

PUTTING A PRICE ON POLLUTION:

ASSESSMENT OF THE FEDERAL PARTIES'
PLANS TO FIGHT CLIMATE CHANGE



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► **To see a one-page summary of the results for each party, go to page 7.**

1. Introduction

The centrepiece of any credible government plan to fight climate change is a “carbon pricing” policy that puts an appropriate price on greenhouse gas (GHG) pollution, broadly across the economy. Economists and policy experts from leading environmental and business organizations are virtually unanimous on this, as the following recent statements illustrate:

There are two main market-based ways for governments to persuade businesses and consumers to reduce emissions of greenhouse gases and pollutants more quickly. One is to send price signals directly to the market via environmentally linked taxes. The other is a cap-and-trade system that limits the total quantity of emissions and distributes the right to emit by creating a market in tradable permits.

— Canadian Council of Chief Executives¹

The only effective and efficient policy that would result in deep GHG emission reductions is a market-based policy, such as a tax, a cap-and-trade system or a combination of the two. These mechanisms are the most effective and efficient means to send a signal throughout the entire economy. This core policy then needs to be complemented by other regulatory policies, which may force emission reductions from parts of the economy that do not respond to a price policy.

— National Round Table on the Environment and the Economy (NRTEE)²

Canada needs to go much further, must faster, in introducing a national, comprehensive, and coordinated system of green taxes that would set a price on greenhouse gas emissions. This GHG tax system should be implemented in tandem with a cap and trade system.

— The Conference Board of Canada³

By 2009, set a price on GHG emissions as the centrepiece of a Climate Action Plan, starting with a price no lower than \$30/tonne CO₂e in 2009 and increasing to \$50/tonne by 2015, and to \$75 a tonne by 2020. This price should be applied broadly in the Canadian economy, either through a tax or through a cap-and-trade system...

— 11 of Canada's largest environmental non-governmental organizations⁴

The Pembina Institute has assessed the carbon pricing policies currently proposed by the five main federal parties, using ten key criteria covering both environmental effectiveness and economic fairness. Carbon pricing needs to be complemented by targeted regulations and investments to cut emissions adequately (see the NRTEE quote above), so this is not a comprehensive assessment of the strength of each party's plan to fight climate change. However, each party has placed a carbon pricing policy at the centre of its climate plan.

2. Criteria for good carbon pricing policy

► **For a one-page summary of our criteria and how we apply them, go to page 6.**

A. Environmental effectiveness

First and foremost, carbon pricing policy is about reducing GHG emissions. The amount of emission reductions will depend on which sources of emissions a price is applied to, and the level of that price over time.

1. Breadth of sectors covered. Put simply, the more sources of emissions subject to a given price, the greater the emission reductions that will be obtained. If governments choose not to apply carbon pricing in a particular sector, then they will need to implement other policies — regulations and investments — to reduce that sector's emissions. While several such sector-specific policies are needed even if an emissions price is applied broadly, keeping them to a minimum will tend to increase the overall cost-effectiveness of a government's climate plan.

Another argument for broad coverage is that it is unfair to make only some polluters pay when we know that all GHG emissions, no matter where they come from, cause equal harm to society.

We therefore give a maximum score to a carbon pricing policy if it has the broadest practical coverage. We give a minimum score if the policy applies only to non-industrial sectors (because a price signal is likely to be least effective there), but a medium score if the policy applies just to industry (because a price signal is likely to be most effective there).

Cap-and-trade is not necessarily limited to industrial emissions,⁵ so either an emissions tax or a cap-and-trade system has the possibility of scoring well under this criterion.

2. Projected price level in 2009. Polluters are best off financially if they implement all emission reduction opportunities that cost less than the emissions price. For example, if a renewable energy project costs \$40/tonne and an emissions tax costs \$50/tonne, it is clearly less expensive to take the renewable energy option. So the higher the price on emissions, the more reductions will occur.

We could have tried to evaluate directly the amount of emission reductions expected from different carbon pricing policies. But this is typically hard to assess without using complex economic models, and it would be difficult to compare policies that cover different sources of emissions.

Climate science shows that there is an urgent need to start cutting GHG pollution: global emissions need to peak before 2020 to avoid the worst impacts, which means that a wealthy, high-emitting country like Canada needs to take immediate action.⁶ Whether a carbon pricing policy puts a price on emissions immediately, in 2009, is therefore an important test.

A review of available economic analysis suggests that for Canada to have a chance of achieving GHG reductions consistent with climate science, the price put on emissions needs to be at least \$30 per tonne⁷ in 2009 and at least \$75 per tonne by 2020.⁸ A reasonable mid-point is a price of at least \$50 per tonne by 2015.

