

The Honourable John Horgan
Premier of British Columbia

The Honourable George Heyman
Minister, Environment and Climate Change

The Honourable Carole James
Minister, Finance

June 12, 2020

Dear Premier Horgan, Minister Heyman, and Minister James

RE: Climate Solutions Council recommendations to government on economic recovery and stimulus

The Climate Solutions Council would like to thank you for the opportunity to continue to provide advice on opportunities for stimulus and economic recovery as B.C. responds to the COVID-19 crisis. The work you have done to flatten the curve and the careful step-by-step process of the BC Restart Plan puts B.C. in good stead to recover from the impacts of the pandemic. Your assertion on May 6 that the province must recommit to putting CleanBC at the center of our recovery affirms B.C.'s climate leadership.

We continue to urge the government to apply a climate and equity lens to all stimulus and recovery measures, building on the objectives, values and actions of CleanBC. This includes ensuring short-term actions are consistent with our longer-term transition to a sustainable low-carbon society and economy, and when it comes to stimulus, seeking out specific projects that are both **“shovel ready” and “shovel worthy.”**

A growing number of jurisdictions have begun rolling out economic recovery plans, and those that have historically led on climate action continue to do so by aligning recovery efforts with ongoing innovation and deployment of climate solutions. Germany, for example, has committed nearly one-third of its 130 billion euro recovery budget. The European Commission's planned recovery similarly includes a focus on climate action, including significant multi-year investments in building renovations (prioritizing schools, hospitals, and social housing), clean hydrogen, renewable energy, and clean transportation.¹ In California, Governor Newsom has appointed a task force to help California recover as fast and safely as possible, creating a fair, green, and prosperous future.

The rationale for this approach is as much about the economy as it is about the environment. In a recent study,² prominent economists note that properly-designed clean stimulus policies can have advantages over traditional fiscal stimulus, delivering climate benefits, strong economic results, and other co-benefits to society. The study surveyed 231 experts from central banks, finance ministries, and other economic experts from G20 countries and found that green fiscal recovery packages can act to

¹ K. Abnett. May 27, 2020. “Key climate spending in EU's 'green recovery' plan.” Reuters. <https://www.reuters.com/article/us-eu-budget-recovery-climate-factbox/factbox-key-climate-spending-in-eu-green-recovery-plan-idUSKBN2331RB>

² Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and Zenghelis, D. (2020), ‘Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?’, Smith School Working Paper 20-02. (Forthcoming in: Oxford Review of Economic Policy 36(S1)) <https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf>

decouple economic growth from greenhouse gas (GHG) emissions, while also reducing existing welfare inequities.

Building on learnings from these other jurisdictions, and our advice letters from April 15 and May 11, we would like to provide the following advice to support the B.C. government's design of an economic recovery plan and allocation of stimulus. We have divided our latest advice into three areas: (1) a set of principles that we recommend government adopt to put CleanBC at the centre of an economic recovery plan, (2) criteria that can be used evaluating proposed immediate stimulus initiatives within the allocated \$1.5 billion, and (3) our advice on stimulus investments, which meet the criteria and are consistent with the principles.

Recommended Principles for B.C.'s Economic Stimulus

- **Benefit every part of British Columbia**
Reduce inequality and create opportunity for all British Columbians, including vulnerable populations disproportionately impacted by climate change and COVID-19.
- **Create sustainable jobs**
Target investments in areas that will create sustainable jobs and grow businesses that produce low carbon goods and services. For example, take advantage of high job multipliers in the retrofits and clean economy sectors. Improve skills and employability of the workforce in partnership with post-secondary and apprenticeship programs, and support a just transition.
- **Accelerate progress on CleanBC and climate action**
Drive transformative change by investing in low carbon pathways such as electrification, renewable fuels, hydrogen, zero emissions transportation, low carbon and energy efficient buildings. Remove barriers and support B.C. businesses and industries to enhance competitiveness and enable production of low carbon goods and services.
- **Advance Indigenous peoples**
Affirm and implement BCDRIPA, with priority for advancing Indigenous peoples, rights, and reconciliation.
- **Increase resilience to climate impacts**
Incorporate climate resilience into COVID-19 recovery and rebuilding plans, informed by BC's Strategic Climate Risk Assessment and future climate conditions, and delivered in communities across B.C.
- **Maximize local impact and local benefit**
Focus on stimulus that will revitalize and grow local economies.

