

CleanBC Review Engagement

Please see our comments by Discussion Question below:

1. With respect to CleanBC's policies—inclusive of legislation, regulation and government direction—that directly reduces or enables emission reductions:

a. What is working well?

There are several good aspects of the Roadmap: it exists, has/had a panel of advisors, has funding, is meant to be more comprehensive than single issue policies, has targets and goals plus some transparency on reporting out on progress.

b. What are the challenges and/or areas for improvement?

Clearly, we are failing to meet the targets and drive meaningful change. The plan itself was not bold enough to do this and the actions in the plan have not fully been rolled out or may have backtracked.

c. What gaps exist, and how could they best be filled?

The focus seems to be scope 1 and 2 emissions and not the more comprehensive suite of emissions (consumption based- emissions -scope 3 and avoided emissions- scope 4) . As a stable climate is a global asset, we need to think more broadly. Consumption of resources is driving climate change, but also a host of other symptoms (pollution, soil nutrient depletion, habitat loss, biodiversity loss, waste, etc.) so there are co-benefits to looking at scopes 1-4.

We are living on this planet as if we are only here for a short stay. Perhaps introducing more involvement of First Nations elders and traditional knowledge/concepts could be helpful. This plan really needs to reach across government ministries to have a full government, holistic effort to succeed.

2. With respect to CleanBC's programs and other government spending that directly reduces or enables emission reductions:

a. What is working well?

ZWBC strongly supports the actions to reduce plastics (especially single use plastics or SUP), the funding of the plastics program and the direction to have a Circular Economy (CE) economy strategy. The extra effort on communications for the roll out of the Single Use Plastics Regulation have been much appreciated.

b. What are the challenges and/or areas for improvement?

The CE strategy has not been approved and released; it is unclear if it is still in development or on the agenda. The first set of funding for plastics action focused on recycling -whereas bigger benefits can be seen from working on reduction and reuse; this was corrected in future funding but shows the need to act strategically and at the highest level of the Zero Waste hierarchy (or even the pollution prevention hierarchy). Also the narrow focus on plastics misses the bigger

footprint of producing materials (including fibre) so merely encouraging a switch to another kind of single use item is problematic and comes with its own set of impacts. This opportunity to move towards reusables instead of just eliminating one kind of single use is a missed opportunity.

The province has missed all deadlines so far for EPR for mattresses, EV batteries, and more household hazardous waste (and this was after missing the key deadlines for EPR for the [2009 Canadian Council of Ministers of Environment plan](#)). Aside from new EPR programs, the province needs to be keeping up with advancements in EPR that are being implemented elsewhere (mandating certain levels or locations for access, scaling up and funding reuse, funding litter clean up, guaranteeing systems for repair, ensuring research and development is included such as we see in France, EU and some US states).

c. What gaps exist, and how could they best be filled?

The Roadmap needs to have a systems lens and understand how changing one aspect can influence another. A non-CleanBC example, in Whistler, buses switched to CNG to supposedly decrease the GHGs but this led to a gas line being put to the bus facility which spurred on more businesses and residences connecting to fossil gas (as Fortis was able to outcompete electricity) and this led to an increase in emissions. These kinds of unintended consequences come from a lack of systems thinking and also a lack of focusing on the solutions that would offer bigger benefits (such as electric buses or bans on new fossil gas hookups).

There also need to be some clear guidance on how to rank solutions. We support the use of Zero Waste Hierarchy¹ for materials and waste (and similarly the transportation hierarchy² and the adapted World Business Council for Sustainable Development hierarchy for buildings³). Using these hierarchies should then drive action at the top of the pyramids, rather than tinkering at the bottom.

CleanBC should be a catalyst to transform our economy from resource extraction to a Circular economy. We have all the elements for success - educated citizens, clean power, different resource processing capacity, a greener mindset, and proximity to markets. Instead we have been squandering tax payer money, environmental assets and our clean power on fossil based projects. This needs to stop.

Accounting for GHGs needs to be future looking. This includes calculating biomass GHGs and including them in carbon calculations at all scales. Many of these biogenic emissions are not from annual crops but from biomass that took decades to grow and will take decades to reabsorb. And this at a time when we should be working to decrease all emissions to have any hope of avoiding the worst climate change impacts. When the biomass emissions are ignored at

¹ Zero Waste Hierarchy: <https://zerowastecanada.ca/zero-waste-hierarchy/>.

