# Responses to the recommendations of the B.C. Climate Action Team from British Columbia environmental non-governmental organizations

October 6, 2008

The following is a joint statement from the a coalition of non-governmental organizations active on climate policy in British Columbia, in response to the government of BC's request for comment on the recommendations of the Climate Action Team.

This document contains responses to all 31 of the CAT recommendations. A separate document (with an overlapping group of endorsing organizations) contains responses to CAT recommendation #27 in particular, focusing on issues dealing with forests and wilderness lands.

We appreciate the opportunity to comment on the Climate Action Team report.

#### *Introduction:*

We support the positive steps that the government has already taken on climate change. The CAT's recommendations represent a largely positive direction that builds on top of the foundation already laid since 2007. We urge the government to adopt these recommendations in full and for all political parties in BC to accept them as a foundation to build upon as we work towards 2020. Beyond this, we have provided detailed comments on individual recommendations indicating where the government can and should go beyond the recommendations of the CAT in implementing greenhouse gas emission reduction measures.

#### General comments:

#### 1) Improve the effectiveness of the carbon tax

As has been amply shown by our activities this year, BC environmental organizations have been strong supporters of the carbon tax introduced in the 2008 Budget. We concur with the large group of economists and public policy experts that a carbon tax is an effective means of putting a price on carbon, which is an essential and fundamental component of any strategy that seeks to achieve significant greenhouse gas reductions.

We are in broad agreement with the CAT's recommendations that the carbon tax and a potentially complementing cap and trade system remain as key planks of climate action in BC. We agree that there are opportunities to improve and strengthen carbon pricing policy in BC and we also see opportunities to go further than recommended by the CAT. These opportunities are discussed below in the detailed comments on individual CAT recommendations.

# 2) Transportation and community measures

Transportation and urban form are clearly responsible for a large proportion of BC's total emissions, and significant policy changes here necessarily have impacts on a large proportion of British Columbian residents and businesses.

In terms of the transportation sector, we generally support all of the CAT's recommendations for the transportation sector. However, we are convinced that much more can be done in this sector than was identified in the CAT recommendations, and we have included additional comments about particular measures that could be adopted by the BC Government to increase the amount of emission reductions achieved from this sector.

With regard to measures affecting buildings and communities (a.k.a. urban form), we are again supportive of all of the CAT's recommendations, but would again point out there are significant opportunities to achieve even greater gains by being more aggressive on some of these measures. Strengthening provincial growth management legislation with mandated urban containment boundaries and density targets will encourage local governments to make land use decisions that reduce GHG emissions. In the absence of stronger provincial land-use legislation, many local and provincial transportation and energy investments will have significantly less impact on reducing GHG emissions, and short sighted land-use decisions could potentially offset any reductions gained through other measures. Several other jurisdictions in North America have similar measures in place, including recent anti-sprawl legislation passed in California.

# 3) Public engagement

Although it is of very limited utility on its own, public education and engagement is an important means of increasing acceptance of and compliance with regulatory and fiscal measures to reduce greenhouse gas emissions. Once again, we are in broad agreement with the recommendations of the CAT, but would urge the government to move more aggressively in this area. We believe that a major strategy is required that would go beyond education and outreach to actively engage communities around the province in a deliberative process around how we can make the transition to a carbon neutral society, and what barriers are standing in the way.

In contrast to the government's bold regulatory and fiscal initiatives, we note that public engagement has been an area of comparative weakness in the Government's greenhouse gas strategy – something apparent when we contrast the government's expansive mandate for the CAT with the very restrictive public engagement strategy employed.

## 4) Forests

Please note that in addition to the comments below we are additionally submitting comments under separate cover specifically pertaining to recommendation 27 (regarding measures for the forest sector and wilderness lands).

# 5) Provincial policies contrary to GHG reductions

Finally, we would like to highlight an important set of measures which was not touched on by the CAT. We are optimistic that implementation of the measures included in the government's Climate Action Plan, and those recommended in the Climate Action Team report, will put British Columbia firmly on the path to meeting the government's 33% GHG reduction target by 2020. However, we are also aware of a number of government policy positions that are contrary to achievement of the government's own targets. If the government continues to allocate support to new GHG-intensive projects and industries, we risk unnecessarily widening the 'gap' addressed by the CAT between now and the target dates.