Criteria

In order to assess potential stimulus projects or programs, we have developed five criteria that relate to the above principles. Given the need to be nimble and recognizing challenges in securing reliable and consistent data, these are qualitative “yes/no/neutral” criteria that can be used for an initial screen. To qualify for near term stimulus, potential investments should be scored yes or neutral for all of the criteria. More detailed scrutiny, including use of quantitative data where available, could subsequently be applied to those projects that pass initial screening.

Objective	Criterion	Measure / Indicators	Data Sources
Economic stimulus	Jobs, business reopening, improves private and public sector financial stability	Increases hours worked, reduces unemployment, business reopening, reduces bankruptcies, reduces GDP loss, stimulates investment	Economic models, economic data (StatCan-labour force surveys), industry surveys
Environment quality	- Supports CleanBC goals - Reduces GHGs; Supports transition to low C economy - Increases climate resilience	- GHGs trend down - Does not increase carbon-intensity	- Fuel consumption in short term - GDP - GHGs
Government capacity	Institutional/implementation capacity and within budget, consistent with federal priorities and programs	- Cost within stimulus budget - Available delivery mechanisms - Supports discussions with federal government	- Program costs - Data from pilot programs - Other jurisdictions' experience
Equity	Reduces inequality and addresses affordability in identified groups	Identify groups: low income, regional, marginalized, racialized, not male dominated; inequality ideally reduced, but at least none worse off	- Follows from type of program - Descriptive
Reconciliation	Supportive of truth and reconciliation, UNDRIP	Inclusion of Indigenous peoples and principles in decision making	- Follows from type of program; descriptive

Strategic Stimulus Initiatives

With the above principles as our guide, and having applied the screening criteria, we have assessed which initiatives align with CleanBC priorities—making them both shovel ready and shovel worthy. To ensure that CleanBC is at the heart of B.C.’s economic response, we recommend at least \$500M of the \$1.5 billion committed by the government to economic stimulus be directed to the following initiatives: (additional details are available for each recommendation in Appendices 1 to 4):

DRIVE TO ZERO: CLEAN TRANSPORTATION. (Appendix 1) B.C. has effectively positioned itself among leaders in transitioning to zero emission vehicles, creating new jobs and economic activity, and cutting pollution in the process. Leveraging its existing policy framework—the ZEV and Low Carbon fuel standards—further progress can be made in supporting personal and business decisions to switch to ZEVs (light, medium and heavy-duty), and to increase the supply of cleaner fuels. With public transit ridership suffering a near-term decline, and building on the province’s Active Transportation Strategy,

strategic investments in support of the province's Active Transportation Strategy can enable more British Columbians to get around by foot and bicycle. We recommend the government:

1. **Accelerate EV charging and hydrogen refueling infrastructure** build-out within and in-between B.C.'s towns and cities, through additional and/or enhanced support.
2. Adopt measures to **increase the production of liquid clean fuels in B.C.** through targeted support to spur new and/or expanded supply.
3. **Create safe, active transportation opportunities** by offering additional support to (i) convert some of the available road space for safe active transportation and (ii) expand incentives that encourage active transportation use.

CLEAN INDUSTRY INNOVATION. (Appendix 2) B.C.'s industrial sector offers several opportunities to create jobs, unlock innovation, accelerate the objectives of CleanBC and strengthen the adaptability, resilience and competitiveness of BC's post-Covid economy. Provincial investment in Clean Industry Innovation projects will unlock additional private and federal capital, resulting in a significant acceleration of the economic recovery impact in the near-term as well as delivering substantial GHG reductions in the medium-term. Opportunities exist to support small, medium-sized and large businesses through the following priority recommendations:

1. **Create a program that helps B.C.'s small and medium-sized enterprises adopt technologies** to measure and reduce their GHGs, increasing resilience to maintain and grow jobs as well as support homegrown BC technology SMEs with market validation and business growth.
2. **Create a CleanBC Industry Innovation Recovery Fund** that stimulates private sector investment in emissions reductions projects such as:
 - a. the collection, transportation, and processing of harvest residuals to **create biofuels and renewable gas**. Note this aligns with Climate Resilience item #2 below.
 - b. emissions reductions projects for large industrial operations.
 - c. early development activities for **industrial electrification projects**. This opportunity would focus on identifying and executing activities (such as planning, surveying, screening, field assessments) and has potential to leverage federal electrification funding.