² CleanBC Roadmap -page 34

³ Community Energy Association (2022). Embodied Emissions Guide. https://docs.communityenergy.ca/wp-content/uploads/Embodied-Emissions-Guide_Final.pdf page 7.

a community or project level, it leads to poor decision making that may be counter to the climate goals. One area where we see this is in the claims around Waste to Energy (also known as waste incineration). Our case study on the Metro Vancouver incinerator (the only one in the province) showed that it put out more GHGs per tonne of waste than other forms of waste management (zero waste actions being the most beneficial but also worse than landfills) and also more GHGs/ per unit of energy than coal (even without including the biogenic emissions).⁴

When we look at why a facility like this exists or why other communities may be exploring waste to energy, it becomes clear that the definition of Clean and Renewable Energy needs to be revised to make it clear that this is neither a clean nor renewable energy source. There needs to be a ban on all new facilities and the existing one needs to close. The province should also work to prevent waste being burned in other ways such as cement kilns or any similar waste burning facilities under other names (advanced recycling, chemical recycling to fuel, gasification, pyrolysis, plasmification, etc.). Otherwise, it presents a drain on the CE and will stymie actions that would otherwise be taken further up the hierarchy (i.e. why redesign a system or product when it can just be burned). This is a not a new issue and the supporting data showing GHG, job creation and environmental benefits of pursuing zero waste and a circular economy can be seen in the many reports, including provincial ones.^{5,6,7,8}

As most of the population are unaware of the true impacts of consumption, there needs to be far better education on this and mobilization of the public around actions.

There also needs to be accountability for delivering on the Roadmap.

3. Are there different ways to fund CleanBC programs beyond government grants, rebates, and incentives? Are there examples from other jurisdictions that could be applied in B.C.?

- Use methods based on the polluter pays concept. For some CE actions (like Recycling Council of BC information services with expansion to repair, reuse, and refill information; roll out of full organic composting systems across province; new material and disposal bans) adding a disposal levy to all disposal (landfill, and waste incineration while it still

⁴ Zero Waste BC (2023). Metro Vancouver - A Case Study on Waste Management Methods. Accessed at <https://drive.google.com/file/d/19oum89-TgC7Ab9-1C1IW2qFyVA7uOjyU/view>.

⁵ Environmental Standards Branch. (2013). Draft Business Case for Zero Waste for. https://www2.gov.bc.ca/assets/gov/environment/waste-management/industrial-waste/industrial-waste/zero_waste_business_case_draft.pdf

⁶ Morris, J. (2009). Environmental Life Cycle Assessment of Waste Management Strategies with a Zero Waste Objective. <https://srmginc.com/images/LCA-and-Zero-Waste-Strategy-for-Metro-Vancouver-Region.pdf>.

⁷ Lee, M., Rees, W., Maxwell, S. and Legg, R. (2013). Closing The Loop: Reducing Greenhouse Gas Emissions And Creating Green Jobs Through Zero Waste In BC. <https://www.policyalternatives.ca/sites/default/files/uploads/publications/BC%20Office/2013/03/CCPA-BC-Zero-Waste.pdf>

⁸ BC Ministry of Environment (2017). Jurisdictional Scan for Circular Economy. https://www2.gov.bc.ca/assets/gov/environment/waste-management/zero-waste/zero-waste/delphi_circular_economy_scan.pdf

exists) can help to fund this in a sustained way (used in many jurisdictions). There should also be a fee on all EPR programs to fund provincial oversight of EPR programs and enhanced province-wide communications. Other levies are also key: increasing the industrial carbon tax, and ensuring the carbon tax includes the fossil carbon burned for energy in plastics.

4. With respect to the role of B.C.'s electricity and gas utilities in CleanBC and the B.C. Utilities Commission as their regulator:

a. What is working well?

We appreciate that the BC Utilities Commission exists and that it is somewhat independent. We also appreciate the options for public hearings.

b. What are the challenges and/or areas for improvement?

There is not systems lens used in decision making, just rote following of a narrow definition of what a clean and renewable energy source is and limited consideration of broader impacts nor opportunity costs. There is also a history of just staying with the status quo and only hearing from organizations with the funding, time and ability to participate rather than a broader array of stakeholders. The environment has not been prioritized.

c. What gaps exist, and how could they best be filled?