We therefore give a maximum score to a carbon pricing policy if the projected price is more than \$30 per tonne in 2009, and a minimum score if the projected price is zero in that year.

3. Projected price level in 2015. In accordance with the preceding discussion, we give a maximum score to a carbon pricing policy if the projected price is more than \$50 per tonne in 2015, and a minimum score if the projected price is zero in that year.

4. Projected price level in 2020. Similarly, we give a maximum score to a carbon pricing policy if the projected price is more than \$75 per tonne in 2020, and a minimum score if the projected price is zero in that year.

5. Limits on use of offsets. “Offsets” are credits granted to projects that reduce emissions outside of the sectors subject to carbon pricing. Polluters subject to carbon pricing may be allowed to buy offsets and use them to comply with a cap-and-trade system or reduce their taxable level of emissions.

Allowing offsets has two drawbacks. First, if there are no limits on their use, and their price is low, then polluters can rely on them to the point where there are few emission reductions from the sources of emissions subject to carbon pricing. (For example, Canada’s industrial emissions could continue to rise if firms purchased a lot of offsets from forestry projects or from projects outside Canada.) Second, offsets may be granted to projects that would have happened anyway, regardless of their ability to sell credits. In these cases the environmental effectiveness of the carbon pricing policy will be undermined. To minimize this problem, strict rules are needed to ensure offsets are “additional,” i.e., they come from projects that would not have gone ahead in the absence of a carbon pricing policy.

We therefore give a maximum score to a carbon pricing policy only if it limit offsets to a small fraction — around 10% — of emission reductions (relative to business-as-usual levels), *and* if there are strict rules to ensure additionality. We give a medium score if there are either tight limits on the volume of offsets *or* strict additionality rules, and a minimum score if there are no volume limits *and* additionality rules are weak.

6. Use of public revenues for GHG reductions. An emissions tax, or a cap-and-trade system in which some of the tradable permits are sold by the government at auction, will generate revenues for the government that could easily run into the billions of dollars. These revenues could be used to generate additional emission reductions. In this case, one might conclude that the carbon pricing policy will reduce emissions more than if the revenues were used to cut personal or corporate taxes.

However, the government could also choose to use other sources of revenue to fund the very same investments in additional emission reductions. So from the perspective of environmental effectiveness, all that matters is the government’s level of spending on cost-effective emission reduction programs — not where the money comes from. In fact, when different sources of government revenues are blended together, “where the money comes from” is arguably a meaningless concept.

We do not, therefore, assess a carbon pricing policy directly on its “use of revenues.” Instead, we focus on the total level of government spending on programs to cut GHG emissions that accompany a carbon pricing policy. A detailed evaluation of the effectiveness of such programs is beyond the scope of this assessment, so we take a qualitative approach. Noting the federal Environment Commissioner’s 2006 conclusion that “a massive scale-up of efforts is needed” by the federal government to cut GHG emissions,⁹ we look at the extent to which parties are proposing such a scale-up in terms of spending. It is clear that a comprehensive federal GHG reduction plan will need to use substantial public investment in areas where it is difficult to regulate (e.g., building retrofits), where the price on emissions is not likely to be high enough initially to produce needed results (e.g., renewable electricity), or where infrastructure is publicly owned (e.g., transit).

Given that the Environment Commissioner’s reference point was the state of federal policy when the previous Liberal government left office at the end of 2005, we give a maximum score only

for an order-of-magnitude scale-up in federal spending commitments on GHG reductions relative to that point in time. We give a medium score for a substantial scale-up in spending, and a minimum score for no significant increase.

7. Simplicity of the policy. History shows that organizations with a financial interest in carbon pricing policies lobby governments to include provisions that generally make the policies more complicated. Examples of such complications include targets (i.e., free allocations of tradable permits) that vary between sectors or even between individual industrial facilities; tax exemptions or variable tax rates; and multiple compliance options.

There are at least four reasons why keeping a carbon pricing policy simple is likely to result in more emission reductions. First, a simple policy can be designed and brought into effect much more quickly than a complex one. Second, if the policy is kept simple, firms will focus on looking for the most cost-effective ways to reduce emissions instead of looking for ways to “game” the system. Third, with a simple policy, the level of the emissions price over the next several years is likely to be much clearer. This reduces the risk that firms take a wait-and-see approach, delay the investments that lead to emission reductions, and focus efforts on lobbying government for a less stringent policy. Fourth, simplicity facilitates transparency, making it easier to assess the policy’s effectiveness and hold the government to account for the results.

Keeping the policy simple doesn’t mean that important issues of economic fairness need go unaddressed. As discussed in Section B, such issues can be dealt with through specific, targeted financial assistance provided separately from the carbon pricing policy itself.