BETTER BUILDINGS. (Appendix 3) To curb carbon pollution from buildings by at least 80% by 2050, we need to encourage fuel switching and comprehensive retrofits in existing buildings and to construct low-carbon energy-efficient new buildings using wood where possible. These investments can significantly reduce GHG emissions, generate savings in energy costs over time, and increase comfort levels. Installing electric space and/or water heating systems in homes and buildings and energy efficiency improvements such as increased insulation, sealing off leaks, and installing better windows and doors will be critical. Integrating EV charging infrastructure in retrofits will also support zero emissions transportation. We recommend the following:

1. **Raise incentive caps on retrofits in homes and buildings, including social and Indigenous housing and public buildings** by increasing the amounts in existing programs, including CleanBC Indigenous Community Energy Coach, and CleanBC Indigenous Community Heat Pump Incentive programs, to support more extensive retrofits to generate deeper reductions in GHGs.

2. **Increase funding for new social and Indigenous housing** allocated under existing programs including the Community Housing Fund and Indigenous Housing Fund.
3. **Grow and train the workforce and develop the supply chain.** Upskill and grow the workforce to build and renovate low-carbon homes and buildings. Increasing grants and caps through the CleanBC Building Innovation Fund to accelerate demonstration projects and to stimulate local supply and manufacturing of low carbon building components will grow the number of B.C. suppliers to domestic markets and beyond.

CLIMATE RESILIENCE. (Appendix 4) B.C. is vulnerable to many climate risks as identified in its Strategic Climate Risk Assessment. Increased funding for programs that reduce these risks and help invest in and restore natural assets is needed throughout the province. We recommend the government:

1. **Invest in Community Flood Hazard Mitigation**, increasing funding for flood plain mapping and for replacing, restoring, and improving bridges, culverts, and roads, including resource roads to reduce flooding vulnerability of vital supply routes and access to communities across B.C.
2. **Increase funding for policies and programs across the province that increase climate resilience, invest in and regenerate natural assets**, and can have the dual benefit of reducing GHG emissions. Each of these could employ youth and other demographics with high levels of unemployment associated with COVID-19's economic impacts. These include slash removal, protecting cultural heritage sites, and improving ecosystem resilience in B.C. parks.
3. **Increase funding for B.C.'s farms** to invest in beneficial management practices (BMPs) that improve climate resilience and reduce GHG emissions.

We appreciate that the economic recession wrought by COVID-19 is unlike previous downturns, with greater job losses and diminished employment prospects for women and youth, and thus requires targeted solutions. We are supportive of immediate training programs that could be in place in the near term, targeted at youth and those out of work, to build the skills that support achieving relevant CleanBC initiatives and increase climate resilience. We recognize that the stimulus investments we've identified won't come close to fully addressing these challenges and that complementary programs and investments will need to be part of the overall plan.

To achieve its intended outcomes, stimulus investments will need to be made in a timely manner, while also acknowledging that potential recipients—including businesses, municipalities, and First Nations—are already strained. Consequently, it will be important to find the right balance between due diligence and the need to be nimble in making decisions with minimal administrative burden, similar to how the government has approached emergency relief programs. By focusing wherever possible on existing programs and delivery agencies, the government will be able to ensure a short timeline from decision to delivery of resources and resultant economic activity.

Conclusion

In closing, by keeping CleanBC at the centre of B.C.'s recovery, we have the opportunity to ensure we build B.C. back better, to be a more equitable province that is better positioned to thrive in the world as it continues to confront climate disruption. This includes ensuring short-term actions are consistent with

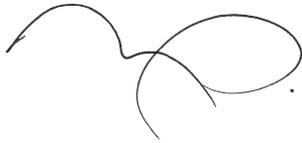
our longer-term transition to a sustainable low-carbon society and economy, and when it comes to stimulus, seeking out specific projects that are both “shovel ready” and “shovel worthy.”

The council also continues to work on medium to longer term opportunities that support B.C.’s economic recovery and will provide subsequent advice to the government on Budget 2021. While the intent of stimulus is to create near-term economic activity, we believe coupling financial support with complementary policy and regulations can deliver more effective stimulus. We reiterate our advice to continue moving ahead with programs, policies, and regulations committed to in Phase 1 of CleanBC, as well as delivering on other commitments. Key actions from Phase 1 of CleanBC include strengthening the low-carbon fuel standard, implementing Zero Emission Vehicle Act regulations, and the development of a low-carbon industrial strategy.

It must be acknowledged that achieving a sustained economic recovery requires ongoing effort by the B.C. government. Consequently, we see the above stimulus recommendations as consistent with the government’s existing commitment to CleanBC, and initiatives that will advance progress on government’s existing goals and plans.

Again, thank you for the opportunity to share our advice. We are hopeful that the government sees the value in these ideas and prioritizes them as core stimulus initiatives. We look forward to meeting with you again to discuss these ideas in detail and answer any questions you may have.

