



June 1, 2016

The Honourable Catherine McKenna, PC, MP
Minister of the Environment and Climate Change
Environment and Climate Change Canada
200 Sacré-Coeur Boul., 2nd Floor
Gatineau, Quebec
K1A 0H3

Dear Minister McKenna,

Thank you for the opportunity to provide input on Canada's approach to climate change and help to inform the federal provincial territorial working groups as they develop a new climate change strategy for Canada. Canadians for Clean Prosperity is a not for profit public policy advocacy organization dedicated to advancing market-based approaches to address environmental challenges in ways that will simultaneously preserve our natural heritage, while strengthening the Canadian economy. We appreciate the federal government re-affirming its commitment to meet Canada's 2030 emissions reduction targets and in using its convening power to include provincial and territorial governments, who have been major actors in addressing climate change, in the development of a truly pan-Canadian strategy.

Achieving our 2030 targets will require a thoughtful balance between environmental and economic imperatives. While it is true that without preventing dangerous climate change, we are condemning ourselves and future generations to a diminished quality of life, it is also true that without a strong economy both the capital and political will to make the necessary changes will disappear. Along with most environmental economists, Canadians for Clean Prosperity believes that carbon pricing, particularly in the form of a simple revenue neutral carbon fee, is the most effective and efficient for tackling greenhouse gas emissions. Our submission will specify the kind of policy instruments we believe would be effective to implement this kind of approach in Canada.

Sincerely,

Mark Cameron,
Executive Director,
Canadians for Clean Prosperity





EXECUTIVE SUMMARY OF CARBON PRICING RECOMMENDATIONS

Canadians for Clean Prosperity's recommendations for governments are embedded throughout this document. You will find our most important recommendations around carbon pricing marked in ***bold italics***, and we have repeated them here as an Executive Summary of our recommendations. We would also encourage you to consider our recommendations toward fostering innovation, which are found below on pages 22-25 of the report.

RECOMMENDATIONS:

- *The federal government should maintain Canada's existing 2030 target of a 30% reduction in carbon dioxide equivalent from 2005 levels by 2030*
- *The federal government should quickly determine how much of Canada's target it intends to meet using changes in land use accounting or the use of international mechanisms*
- *While regulation and government programs may have a role to play in reducing emissions where regulation can operate more effectively than market pricing, federal, provincial and territorial governments should be looking primarily towards carbon pricing as the main tool to drive Canada's greenhouse gas emissions reductions*
- *Canada's national minimum carbon price should be set at \$30 per tonne to match British Columbia's (BC) current carbon tax and the price level Alberta's new economy wide system will reach in 2018*
- *The price should escalate by roughly 12.5% per year (just over 10% per year in real terms) to reach a price level of about \$124 in nominal dollars (or \$96 in constant 2016 dollars) by 2030*
- *The level of price increases should be evaluated every 3-5 years by an independent panel of experts, similar to the Canada Employment Insurance Commission, to determine whether the existing schedule of price increases will be sufficient to achieve target reductions and recommend changes to the price increase schedule should it be necessary*





- *Specific mechanisms of carbon pricing and revenue recycling should be administered by each province to allow jurisdictions to build and adjust their carbon pricing systems to meet their unique circumstances*
- *The federal government should ensure that certain national standards around minimum price, coverage, measurement, and integration are adhered to*
- *While provinces should retain control over their pricing mechanisms and revenues, all provinces should follow the lead of British Columbia in dedicating 100% of the revenues raised to reducing taxes for citizens and businesses*
- *Provinces should commit to a carbon pricing system of sufficient breadth of coverage. At a minimum, carbon pricing should cover at least a province's fossil fuel combustion emissions as a share of their total emissions*
- *No system of compensation or free allowances for industrial emitters should allow more than 75% of covered emissions from non-utility large final emitters within a province to be exempted from the impact of the carbon price*
- *A province should be considered compliant with a national standard when it:*
 - *Meets the national minimum price of \$30 in 2018 with escalation; and*
 - *Covers at least all fossil fuel combustion emissions within a province; and*
 - *Does not exempt more than 75% of covered emissions from non-utility large final emitters from the impact of pricing to deal with EITE competitiveness issues*
- *Where a province falls short on one or more of these criteria, the federal should have resort to a national backstop price mechanism*
- *The federal backstop should be applied by calculating the extent to which a provincial carbon pricing system falls short of the national standard. The federal government should then impose a uniform carbon price on all fossil fuel combustion emissions within a province sufficient to make up that gap*
- *Revenues collected from within a province through the federal backstop should be refunded as direct, equal per capita payments to individuals or households within the province totaling an amount equal to the federal backstop revenues collected from within that province*



