



Consultation Opportunity on the Draft BC Climate Leadership Plan ACT, SFU Recommendations Delivered April 4th, 2016

Preamble

Given planned provincial investments in LNG, and reluctance across the country to implement a carbon tax, and other factors, it seems clear that neither the Province of BC nor Canada will meet prescribed carbon reduction targets by 2020, and both will be challenged to meet targets set for 2030. Moreover, global projections suggest that, even if every country that signed onto the Paris Agreement implements the voluntary, non-binding emissions reduction targets they submitted, the global climate will still exceed two degrees of warming by mid-century. In fact, climate projections indicate that, no matter what action we take to reduce our emissions, warming will occur at about the same rate and amount by 2030-2050, due to the inertia of the system and the longevity of CO₂ in the atmosphere. This is known as the “commitment to climate change,” and is already evident in troubling impacts such as the pine beetle epidemic, record-setting temperatures, and changing hydrological patterns, to name but a few issues of concern for BC residents. Sea level rise is likely locked in for millennia.

The World Economic Forum’s 2016 Global Risks report identifies failure of mitigation and adaptation to climate change as the top risk over the next ten years, and the other top risks are all related to climate change impacts, including water, food, and social displacement and unrest. On both global and local scales, failure leads first to greater vulnerability to extreme weather events, resulting in food and water crises, large-scale migration and other man-made environmental catastrophes, such as infrastructure failure, which in turn lead to loss of ecosystem services and high economic costs.

We therefore must plan for and adapt to some level of climate change impacts, while we work hard to reduce our emissions. This adaptation work will require increasingly transformative policies to counter the continuing impacts of a changing climate globally and regionally on the economy, the environment and the climate nexus of water, food, energy and biodiversity, and we urge the team that is charged with planning and implementing BC’s Climate Leadership Plan to take these challenges into account.

Water is at the heart of most climate change impacts, and we acknowledge the Province’s achievement of progress with the new Water Sustainability Act, which outlines a direction consistent with the new UN Sustainable Development Goals. BC has a similar opportunity to show significant leadership with the proposed Climate Leadership Plan; however, the current draft requires the addition of actionable adaptation measures that complement emissions management and reduction approaches if it is to reflect the goals of the three major international climate-related agreements agreed upon in 2015: the UN SDGs, the Sendai Disaster Agreement and the Paris Agreement.

The new federal mandate letters and funding actions refer to “low carbon resilience” and “green infrastructure” as priorities. It is time we brought together the until-now largely separate discourses on climate change adaptation and mitigation to achieve win-wins. We feel that this is possible and set out **some of the ways we can achieve this goal at the provincial level in BC** below. We have presented our suggestions within the structure identified by the Province in its response to the recommendations provided by the Climate Leadership Team:

What We Value

- Carbon pricing and general financial mechanisms
- Climate risk management and adaptation

» Amend the Environmental Assessment Act to include the social cost of carbon (#11)



