#### CLIMATE, ENERGY AND THE B.C. ELECTION 2009: A REVIEW OF THREE PARTY PLATFORM COMMITMENTS

The Pembina Institute has examined the climate and energy commitments of British Columbia's three main parties — Liberal, NDP and Green — in order to help voters better understand what each party is promising with respect to climate and energy issues. For the Liberal Party, we have drawn from their platform, the 2007 Energy Plan, and the 2008 Climate Action Plan. For the NDP and the Green Party, we have drawn from their respective platforms and supplementary information on their websites.

We have evaluated each party's energy and climate change commitments using the following six criteria:

- 1. Setting science-based greenhouse gas emission reduction targets.
- 2. Putting a price on global warming pollution.
- 3. Helping British Columbians use less energy for transportation.
- 4. Helping British Columbians use less energy in their homes and buildings.
- 5. Greening B.C.'s electricity supply.
- 6. Reducing impacts from oil and gas development.

We developed a five-star classification that evaluates a combination of measures in each category in order to better evaluate the proposals of each party.

****	The proposed measures are equivalent to Pembina Institute recommendations, and are realistic.
****	Many of the proposed measures almost meet Pembina Institute recommendations, or offer progressive ideas without sufficient detail to confirm their feasibility.
$\star \star \star$	Some of the proposed measures would result in progress on the issue but are not as ambitious as they should be.
**	The proposed measures would substantially maintain the status quo.
*	A majority of the proposed measures represent steps backward and impede progress on the issue.

We have attempted to fairly represent the commitments made by each party. Any errors or omissions are the sole responsibility of the Pembina Institute.

#### SETTING SCIENCE-BASED GREENHOUSE GAS EMISSION REDUCTION TARGETS

Targets are an indication of a party's ambition to act on climate change. While a target does not equate with action, it is an indicator of a party's commitment to addressing global warming. If achieved, a science-based target will allow a jurisdiction to contribute its fair share to a global effort to avert dangerous climate change.

	Pembina Institute	B.C. Liberals	B.C. NDP	B.C. Green Party
Medium term targets.	25% below 1990 by 2020.	14% below 1990 by 2020.	14% below 1990 by 2020.	30% below 1990 by 2020.
Long term targets.	80% below 1990 by 2050.	74% below 1990 by 2050.	74% below 1990 by 2050.	85% below 1990 by 2040.

*Summary:* All parties acknowledge the importance of dealing with climate change and the need for science to be a guide for political action. Parties were ranked on the quantitative reduction targets established and the extent to which those targets are consistent with science-based emission reductions. A target is a critical statement as it sets the goal, but the real work is in the policies that are proposed or implemented, as they are what will make or break the target. Policy experts agree that serious policies must include a significant price on carbon across the economy (see next table).

*Ranking:* The Liberals and NDP targets for 2020 and 2050 are aggressive, although they should be higher if B.C. is to contribute fairly in efforts to act on climate change. The Green Party has set an extremely ambitious target of being 30% below 1990 levels by 2020 and 85% below 1990 by 2040.



#### PUTTING A PRICE ON GLOBAL WARMING POLLUTION

A price on greenhouse gas emissions provides a clear incentive to reduce emissions. When done properly, that incentive will trickle into all areas of the economy by, for example, making energy retrofits more cost effective, increasing the attractiveness of clean cars, and making low impact renewable energy more affordable than natural gas-fired power plants.

	Pembina Institute	B.C. Liberals	B.C. NDP	B.C. Green Party
Applying to all sources of emissions equally.	A system that applies a price to all greenhouse gas emissions. In the short term, coverage of 85% of emissions is achievable. A price that is established by implementing a carbon tax, a cap and trade system, or a combination of the two.	Implemented a carbon tax covering 76% of B.C.'s emissions. Committed to developing a cap and trade system with US states and Canadian provinces as part of the Western Climate Initiative. This would increase coverage to a total of 85% or more by 2012.	Committed to cancelling the carbon tax and replacing it with a limited cap on industrial emitters that Pembina has estimated would cover up to 32% of B.C.'s emissions. Committed to developing a continental cap and trade system, but no details provided on the timing or emissions sources to be included.	Committed to increasing the coverage of B.C.'s existing carbon tax to some of sources not covered (estimated to result in total coverage of 85%). Committed to capping the emissions of some large emitters, but no details provided.
Being high enough to spur significant change while protecting low- income families.	<ul> <li>Based on national modelling results, prices need to be in the range of:</li> <li>\$50 per tonne by 2010</li> <li>\$125 per tonne by 2015</li> <li>\$200 per tonne by 2020</li> <li>Increasing the price over time gives families and businesses time to reduce their emissions.</li> </ul>	Carbon tax to increase by \$5 per tonne annually until 2012 when it would be \$30 per tonne. Low-income tax credits provide adequate protection for low-income families until 2010. No details on how the tax would increase after 2012 or how protection for low- income families would be strengthened.	No information on what the cap would be, so it is impossible to estimate what level of emissions reductions would be achieved.	Would increase carbon tax to \$50 per tonne immediately. Committed to continue increasing the price over time, but no details provided. Would implement a guaranteed livable income program, although no details have been provided.