- *The federal government should play the lead role in handling the challenge of leveling the playing field for emissions-intensive, trade-exposed industries (EITEs) through border carbon adjustments (BCAs)*
- *The implementation of effective carbon pricing systems across Canada should be used as a tool to encourage provinces to open markets to allow for non-emitting electricity imports from other provinces*

THE AMBITION OF CANADA'S 2030 TARGETS

The previous federal government submitted Canada's Intended Nationally Determined Contribution (INDC) to the United Nations Framework Convention on Climate Change (UNFCCC) in May 2015, in advance of the Paris COP 21 meetings. The government committed to a 30% reduction of greenhouse gas emissions from 2005 levels by 2030. Given 2005 emissions levels of 749 megatonnes (Mt), this implies a target of 524 Mt of carbon dioxide or equivalent (CO₂e) in 2030. This target was supplementary to Canada's previously announced target under the Copenhagen Accord of a 17% reduction relative to 2005 levels, or 622 Mt. At the time, the government characterized its new 2030 target as "ambitious but achievable."¹

However, there has been considerable debate as to what degree of ambition these targets represent. Climate Action Tracker, an independent analysis produced by four European research organizations, characterized Canada's INDC as "inadequate,"² an assessment shared by many ENGOs. It is certainly true that both Canada's Copenhagen commitments for 2020 and Paris INDC for 2030 fall below the level of ambition of Canada's Kyoto targets, which would have seen Canada's emissions fall to 6% below 1990 levels by 2012 – some 573 Mt. Others

¹ Canada. "Canada's INDC Submission to the UNFCCC," May, 2015. p. 1
<http://www4.unfccc.int/submissions/INDC/Published%20Documents/Canada/1/INDC%20-%20Canada%20-%20English.pdf>

² <http://climateactiontracker.org/countries/canada.html>





have argued that as an advanced economy with a high per capita income, countries like Canada should undertake a greater share of effort when it comes to reducing their carbon footprint.

But Canada faces unique challenges in reducing its emissions profile as a resource exporting country with a large, sparsely populated landmass and a very cold climate. Studies have shown that if Canada had the same characteristics as the average of G7 nations when it comes to geography, climate, fossil fuel imports and exports, industrial structure, and access to low carbon electricity, we would have 6% lower emissions.³ Furthermore, Canada's advantage in comparison to its G7 counterparts is our access to abundant hydroelectric power resources. But Canada is already using hydroelectricity to produce a large portion of its electricity, meaning that one easily affordable path to further emissions reductions – replacing coal fired electricity with lower cost, less emitting natural gas – is not available to Canada. Our major industrial competitor and trading partner will be able to meet most of its Paris commitment – a 26-28% reduction below 2005 levels by 2025 – simply by staying on its existing course of converting coal to natural gas. A 2011 study by the National Round Table on the Environment and the Economy (NRTREE) estimated that while the United States could achieve its Copenhagen target of a 17% reduction from 2005 levels by 2020 through carbon pricing with a price level of \$54 per tonne, for Canada it would take a carbon price of \$78 per tonne to achieve the same reductions.⁴ In a similar analysis, the international advisory firm PwC estimates that for Canada to meet its 2030 reduction targets, it would have to decarbonize its economy by 3.9% per year, up from a current rate of decarbonization of 1.2% per year. It notes, "Contrary to other commentary, our Low Carbon Economy Index model shows that Canada's target is more ambitious than the EU and US targets. This is because it requires a greater shift from its business as usual carbon intensity reductions than the shift required by the EU and US to achieve their targets."⁵ While Canada

³ Bataille, C., N. Rivers, P. Mau, C. Joseph & J-J. Tu. (2007). How Malleable are the Greenhouse Gas Emission Intensities of the G7 Nations? *The Energy Journal*, 28(1) 145-170.