Note that we already face significant risk of missing the goal of avoiding dangerous climate change. There is uncertainty in the estimates of emission reductions associated with each policy in the Climate Action Plan and the CAT report; some policies may result in lower emission reductions than estimated. We also note that further scientific and economic analysis may show that emission reductions for BC should greatly exceed the provincial government's reduction targets. Because of these uncertainties, the prudent action of the government should be to take all precautions to avoid adding any GHG emissions through its own policies. 2

We are specifically concerned about the following potential large sources of new GHG emissions:

- Coastal/offshore oil and gas exploration.
- An Alberta-to-Kitimat twin oil/condensate pipeline, which would include new heavy oil tanker traffic and a new marine terminal.
- Generally, the current system of infrastructure credits and decreased royalty programs offered to the natural gas industry.<sup>3</sup>
- Specifically, the government's explicit eagerness to expand its natural gas production profile into coalbed methane a GHG-intensive industry evidenced by a poor regard for local concerns relating to projects such as Shell's Klappan project, PetroBank's Princeton project, etc
- The Gateway transportation project.

We feel support for these projects/programs/industries directly contradicts the government's aggressive climate change program. In other words, these are issues where there are clear differences of position between certain subsets of government and many environmental groups in BC.

We do not feel any of the projects/programs listed above are necessary to maintain the health and wellbeing of British Columbians. As such, although we strongly support the government's leadership on climate change relative to other jurisdictions, members of the ENGO working

<sup>&</sup>lt;sup>1</sup> Campbell, C.R. & C. Stainsby. *Greenhouse gas emission reduction scenarios for B.C. – meeting the twin objectives of temperature stabilization and global equity.* CCPA. August 2008. http://www.policyalternatives.ca/Reports/2008/08/ReportsStudies1938/index.cfm?pa=BB736455

<sup>&</sup>lt;sup>2</sup> We note that these uncertainties are symmetric and could result in lower effort being required to meet the climate action goal. However, the huge potential costs of dangerous climate change lead us to be more concerned about the risks of not doing enough.

<sup>&</sup>lt;sup>3</sup> Natural gas production and rights sales currently represent the single largest source of revenue for the provincial government, and are essentially solely responsible for the current ~\$2 billion surplus; the industry is also responsible for a significant percentage of BC's GHG emissions. Given that carbon sequestration is still largely in the assessment phase, it will likely not be possible to increase gas production without a concurrent significant increase in GHG emissions. Therefore we are strongly in favor of decreasing present and future emphasis on non-renewable natural gas revenue to meet the service needs of British Columbians.

group will continue to strongly campaign against these 'contradictory initiatives' on climate change grounds.

# <u>Detailed comments on the recommendations of the Climate Action Team:</u>

The organizations listed at the start of this document each provided comments on individual recommendations in the CAT report. These comments are included in the following section. The comments represent opinions provided by individual organizations and, while the groups are generally supportive of all comments, we note that not all organizations fully endorse all comments as written in this section.

# **Pricing emissions**

- 1. Government should review progress related to B.C.'s emissions targets, the impact of existing policy measures, actions by other jurisdictions to price emissions, and key economic factors like the cost of oil. Based on this data and recognizing the impact of emissions pricing as a core policy for emissions reduction, the government should:
- 1.1 After 2012, if required to achieve the emissions targets, increase the British Columbia carbon tax in a manner that aligns with the policies of other jurisdictions and key economic factors.

# **Responses:**

- We strongly support this recommendation.
- The decision to raise the carbon tax should be made in the 2010 budget (as per the current legislation), and by 2010 the province should also indicate the expected price for carbon in 2020.
- Tie the tax to a monthly Fuel Surcharge "pass-on" requirement per our comment regarding CAT recommendation #5 to minimize commercial resistance
- 1.2 By 2012, either expand the carbon tax to cover all greenhouse gas emissions-including those from industrial processes- or include these additional emissions as part of a cap and trade system. Again, this should be done in light of progress toward B.C.'s reduction target, policies of other jurisdictions, and key economic factors.

- We strongly support this recommendation.
- The carbon tax should cover all emissions, including emissions from forestry, forest products, and bioenergy. Even though these are not part of the formal accounting of GHG emissions a tree over its lifecycle is technically carbon neutral emissions are emissions. We want to avert a situation where people, for example, stop using natural gas in favour of burning wood.