- Natural capital assets and ecosystem services, such as flood control, cooling and shading, water and air filtration, and low-flow augmentation, carbon sequestration and social benefits such as improved health and property prices, should be evaluated as key benefits for British Columbians.
- » Update forest and agriculture policy, regulation and protected areas strategies to account for climate change impacts (#16)
 - Establish/maintain connectivity corridors and conservation networks between protected areas where these are identified as critical for species adjusting to climate change.
 - Increase monitoring of climate change impacts on representative ecosystems to track the rate of hydro-climatic change and improve forecasting and planning for such changes.
 - Establish a target for a 30% increase in carbon sequestration across BC by 2030, to be achieved through a focus on 50% of the land base capable of sequestering carbon via existing and new protected areas and a combination of conservation approaches, e.g. wildlife management, wetlands preservation, conservation-oriented development, and stormwater management, to maintain and restore ecosystem integrity and diversity.
 - Establish a tracking system to measure the resultant increase in carbon sequestration and account for this in the provincial carbon budget and for marketing carbon credits.
- » Update by 2020 hazard maps for all climate related hazards (#24a)
- » Invest in sufficient monitoring systems to ensure the change in climate can be managed effectively (#24b)
 - Ensure monitoring systems including effective mechanisms for province-wide hydrology monitoring and make data accessible to the public.
- » Develop a policy framework to guide government's management of the risks associated with a changing climate (#24c)
 - Mandate a review of provincial climate change risks and adaptation actions every five years.
 - Provide clear instructions to all Ministers on action required on climate change adaptation and mitigation in their mandate letters.
 - Coordinate across ministries to maximize effectiveness of action and outcomes.
 - Train all provincial government staff in climate change mitigation and adaptation basics.
 - Update the provincial Disaster Financial Assistance policy to ensure funds are spent in ways that build back resilience and incent ecosystem-based adaptation responses.
 - Provide centralized support and resource provision to municipalities as they prepare for costly adaptation measures for flooding, extreme heat, and sea level rise.
 - Expand provincial responsibility for dikes and ecosystem-based coastal adaptation measures to assist municipalities in planning for and bearing the costs of sea level rise.
 - Evaluate tax incentives and other financial assistance for municipalities to support infrastructure upgrades and/or recovery from extreme events.
 - Establish provincial fund designed to meet major future costs such as sea level rise.
 - Align provincial funding with new federal funding; design related incentives for action.
 - Establish an adaptation fund as part of the LNG legacy fund should LNG projects be undertaken to support local governments and align with federal funding proposals
 - Develop new policies to integrate private sector insurance with public-sector financial assistance in order to protect properties in a wide range of hazard areas and reduce public sector costs.



- Prevent future development and assist buyout of properties in high hazard areas.
- Promote usage of ecosystem-based adaptation approaches such as wetlands and swales, and set back dikes to reduce risks plus benefit ecosystems struggling to adapt.
- » Increase communications to public (#24d)
- Create resources for higher education curriculum materials to support climate literacy amongst BC students and residents, including core courses on biodiversity and the value of ecological goods and services plus ways to reduce personal consumption of energy, water and food wastage.
- Establish trackable budgets for water, food and energy at personal and institutional levels (e.g. individuals, schools, government offices, transportation systems) and all government levels (provincial, regional and municipal) that can be reduced over time in accordance with provincial targets to reduce carbon, water use and ecosystem degradation.
- Ensure public awareness of climate change-related health hazards and emergency planning through educational materials, early warning systems and other tools.
- » Use First Nations traditional knowledge when appropriate as part of hazard mapping information (#25a)
- » Resource the research of climate change impacts on the inherent and treaty rights of indigenous people (#25b)

The Way We Live

– Community and built environment

- » Revisions to the building code that require new buildings to (i) increase use of materials that sequester carbon and (ii) have the capacity of meeting most of their annual energy needs by on-site renewable energy within 10 years (#20b)
- Revisions to the building code should simultaneously consider new flood construction levels for sea level rise, updated 200-year flood plains, and other adaptation actions now being mandated by municipalities designed to build in resilience to the built environment based on provincial guidelines and municipal climate risk and vulnerability assessments.

The Way We Work

– Industry, business and natural resources

- » Create a task force with appropriate expertise (e.g. economics, global markets, clean innovation, environment-economy policy) to research B.C.'s competitive advantages and potential growth areas in a low-carbon economy, both within and across sectors, and to develop recommendations on stimulating these areas (#10)
- This task force should include a focus on “low-carbon resilience” (LCR), rather than solely low-carbon; such solutions ensure we build in resilience while reducing emissions by bridging between adaptation and mitigation and identifying win-win approaches.
- » Create a task force to review and update carbon management best practices for the agriculture sector (#18)
- See target for a 30% increase in carbon sequestration across the province by 2030 under recommendation #16 in [What We Value](#) above.
- Improve soil management to increase carbon sequestration and overall water management.