*Summary:* Putting a price on global warming pollution through a carbon tax or cap and trade system, and relying on that price to encourage change, is a relatively new policy tool (especially in North America). Parties were ranked on the extent to which the proposed (or operative) price on carbon would apply broadly across the economy and how high that price would be.

*Ranking:* The Green Party would immediately increase the carbon tax and broaden its coverage from 76% to 85% of B.C.'s emissions. The coverage offered by the Liberals' carbon tax is extensive, but they have not indicated whether or by how much the price would increase beyond 2012. The NDP approach is a clear step backward. Their system would apply to only 32% of B.C.'s emissions instead of the current 76%, and they have not offered enough detail in their platform to assess how stringent their carbon cap would be.



### HELPING BRITISH COLUMBIANS USE LESS ENERGY FOR TRANSPORTATION

Cleaner vehicles, cleaner fuels and a reduced reliance on vehicles are key opportunities to decrease fossil fuel use and reduce greenhouse gas emissions. Governments can help make these changes happen through regulations, incentives, and infrastructure decisions.

	Pembina Institute	B.C. Liberals	B.C. NDP	B.C. Green Party
Regulating and encouraging cleaner vehicles and cleaner fuels.	Energy performance standards for light duty vehicles that meet and eventually exceed California's tailpipe standards. Incentives for efficient light duty vehicles and corresponding extra charges for inefficient vehicles. Requirements for cleaner fuel.	Implemented California's tailpipe standards pending implementation in California. In the process of implementing renewable fuel and low carbon fuel standards.	Committed to California's tailpipe standards.	Committed to fuel efficiency standards in line with California's standards. Would phase out gasoline-powered cars and short-haul trucks by 2030. Would implement incentives for efficient vehicles and fees for inefficient ones.
Making it easier to carpool, walk, cycle, and take transit.	Increased investments in transit service, and walking and cycling infrastructure. Encourage sustainable community growth by requiring new developments to minimize greenhouse gas impacts.	Committed to expansion of Skytrain, rapid bus, and standard buses as detailed in 2008 transit plan. Committed to expanding universal transit pass system to all post-secondary students in B.C.	Committed to expanding transit, with specific focus on the Evergreen line and service south of the Fraser. Committed to reversing the most recent increases in transit fares.	<ul><li>Would implement pay as you drive insurance and congestion pricing.</li><li>Committed to expanding transit, cycling, walking, and carpooling infrastructure.</li><li>Would invest in improving rail systems, and shift freight to rail where possible.</li></ul>
Limiting expansion of roads, highways, and bridges.	No major infrastructure expansion without an analysis of potential increases in emissions that could result. Any predicted increases would be accounted for in short and long-term climate action plans before proceeding.	Committed to highway and bridge expansion in the lower mainland. Committed to highway expansion throughout the province. Claim that road and bridge expansion would reduce greenhouse gas emissions.	No opposition to planned highway and bridge projects in the lower mainland. Limited mention of highway projects elsewhere in the province.	Would cancel highway and bridge expansions in the Lower Mainland.

*Summary:* Cars and trucks account for 25% of B.C.'s emissions. Parties were ranked on the extent to which their policies would encourage British Columbians to drive cleaner vehicles and use them less.

*Ranking:* All three parties have similar commitments with regard to fuel efficiency regulations, although the Green Party would use pricing measures as well. All three parties would increase transit, while only the Green Party has also focused on the need for expanded walking, cycling, and carpooling infrastructure. The Green Party proposes to cancel the Gateway Project that would see the expansion of highways and bridges in the Lower Mainland and anticipated increases in greenhouse gas emissions from additional cars and trucks on the road. The Green Party has not put forward an implementation plan explaining how they would phase out gasoline-powered cars and shot-haul trucks in the next 20 years. While the Liberals are the only party to commit to a low carbon fuel standard, that advance is tempered by concerns about their unsupported claim that road and bridge expansion would reduce congestion and thereby reduce greenhouse gas emissions.



### HELPING BRITISH COLUMBIANS USE LESS ENERGY IN THEIR HOMES AND BUILDINGS

Making B.C.'s homes and buildings more energy-efficient and more reliant on local renewable energy reduces the need for electricity and natural gas. Less energy means fewer emissions, and less pressure to pursue new sources of energy. Governments can help make these changes happen with strong regulations, incentives, and information.