- Industrial fugitive and process emissions should be included under the carbon tax in the 2009 budget where they can be accurately measured. The government and industry will need to work together to identify areas where measurement accuracy can be improved and evaluate the resources needed for these improvements. The carbon tax on these emissions and the industrial combustion emissions already covered by the tax could be replaced in part by the cap and trade when it is operational and sufficiently stringent.
- Landfill gas emissions could also be included in the tax as soon as emission estimates are accurate enough, but it may be more effective to use regulation to reduce emissions from wastes.
- Addressing methane is particularly urgent, as its real short-term impact is underestimated approximately five-fold because of the standardized 100-year period used to estimate Global Warming Potentials. Methane's life in the environment is 8.6 years, and its GWP over this period is closer to 125 times more than that of CO<sub>2</sub>.
- In the event that emission reduction proves insufficiently sensitive to carbon pricing, emissions at every level should be capped at the volume necessary to meet targets.
- 2 Revenues from the carbon tax should continue to be offset by equivalent reductions in personal, corporate and small business tax rates. Support for low income families should be continued.

- We support this recommendation with the following caveats:
- Income supports should be expanded to give people with low to middle incomes real options for changing their behaviour. Minimally, the total amount of the credit should grow in line with the carbon tax itself. If not the carbon tax will be regressive by year three even after considering all recycling measures already in place. Also, some way of addressing impacts on the public sector must be developed, on the capital and operating sides so that public services are not adversely affected by the tax.
- Maintaining revenue neutrality is not critical from our perspective, and we would support the government being open to different uses for the revenue, including tax cuts and strategic investments to help reduce emissions. Having a portion of revenues directed to public benefit is the model proposed for WCI's cap and trade. Regardless of the degree to which BC's carbon tax is revenue neutral, our main concern is that the overall provincial budget makes sufficient climate change investments.
- We urge the government to indicate where the government's funding for infrastructure investments related to its climate policies is to come from, given that behavioural change at the level required to achieve deep reduction is unlikely unless practical alternative choices are provided.

#### Public engagement and outreach

In collaboration with public and private partners, develop a comprehensive, multidimensional public engagement and outreach campaign that will: 1) educate British Columbians about the importance of climate change and the policies that are necessary to address this issue, 2) help British Columbians reduce their greenhouse gas emissions in the most efficient way possible, and 3) make British Columbians aware of the incentives and savings available by taking action to address climate change.

# **Responses:**

- We strongly support this recommendation.
- The BC public service has demonstrated an impressive level of commitment to helping British Columbians move forward on a climate agenda. As all of our efforts continue to accelerate and build momentum, it will be critical to ensure that they have the human resources to continue playing that key role. All of the CAT's recommendations will place additional demands on the public service, so we recommend that the government invest in those resources as needed.
- The current CAT recommendations focus on educating the public about what the government is doing and why. We believe the government can go further by developing an engagement strategy that strives to empower the public so that all British Columbians begin crafting their own solutions and pushing government to go further and faster.
- A major strategy is required that would go beyond education and outreach to actively engage communities around the province in a deliberative process around how we can make the transition to a carbon neutral society, and what barriers are standing in the way. This could draw on the models from the Conversation on Health or the Citizens Assembly on Electoral Reform.
- The government should not rely too heavily on the Citizens Conservation Council. The government's outreach program needs to be both broad and deep, engaging all levels of society. Create a GHG reduction budget, and invite organizations and businesses to make proposals for funding, in the normal way, with allocated budgets for different area households, businesses, industrial sectors, etc. Then judge them by their measured results. This could get programs happening very quickly, and allow natural competition to sort out which programs work best, and lend themselves to duplication and province-wide roll-out. Getting climate change into the K-12 curriculum is really important but it must be done in an exciting way, with 80% of the material focused on solutions, not on the problems.

# **Transportation:**

To further reduce emissions from all fossil fuel-based forms of transportation, increase the low-carbon fuel standard from 10 per cent to 15 per cent by 2020.

#### **Responses:**

• We support the LCFS expansion if it turns out to be a workable policy. An alternate

approach that could produce similar effects would be advancing the RFS for diesel and gasoline beyond the percentages currently being implemented. With either approach, it will be critical to consider the policy (and the anticipated outcomes) through a comprehensive sustainability lens.

5 Introduce program and policy measures to improve the efficiency of heavy-duty vehicles, including niche-market regulation.