⁴ Canada, National Round Table on the Environment and the Economy. (2011) *Parallel Paths: Canada-U.S. Climate Policy Choices*. Ottawa: NRTREE. p. 74

⁵ PricewaterhouseCoopers LLP (2015). *Canada: Emissions targets and implications for business*. p. 3.





would have to intensify its rate of decarbonization by 2.7% per year, for the US and the EU the shift would be under 2%.

So in sum, a goal of a 30% reduction from 2005 levels by 2030, while perhaps insufficient compared to Canada's proportionate share necessary to achieve a global two degree climate goal, is in fact more ambitious than the commitments made by many of Canada's OECD competitors. Given Canada's unique geographic, climate, and resource factors, this difference in required effort is understandable and should be taken into account when assessing the ambition of Canada's target. Therefore, ***we think it is appropriate for the government to maintain Canada's existing 2030 target.***

However, in addition to simply judging the numerical size of Canada's target, we need also to consider the proposed measures Canada will adopt to meet this target. The previous government stated that it intended to meet its target through a combination of additional regulatory measures, and taking advantage of "international mechanisms to achieve the target, subject to robust systems that deliver real and verified emissions reductions." The government also announced that Canada "intends to account for the land sector using a net-net approach, and to use a 'production approach' to account for harvested wood products. Canada will exclude emissions from natural disturbances."⁶ The effect of taking advantage of international mechanisms, such as purchases of allowances from developing countries, and of changing the way Canada accounts for land use, land use change and forestry (LULUCF) to meet its targets, means that the 2030 target may represent less than a straight 30% reduction in domestic

⁶ "Canada's INDC Submission to the UNFCCC," p. 3-4.





greenhouse gas emissions. Estimates are that the change in land use and forestry accounting practices alone could account for up to 126 Mt of reductions by 2030.⁷

It would be legitimate for Canada to properly account for any genuine change in land use and forestry practices that were resulting in a greater presence of carbon sinks in Canada. And if there are genuine low cost reduction opportunities in other countries that Canada can incent through the use of international carbon finance mechanisms that are in accord with the rules of the Paris accords, then it is legitimate for Canada to make use of these mechanisms. But Canada must be transparent about its intent to use these mechanisms and how it will affect its domestic reduction targets, and whether in doing so, it reduces the level of ambition and effort Canada is requiring of itself to meet our 2030 targets. ***The federal government should quickly determine how much of Canada's target it intends to meet using changes in land use accounting or the use of international mechanisms*** so that provinces, industry and other stakeholders can determine what level of domestic emissions reductions will be necessary to meet Canada's 2030 targets.

PRICING CARBON AS THE PRIMARY TOOL FOR REDUCING EMISSIONS

In order for Canada to reach our 2030 target of 524 Mt - 30% below 2005 levels of 749 Mt, we will need to undertake ambitious action (even if a portion of that target is met by changes in LULCF accounting or use of international mechanisms). Most economists and experts would agree that only by relying on price as the primary driver of emissions reductions could Canada (or other countries with comparably ambitious targets) hope to achieve these goals.

⁷ Nic Rivers, "Just What is Canada Bringing to the Table at the Paris Climate Summit," Policy Options, November 24, 2015. <http://policyoptions.irpp.org/2015/11/24/just-what-is-canada-bringing-to-the-table-at-the-paris-climate-summit/>





This approach is one that has been advocated by economists across the political spectrum for decades because it both ensures that the cost of emissions are borne by emitters – whether industrial producers or end use consumers – and because it allows consumers and businesses alike to identify the lowest cost path to reducing their emissions without the heavy and often inefficient hand of government regulation.

The evidence is clear, both from historical experience of carbon pricing and other forms of pollution pricing, and from economic modeling of the effects of possible future policies, that carbon pricing is the most effective, least cost way to reduce emissions.