	Pembina Institute	B.C. Liberals	B.C. NDP	B.C. Green Party
Regulating more energy-efficient construction.	Leading-edge energy efficiency and renewable energy standards for all new and existing homes and buildings.	Implemented B.C.'s first energy efficiency standards for new homes and buildings. Committed to increasing those over time, but no details on what those improvements would be.	Committed to improving energy efficiency standards over time. No details on what those improvements would be.	Committed to improving energy efficiency standards over time. Would immediately require new homes and buildings to be using solar energy. Would require all new homes and buildings to produce as much energy as they use by 2020.
Providing loans and incentives for energy retrofits.	Increased scale and availability of the incentives for energy-efficient construction and retrofits. Penalties for energy-inefficient construction and renovations.	Implemented the LiveSmart program and a number of PST exemptions for energy efficient equipment. Committed to increasing these programs.	Committed to offering low-interest loans for energy retrofit projects. Green bonds would finance the loans. Committed to increasing retrofit programs including a program to retrofit public buildings.	Program to retrofit public buildings and require new publicly funded buildings to have net zero emissions by 2016. Refundable tax credits and revolving loans to encourage energy retrofits.
Making British Columbians aware of solutions.	Requirements for better information about the energy performance of homes and buildings.	<ul> <li>Would have B.C. Hydro install smart meters in all homes by 2012 to give better information about household energy consumption.</li> <li>Started a pilot program that would require energy labels on homes at sale.</li> <li>Directed B.C. Hydro to move towards rates that encourage conservation.</li> </ul>	Would cancel the smart meter installations. Have expressed concerns about conservation rates, but have not provided details on how they would be changed.	Committed to having smart meters in all homes by 2012. Would require energy performance labels on all homes and buildings before they are sold or leased.

*Summary:* Parties were ranked on the extent to which their proposals would make homes and building more energy-efficient and enable them to generate more of their own energy. These measures are important because they impact how families understand and use energy on a day-to-day basis.

*Ranking:* All three parties have made similar commitments to regulate new construction, but none would require existing homes and buildings to undergo retrofits. All parties have also committed to increasing the scale and availability of incentives to encourage retrofits, and the NDP and Green Party have also promised loan programs to finance retrofits. Keeping track of energy consumption is also an important part of conserving energy. In this regard, parties have a variety of commitments, The Green Party would implement smart meters so that people can see their energy use in their home, and require all homes and buildings to have energy performance labels. The Liberals have the same smart meters commitment, and would implement a pilot program for energy labels. The NDP would cancel the smart meters, and have made no commitments regarding energy labelling.



# **GREENING B.C.'s ELECTRICITY SUPPLY**

Greening our electricity supply means first and foremost reducing the amount of energy we use (see the previous two tables). The next steps are to minimize the impacts of fossil fuel generation and new sources of supply. Any energy sources can raise serious environmental and community concerns.

	Pembina Institute	B.C. Liberals	B.C. NDP	B.C. Green Party
Reducing the impacts from fossil fuel generation.	Supported B.C.'s policies requiring electricity generation to have net-zero emissions. Zero-emissions requirements should also be applied to any imported electricity.	Banned new coal-fired projects without carbon capture and storage technology. Required new projects to have net zero emissions, and existing projects to have net zero emissions by 2016.	Supported legislation requiring carbon capture and storage on coal-fired generation, and net-zero emissions from all electricity generation.	No coal-fired generation in B.C. Committed to phasing out natural gas and diesel generation by 2012. Would include greenhouse gas emissions from imported electricity in accounting.
Prioritizing low- impact sources for new supply.	All new supply should come from low- impact renewable sources.	Supportive of any sources that have net zero greenhouse gas emissions (other than nuclear). This includes a focus on run-of-river, wind and biomass projects. Have directed B.C. Hydro to consult on the feasibility of the Site C large hydro project on the Peace River.	Have not articulated the specific types of electricity generation that they want to see.	No run-of-river without a more rigorous environmental assessment process. Would implement a feed-in tariff that prioritizes solar, ocean, tidal, and wind. Would ban new large hydro projects, and phase out existing dams by 2100.
Ensuring that good projects are built and bad projects are rejected.	Whether owned publicly or privately, all projects should be planned and regulated effectively, with strong oversight and meaningful community engagement. A willingness to pay more for electricity to ensure that projects are built in appropriate locations and with an appropriate design.	Would rely on the private sector through calls for power and the standard offer. Have directed the B.C. Utilities Commission to conduct a long-term assessment of B.C.'s transmission needs. Have committed to launching a Green Energy Task Force that would advise on how to maximize growth in clean energy at the lowest net environmental impact.	<ul> <li>Would place a moratorium on new private power projects until a full review of supply and demand is completed.</li> <li>Would allow B.C. Hydro to build new projects.</li> <li>Would give local governments and First Nations oversight over local projects.</li> <li>Would expand community energy trusts to help First Nations and regional governments develop projects.</li> </ul>	<ul> <li>Would implement feed in tariffs that prioritize co-op and public ownership.</li> <li>Would give local governments the right to say no to new supply projects.</li> <li>Would establish elected regional boards to review development proposals.</li> <li>Would improve assessment process to better account for cumulative impacts.</li> </ul>

*Summary:* Fossil fuel power generation accounts for 5% of B.C.'s emissions, and all parties acknowledge the need to reduce these emissions. Parties were ranked on the extent to which their proposals would move B.C. toward low impact, renewable electricity sources, and the extent to which they would address the current public debate regarding the environmental and community impacts of renewable energy.