# **Response:**

- We support this recommendation.
- Most trucking companies are desperate to find ways to save fuel. One important policy tool that could really help truckers would be for MEMPR to publish an official Monthly Fuel Surcharge figure, starting at a level (e.g.) of \$1.00 or \$1.20 a litre, and require all commercial transport operators to pass the fuel surcharge on to their customers. This would protect taxis, truckers, etc from harsh competition to cut costs from labour or other aspects of operations that do not contribute to GHG emissions.
- 6 Remove barriers to improve the efficiency of port operations and explore such options as shifting traffic to off-peak hours, reducing the number of one-way truck movements, and optimizing the use of Prince Rupert and Vancouver Ports.

# **Responses:**

- We support improving the efficiency of goods movement, but any strategy needs to look at the inter-relationships between freight and personal transportation where appropriate. We would not want to see investments in freight movement prove ineffective because they inadvertently encouraged an increase in personal transportation demand.
- Create a six-month Task Force of contracted consultancy to itemize the barriers, and propose systematic solutions for each barrier.
- 7 Enhance the role of rail in moving freight in B.C.

#### **Response:**

- We support this recommendation.
- Work with the other partners in the Western Climate Initiative to include emissions from air travel in the new cap and trade system currently under development. Mandatory carbon credit payments at points of air travel to offset emissions associated with air travel could be considered should the proposed cap and trade system not be in place by January 2012.

- We strongly support this recommendation.
- We encourage the government to look at the opportunities to address air-travel emissions immediately because based on the WCI cap and trade recommendations, it appears unlikely that the system will include air emissions at the onset. This is certainly something that BC could do with its WCI partners to expand the initiative's impact.
- Prior to any WCI agreement, BC airports might be encouraged, required, or paid to display large posters showing the carbon footprint of the key flights from that airport, plus the website addresses for the Air Canada, West Jet and Harbor Air offset programs. A year later, this information might be required on every printed ticket.

#### Responses to CAT Transportation recommendations in general:

- Mandate ICBC to offer "pay as you drive" (PAYD) insurance options to motorists. California has just passed legislation that requires automobile insurers to offer a PAYD option to car drivers. PAYD is known to help reduce annual kilometers driven (VMD in the US abbreviation) in jurisdictions in Europe. It typically gains support amongst people who maintain a second automobile for occasional/special use. Provided the average range of VMD is sufficient to cover the averages in rural British Columbia (i.e. rural people are not punished for the longer distances they MUST regularly travel for doctors, intra mural sports for their kids, etc), then it is a good regulatory instrument. It is, in our system, both carrot and stick.
- Mandate Air-Care to purchase in mass quantity, and install on all cars (and to
  provide to local repair shops outside the Lower Mainland), a carbon clicker that will
  provide drivers with ongoing information about CO2 emissions, and end of day
  calculations. This is a transportation equivalent of electricity or water meters in
  homes. The government pays the initial purchase price, and it is installed on every
  car for free.
- Provide corporate tax reductions for companies that create formal, documented car ride share systems.
- Provide funds to municipalities and regional districts that create formal, documented ride share education/outreach, and software technology to support corporate efforts (3. above).
- Municipalities and Regional districts that undertake to set up and operate ride share/small scale charter transit services, or other schemes that lower the volume of local and regional vehicle kilometers traveled (vkmt) should receive special funds to accomplish this. (The BC Transit model has some severe limitations. What is needed are local and regional approaches that are controlled locally, in order to glean the most efficiency possible)
- Create standards for driver efficiency in Motor Vehicle Branch regulations, and make testing of knowledge of these standards part of the test for Class 5 Drivers

- Licenses. Standards would include tire pressure, gas efficiency ranges at varying speeds, provincial anti-idling legislation, etc.
- Encourage the use of GPS technology to identify shortest trip routes and minimize drive times.
- Mandate TransLink and municipalities to create rapid bus lanes throughout the Metro Vancouver region.
- Starting with Vancouver and Burnaby, support creation of separated bike lanes on selected arterial commuter routes. Mandate TransLink to design a plan that will extend a grid of separated bike lanes throughout the region, and in the Greater Victoria region.
- Light duty vehicle standards: As per other CAT efficiency recommendations, we would encourage the government to adopt world-leading tailpipe standards (as opposed to "best-practice-in- North America" objective). The California standards are undeniably a positive step, but based on analysis by the Pembina Institute, proposed European standards would enable significantly greater emissions reductions than the California standards.

#### **Buildings**:

9 Update B.C.'s Green Building Code at least every three years to ensure the B.C. code is a leader among North American energy codes.