Ensure the Clean and Renewable Energy definition is truly focused on clean and renewable resource. Do not allow district energy systems to be connected to non-renewable sources (like waste). Revisit the mandate for the BCUC so it can use systems thinking and also reconsider the direction to keep energy systems inexpensive. The prices should tell the truth and incorporate all climate and social costs. Mitigate the impact to low income families through income supports. That way the return on investment calculations will be based on fact and drive more action.

We need to factor in that fossil gas is very harmful and account for all of its impacts including fugitive and upstream emission (and health impacts outside of climate emissions). The fact that this is ignored allows it to outcompete clean electricity and sets us even further back on our emissions goals. Incorporate externalized costs and develop a plan to phase it out. Add a provincial policy to ban connections in new homes and buildings like Vancouver.

5. Are there enabling conditions (e.g. workforce, supply chains, permitting, capital, cost effectiveness/affordability) that are currently insufficient to support the adoption of emissions-reducing technologies and services encouraged or required by CleanBC? If so, please describe the challenge and provide suggestions for how it can be addressed.

We need a CE strategy -the early work on skills/workforce needs has been done.

We need clear policy to support an expansion and improvement of EPR in BC including strong oversight and requirements for research and development, reuse, repair, parts availability, etc. like is starting in France and EU.

We need a province-wide deconstruction policy that would then support early adopting businesses and encourage the development of infrastructure.

We need enforcement of existing policy (both provincial and local government) and province-wide waste hauler licensing and reporting requirements would help. The data should be transparent and publicly available. Overall need to be bold and take action.

6. Are there other barriers that have hindered the effectiveness of CleanBC policies and programs?

There have been long delays in providing funding for projects meaning projects start late and have shorter duration), initial funding sometimes has gone to very low impact projects, and delays in enacting promised policy has impacted the very entrepreneurial circular businesses we are trying to encourage. Care needs to be taken with the inclusion of the fossil fuel industry at advisory tables and their access through lobbying as this can hamper progress.

7. How could CleanBC's policies and programs be better aligned or integrated with other provincial priorities, including (but not limited to) improving affordability, enhancing economic competitiveness, protecting health, and ensuring energy security?

A CE strategy could then incorporate and enhance material consumption reduction and decreased waste (EPR, SUP, Organics) but also make it more comprehensive/systematic and provide a clear goal. We need to look less to the US and more to the EU for policy examples. CE can help to increase resilience to supply chain disruptions and build more capacity here. Repair and reuse are key opportunities to ensure local jobs. For affordability, for example, EPR for mattresses would likely slightly increase the costs for new mattresses but eliminate the cost to dispose of them for consumers; it would also decrease municipal costs and keeping appliances working longer through repair and reuse decreases the need for new large expenditures. Health is protected when the waste to energy facility is shut down and new ones prevented (note that the incinerator is not even meeting existing provincial guidelines despite a lengthy timeline to meet them). CleanBC could also look at ways to decrease the use and circulation of toxic materials (such as pesticides, PFAS, brominated fire retardants, 6PPD-quinone, etc.).

8. Are there other innovative and effective approaches—including those that account for or align/integrate with other priorities—from other jurisdictions that B.C. should consider adopting?

BC should look at the EPR programs in France, the CE strategies in the Netherlands and Montreal, and the Doughnut Economics policies in Amsterdam.

9. With regards to B.C.'s approach to establishing targets (2025, 2030, 2040 and 2050; and sectoral targets), public reporting and accountability:

a. What is working well?

The reports and targets exist and the roadmap was a good start.

b. What are the challenges and/or areas for improvement?

BC is never going to meet the targets due to an ideological commitment to LNG. The CE strategy has not been developed/released. The promised EPR expansion and improvement has missed deadlines or is not happening.

c. What gaps exist, and how could they best be filled?

Develop the CE strategy, phase out LNG (and no new export facilities) and focus on resource and energy conservation. Do not even consider another oil pipeline. We need to plan to use materials at highest and best use, at a sustainable rate and to save some for future people and other species.

10. Are there other potential indicators of progress (e.g. investment, behavioural change, energy production and use, deployment of key technologies etc.) that should be considered for tracking and reporting?

- Tracking of materials flows (like in Scotland), not just waste but also amount of recycling, compost, and ideally reuse; reduction in materials; % intact habitat; toxic material use and pollution; consumption-based emissions inventories.
- Gross provincial happiness? We need to look at what really matters to people rather than solely an economic indicator which misses the degree to which some people are being left behind. Possibly also the gap between rich and poor.