Sincerely,



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- Lee Brain, Mayor, City of Prince Rupert
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Minister Ralston, Ministry of Energy, Mines and Petroleum Resources
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Appendix 1: Drive to Zero: Clean Transportation

Drive to Zero: Initiative 1	Accelerating Electric Vehicle Charging and Hydrogen Refueling Infrastructure
Project Description	Additional support to accelerate and expand the network of EV charging and hydrogen refueling infrastructure throughout B.C.
Geographic area of focus	Province-wide—public, home and workplace, highway rest areas, commercial.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	< 3 months to start, with sustained activity for the duration of available funding.
Supported by existing policy/regulation?	Yes—supports ZEV Standard targets and can be delivered via existing GoElectric charging incentive program. Supported by LCFS (Part 3 credit generation). Consistent with B.C.’s “Drive to Zero” pledge .
Opportunity for private/public partnership? Or links to other initiatives?	If coupled with complementary policy signals—notably the 20% by 2030 LCFS target and “right to charge” amendments to the Strata Act—these programs will encourage private sector investment.

Drive to Zero: Initiative 2	Adopt measures to increase the production of liquid clean fuels in B.C. through targeted support to spur new and/or expanded supply
Project Description	Measures to increase the production of liquid clean fuels in B.C.
Geographic area of focus	Existing operations in Delta (Consolidated Biofuels) and Burnaby (Parkland Refinery). Prospective opportunities throughout B.C., including in agricultural and forestry sectors and communities.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	Likely 12+ months for construction (however design/engineering activity could commence in > 3 months).
Supported by existing policy/regulation?	Yes—a prerequisite for attracting new investment is quick passage of amended LCFS legislation to enshrine the 20% target in 2030.
Opportunity for private/public partnership? Or links to other initiatives?	Linkage to ICE fund for supporting pre-commercial technologies.

Drive to Zero: Initiative 3	Create safe, active transportation opportunities
Project Description	Additional support to (1) convert some of the available road space for safe active transportation and (2) expand incentives that encourage active transportation use.
Geographic area of focus	Province-wide: neighbourhoods, communities, and city centres.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	< 3 months from funding decision to execution, for both active transportation infrastructure and incentives.
Supported by existing policy/regulation?	Yes—supports the CleanBC plan and BC’s Active Transportation Strategy, which aims to double the percentage of trips taken with active transportation by 2030.
Opportunity for private/public partnership? Or links to other initiatives?	Yes—BC’s Active Transportation Infrastructure Grants Program leverages funding from BC communities to provide cost-sharing opportunities for network planning grants and infrastructure grants.

Appendix 2: Clean Industry Innovation

Clean Industry Innovation: Initiative 1	Help B.C.'s small and medium-sized enterprises adopt smart technologies to measure and reduce their GHGs
Project Description	Create programs that support homegrown B.C. technology SMEs to provide green audits and mechanisms to help lower the barriers of implementation of smart solutions. Such programs would provide educational materials, case studies, guidance on best practices and mentorship to increase awareness of the idea that 'clean is the side effect of smart'.
Geographic area of focus	Province-wide.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	9 months for pilot (which can be started immediately).
Supported by existing policy/regulation?	No.
Opportunity for private/public partnership? Or links to other initiatives?	Yes. B.C. Tech's ScaleUP BC partnership leverages funding from industry and federal government to provide training and support to non-tech SMEs on technology adoption.

Clean Industry Innovation: Initiative 2	CleanBC Industry Innovation Recovery Fund
Project Description	<p>Create a fund that stimulates private sector investment in emissions reductions projects. As companies face COVID-19 related capital spending cuts, this additional funding would allow companies to continue with discretionary spend on emissions reductions projects, allocate jobs to process improvements and application of new technology, and drive investment in early phases of larger emissions reductions projects. It would also allow companies to re-engage contractors, including Indigenous partnerships, on projects that may have been recently deferred or cancelled. Three key areas of opportunity are:</p> <p>i) the collection, transportation, and processing of harvest residuals to create biofuels and renewable gas. The collection could start immediately. Initial uptake of the program will likely be bioenergy producers (e.g., biomass power plants, pellet sector).</p> <p>ii) emissions reductions projects for large industrial operations.</p> <p>iii) early development activities for industrial electrification projects. This opportunity would focus on identifying and executing activities such as planning, surveying, screening, field assessments.</p>
Geographic area of focus	Province-wide—especially in key natural resources areas.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	< 3 months for updated program, 6-9 months until start up and or execution of successful projects.
Supported by existing policy/regulation?	Yes—BC Bioenergy strategy, Methane regulations, Federal Emissions Reduction Fund, CleanBC program for Industry (Industry Incentives & Fund).
Opportunity for private/public partnership? Or links to other initiatives?	Yes—Forest Enhancement Society of BC could to help deliver the forest residuals program, Clean Industry Fund, 2019 B.C./Federal Govt MOU for natural gas sector electrification.