- We recommend that the benchmarking of building standards include building codes from all over the world not just North America. In this vein we see room to go beyond E80 and LEED requirements by 2010.
- The building code should be revisited to remain relevant to advances in technology and policy. We would further recommend that the Climate Action Team consider moving the BC Code towards an energy intensity measure for energy performance and greenhouse gas emission standards (i.e. specific kWh/m²/year and tonnes CO<sub>2</sub>e).
- To assist local and provincial governments with carbon and energy reporting, we further recommend that the BC Code consider phasing out the prescriptive path (i.e. the reliance on specific insulation values as per the current insulation tables in Part 10 of the Code).
- Adopt the Architecture 2030 language for incorporation into building codes—see <a href="http://www.architecture2030.org/pdfs/2030Challenge\_Codes\_WP.pdf">http://www.architecture2030.org/pdfs/2030Challenge\_Codes\_WP.pdf</a> LEED is good, but not enough, since it does not have enough focus on carbon reduction. Appoint someone to track the best progress on Codes across North America and Europe. Make it very clear that communities are encouraged to experiment with Codes that go beyond the new Green Building Code.

- Building standards should be designed to withstand anticipated climate impacts for the year 2100, given that engineering guidelines call for most classes of buildings to be structurally sound for up to 99 years after construction.<sup>4</sup>
- 10 Work with local governments on a strategy to ensure a high level of compliance with energy codes through proper building code enforcement in all areas of the province.

- We support this recommendation.
- Work with local colleges to train new building inspectors in the new Codes. Require
  every Building Inspector course to look ahead to where Codes are going, so that new
  Inspectors are prepared, and require all existing Inspectors to take a yearly Green
  Skills Upgrade course. Resistance from building and plumbing inspectors, based on
  simple lack on knowledge and experience, is one of the major barriers to innovative
  green building progress.
- 11 Introduce new regulations under B.C.'s Energy Efficiency Act to adopt leading North American and international standards. B.C. should also consider portfolio standard approaches to improve the energy performance of appliances and equipment.

# **Responses:**

- We support this recommendation.
- BC and California should work to achieve international adoption of the Japanese "Front Runner" program (www.eccj.or.jp/top\_runner), which sets the standard for all appliances based on the best in the category. Don't aim for "minimum standards" aim for "maximum standards".
- Require all major appliances to be built with smart chips that allow for demand response. Make energy-use labeling mandatory for everything that uses energy, using an easy 5-star system. Limit stand-by power use to 1 watt per device.
- Adopt "decoupling" legislation and incentives that enable BC's private gas and electric utilities to earn a profit while reducing sales by increasing conservation, as California has done. (www.tinyurl.com/4adqmy)
- 12 Require that, by 2016, all new publicly-funded buildings in the province have net-zero GHG emissions and that by 2020 all new houses and buildings in the province have net-zero GHG emissions.

<sup>&</sup>lt;sup>4</sup> Heap, N. *Hot properties: how global warming could transform B.C.'s real estate sector*. David Suzuki Foundation. November 2007.

- We support the medium to long-term goals for net-zero buildings, but we would urge specific targets and policy support for the construction of a nonnegligible number net zero homes and buildings starting in 2009.
- Establish incentive funding for a pilot for 100 buildings to be zero-carbon in energy use in 2010, 200 in 2011, 500 in 2012, etc., to help the building industry learn what's needed.
- Require that all new houses and buildings in the province have net-zero GHG emissions in. 2016, as has already been done in Britain.
- Establish a green building trades training initiative, requiring all colleges to teach the relevant skills. Builder resistance, based on ignorance of the new approaches, is another serious barrier.
- 13 By no later than 2012, require all houses and buildings to have a current energy efficiency rating or label when they are sold or transferred.

- We support the recommendation for energy labeling, but we think it should be enhanced to also require that all homes and buildings must meet minimum energy performance standards when they are sold or transferred. This would build on a model that has already been implemented in Berkeley and San Francisco. By 2006, 12,000 residences in Berkeley had been upgraded (i.e. 30% of the building stock), resulting in a 25% 50% reduction in per-unit energy use. Berkeley also has a Commercial Energy Conservation Ordinance (CECO). See: .
- 14 Introduce an aggressive energy efficiency and renewable energy program for houses and buildings, combining incentive and regulatory approaches and coordinated across governments and utilities.

