help facilitate this, including targeted programming and the Canada Infrastructure Bank, which in Budget 2023 had its mandate expanded to allow it to provide loans to Indigenous communities to support them in purchasing equity stakes in infrastructure projects in which the Bank is also investing.

Beyond decarbonization initiatives, recent geopolitical and domestic supply pressures have highlighted the risks associated with energy and the supply chain for metals needed for the energy transition. Infrastructure projects to support electricity demand from ports, as well as clean fuels production and distribution opportunities, underpin the possibilities for economic growth and export of clean energy products like hydrogen and ammonia. Further, efforts to utilize raw materials and support the critical minerals value chain demand access to clean electricity to electrify existing and developing mines in the Northwest region of British Columbia.

Initial successes

Canada and British Columbia commit to **partner on intra-provincial electricity infrastructure**, working with Indigenous Nations to support lowcarbon economic development in the **North Coast and Northeast**, including assessing options for utility and government financial support, encouraging Indigenous partnerships, and accelerating the regulatory and permitting processes

Fund up to \$6.7 million from Natural Resources Canada's Smart Renewables and Electrification Pathways (SREPs) Program for six projects, including capacity-building and feasibility studies, to support Indigenous communities by building knowledge and skills related to renewable energy and grid modernization technologies

BC Hydro Task Force created to assist in expediting decisions on critical infrastructure required for electrification

British Columbia is moving forward with a **call for new sources of renewable, emission-free electricity** to power British Columbia's growing clean economy and is providing \$140 million to the BC Indigenous Clean Energy Initiative (BCICEI) to support Indigenous-led power projects, create economic opportunities for First Nations, and advance community selfdetermination

Advance priority transmission projects to support electrification

Investment in new or expanded transmission infrastructure to support the electrification of emerging and existing industrial operations is a central priority for British Columbia and Canada. A first step is undertaking assessments to fully understand customer connection economics and potential project costs and benefits (including jobs, capital investment, and reduced or avoided greenhouse gas emissions). For example, BC Hydro recently concluded a call for Expressions of Interest to identify current or proposed initiatives in order to assess industrial electrification opportunities in the North Coast region. This important foundational work will highlight potential opportunities for collaboration and will support the BC Hydro Task Force's work as part of the British Columbia Energy Action Framework. The forward approach and commitment would be that any potential project would be pursued in full partnership and with the consent of impacted First Nations.

Focused collaboration in the short-term

Review identified areas in British Columbia – the North Coast, North Montney, the Southeast, and Lower Mainland – to establish a collective understanding of potential electrification opportunities from new demand, in summer 2023 Assess constraints and options for new transmission and upgrades that could serve this new demand. This could include consideration of requirements for new generation

Identify priorities for electricity infrastructure projects that could support electrification and economic development, with a particular focus on the North Coast. This would include an assessment of financial requirements and opportunities for First Nations economic participation in full partnership with impacted First Nations Explore options to support industrial customer grid connections that will enable the electrification of existing and new customers Consider local generation opportunities to reduce the use of diesel in rural and remote communities as well as Indigenous communities

Enhance energy efficiency programs

The CleanBC Roadmap to 2030 outlines end-use pathways to meeting provincial targets, including the decarbonization of buildings through zero-carbon building code requirements for new construction and highest efficiency equipment standards by 2030. Both pathways will rely on electrification as a major pathway and British Columbia has worked to integrate provincial, utility, and local government clean building programs and incentives. Continued collaboration and integration of federal and provincial programs in an inclusive manner will accelerate end-use electrification in preparation for future codes and standards.