British Columbia brought in its revenue neutral carbon tax in 2008 at \$10 per tonne on combustion emissions, rising to \$30 per tonne by 2012. Many academic studies have shown that BC's tax was successful in reducing sales of petroleum fuels by about 16%, and reducing overall emissions by 5-15%, while having a minimal impact on British Columbia's economy (as any negative drag on economic growth created by the carbon tax was offset by reductions to corporate and personal income tax which stimulated growth.)⁸

Australia brought in a carbon tax between 2012 and 2014, which reduced emissions in the electricity sector by 4% in its first year of implementation, and reduced emissions by 11% over two years. When the tax of about \$C24 was repealed after a change of government in 2014, electricity sector emissions jumped back up by 4.3% in the following year.⁹

While most European countries are covered by the European Trading System (ETS), the European Union's cap and trade carbon market system, several European countries have versions of carbon taxation as well. Finland brought in the world's first carbon tax in 1990, now

⁸ B. Murray and N. Rivers. 2015. "British Columbia's Revenue Neutral Carbon Tax: A Review of the Latest 'Grand Experiment' in Environmental Policy." NI WP 15-04. Durham, NC: Duke University.
<http://nicholasinstitute.duke.edu/publications>

⁹ "Carbon tax repeal sparks jump in Australia's electricity emissions," The Guardian, July 5, 2015.
<http://www.theguardian.com/environment/2015/jul/05/carbon-tax-repeal-sparks-jump-in-australias-electricity-emissions>





standing at about 20 Euros or \$30 Canadian, which reduced emissions by an estimated 7% by 1998. Similarly, Sweden's carbon tax (which charges consumers at a higher rate than industry) reduced emissions by 9% between 1990 and 2006.¹⁰

So historical experience has shown that carbon taxes in many jurisdictions have been effective ways of reducing emissions. Similarly, economic modeling predicts that carbon taxes are the least cost path to further emissions reductions within Canada. For example, recent forecasting done for the Ontario Ministry of Environment and Climate Change predicts that a \$72 per tonne carbon tax, with proceeds refunded as tax cuts, could reduce Ontario emissions by 18.7 megatonnes by 2020, a reduction of about 11% from today's levels.¹¹

Some have argued that there is too much political and consumer resistance to broad based carbon pricing, and that therefore regulatory approaches or subsidies are a preferable, or at least politically more palatable, approach. Yet almost inevitably, using regulation or subsidy to reduce emissions imposes higher costs on the economy than a simple tax. For example, estimates of the implied carbon costs of the various subsidies for different forms of renewable energy procured through feed in tariffs under Ontario's *Green Energy Act* show that in 2012, the cost per tonne of avoided carbon dioxide emissions ranged from \$104 per tonne for biomass projects to \$125 per tonne for onshore wind to a whopping \$887 per tonne for small roof top solar projects.¹²

As such, ***while regulation and government programs may have a role to play in reducing emissions where regulation can operate more effectively than market pricing, federal, provincial and territorial governments should be looking primarily***

¹⁰ Sumner, Jenny, Lori Bird, and Hillary Smith, "Carbon Taxes: A Review of Experience and Policy Design Considerations," United States National Renewable Energy Laboratory, December 2009.

¹¹ Sawyer, Dave and Peters, Jotham, "Impact Modelling and Analysis of Ontario's Proposed Cap and Trade Program," p. 5, 21. <http://www.enviroeconomics.org/#!/Impact-Modelling-and-Analysis-of-Ontario's-Proposed-Cap-and-Trade-Program/c1uze/573a64620cf23f57cc66dd05>

¹² Dewees, Donald. *The Economics of Renewable Electricity Policy in Ontario*. University of Toronto, Department of Economics Working Paper 478. March, 2013. p. 19





towards carbon pricing as the main tool to drive Canada's greenhouse gas emissions reductions.

SETTING THE RIGHT PRICE

In order to achieve sufficient reductions, it is critical that carbon emissions be priced at the correct level. There are several ways of measuring what that level should be: the so-called social cost of carbon, which measures the discounted future cost of damage caused by carbon emissions today, the price necessary for all countries, acting in sync, to achieve the goal of preventing two degrees (or more ambitiously 1.5 degrees) of warming, or the price necessary for Canada to achieve its 2030 reduction targets. As we will see, all of these prices fall in the same range, which should allow Canada to design a price path for the cost of carbon that will enable us to meet our 2030 goals, will align Canada with an appropriate global level of ambition and will effectively mitigate the cost of future climate damage.