- We are extremely encouraged by the long list of ideas in recommendation #14. These do a great job of demonstrating the scope for potential action, and all of the recommendation merit implementation on a province-wide or pilot basis. Some additional ideas include the following:
- Create a low-interest or interest-free Energy Efficiency Loan Fund that can be used by local governments, industry, organizations, schools, and consumers to finance building efficiency investments, as Northern Ireland is doing in partnership with the UK's Carbon Trust. Allow paybacks of up to 20 years.
- Ask BC Hydro to establish an Energy Efficiency Public Benefit Fund that can pay for efficiency programs through a small rider on utility bills. (Similar to the ICE Fund)
- Adopt a BC version of Britain's "Merton Rule", that requires all new buildings with 8 or more units to obtain 14% of their energy from renewables. See

#### www.themertonrule.org

• Government should encourage local grid power systems where feasible, or encourage the use local low voltage generation as a supplement to reduce the demand for grid-based electricity.

#### Energy:

15. Build generation and transmission capacity for clean and renewable electricity generation and create a surplus.

- We support this recommendation with the following significant caveats and additions:
- The development of this strategy must be done in a way that meaningfully involves local government and First Nations, and considers the cumulative regional impacts of development.
- Energy conservation and efficiency are the first and preferred ways to reduce emissions
- Any increased generation and surplus should be planned and executed to maximize the displacement of GHG-emitting generation, rather than simply increasing the supply of energy.
- All BC Hydro planning should also take into account the reality that electric vehicles and PHEVs will become widespread, and plan for increased power uptake. The cars buses and trains of the future are not hydrogen or biofuel, but electric.
- Remote communities and First Nations also need special attention to help them replace diesel generation with hybrid wind/solar/microhydro power, and to optimize the efficiency of all generation. The Queen Charlotte Islands deserve special attention.
- We do not support the proposed Highway 37 grid extension, as this would not contribute significantly to reduced emissions.
- Tidal and wave energy also need special attention; they were passed over in the first ICE funding release. BC will lose its nascent ocean energy industry to the UK and USA unless BC acts to encourage them.
- Biomass energy projects need to be subject to full cycle carbon analysis, including the fuel needed to truck dead pine beetle wood and forest wastes from the forest to the power plant, projected over the full life of the plant.
- Bioenergy projects from sewage and farmland wastes should be encouraged,
- In Austria, the town of Gussing (population 7500) has achieved a 93% reduction in its GHG emissions since 1993 by means mostly of around 30 different bio-energy projects; they are now planning for the larger region (population 28,000) to be zero carbon by 2010. See Gussing Renewable Energy Network: <a href="www.ficfb.at/renet\_d.htm">www.ficfb.at/renet\_d.htm</a>

15 Create a conservation culture to ensure energy efficiency.

#### **Responses:**

- We strongly support this recommendation.
- In addition to the existing programs, allow BC Hydro and Fortis to pay up to 8 cents/kWh for saved energy. Most saved power costs only 3-4 cents/kWh, so this will allow far deeper penetration into the longer payback area, while still averaging less than the price of new power.
- Create a market for certified energy efficiency savings, monetized as "white certificates" or "white tags", as the UK, Italy, France, Connecticut, Pennsylvania, and Nevada have done.
- 16 Introduce policies and regulations to promote electrification in new oil and gas developments **Responses:** 
  - While we are broadly supportive of this policy, a recommendation for the electrification of natural gas operations does raise concerns because the province has not provided a picture of how the development of BC's gas resources (and the accompanying emissions) is expected to proceed. With proposed CBM development, new exploration in the Nechako basin, and offshore objectives all adding on top of conventional production, we recommend the government produce this picture prior to proceeding with a push for electrification in new development.
  - We believe that there is also room for additional combustion, flaring, and venting policies and regulations to build on the first steps directed in the Energy Plan.
- 17 Accelerate carbon capture and storage deployment.

#### **Response:**

• Carbon capture and storage (CCS) should be mandatory for all oil, gas, shale gas and CBM developments after 2020: this, plus a clear signal that the carbon tax is here to stay, will force industry to plan ahead for a CCS future.

#### *Industry:*

18 Create a cap and trade system that will place a hard cap on large industrial emitters (e.g., through partnerships such as the Western Climate Initiative) or expand the carbon tax to apply to all greenhouse gas emissions, including those from industrial processes by 2012. Ensure the method chosen is consistent with the province's 33 per cent reduction target.

#### **Responses:**

• We strongly support the creation of a cap and trade system.