We therefore give a maximum score to a carbon pricing policy that has a single target or rate, and a single compliance option. We give a minimum score to a policy with numerous targets or rates and multiple compliance options.

B. Economic fairness

Fairness is an important consideration for any policy that generates significant economic costs or benefits. Fairness is obviously important from an ethical perspective. And in purely practical terms, a policy that is seen to be fair has a greater chance of securing enough political support to be implemented. Also, using financial resources fairly means not wasting them where they are unneeded, thereby freeing up more funds for reducing emissions.

8. Avoidance of exempted emissions in covered sectors. Our starting point for assessing fairness is the polluter pays principle, which says that polluters should have to pay the same amount for every tonne they emit, because each tonne causes the same harm to society. “Polluter pays” means that an emissions tax should apply at the same rate (\$ per tonne) to all sources of emissions, and that in a cap-and-trade system, all the tradable permits should be sold at auction rather than being given to firms free of charge, as free permits represent emissions that are effectively exempted from carbon pricing. It also means that no sources or types of emissions in sectors covered by a carbon pricing policy should be exempted unless it would be clearly impractical to include them.

In criteria 9 and 10 below, we recognize that financial compensation to prevent unfair side-effects of carbon pricing is needed for people with low incomes and industries whose international competitiveness is demonstrably harmed. But to ensure such compensation is justified and transparent, we believe that it is preferable to deliver it through specific, targeted financial assistance provided separately from the carbon pricing policy itself.

We therefore give a maximum score to a cap-and-trade system in which 100% of permits are auctioned, or to a uniform emissions tax, as long as there are no unjustifiably exempted sources or types of emissions. We give a minimum score to a cap-and-trade system with all permits provided free of charge. We give a medium score to cap-and-trade system with a transition to 100% auctioning over a few years, or a tax with significant variations in the tax rate among sectors.

9. Compensation for regressiveness. On its own, a price on GHG emissions is “regressive” because it will cost a greater percentage of the income of a typical person with a low income than of that of a typical person with a higher income. In the context of taxation, this is widely agreed to be an unfair outcome that needs to be remedied by providing financial compensation to people with low incomes. In other words, “polluter pays” needs to be balanced with “ability to pay.” Governments can avoid diluting the carbon price signal or the related emission reductions by providing an amount of compensation that is not linked to emissions levels.

The same arguments apply to carbon pricing more generally. A cap-and-trade system will increase energy prices and therefore be regressive. This is true even if cap-and-trade applies only to industry, because producers will pass on some portion of their GHG-related costs to consumers.

We therefore give a maximum score to a carbon pricing policy that is accompanied by measures that fully compensate people with low incomes in reasonably foreseeable circumstances. We give a minimum score if there are no such compensation measures.

10. Targeted protection of industries’ international competitiveness. “Ability to pay” is also an issue for industry sectors in which a carbon pricing policy would reduce profitability to the point where significant market share would be lost to producers in other countries. This would not only be unfair but also bad for environmental effectiveness, because there will be no reduction in total emissions if Canadian production is simply replaced by production in other countries. This problem is referred to as “carbon leakage.”

Care is needed with this issue, because putting a price on the emissions of a sector that is competing internationally will not necessarily result in carbon leakage. For instance, it is unlikely that any sector would be subject to significant carbon leakage at an emissions price up to \$30 per tonne. Whether leakage actually occurs will depend on

- a sector’s profitability,
- the size of its GHG-related costs relative to profits,
- the extent to which foreign competitors are subject to carbon pricing, and
- the ease with which companies can relocate (for example, manufacturing can more easily relocate than natural resource extraction).






Financial assistance should therefore only be provided to industry sectors that have been clearly shown to be likely to suffer significant carbon leakage in an independent, public assessment of all the factors just mentioned. The assistance will need to be related to domestic production levels so that it effectively blunts the incentive to reduce those levels. But if such assistance is not targeted to the sectors that demonstrably need it, the carbon price signal will be effectively blunted for too many firms. Money that could have been spent on emission reductions will be wasted, and the carbon pricing policy’s environmental effectiveness will be unnecessarily reduced.

We therefore give a maximum score to a carbon pricing policy that is accompanied by measures that provide effective protection of international competitiveness in the targeted way described

above and only at higher emission prices. We give a minimum score if there is no protection at higher prices, or non-targeted protection.

Table 1 summarizes our ten assessment criteria and, in keeping with the foregoing descriptions, how we apply them. A maximum score is represented by two thumbs up, a medium score by a thumb sideways, and a minimum score by two thumbs down. One thumb up or one thumb down represent intermediate scores.

Table 1. Our assessment criteria and how we apply them.