One commonly proposed standard for an appropriate carbon price is the social cost of carbon – the estimated value of the cost of damage likely to be caused if enough carbon is emitted to result in greater than two degrees of warming beyond pre-industrial levels, divided by the number of tonnes emitted. There are various estimates of what the social cost of carbon would be with widely ranging values, but perhaps the most commonly used measure is the social cost of carbon estimate prepared by the United States Environmental Protection Agency, using its middle range discount rate of 3%.

This estimate would give a social cost of carbon of (in \$2007 US dollars) of \$36 for 2015, \$42 for 2020, and \$50 for 2030. In current Canadian dollars, this would give a social cost of carbon of roughly \$54 for 2015, \$63 for 2020, and \$75 for 2030. By setting its carbon prices at or near these levels, Canada could argue that it is offsetting its share of the future damage likely to be caused by excessive carbon emissions.





Revised Social Cost of CO₂, 2010 – 2050 (in 2007 dollars per metric ton of CO₂)

Discount Rate	5.0%	3.0%	2.5%	3.0%
Year	Avg	Avg	Avg	95th
2010	10	31	50	86
2015	11	36	56	105
2020	12	42	62	123
2025	14	46	68	138
2030	16	50	73	152
2035	18	55	78	168
2040	21	60	84	183
2045	23	64	89	197
2050	26	69	95	212

U.S. EPA Estimates for the Social Cost of Carbon¹³

Another approach would be to consider what carbon prices would have to be globally in order to reduce emissions enough to prevent climate change from surpassing two degrees of warming from preindustrial levels (which would require keeping atmospheric carbon concentrations below 450 parts per million.) The Energy Information Agency's World Energy Outlook for 2010 developed a series of scenarios for future energy and climate policies, including a "450 scenario" in which the world's major economies took the steps necessary to restrain carbon emissions to 450 parts per million. To reach this level, OECD countries would be required to impose carbon prices of \$45 per tonne in 2020 and \$105 per tonne in 2030, calculated in 2009 US dollars. In 2016 Canadian dollars, this would mean carbon prices of roughly \$66 in 2020 and \$153 in 2030.

¹³ Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis -Under Executive Order 12866. (May 2013). http://www.whitehouse.gov/sites/default/files/omb/inforeg/social_cost_of_carbon_for_ria_2013_update.pdf



**Table 1.5 • CO₂ prices by main region and scenario (\$2009 per tonne)**

	Region	2009	2020	2030	2035
New Policies	European Union	22	38	46	50
	Japan	n.a.	20	40	50
	Other OECD	n.a.	-	40	50
Current Policies	European Union	22	30	37	42
450	OECD+	n.a.	45	105	120
	Other Major Economies	n.a.	-	63	90

Note: OECD+ includes all the OECD countries plus non-OECD EU countries. The CO₂ price in the European Union is assumed to converge with that in OECD+ by 2020 in the 450 Scenario. Other Major Economies comprise Brazil, China, the Middle East, Russia and South Africa.

From IEA World Energy Outlook, 2010¹⁴

Finally, there have been various estimates of what levels of carbon pricing would be necessary for Canada to meet its 2020 and 2030 emissions targets. As referenced earlier, in 2011 NRTEE estimated the carbon price required to meet Canada's Copenhagen target of a 17% reduction from 2005 levels by 2020 to be \$78 (\$83.50 in 2016). For the 2030 target of a 30% reduction from 2005 levels, environmental economist Mark Jaccard states that "in order to achieve the 2030 Harper target, if oil sands are allowed to expand to the limit recently set by the Alberta government, a Canada-wide carbon price starting at \$30 in 2017 must jump \$10 each year to reach \$160 in 2030."¹⁵ Similarly, Dave Sawyer of enviroEconomics estimates that carbon prices would have to reach \$180 by 2030 to fulfill Canada's target.¹⁶

Whether we are looking at the social cost of carbon, the price necessary globally to constrain climate change to a two-degree goal, or estimates of the prices necessary to achieve

¹⁴ IEA (2010) World Energy Outlook 2010. IEA:Paris, France. p. 74

¹⁵ Jaccard, Mark. "Want an effective climate policy? Heed the evidence." Policy Options, February, 2016 <http://policyoptions.irpp.org/magazines/february-2016/want-an-effective-climatepolicy-heed-the-evidence/>

¹⁶ Shawn McCarthy "Ottawa seeks to set national minimum on carbon pricing." Globe and Mail, February 17, 2016.