- The application of a carbon tax or cap and trade to CO<sub>2</sub> and methane emissions from oil and gas installations and refineries needs to be accelerated as a matter of urgency. A Sept 6th 2008 report in the Globe & Mail (source?) found that one Alberta refinery was producing 9 times more methane than it was reporting. If this is true for BC refineries too, rapid action is needed.
- The cement industry will need special help with accelerated R&D assistance, since (with the exception of fly-ash additives) the emerging alternatives are still technologically immature, and the cement industry is extremely conservative, due to the high cost of disastrous failure in bridges and high-rise buildings.
- The refrigerant sector should be given clear message by the full phase-out of HFC refrigerants by 2020. Substitutes are available, but right now, HFC use is being encouraged under the Montreal Protocol as the substitute for CFCs and HCFCs, even though HFCs are very powerful GHGs.
- Our comments under recommendations 1.1 and 1.2 are also relevant for this recommendation.

# Communities:

19 Ensure that rural and remote communities have continued access to energy efficiency and clean energy programs and incentives, and access to training to support local green jobs.

# **Responses:**

- We support this recommendation.
- Training for green jobs is needed all over BC, and needs to be the focus of special attention, to get every community college and university on board with the necessary trades training.
- Provide provincial support for rural and remote communities to do integrated sustainability planning which looks at the land-use and economic development together to ensure sustainable development in the future.
- 20 Create a regulatory regime that encourages compact, smart community development.

- We support this recommendation.
- Regional Growth Strategies should be mandatory and they should include density
  thresholds that will determine when the urban containment boundaries can be
  expanded. Government should remove local regulatory barriers and create
  incentives for infill development, downtowns and downtown revitalization, and
  greening of developments.
- Most new BC subdivisions take no account of GHG reduction at all. In Boulder, Colorado, for instance, subdivision developers must buy a 3-year Transit Pass for all residents. The Regional Growth Act needs to be strengthened to make urban

- containment boundaries mandatory and stronger, and lands zone for forestry should not be rezoned for development without regard for regional plans.
- All municipalities should be encouraged to use a Climate Scorecard for New Developments when assessing subdivision development applications, similar to Coquitlam's, and be given an incentive not to proceed with any applications that score, say, less than 60 points out of 100.
- 21 Double the transportation mode share of cycling and walking by 2020.

- We believe this is a very weak goal given that some communities only have 1% of people cycling. Copenhagen is aiming for a 50% cycling rate by 2015 (up from today's 36%). Davis CA has a 17% cycle-commute rate. All communities should be required to report their cycling and walking rates by 2012, and to increase them to 20% walking and 20% cycling by 2020, with increased grant support for new sidewalks, cycle lanes, etc.
- More explicit recognition is needed regarding the fundamental role that land-use policy plays in meeting the mode share goal. Provincial funding should be made available to municipalities to plan for walkable and/or transit oriented neighbourhoods.
- 22 Take steps to ensure that federal and provincial infrastructure funding for communities is directly tied to demonstrated progress towards achieving complete, compact and energy-efficient communities.

# **Responses:**

- We strongly support this recommendation.
- This is a very intelligent proposal. The measurement criteria for funding could include (e.g.) demonstrated progress towards GHG reduction, zero waste, cycling and walking goals.
- Infrastructure funding should be reoriented towards meeting Climate Action Plan objectives. Funding should be tied to clear objectives and strategies in Official Community Plans and Regional Growth Strategies. Overtime funding should be linked to measurable progress towards meeting GHGs targets.
- The funding recommendation currently referring to provincial and federal funding for community projects should also apply to provincial infrastructure spending for projects such as highways and bridges.

#### Agriculture:

23 Identify and remove regulatory and institutional barriers to clean energy development in the agricultural industry.

- We support this recommendation.
- We note, however, that the production of biogas requires 13 cents/kWh. Farmers
  and partners will not invest unless BC Hydro brings in a German style Feed Law
  for biogas that provides secure 20-year power contracts at this price.
- 24 Work with industry to identify and implement mitigation and adaptation solutions tailored to British Columbia's environment and agricultural markets.

#### Responses:

- We support this recommendation.
- ALR policy should remain strong and exclusions reduced to ensure the long-term protection of valuable agricultural land.
- Grasslands farmers of grazing herds, in particular, need encouragement to become carbon farmers by practicing holistic land management methods that have the ability to sequester large quantities of carbon in the soil, which can be sold as offsets or credits. See www.carbonfarmersofaustralia.com.au and www.holisticmanagement.org
- Much needs also to be done to encourage far greater local food production in BC, to lessen BC's external carbon footprint.