Appendix 3: Better Buildings

Initiative	Raise incentive caps for new construction and retrofits and increase training
Project Description	<ul style="list-style-type: none"> a. Increase caps for retrofits in homes and buildings, social and Indigenous housing, and public sector buildings. b. Increase funding for new social and Indigenous housing. c. Grow and train the workforce and develop the supply chain.
Geographic area of focus	Province-wide.
Timing to deliver (execute?) (<3, 6-9 months, 12+ months)	< 3 months to start, with sustained activity for the duration of available funding.
Supported by existing policy/regulation?	CleanBC Better Homes and CleanBC Better Buildings CleanBC Government Buildings and CleanBC Communities CleanBC Indigenous Community Energy Coach and CleanBC Indigenous Community Heat Pump Incentive Program
Opportunity for private/public partnership? Or links to other initiatives?	For training: partner with industry associations, training institutions, professional bodies, and trade unions. For training and supply chain: Emerging Economy Task Force report.

Appendix 4: Climate Resilience

Climate Resilience: Initiative 1	Investing in Community Flood Hazard Mitigation
Project Description	<p>Increase funding for “Climate Proofing”—replacing, restoring, and improving bridges, culverts, roads, and resource roads to reduce flooding vulnerability of vital supply routes and access to communities across B.C.</p> <p>The initial focus could be on projects that have been identified and are ready for funding. Increase funding for flood plain mapping and risk assessment. An important part of this funding would go to skills training to equip residents of these communities to undertake the needed work and incorporate Indigenous and local knowledge.</p>
Geographic area of focus	Province wide, especially rural and remote communities, focusing on First Nations and communities at high risk of flooding and being cut off by road access.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	Immediate funding for work in summer—fall season.
Supported by existing policy/regulation?	Builds on existing programs in MOTI, FLNRD, EMBC as well as municipal and First Nation asset management plans.
Opportunity for private/public partnership? Or links to other initiatives?	Work with Indigenous communities, private sector, university, NGO expertise in flood plain mapping.

Climate Resilience: Initiative 2	Ecosystem Resilience and GHG Mitigation: Fires, Floods, Cultural Heritage Protection
Project Description	<p>Increase funding for policies and programs across the province that increase climate resilience, invest in and regenerate natural assets, and can reduce GHG emissions. Target employment at youth and other demographics with high levels of unemployment. Potential programs:</p> <ol style="list-style-type: none"> 1. Slash pile removal initiatives to reduce fire risk and potential conversion to bioenergy. 2. In partnership with the First Peoples’ Cultural Council increase funding to document and protect cultural heritage from flooding and fires. 3. Increase funding to BC Parks’ programs to sustain and improve ecosystem resilience to climate risks. This can also include programs to treat and protect against invasive species.
Geographic area of focus	Province wide, especially rural and remote communities.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	Immediate funding for work in summer—fall season and ongoing over next 12 months.
Supported by existing policy/regulation?	Builds on existing programs in Parks, FLNRD, First Peoples’ Cultural Council, and municipal and First Nations plans.
Opportunity for private/public partnership? Or links to other initiatives?	Work with Indigenous communities, private sector, university, NGO expertise in ecosystem resilience.

Climate Resilience: Initiative 3	Agricultural Beneficial Management Practices for Climate Resilience and GHG Mitigation
Project Description	Improve GHG management and resilience to climate impacts (e.g., flooding, heat events) through BMPs that will also improve food security. Both infrastructure and operating programs that may include increases in livestock efficiency/grazing projects, soil aeration, manure storage, anaerobic digestion, flood/fire protection, improve natural assets, pest and invasive species management.
Geographic area of focus	Province wide, agricultural lands.
Timing to deliver (execute?) (< 3, 6-9 months, 12+ months)	Immediate funding for work in summer—fall seasons into 2021.
Supported by existing policy/regulation?	Builds on existing programs in Agriculture Ministry, AAFC-Environmental Farm Plans.
Opportunity for private/public partnership? Or links to other initiatives?	Work with private sector, university, NGO expertise in agricultural BMPs, Environmental Farm Plans.