						
Environmental effectiveness						
1	Breadth of sectors covered	Only non-industrial emissions		Only industrial emissions		Broadest practical coverage
2	Projected price level in 2009	\$0/tonne	\$10/tonne	\$20/tonne	\$30/tonne	> \$30/tonne
3	Projected price level in 2015	\$0/tonne	\$15/tonne	\$30/tonne	\$50/tonne	> \$50/tonne
4	Projected price level in 2020	\$0/tonne	\$25/tonne	\$50/tonne	\$75/tonne	> \$75/tonne
5	Limits on use of offsets	No volume limits, no strict rules for additionality		Either tight volume limits or strict rules for additionality		Tight volume limits plus strict rules for additionality
6	Use of public revenues for GHG reductions	No significant increase from 2005 level of spending commitments on GHG reductions		Substantial scale-up from 2005 level of spending commitments on GHG reductions		Order-of-magnitude scale-up from 2005 level of spending commitments on GHG reductions
7	Simplicity of the policy	Numerous targets/rates and multiple compliance options				Single target/rate and single compliance option
Economic fairness						
8	Avoidance of exempted emissions in covered sectors	All permits provided free of charge		100% auctioning of permits after a few years, or tax with significant rate variations among sectors		100% auctioning of permits or uniform tax; no unjustifiably exempted emissions
9	Compensation for regressiveness	No compensation measures				Full compensation for people with low incomes
10	Targeted protection of industries' international competitiveness	No protection at higher prices, or non-targeted protection				Targeted protection, only at higher prices

3. Assessment of parties' proposed policies

Our assessment is based on the five parties' election platforms (and accompanying budget tables) plus the Conservative government's "Turning the Corner" plan (March 2008)¹⁰ and Budget Plans, the Green Party's "Vision Green" policy statement (October 2007), the Liberal Party's "Green Shift" proposal (June 2008), and the NDP's climate plan.¹¹

Table 2 shows the results, and is followed by an explanation of each score we have given. A question mark indicates that insufficient information is available to give a score.

Table 2. Results of our assessment for the five parties.

		Bloc Québécois	Conservative Party	Green Party	Liberal Party	NDP
Environmental effectiveness						
1	Breadth of sectors covered					
2	Projected price level in 2009	?				
3	Projected price level in 2015	?	?			
4	Projected price level in 2020	?	?			
5	Limits on use of offsets	?		?	?	?
6	Use of public revenues for GHG reductions					
7	Simplicity of the policy	?				?
Economic fairness						
8	Avoidance of exempted emissions in covered sectors					
9	Compensation for regressiveness					
10	Targeted protection of industries' international competitiveness	?				?

1. Breadth of sectors covered

The Bloc and the NDP both propose GHG cap-and-trade systems for industry but no carbon pricing policy for other sources of emissions. In accordance with Table 1, both therefore receive a thumb sideways.

The Conservatives propose a system of regulated “emissions intensity” targets for industry that would put a price on GHG emissions via emissions trading and other compliance options, but the party would not implement carbon pricing more widely.¹² (We do not consider that the Conservatives’ proposed offset system broadens carbon pricing in the sense used here, because it would not increase the total amount of emission reductions obtained.) The party therefore also receives a thumb sideways.

The Green Party proposes a tax that would apply to 100% of Canada’s emissions (they do not discuss how this would work for sources of emissions that are difficult to quantify), plus a cap-and-trade system for large industry. We therefore give two thumbs up.

The Liberals propose a tax that would apply to all fossil fuels, covering approximately 75% of national emissions (their estimate). However, gasoline would be effectively exempted for at least the first four years as a result of a phase out of the existing excise tax. The Liberals propose to complement the emissions tax with a cap-and-trade system “several years” later, but do not name the sectors to which it would apply. Because of the gasoline exemption, we give one thumb up rather than two.

2–4. Projected price levels in 2009, 2015 and 2020

The only information provided by the Bloc regarding the stringency and timing of its proposed cap-and-trade system is that it would be based on “short- and medium-term absolute emission reduction targets allowing Canada to get as close as possible to its Kyoto Protocol target” (which applies to the period 2008–12). While this sounds like a rapidly implemented system with a high emissions price, this statement does not provide enough information to give scores for price levels in any of the three years assessed.

Projected emissions prices are difficult to determine for the Conservatives’ proposed industry regulations because of the complexity of the compliance options. (Emission reductions are also difficult to project, because of the complexity of the targets and the fact that some compliance options do not represent near-term emission reductions.) However, it is clear that the emissions price for 2009 is zero, because regulated targets would not apply until 2010.