Initial successes

Fund more than \$10.8 million to support 9 projects through the Clean Energy for Rural and Remote Communities program for demonstration projects and feasibility studies that will help **reduce reliance on fossil fuels to power local homes and buildings**

Provide \$30 million to remote Indigenous communities to help them **reduce diesel use for power through investments in energy efficiency and more renewable energy options** through the provincial Community Energy Diesel Reduction program

Focused collaboration in the short-term:

Continue to work together to better align the Canada Greener Homes Grant and the CleanBC Better Homes program Share research and develop a plan to increase the supply of heat pumps and other essential equipment for lowcarbon buildings Provide technical guidance to inform British Columbia's implementation of a Virtual Home Energy Rating System to assess and foster compatibility and complementarity with federal programs and policies

Accelerate clean transportation goals

As it relates to the clean transportation space, British Columbia's ambitious efforts encouraging "mode shifting" to more energy efficient forms of transport, such as public transit, alongside the transition to zero-emission vehicles and cleaner fuels will be part of a Clean Transportation Action Plan, setting out targeted actions to reduce transportation emissions by 27 to 32 per cent (from 2007) by 2030. Opportunities for collaboration with partners are aimed at better aligning and coordinating provincial and federal zero-emission vehicle infrastructure programs, promoting consistent modelling of whole transportation systems, charting transition pathways for both light-duty and medium- and heavy- duty vehicles, and exploring opportunities for zero-emission vehicle supply requirements, and regulatory options to increase efficiency of on-road vehicles. Improving collaboration between federal and provincial programs to understand the available tools to increase end-use electrification and assess how further alignment, including integration, can increase effectiveness of projects and programs is ongoing.

Initial successes

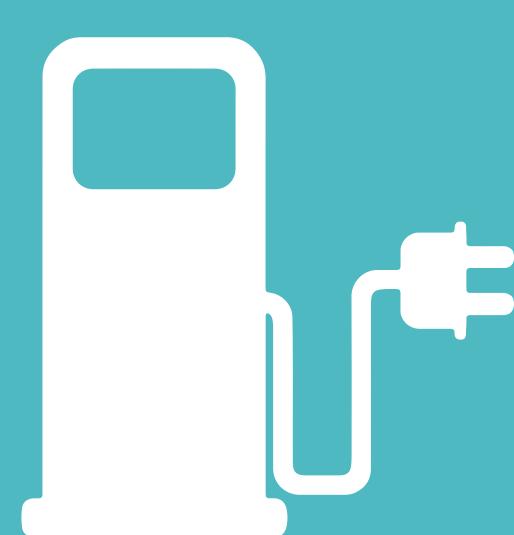
Support for **clean transportation initiatives**, including \$26 million for lightduty vehicle charging under the CleanBC Public Charging program; \$19.5 million for medium- and heavy- duty charging under the CleanBC Public Charging program; \$17.3 million under the Clean BC Go Electric program; and \$30 million towards the Commercial Vehicle Innovation Challenge

Focused collaboration in the short-term

Improve understanding of the clean transportation sector and its needs through data gathering/studies Continue to work together to better align the provincial and federal zero-emission vehicle rebate and infrastructure programs and regulations Assess new measures to support transportation decarbonization

Clean fuels / hydrogen

Accelerate the production and use of clean fuels – in particular, hydrogen – to foster British Columbia's position as a world leader



Hydrogen is expected to play an important role in efforts to transition away from higher-carbon fuels to a cleaner, low-carbon energy system. Hydrogen opportunities across Canada could create \$50 billion in domestic revenue and more than 350,000 high paying jobs from coast to coast to coast. Beyond domestic uses, Canadian hydrogen exports could add another \$50 billion to the Canadian economy by 2050, according to a study from The Transition Accelerator.

Recognizing British Columbia's expertise in fuel cell innovation, home to the hydrogen fuel cell renaissance in the 1990s, as well as its hydrogen technologies, there is immense potential for British Columbia to leverage its strengths as the hydrogen economy grows. A combination of low-cost, low-carbon electricity generation, substantial natural gas resources and carbon sequestration reservoirs, deep-sea harbour locations, and good road and rail networks also make the province an obvious choice for clean hydrogen production and export to Asian markets. British Columbia's clean hydrogen production capacity is estimated to be in excess of 2.2 million tonnes per year, positioning it to satisfy demand not just in-province, but across the Indo-Pacific region.