*Ranking:* Party commitments regarding new power opportunities do not fully respond to the current public debate. The NDP would establish a moratorium on private power projects until a supply and demand assessment is completed, while the Liberals would continue to promote private power projects and create a Green Energy Advisory Task Force to respond to public concern. All three parties are vague on important issues such as cumulative impacts and appropriate community consultation – issues for which British Columbians have been demanding solutions. The Green Party would establish feed in tariffs to ensure that resource type, location, and community ownership are valued, as is being done in Germany and Ontario for example. They have also committed to phasing out natural gas and diesel-fired electricity generation, but have not provided an implementation plan.



## **REDUCING IMPACTS FROM OIL AND GAS DEVELOPMENT**

Oil and gas development is already one of the largest environmental concerns in B.C. Potential new developments including coalbed methane, shale gas, offshore oil and gas, oil sands pipelines and tankers travelling on the B.C. coast would create additional environmental and climate challenges.

	Pembina Institute	B.C. Liberals	B.C. NDP	B.C. Green Party
Ensure terrestrial oil and gas development doesn't compromise B.C.'s climate objectives or exceed an acceptable level of impact on lands and communities.	Suspend coalbed methane development until baseline research is completed, independent science is undertaken and community consent is secured. A more measured approach to new development, and increase conservation, efficiency and renewables. An adequate combination of regulation and pricing to keep oil and gas emissions from undermining climate objectives.	Committed to developing a coalbed methane industry in B.C. Committed to expanding unconventional shale gas production in the Horn River, Montney, Bowser and Nechako Basins. Promote potential greenhouse gas reductions from natural gas consumption without acknowledging the corresponding increases in emissions in B.C. from gas production.	No coalbed methane projects until they have undergone full community consultation and proper environmental assessment. No mention of shale gas or other new terrestrial basins.	Permanent moratorium on coalbed methane. No shale gas development. No oil and gas activity by 2020.
Better regulations and royalty practices in oil and gas sector.	End subsidies and royalty breaks. Direct 25% of oil and gas revenues to a heritage fund to support just transition.	Would end routine natural gas flaring by 2016. Commitment to implement coalbed methane regulations.	<ul><li>Would end routine natural gas flaring by an unspecified date.</li><li>Would charge royalties on flared and fugitive natural gas. Pembina estimates the gas these royalties would be applied to account for 8% of B.C.'s emissions.</li></ul>	Would prohibit routine flaring by an unspecified date.
Keeping fossil fuels off B.C.'s coast.	Maintain moratorium on offshore oil drilling and the tanker moratorium.	Commitment to northern pipelines is contingent on liquefied natural gas tankers in B.C.'s coastal waters. Committed to developing offshore oil and gas sector.	Would confirm the moratorium on crude oil tankers. No mention of liquefied natural gas tankers. Would not develop offshore oil and gas.	Would confirm the moratorium on crude oil tankers. No mention of liquefied natural gas tankers. Would not develop offshore oil and gas.
Gas and oil pipelines.	New pipelines must be evaluated in the context of climate change and must not create unacceptable risk to lands, waters and communities.	Continuing to promote new natural gas pipeline developments that would make it easier to access new gas basins. No mention of oil pipelines.	No mention of specific pipeline projects. Moratorium on crude oil tankers would prevent oil sands pipelines, but wouldn't impact proposed natural gas pipelines.	Committed to preventing any new pipeline projects.

*Summary:* Parties were ranked based upon the extent to which they would ensure that oil and gas development is consistent with B.C. meeting its climate objectives, and does not exceed an acceptable level of impact on the environment and communities in areas where the industry operates.

**Ranking:** The Liberal commitment to drilling for oil offshore, expanding pipeline networks, opening up new gas basins, and establishing an "energy corridor" runs the risk of compromising B.C.'s climate leadership. The Green Platform is in stark contrast; it envisions sun-setting the oil and gas industry by 2020, and while this would support climate objectives, the party has not offered a phase-out plan that can be clearly implemented. The NDP has made positive commitments regarding some new sources, but has not offered a comprehensive vision of intentions with respect to this influential industry.