Canada's 203 targets, we see that Canada's carbon price will have to reach the range of \$75-180 per tonne in constant 2016 Canadian dollars by 2030.

Clearly, imposing such high carbon prices today would be extremely economically and politically challenging, even if carbon prices were fully recycled back into the economy as tax reductions. (The tax cuts would largely counteract any negative economic effects, but there would be considerable disruption to some industries and Canadian businesses and consumers would have difficulties in adjusting to such a dramatic change in the tax base.) But implemented gradually, starting from the levels of carbon pricing either already in place or anticipated in Canada's four largest provinces, it would be possible to put Canada on a gradual path to reach those levels by 2030.

As such, ***we recommend that Canada's national minimum carbon price should be set at \$30 per tonne to match British Columbia's (BC) current carbon tax and the price level Alberta's new economy wide system will reach in 2018.*** Further, it must be scheduled to rise consistently every year in order to reach levels that would enable us to meet our 2030 targets. ***We would therefore recommend setting a minimum national carbon price of \$30 in 2018. The price should escalate by roughly 12.5% per year (just over 10% per year in real terms) to reach a price level of about \$124 in nominal dollars (or \$96 in constant 2016 dollars) by 2030.*** This would be at the low end of the range of prices that would be necessary for Canada to meet its targets and be seen as undertaking an effort commensurable with its global responsibilities. And if Canada's targets require somewhat less than a direct reduction of domestic emissions of 30% because of taking advantage of different land use and forestry accounting or the use of international mechanisms, then a 2030 price of around \$100 may be sufficient to allow Canada to meet its goals.





RE-EVALUATION OF THE PRICE

A commitment to regular and predictable increases would create important market certainty which is a necessity to attract investment and would allow businesses the foresight to make long-term investments to reduce their emissions and costs. But Canada's price path should take into account current performance in meeting targets, technological changes, and the actions of international partners in evaluating whether the pace of increases proposed is too high or too low. To that end, *the level of price increases should be evaluated every 3-5 years by an independent panel of experts, similar to the Canada Employment Insurance Commission, to determine whether the existing schedule of price increases will be sufficient to achieve target reductions and recommend changes to the price increase schedule should it be necessary.*

PROVINCIAL CARBON PRICING WITH NATIONAL STANDARDS

ENSURING REGIONAL FAIRNESS

The distinct economic and emissions profiles of Canada's provinces means that *the specific mechanisms of carbon pricing and revenue recycling are best administered by each province. This would allow jurisdictions to build and adjust their carbon pricing systems to meet their unique circumstances.* For example, Alberta has been heavily reliant on fossil fuels for electricity and is a major fossil fuel exporter, while Quebec's electricity is predominantly hydroelectric, and it is an exporter of clean hydroelectric power to the United States. These discrepancies can mean major differences in how carbon pricing will affect families and businesses.

Furthermore, by having provinces implement the pricing mechanisms, their economies are protected from major wealth transfers between provinces. A system that taxed all emissions nationally, but recycled revenues on a per capita basis would end up making major transfers of wealth from high emissions and / or fossil fuel exporting provinces to provinces with lower emissions intensity. So keeping the responsibility for carbon pricing and revenue recycling at the





provincial level not only ensures that regional economies are not disproportionately disadvantaged by a pricing system, but it also avoids inflaming inter-regional tensions.

At the same time, *it is imperative that the federal government should ensure that certain national standards around minimum price, coverage, measurement, and integration are adhered to*. In this, the federal government would play a similar role to the one they play with healthcare – ensuring national standards and coordination, while allowing each province the flexibility and freedom to best serve its population and manage its economic realities.