Developing and scaling-up other clean fuels can also support a prosperous economic future for British Columbia in achieving net-zero emissions by 2050. Liquid biofuel alternatives to fossil fuels used for transportation play an integral role in lowering greenhouse gas emissions and supporting British Columbia's economy. The province has announced a target of 1.3 billion litres of renewable fuel production by 2030. Several projects are already underway, incentivized by the provincial *Low Carbon Fuel Standard* and the federal *Clean Fuels Regulations*, that will utilize the province's renewable resources to produce lowcarbon gasoline, diesel, and aviation fuel. Recently, British Columbia's carbon intensity stringency for transportation fuels has been increased from 20 per cent lower by 2030 to 30 per cent lower by 2030. Maintaining competitiveness in relation to other jurisdictions positioning themselves to supply global clean fuels markets will continue to be a key focus for British Columbia.

Consistent with the <u>Hydrogen Strategy for Canada</u>, the <u>British Columbia</u> <u>Hydrogen Strategy</u>, a planned First Nation Hydrogen Strategy, and the CleanBC Roadmap to 2030, partners will work together to achieve the fullest potential in hydrogen and other clean fuel sectors. To this end, the BC Energy Regulator is providing oversight and permitting on all types of hydrogen production, including for ammonia and methanol. In addition, federal Budget 2023 announced an Investment Tax Credit for Clean Hydrogen, proposed to support future projects.

As part of the Regional Table, partners will look at opportunities to support low-carbon fuel project development and hydrogen hubs, promote exports, and support First Nation-led clean fuel projects. Partners will also work with industry to maximize private sector investment, simplify federal and provincial government funding processes, and enhance regulatory certainty. The support framework will continue to maximize market flexibility and avoid picking winners.

Initial successes

Canada and British Columbia commit to working together to explore **opportunities for large-scale clean fuels projects** needed to anchor the sector, decarbonize large industry, and bring extensive global major project experience to British Columbia to kickstart hydrogen hubs

Fund up to \$53.7 million from the Government of Canada's Clean Fuels Fund and its Energy Innovation Program to support production projects and feasibility studies related to **hydrogen** and other **clean fuels** in British Columbia

Support from a Part 3 Agreement under the British Columbia Low Carbon Fuel Standard for Tidewater Renewables' **renewable diesel production** plant at its Prince George refinery

Provide up to \$15 million through the Strategic Innovation Fund to AVL Fuel Cell Canada Inc. to develop a centre and a portfolio of **innovative fuel cell technologies** and world-class engineering solutions for customers in the transportation sector globally

British Columbia's new Low Carbon Fuels Act, scheduled to come into force January 1, 2024, will enable **coverage** of other fuel pools such as aviation and marine

Enable foundations for clean fuels competitiveness in British Columbia

Several factors will determine British Columbia's success in expanding its clean fuel production, growing domestic demand, and reaching external markets. These range from building the right infrastructure, supporting First Nation participation, and ensuring effective policies are in place to support high-impact projects through effective investments and regulatory processes across governments.

Focused collaboration in the short-term

Commit to share information on the assessment of competitiveness actions taken by other countries in order to promote clean fuels production and use Support First Nations leadership by offering resources to First Nations partners, encouraging more First Nations-led clean fuels projects

Undertake joint consideration/review of a case study in order to develop clear guidance for proponents on hydrogen regulatory processes and priority areas for regulatory reform and alignment Collaborate to assess and support key infrastructure needed to increase gaseous and liquid clean fuels production, distribution, enduse, and exports in British Columbia, including hydrogen transportation refueling infrastructure Leverage federal and provincial incentives and regional advantages, like electrical infrastructure, to continue to promote the production and consumption of clean fuels in British Columbia

Develop the hydrogen economy in British Columbia and support the entire hydrogen value chain

British Columbia is well positioned to not only meet local demand for hydrogen through regional project development but also to be a trusted supplier to the global market. To secure its comparative advantage, the province will need to be a destination of choice for investment in hydrogen-related projects and find ways to localize an increasing share of the value chain over time. Effective government investments and other public supports will assist with this.