The economic modelling study accompanying the “Turning the Corner” plan projects emissions prices of just over \$30 per tonne in 2012, just over \$50 per tonne in 2016 and about \$65 per tonne in 2020. However, those prices depend on unstated assumptions about the rules for granting offset credits, which firms could buy and use without limits to comply with their targets. Current offset markets worldwide exhibit a wide range of prices depending on how restrictive or otherwise the rules are. The Conservative government has published a portion of its detailed rules for offsets, but their practical application will depend on interpretation. In practice, offset prices could be much lower than those just cited, and, in the words of one leading expert, “the 100% offset provision in the federal industrial emitters regulation creates a serious uncertainty in the government’s claim of the emissions reductions it will achieve by 2020.”¹³

For these reasons we consider that there is not enough information to give scores to the Conservatives for price levels in 2015 and 2020.

The Green Party's proposed emissions tax would start at \$50 per tonne immediately, increase to \$60 per tonne by 2011, and increase to \$100 per tonne by 2020 if that price was required to meet the party's national emission targets. Since no information is provided for 2015, we assume that the tax would still be at \$60 per tonne in that year. However, given that the party's national emission target for 2020 is very stringent (30% below the 1990 level), we assume that the tax would indeed be increased to \$100 per tonne by 2020. The party does not explain how the tax would interact with its proposed cap-and-trade system for industry, but we assume that the price on industrial emissions would be at least as high as the tax level. In accordance with Table 1, then, we give two thumbs up for all three years assessed.¹⁴

The Liberals' proposed emissions tax would start at \$10 per tonne in 2009 and increase to \$40 per tonne by 2012. The party has not specified the subsequent level of the tax, although it does hint that the tax would rise further by stating that a rate of \$40 per tonne would only have "started the transformation toward a greener Canadian economy." To be conservative, however, we assume that the tax would simply remain at the \$40 per tonne level in 2015 and 2020. The party says that firms covered by its proposed cap-and-trade system would not be "double-taxed," but we assume that a Liberal government would not want to retreat from the price signal set by the emissions tax by allowing a lower price in its cap-and-trade system. In accordance with Table 1, we therefore give one thumb down for 2009, one thumb up for 2015, and a thumb sideways for 2020.

Under the NDP's proposed cap-and-trade system, tradable permits would be auctioned in 2009 at \$35 per tonne, rising to approximately \$50 per tonne by 2012. The party's plan suggests that the price would rise further in subsequent years, but provides no details. In practice, an NDP government would not be able to set both the emissions price *and* the level of the cap on industrial emissions, because one depends on the other. However, the NDP plan is more definite about the level of the price than it is about the level of the cap. To be conservative, we assume that the price would remain at \$50 per tonne in 2015 and 2020.

According to Table 1, the NDP should therefore receive two thumbs up for 2009, one for 2015 and a thumb sideways for 2020. However, although the NDP says that it could start up its cap-and-trade system within one year of taking office (i.e., shortly before the end of 2009), this does not seem plausible. According to the party's plan, most of the permits would be allocated free of charge based on each sector's historic share of emissions and each firm's production levels. Given the complexity of Canadian industrial production, this implies a formidable and time-consuming data-gathering exercise that would complicate and very likely delay the drafting and finalization of the necessary regulations. We therefore give the NDP one thumb down for 2009, as there is only a remote chance that its policy would put a price on emissions in that year.

5. Limits on use of offsets

The Bloc, the Green Party, the Liberal Party and the NDP are all silent on whether their proposed cap-and-trade systems would allow firms to use offsets for compliance. (Both the Green and Liberal platforms mention offsets, but not clearly in connection with their cap-and-trade proposals.) However, offsets have always been part of federal and provincial government discussions about cap-and-trade in Canada. The current proposal for a cap-and-trade system including Québec, Ontario, Manitoba, British Columbia and several U.S. states, under the Western Climate Initiative, includes offsets.¹⁵

It does not, therefore, seem prudent to assume that silence on offsets equates to a commitment not to allow them as a compliance option. We do not therefore consider that there is enough information to give scores on this criterion for these four parties.

As mentioned above, under the Conservative proposal, firms could buy and use offsets without limit to comply with their targets. There would be volume limits on offsets purchased from developing countries through the Kyoto Protocol's Clean Development Mechanism (CDM), but no limit on domestic offsets. As noted above, the Conservative government has published a portion of its detailed rules for offsets which include some key principles for ensuring "additionality". However, it is not yet clear how or whether these principles will be fully operationalized, so they cannot be described as "strict rules." (Notably, the government has not yet described an adequate series of tests that projects will have to pass to demonstrate additionality.) Balancing the lack of a limit on the volume of domestic offsets with the adoption of at least some key additionality principles, we give one thumb down.