#### Waste:

25 By 2020, B.C. ends its growing dependency on disposing municipal solid waste in landfills both here and the United States, through a strategy that is based on requiring that the pollution prevention hierarchy (reduce, reuse, recycle, recover, residuals management) be considered in waste management planning and requiring the management of waste as close to the source as possible.

## **Response:**

- We support this recommendation with the following caveat:
- The incineration of wastes should not be allowed, however, since the emissions contain a 50:50 anthropogenic:biogenic ratio of CO<sub>2</sub>, as well as being a major health/cancer hazard since burning plastic waste produces dioxins and furans.
- B.C. should emulate San Francisco, which is on track to achieve its goal of Zero Waste by 2020. Current practices in B.C. are failing, with the CRD (for instance) recycling less each year. BC needs more stringent Zero Waste regulations, imposing fines on communities that fail to achieve 50% waste reduction/diversion by 2012, 75% by 2020, and 100% by 2030.

#### Forest:

26 Include forests, land use, the forest-product sector, bioenergy and other renewable wood-derived bio-products in the government's climate action strategy. This should be done with the involvement of stakeholders in a full assessment of mitigation options in terms of greenhouse gas benefits, biodiversity values and other co-benefits.

# **Responses:**

- With regard to urban forests, actions/policies are needed to focus on the enhancement of current urban forests and to prevent land-use change that will endanger ecologically significant features within and adjacent to urban and rural communities in BC.
- Please refer to the separate submission submitted by B.C. ENGOs, which focuses on recommendation 27 (regarding measures for the forest sector and wilderness lands).

#### Carbon neutral government:

27 Amend the province's Core Policy and Procedures Manual to emphasize that, when determining the lowest price by a qualified bidder, the government take into account the full lifecycle cost of the goods or services being procured.

#### **Response:**

- We support this recommendation.
- 28 Remove capital funding restrictions limiting the ability of the public-sector to fund strategic energy retrofits that will achieve significant energy conservation, GHG reductions and operating cost savings.

#### **Responses:**

- We support this recommendation.
- Develop a standard ride-sharing website that staff can use within each place of work to reduce their personal emissions.
- Accelerate progress towards the development of local videoconferencing facilities for meetings, which can also be used by the community.
- In the event that the flood of purchase requests for carbon offsets in 2010 cannot be met by valid, transparent, made-in-BC offsets, either prepare a list of valid BC-related offsets in the developing world, or make plans for a change of policy that would require a 10% reduction in assessed carbon footprint by 2010 (20% by 2015, 50% by 2020) as an alternative to paying for full carbon neutrality.

#### *Interim targets:*

30. By 2012, the growth in emissions must be reversed and emissions must begin to decline significantly, to between five and seven percent below 2007 levels.

- See responses to CAT recommendation #31 below.
- 31. By 2016, the decline in emissions needs to accelerate. In order to ensure that B.C.'s 2020 target can be reached, emissions should fall between 15 and 18 per cent below 2007 levels by 2016.

- We are concerned that these interim deadlines are "back-loading" the GHG reductions, placing half of the load in the final four years of the 12-year period.
- We would encourage the government to commit to more challenging interim targets, recognizing that modest initial targets will make it much more difficult to achieve needed emission reduction targets later this century (see reference footnote #1 above).

Thank you for the opportunity to comment on the recommendations of the Climate Action Team.

Yours sincerely,

Margaret Mahan Executive Director Better Environmentally Sound Transportation margaret@best.bc.ca

Guy Dauncey President BC Sustainable Energy Association guydauncey@earthfuture.com

Morag Carter Director, Climate Change David Suzuki Foundation mcarter@davidsuzuki.org

Will Horter Executive Director Dogwood Initiative whorter@dogwoodinitiative.org









Merran Smith Director, Climate Program Forest Ethics merran@forestethics.org

Helen Goodland Executive Director Light House Sustainable Building Centre helen@sustainablebuildingcentre.com

Matt Horne Acting Director, B.C. Energy Solutions Pembina Institute for Appropriate Development matth@pembina.org

Colin Campbell, Ph.D. Science Advisor Sierra Club of Canada – B.C. Chapter colin@sierraclub.bc.ca

Cheeying Ho
Executive Director
Smart Growth BC
cheeying@smartgrowth.bc.ca

Greg Gowe Staff Lawyer, Energy Programme West Coast Environmental Law ggowe@wcel.org

# **FORESTETHICS**