Focused collaboration in the short-term

Identify opportunities for risk-sharing and government support to facilitate greater private sector investment in hydrogen Support the advancement of hydrogen projects ranging from pilot- to utility-scale Collaborate on analysis and research for valueadded clean hydrogen co-products, such as carbon black, oxygen, and others Develop a labour market plan to support clean fuels development and production

Advance the role of bioenergy and synthetic energy in British Columbia's energy system

Various factors will drive the long-term demand trajectory for clean fuels, including bio- and synthetic fuel and their role in British Columbia's energy shift. Demand for all clean fuels is expected to grow on the road to net-zero 2050, as clean fuels are an important transition pathway to a strong economy. Pathways to net-zero by 2050 vary, but each involves supporting clean fuels to enable their full decarbonizing potential, wherever that ceiling may be. It will be important to be nimble in adapting to new understandings and market realities.

Focused collaboration in the short-term

Collaborate on a strategic review or general assessment of British Columbia's biofuels and bioenergy production potential in different regions of British Columbia

Forest sector

Develop British Columbia's bioeconomy and markets for forest-based products domestically and abroad to maximize the forest sector's contribution to emissions reductions targets and to advance First Nations' participation in the sector



Forests in British Columbia are sustainable and various demands on the forest and land base — including jobs and economic development, biodiversity and habitat, conservation, carbon storage, and reconciliation — are carefully balanced and supported by collaborative efforts.

Forests in British Columbia are a major source of economic, social, cultural, and environmental benefits. In 2022, about 56,000 British Columbians were employed in the forest sector, which made up 24 per cent of the province's total commodity export value, equal to \$15.3 billion. Overall, the forest sector contributed \$5.8 billion to the provincial gross domestic product in 2022 and \$1.89 billion to the provincial government's revenue for 2021/22. It also accounted for 33 per cent of provincial manufacturing sales in 2021. British Columbia has incredibly diverse ecosystems with 14 broad ecological zones, each of which is distinct in terms of climate, soil, and vegetation. An estimated 13.2 million hectares of British Columbia's forests are old growth.

First Nations, federal, and provincial governments have sought to implement forest and sector-specific programming to develop new approaches to utilize forest resources, products and processes; demonstrate firstin-kind commercial processes and increase the use of mass-timber; expand and diversify markets around the world; support reforestation efforts; mitigate and adapt to climate change; and provide opportunities for First Nations participation in the industry. First Nation's leadership have indicated a stewardship of all lands, including old forests, is an important matter to them and their communities.

At the federal level, Budget 2023 proposed to provide Natural Resources Canada \$368.4 million over three years, starting in 2023-24, to renew and update forest sector support, including for research and development, Indigenous leadership, and data. Renewed forest sector programs may be able to support projects in line with objectives identified in this framework, including projects related to research, development and demonstration, wood-based construction, and First Nation opportunities in the forest sector.

The Province of British Columbia is working to modernize forest policy and transform the sector, recognizing the need to make sustainable choices to ensure future generations continue to enjoy and benefit from forests. This includes British Columbia's new approach to old growth management as well as provincial forest landscape planning, which will be completed in partnership with First Nations and informed by stakeholders. This work will be supported by the British Columbia Old Growth Nature Fund, which includes \$50 million contributions from both the Government of Canada and the Government of British Columbia to protect the most iconic old growth forests in the province. Additionally, ongoing efforts will support British Columbia's vision for its forests by increasing local control, enabling reconciliation, and prioritizing forest health in a manner that supports economic opportunities.

For the forest sector to continue to generate strong economic and social benefits, the growing opportunities for forests to support clean growth will need to be pursued in a way that upholds Indigenous rights and aligns with biodiversity and climate change imperatives. As part of the Regional Table, governments and partners will look at opportunities to continue to advance these goals by supporting growth in the production and export of high-value forest products; encouraging innovators and manufacturers to use forest harvest and processing residues; seizing opportunities for the forest sector to contribute directly to Canada's net-zero goals; and advancing forest landscape plans to create opportunities for shared-decision making between governments and interested First Nation partners. This work will support actions identified through the Canadian Council of Forest Ministers Renewed Forest Bioeconomy Framework to realize the potential of the forest bioeconomy in Canada.