6. Use of public revenues for GHG reductions

The 2005 federal Budget Plan committed about \$3B of spending to GHG reductions over three years (2005/06–07/08), or an average of about \$1B per year.¹⁶ This was then increased to about \$1.5B per year by Bill C-66, which received Royal Assent in November 2005. Over the 2006,¹⁷ 2007¹⁸ and 2008¹⁹ federal budgets, the Conservative government has increased the sums committed per year to about \$2B. However, it is questionable whether major elements of the Conservative government's spending are, in fact, primarily for the purpose of GHG reductions. In particular, it may be more appropriate to view the tax credits for transit passes (about \$200M per year) and subsidies for ethanol production (\$120M per year) as primarily as tax reduction and agricultural subsidy programs respectively, given that the expected emission reductions are very small.

Nonetheless, we give the Conservatives the benefit of the doubt and credit the party with a modest increase in spending, with a score of one thumb down.

The other parties propose to increase spending on GHG reductions, relative to current levels, by the following amounts (which are averages over three or four years):

- Bloc — about \$1B per year
- Green Party — about \$10B per year
- Liberals — about \$0.9B per year²⁰
- NDP — about \$3.7B per year.²¹

We do not regard the commitments by the Bloc or Liberals as large enough to qualify as a "substantial scale-up," so we give them both one thumb down. The NDP commitment is a substantial scale-up, and receives a thumb sideways. The Green Party, with an order-of-magnitude scale-up, qualifies for two thumbs up.

7. Simplicity of the policy

The Bloc's proposed cap-and-trade system appears to be one in which all permits would be allocated free of charge, since the party refers to targets for industrial facilities (i.e., free allocations of permits) and makes no mention of auctioning permits. This means that there would likely be numerous targets in the Bloc's system, and, in accordance with Table 1, it would merit a score no better than a thumb sideways. The same applies to the NDP's proposed system, despite its phase-in of auctioning. However, in neither case are the compliance options fully clear (for example, as noted above, it is not clear whether offsets would be allowed), so we do not consider that there is enough information to give a clear score to these two parties.

As noted above, the Conservatives' proposed industry regulations would establish a complex structure of targets and allow complex compliance options. Depending on the sector, targets

would be facility-level, corporate-level or sector-level; they would also vary according to facilities' start-up date. Compliance options — apart from on-site emission reductions — would include credits from other industrial firms, domestic offset credits, credits from the CDM, early action credits, credits for “certified project investments,” and payments into possibly multiple “technology funds” (each with two components). Given this high degree of complexity, we give two thumbs down.

The emissions taxes proposed by the Green Party and Liberals, with a single rate and a single compliance option (payment of the tax), qualify for two thumbs up. However, both parties also propose complementary cap-and-trade systems. In both cases they make reference to auctioning of permits, but it is not clear whether all permits would be auctioned or whether there would be a need to determine free allocations of permits to firms. Given this possible complication, and because neither party explains clearly how the tax would interact with its proposed cap-and-trade system, we give both one thumb up rather than two.

8. Avoidance of exempted emissions in covered sectors

As noted above, the Bloc's proposed cap-and-trade system appears to be one in which all permits would be allocated free of charge. We therefore give two thumbs down.

The Conservatives' proposed intensity-based industry regulations would not actually require firms to hold tradable permits. However, the party's proposed system is, for the purposes of this criterion, equivalent to a cap-and-trade system in which all permits are allocated free of charge (i.e., the Conservative proposal would mean that firms would pay no further charge if they reduce their total industrial emissions to the targeted level set in the regulations). In addition, 30% of more of the emissions of the upstream oil and gas sector are exempted.²² We therefore give two thumbs down.

The emissions tax proposed by the Green Party, covering 100% of Canada's emissions, would qualify for two thumbs up. The Liberals' proposed emissions tax likely only qualifies for one thumb up because the party makes no statement about extending it to additional sources of industrial emissions such as process and fugitive emissions. But because both parties also propose complementary cap-and-trade systems in which it is not clear whether all permits would be auctioned (see above), we give both parties one thumb up rather than two.

The NDP's proposed cap-and-trade system would transition to an auction of 100% of permits, although the party does not say how long this would take. About one-fifth of permits would be auctioned in the first year, and about one-third in the fourth year. Although it appears that it might take a long time to arrive at 100% auctioning, we give the party the benefit of the doubt and one thumb sideways.

9. Compensation for regressiveness

Neither the Bloc nor the NDP propose to compensate people on low incomes specifically for the effects of their proposed cap-and-trade systems. Both parties would considerably increase financial assistance for low-income Canadians over current levels (the Bloc proposes an extra \$4.7B per year on average, and the NDP about an extra \$3B per year on average). However, neither party has shown that these measures would fully compensate low-income Canadians in all reasonably foreseeable circumstances. We therefore give both parties one thumb up.