Initial successes

Co-invest, along with industry, \$9 million in a **robotic mass timber processing line**. Aims to design, install, and commission a robotic multi-function processing line that will produce high-performance mass timber panels with superior acoustic and moisture-resistant properties

Contribute \$1.3 million to support trials for **lime kiln decarbonization** to de-risk fuel switching and carbon capture processes in large-scale lime kilns in regional kraft mills

Provide over \$460,000 to the First Nations Forestry Council to develop and facilitate a series of 3-day online **First Nations Forestry Basics Courses** followed by a career fair in four regions throughout British Columbia

Provide up to \$1.6 million through Regional Innovation Ecosystems to support an FPInnovations project focused on establishing an **Indigenous Innovative Bioeconomy Demonstration Program** for Indigenous communities and businesses involved in British Columbia's forestry sector

\$50 million over two years with the **Forest Enhancement Society of British Columbia** to collaborate on projects and programs to increase the use of trees damaged by recent wildfires and fibre that would otherwise be burned in slash piles – actions that benefit communities, workers, and the health of forests

\$80 million in joint funding with a two-year Contribution Agreement under the **2 Billion Trees program**

Growth in the production and export of high-value forest products

There are emerging opportunities for the forest sector in British Columbia to increase its socio-economic and environmental benefits through the growth of high-value wood and bioproducts markets. To capture these opportunities, further investment is required to increase research, development, and demonstration in key technologies and conversion processes, and in the development of standards and definitions for products. This would support increased production and market uptake of bioproducts and wood construction materials as alternatives to traditional carbon-intensive products.

Focused collaboration in the short-term

Continue to support research, development, and innovative forest practices to promote British Columbia's forest bioeconomy and advanced bioproducts Support market development and commercialization of wood-based construction materials

Support markets that use forest harvest and processing residues and improve resource utilization for British Columbia commercial harvest

British Columbia's timber supply has been impacted in recent years. Developing opportunities to utilize more fibre from timber by increasing the use of harvest and processing residues will allow British Columbia to realize greater value from reduced harvests while moving up the value chain.

Focused collaboration in the short-term

Support bioproduct development to better utilize harvest slash pile residuals

Increase Indigenous access to training and participation in the forest sector and create opportunities for shared decision-making between federal and provincial governments and First Nations partners

First Nations are significant contributors, knowledge holders, and participants in the forest sector in British Columbia. Engagement with First Nation partners will help identify priorities and requirements to expand communities' participation in forestry and stewardship, increasing involvement and employment of Indigenous citizens in the sector. Collaboration with partners will also provide opportunities to weave together Western and Indigenous knowledge systems to better manage forest resources.

Focused collaboration in the short-term

Support technical and business development of uses for forest biomass by providing access to attract investment and inform decision-making Increase First Nations participation and shared decision-making opportunities in forest management through forest landscape planning, incorporating traditional values and knowledge in managing forests for sustainability and resiliency Analysis of impacts of forest management activities on social, ecological, cultural, timber values through forest landscape planning

Accelerate deployment of opportunities for the forest sector to contribute to Canada's net-zero goals

The forest landscape offers nature-based climate solutions and carbon storage opportunities that can support emissions reductions, contribute to conservation objectives, and strengthen the carbon-credit marketplace. Significant opportunities exist for the forest sector in British Columbia to contribute to broader net-zero goals by growing the provincial forest carbon sink, deploying negative emission solutions that leverage biomass, and enhancing a common, efficient market for interjurisdictional carbon offsets.

Focused collaboration in the short-term

Explore opportunities to accelerate support of reduced emissions technologies in the forest sector

Carbon management technology and systems

Develop a regionally specific carbon management approach that supports competitive clean energy and resource sectors



Carbon management will be a key enabler in the net-zero economy. British Columbia is well positioned to supply the solutions needed to support clean growth goals while growing the sustainable economy of the future. British Columbia holds advantages in the deployment of carbon management technologies and systems (CMTS) that includes factors such as suitable geology in Northeast British Columbia for carbon storage; an established and experienced single-window regulator in the British Columbia Energy Regulator; and an active research and development sector. It is important to recognize that this innovation is driven from a variety of homegrown innovators – companies that are having a global impact in this space. In addition, British Columbia has experience with carbon dioxide (CO2) injection and storage through acid gas disposal projects that operate in the Northeastern region of the province.

Joint efforts can help support the research, development, and deployment of carbon management technologies and the development of related infrastructure, including the advancement of policy frameworks that enable adoption, deployment, and the permanent and safe storage of captured CO2. Leveraging British Columbia's expertise and capacity in research and technology development will help to favourably position British Columbia innovators, while also contributing to clean economic growth. Job retention and creation associated with the growth of value-added industries and carbon tech companies in the province will aim to benefit First Nation and other communities in British Columbia.

British Columbia's priorities in carbon management technologies and systems include attracting private investment by leveraging provincial programs, including the CleanBC Industry fund, and federal measures including the Investment Tax Credit for carbon capture, utilization, and storage (CCUS), direct funding supports, and other financial support measures. British Columbia is working to introduce further supporting policy for CCUS in the province. Similarly, having an enabling business and regulatory environment with competitive climate policies relative to those of other leading international jurisdictions like the United States is also an important element for attracting investment. Other British Columbia priorities include supporting the development of a skilled and diverse workforce, building public confidence, and promoting opportunities for First Nations.

Initial successes

BC Energy Regulator to provide oversight on carbon capture, utilization and storage (CCUS) implementation

Confirmed eligibility of British Columbia's CO2 geological storage regime under the federal CCUS investment tax credit, which could support CCUS projects in the province

Advance the development of a provincial carbon management approach

British Columbia's policy framework, expertise, and storage capacity — along with its research, development, and deployment infrastructure – position it well to successfully deploy carbon management technologies. Emphasizing its comparative advantages could bring a regionally specific vision to this opportunity that could better support leveraging existing tools in future programming approaches. Considering additional information on pathways for emissions reductions could enable a collective understanding of the needs and uses for carbon management technologies in the province.

Focused collaboration in the short-term

Review existing studies for insight on emissions reductions needed from carbon management technologies and systems in British Columbia, including how they might enable economic opportunities

Address knowledge gaps and enable and incentivize the development and deployment of carbon management systems

Generating a base of evidence to inform the development of a British Columbia carbon management approach can provide clear signals to industry and foster a spirit of collaboration. Identifying knowledge gaps with a focus on targeted analysis to inform efficient and coordinated development of carbon management would also be a key enabler of the technology and related systems.

Focused collaboration in the short-term

Conduct joint analysis of potential storage capacity, which could leverage research activities such as the Northeast BC Geological Carbon Capture and Storage Atlas Explore whether there are opportunities to advance additional areas for collaboration aimed at increased program-based alignment between Natural Resources Canada, the province, and interested First Nation organizations Assess opportunities and options linked to infrastructure hubs, clusters, and network planning through targeted analysis

Regulatory efficiency

Engagement between Indigenous rights-holders, Canada, British Columbia, and key industry to align expectations and opportunities, as well as test innovative approaches to improve the efficiency of the regulatory and permitting system



Meeting Canada and British Columbia's climate goals and building a prosperous low-carbon economy will require transformative clean growth projects to move forward at a faster pace, while retaining robust assessment processes. Clean growth projects will require multiple regulatory and permitting approvals across jurisdictions. Most will fall within provincial jurisdiction but will likely require federal and First Nations decisions, or may require federal and First Nations impact assessment. Emerging clean growth sectors such as hydrogen require system clarity. Other more conventional sectors, such as critical mineral mining, could benefit from improved regulatory efficiency and greater involvement of impacted First Nations to maximize competitiveness, community benefits, and meet climate goals.

To do this, governments will need to find ways to better coordinate regulatory and permitting processes, while continuing to improve how to partner with First Nations to advance their involvement in regulatory and permitting processes, reconciliation, and the implementation of the UN Declaration. This requires working in lockstep with Indigenous rights-holders and First Nations organizations, communities, and industry.