The Conservatives acknowledge that their proposed industry regulations would result in higher electricity and natural gas prices “for the majority of individual Canadians.” But the party proposes no financial compensation for these price rises for people with low incomes, and would

increase financial assistance for low-income Canadians over current levels by no more than about \$650M per year by 2012. Given the relatively small size of this increase, we give one thumb down.

The Green Party explicitly commits to make its proposed emissions tax “non-regressive” via rebates for people with low incomes, and would allocate over \$5B per year to such rebates (about one-seventh of the emissions tax revenue), as well as additional sums to general anti-poverty measures. We therefore give two thumbs up.

About one quarter of the revenues from the Liberals’ proposed emissions tax, or \$4.5B in the fourth year, would be used for tax benefits targeted at people with low incomes, families with children, and rural Canadians, and additional assistance for these groups would be funded from other sources. While the party has not shown that these measures would fully compensate low-income Canadians in all reasonably foreseeable circumstances, its dollar commitments are comparable to those of the Bloc and NDP; we therefore give one thumb up.

10. Targeted protection of industries’ international competitiveness

In the cap-and-trade systems proposed by the Bloc and the NDP, it would be possible to provide targeted protection of international competitiveness via a carefully-designed free allocation of tradable permits. The Bloc does state that the aluminum and forest sectors would be given more permits than their level of emissions, allowing them to sell some. However, neither the Bloc nor the NDP provide sufficient information about how they would allocate permits to determine how they would address international competitiveness specifically. Although the Bloc makes detailed proposals for supporting Québec’s manufacturing industries, it does not relate these to the effects of its cap-and-trade system. It is therefore not possible to give either party a score on this criterion.

The Green Party does not propose any measures to address international competitiveness impacts of its emissions tax. Given that the emissions tax starts at a relatively high level and is set to increase further by 2020, we give two thumbs down.

The Liberals propose to offset their emissions tax in the corporate sector mostly via general tax cuts. The party does also propose some tax incentives (accelerated capital cost allowances) for green technologies, which should help to reduce potential carbon leakage. However, there is no mention of targeting these to specific sectors. In addition, the party proposes a “carbon tariff” on imports from countries that are not implementing carbon pricing policies — again, with no mention of limiting it to the sectors that demonstrably require such protection. Because of the non-targeted character of these proposals, we give two thumbs down.

In the Conservatives’ proposed industry regulations, competitiveness issues are addressed most clearly through the use of intensity targets and the exemption of all “fixed process emissions.” While the use of intensity targets will be effective in limiting carbon leakage,²³ the party proposes them for all industry sectors, regardless of which sectors demonstrably need protection. Because this approach is not targeted, we again give two thumbs down.

4. Endnotes

¹ Canadian Council of Chief Executives, *Clean Growth: Building a Canadian Environmental Superpower* (Ottawa, ON: Canadian Council of Chief Executives, 2007), 7. Also available online at http://www.ceocouncil.ca/publications/pdf/test_14a7f87d43da18e574aa830d322a9cbe/Clean_Growth_ELI_Policy_Declaration_October_1_2007.pdf.

² National Round Table on the Environment and the Economy, *Getting to 2050: Canada's Transition to a Low-emission Future* (Ottawa, ON: NRTEE, 2007), 29. Also available online at <http://www.nrtee-trnee.ca/eng/publications/getting-to-2050/Getting-to-2050-low-res-eng.pdf>.

³ Glen Hodgson, Gilles Rhéaume and Len Coad, *Use Green Taxes and Market Instruments to Reduce Greenhouse Gas Emissions* (Ottawa, ON: The Conference Board of Canada, 2008), 6. Also available online at <http://www.conferenceboard.ca/documents.asp?rnext=2426>.

⁴ Canadian Parks and Wilderness Society et al., *Tomorrow Today: How Canada can make a world of difference* (Ottawa, ON: Canadian Parks and Wilderness Society et al., 2008). Also available online at <http://www.tomorrowtodaycanada.ca/download/tomorrow-today-web.pdf>.

⁵ Cap-and-trade can be applied to emissions from *all* fuel use by requiring fuel wholesalers to hold tradable permits for those emissions. Administratively this would be very similar to a broad emissions tax.

⁶ See, for example, United Nations Development Program, *Human Development Report 2007/2008* (New York, NY: Palgrave Macmillan, 2007), 48–49. Also available online at <http://hdr.undp.org/en/reports/global/hdr2007-2008/>.