Internal to governments, efforts are underway to address challenges associated with multiple and sometimes overlapping mandates and jurisdictions; unclear regulatory pathways for emerging sectors; measures to improve economic inclusion of Indigenous citizens; and the need for clear guidelines to ensure respectful, early, and ongoing engagement with rights-holders.

Importantly, adopting regulatory alignment principles among jurisdictions that prioritize early and meaningful engagement of First Nations will build a better regulatory landscape for proponents with clearer outcomes and pathways to final investment decisions.

A common goal for governments and partners is to find ways to expedite clean growth projects through existing regulatory and permitting processes, while maintaining strong regulatory standards and implementing the principles of the UN Declaration. Canada and British Columbia will work in collaboration with First Nations organizations and governments to identify opportunities to improve alignment, integration, and coordination of regulatory and permitting processes. This will include collaboratively mapping regulatory system opportunities; working through potential efficiencies by using real world projects and processes to inform potential approaches to regulatory problem solving; and investing in building a sustainable approach through appropriate oversight mechanisms.

Accelerating Clean Growth Projects

Canada, British Columbia, and First Nations commit to an approach, with the participation of industry, that would accelerate clean growth projects (e.g., critical minerals, electrification and/or clean fuels) through the regulatory and permitting processes, while retaining robust and integrated assessment processes consistent with the Declaration on the Rights of Indigenous Peoples Act. British Columbia and Canada will commit to plans for integrated processes including robust senior executive oversight mechanisms as appropriate, between First Nations, federal and provincial governments that will provide guidance and support for project proponents and impacted First Nations groups during regulatory, permitting, and consultation processes.

Focused collaboration in the short-term

By Fall 2023, work collaboratively to identify challenges and opportunities for improvements in regulatory coordination and efficiency in priority geographic areas and sectors, including through focused case studies Work with First Nations, and with the participation of industry, on an approach that would accelerate clean growth projects (e.g., critical minerals, electrification and/ or clean fuels) through the regulatory and permitting processes, while retaining robust and integrated assessment processes consistent with the Declaration on the Rights of Indigenous Peoples Act. British Columbia and Canada will commit to plans for integrated processes, including robust senior executive oversight mechanisms as appropriate, between First Nations, federal, and provincial governments that will provide guidance and support for project proponents and impacted First Nations groups during regulatory, permitting, and consultation process

Sustainable jobs

To ensure a prosperous net-zero future, it is important to ensure we keep pace with the changing nature of the labour market and the variety of skills that will be in demand. While the term 'sustainable job' has various connotations, in the context of the <u>Sustainable Jobs Plan</u>, the Government of Canada understands a 'sustainable job' to mean any job that is compatible with Canada's path to a net-zero emissions and climate resilient future. The term can also reflect the concept of decent, wellpaying, high-quality jobs that can support workers and their families over time, and includes such elements as fair income, job security, social protection, and social dialogue. Developing a low-carbon economy will create significant job growth in emerging and expanding energy and resource sectors and provides an opportunity to enhance equity and diversity and address barriers for underrepresented groups. The Regional Tables will support the creation of good, sustainable jobs and careers in every region of Canada.

Positioning British Columbia for success in the opportunity areas identified in this framework will require ensuring that there are enough skilled workers to meet future demand. Governments, First Nation leaders, labour unions, employers, and educational organizations all have a role to play in ensuring the workforce is ready for this future. First Nations have also shared that self-determination with autonomy, rather than short-term employment, is a desired goal.

The Government of British Columbia is taking action to respond to these challenges, including the recently announced the <u>StrongerBC: Future Ready Action Plan</u>, which represents a \$480 million investment in helping people get the skills they need to succeed in the changing economy and help close the skills gap many businesses are facing. This Action Plan is focused on making post-secondary education and skills training more affordable and accessible, and responds to the biggest challenge heard from businesses – the need for people. Future Ready investments will add thousands of training seats and offer a new grant for short-term training programs to help people get trained and working in high-demand fields.

Various sectors profiled in this framework are already facing a skills gap. For example, in British Columbia, the mining and forestry industries have indicated a need to build training and workforce capacity, particularly among Indigenous communities and employees. Other priorities within the collaboration framework, such as electrification, may not require large increases in the overall labour force, but may require new skills and certifications for the current workforce to shift towards new work activities. For example, transitioning to electric heating, ventilation, and air conditioning systems will require different skills and certifications than those needed to install and maintain oil/natural gas-powered equipment.

Some workers already have some or all of the skills needed for a net-zero economy. As many as 70 occupations have some level of skill transferability to carbon capture, hydrogen, and renewable energy such as wind, solar, and geothermal, sectors. These occupations include electrical engineers, heavy equipment operators, facility operations and maintenance managers, investment relations professionals, warehouse technicians, and logistics coordinators. The Regional Table in British Columbia provides a forum to discuss the skills needed as Canada moves to a low-carbon economy.

In addition to skills considerations, the practice of pursuing training, certain educational prerequisites needed to access training, and how far along a worker is in their career could impact an employee's capability to enhance their existing skillset. Employer-funded skills training, financial supports for workers looking to retrain, and the availability and articulation of opportunities based on skills similarity and skill level are strategies that can be implemented to help address some of these barriers and to ensure that the workforce is able to access the training they need to be successful in a net-zero environment. The precise nature of these skills and the demand for them will depend on the transition paths that British Columbia and Canada take. In this regard, the work and engagement that will be pursued through the Regional Table will look to provide insight on anticipated workforce and skills needs associated with British Columbia's net-zero economy.

Initial successes

British Columbia continues to support inclusive economic growth and commits to joining the Equal by 30 campaign, an international initiative that works to accelerate gender equality and diversity in clean energy transitions and close the gender gap by 2030

Focused collaboration in the short-term

Develop a labour market plan to support the priorities identified in the Regional Table in partnership with British Columbia labour organizations, industry, First Nations, and Indigenous organizations. The plan is to include projections of British Columbia's labour force in the medium to long-term; analysis of workforce availability and suitability; future opportunities, risks and barriers; and participation of under-represented groups and Indigenous peoples

Implementation and next steps

The areas for early collaboration identified in this document represent initial priorities and actions that, together, will help generate increased momentum in mobilizing partners and attracting investment in sectors that are key to economic prosperity in British Columbia, in a manner that recognizes First Nations' values and knowledge related to the land and is grounded in respect and reconciliation.

This framework for collaboration developed between the Government of Canada, Government of British Columbia, and the FNLC was shaped by initial input from First Nations, labour and industry groups, experts, and others. The next phase of this initiative will involve broadened and more substantive engagement with the objective of developing a comprehensive strategy. These discussions will seek to deepen understandings of value chain opportunities in priority energy and resource sectors, as well as knowledge of workforce considerations, enabling factors, barriers to development, and projects of regional significance that will transform British Columbia's economy. This work and its objectives will remain consistent with federal and provincial climate and sustainable jobs objectives and legislation.

Dialogues will further develop and expand to reflect and account for Indigenous perspectives, as the inclusion of these perspectives is essential to the initiative. Continued engagement with interested First Nations and Indigenous organizations in British Columbia will provide fora to discuss the opportunity areas, Indigenous perspectives, and interests related to an inclusive net-zero economy, while reflecting Indigenous laws and values.

Finally, over the coming months, the Regional Table will pursue ongoing collaboration to explore more systematic and effective ways to identify, prioritize and advance regionally significant projects in British Columbia, including through improving program alignment and complementarity, exchanging technical expertise, and co-funding strategic projects.

As this work is taking place, implementation of the actions listed in this framework will be a primary focus over the coming year. A number of actions are already underway, while others will require mobilizing partners and securing opportunities to leverage various funding and financing instruments to support priorities and projects that will drive the transformation and growth opportunities in the province. Efforts will continue throughout the year to deliver and demonstrate tangible results. The Minister of Natural Resources Canada and the Minister of Energy, Mines and Low Carbon Innovation of British Columbia will publicly report on progress across the opportunity areas detailed in this collaborative framework within one year, at which point key elements of a more detailed strategy will also be released.