⁷ In this document, “tonne” means tonne of carbon dioxide equivalent emissions (a measure that includes all six GHGs covered by the Kyoto Protocol).

⁸ Clare Demerse, “Carbon Pricing: Efficiently Stimulating Greenhouse Gas Emission Reductions,” in *Big Steps Forward, Recommendations for Budget 2008* (Ottawa, ON: Green Budget Coalition, 2007), 7–15. Also available online at <http://climate.pembina.org/pub/1549>.

⁹ Commissioner of the Environment and Sustainable Development, *2006 Report of the Commissioner of the Environment and Sustainable Development* (Ottawa, ON: Office of the Auditor General of Canada, 2006), 11. Also available online at <http://www.oag-bvg.gc.ca/internet/docs/c20060900ce.pdf>.

¹⁰ The multiple documents that describe “Turning the Corner” are available online at <http://www.ec.gc.ca/default.asp?lang=En&n=75038EBC-1>.

¹¹ This eight-page document, entitled “New Democrats’ better plan,” was distributed on September 11, 2008.

¹² The Conservatives’ election platform confirms the party’s commitment to implement its “Turning the Corner” system of intensity targets, but also makes a new commitment to “work with the provinces and territories and our NAFTA trading partners in the United States and Mexico, at both the national and state levels, to develop and implement a North America-wide cap and trade system for greenhouse gases and air pollution, with implementation to occur between 2012 and 2015.” These two commitments appear to be incompatible, at least from 2012 onwards, because the proposed intensity targets are due to apply until 2020. In this document we have assessed the Conservatives on their “Turning the Corner” proposal because it is more immediate and because there is currently insufficient information available on a future North America-wide cap-and-trade system to be able to score it against our criteria.

¹³ Mark Jaccard, Nic Rivers and Jotham Peters, *Assessing Canada's 2008 Climate Policy* (Vancouver, BC: Simon Fraser University, 2008). Also available online at <http://www.sfu.ca/pamr/files/fall2008/PDF/AssessmentofCanadasClimatePolicySep26-08.pdf>.

¹⁴ The Green Party also proposes to “cut corporate tax by \$50 for each tonne of carbon emission reductions, to create a \$100 per tonne saving when combined with avoided carbon tax.” We consider this measure to fall under the category of public spending, and include it in our assessment under criterion 6.

¹⁵ See <http://www.westernclimateinitiative.org/>.

¹⁶ Department of Finance Canada, *The Budget Plan 2005* (Ottawa, ON: Department of Finance Canada, 2005), Tables 5.1 and 5.4. Also available online <http://www.fin.gc.ca/budget05/pdf/bp2005e.pdf>. We have counted about half of the gas tax transfer in this total.

¹⁷ Department of Finance Canada, *The Budget Plan 2006: Focusing on Priorities* (Ottawa, ON: Department of Finance Canada, 2006), Tables 3.9 and 3.11. Also available online at <http://www.fin.gc.ca/budget06/pdf/bp2006e.pdf>.

¹⁸ Department of Finance Canada, *The Budget Plan 2007: Aspire to a Stronger, Better, Safer Canada* (Ottawa, ON: Department of Finance Canada, 2007), 63 and Tables 3.7 and 4.5. Also available online at <http://www.budget.gc.ca/2007/pdf/bp2007e.pdf>. We have counted half of the “Canada ecoTrust.”

¹⁹ Department of Finance Canada, *The Budget Plan 2008: Responsible Leadership* (Ottawa, ON: Department of Finance Canada, 2008), Tables 3.6 and 4.1. Also available online at <http://www.budget.gc.ca/2008/pdf/plan-eng.pdf>.

²⁰ Over four years, the Liberals propose new spending of \$645M from general revenues plus \$2.9B of GHG-related tax incentives funded from their emissions tax (\$1.7B for Accelerated Capital Cost Allowances, \$400M for Emission Reduction Credits, \$300M for home retrofits, \$250M for a Green Fisheries and Transport Fund, and \$250M for a Green Farms Fund).

²¹ We have not counted the \$750M per year assigned to the Green-Collar Jobs Fund, because it does not appear that it falls into the category on money spent directly on encouraging emission reductions. However, we *have* counted

the \$1.05B over four years of “other measures” in the “carbon reduction” section of the platform’s explanatory tables.

²² Clare Demerse and Matthew Bramley, *The March 2008 Federal Regulatory Framework for Industrial Greenhouse Gas Emissions* (Drayton Valley, AB: The Pembina Institute, 2008), 5. Also available online at <http://climate.pembina.org/pub/1614>.

²³ This is because with intensity targets there is a much smaller financial incentive to reduce emissions by cutting production, than to reduce them by maintaining production at a lower level of emissions intensity.