ENSURING ECONOMIC SUSTAINABILITY

If governments followed our recommendation of raising the minimum carbon price on an annual basis and to levels reaching close to \$100 by 2030, Canada's carbon pricing systems would collect tens of billions of dollars in revenue from the Canadian economy. In order to ensure that pricing does not harm economic growth, it is vital that all of the revenue generated be returned to families and businesses, so they can adjust and adapt to higher prices. *While we believe that provinces should retain control over their pricing mechanisms and revenues, our strong recommendation is that all provinces should follow the lead of British Columbia in dedicating 100% of the revenues raised to reducing taxes for citizens and businesses* (including the provision of tax credits or dividends to compensate lower income households).

Doing this not only ensures that families and businesses can afford to transition to alternative fuels, it also can also shift the economy towards a more productivity enhancing taxation system and help build political support for carbon pricing across the political spectrum

RECOMMENDED NATIONAL STANDARD

As stated above, we believe that a national price of \$30 per tonne in 2018 rising by 12.5% nominally in subsequent years is an appropriate national minimum level for carbon





pricing. Furthermore, *provinces should commit to a carbon pricing system of sufficient breadth of coverage. At a minimum, carbon pricing should cover at least a province's fossil fuel combustion emissions as a share of their total emissions.* Over time, standards for breadth could be increased to cover other items such as industrial process emissions and methane emissions from landfills as effective national standards are developed. But in the short term, calculating all fossil fuel combustion emissions within a province is a realistic goal.

Several provinces have indicated that they intend to use different kinds of measures – free allowances, output based allocations, or tax rebates – to compensate large industrial emitters in emissions intensive, trade exposed (EITE) sectors who cannot pass on their carbon pricing costs to their customers or end users. As we will discuss below, we believe that this is a legitimate goal of carbon pricing policy, especially over the next few years when many of our major competitors have not brought in carbon pricing systems of their own. But in considering national standards for a carbon pricing system, the federal government should ensure that competitiveness measures do not effectively negate the impact of carbon pricing. For instance, Alberta's current SGER system covers all industrial emissions in the province, but as of 2015 only imposed the \$15 per tonne price on facilities to the extent that they had not met a 12% intensity improvement target. So in effect, only a small percentage of covered emissions were subject to pricing. We would argue that *no system of compensation or free allowances for industrial emitters should allow more than 75% of covered emissions from non-utility large final emitters within a province to be exempted from the impact of the carbon price.* Over time, we believe that a consistent national approach to exempting EITE industries should be developed.

We believe that a province should be considered compliant with a national standard when it:

- *Meets the national minimum price of \$30 in 2018 with escalation; and*





- *Covers at least all fossil fuel combustion emissions within a province; and*
- *Does not exempt more than 75% of covered emissions from non-utility large final emitters from the impact of pricing to deal with EITE competitiveness issues*

Where a province falls short on one or more of these criteria, we believe that the federal should have resort to a national backstop price mechanism (which we hope would encourage all provinces to bring in carbon pricing systems compliant with the national standard.)

The federal backstop could be applied by calculating the extent to which a provincial carbon pricing system falls short of the national standard. The federal government should then impose a uniform carbon price on all fossil fuel combustion emissions within a province sufficient to make up that gap. To avoid the federal backstop from being seen as a tax grab, revenues collected from within a province through the federal backstop should be refunded as direct, equal per capita payments to individuals or households within the province totaling an amount equal to the federal backstop price collected from within that province.

To take two examples of how the backstop price might work:

Province A has no province wide carbon price.

Total emissions are 75 MT

Fossil fuel emissions are 60 MT

Non-utility large final emitters produce 20 MT

Therefore, 25% of non-utility large final emitter emissions (5MT) and 100% of remaining fossil fuel emissions (40MT) should be subject to pricing. Therefore, a fee sufficient to realize \$30 in revenue on 45MT of emissions would be imposed on all fossil fuel emissions in the province – a fee of \$22.50 per tonne of fossil fuel combustion emissions. This would generate





some \$1,350 million in revenues. If Province A has 1 million residents, each resident would receive a payment from the federal government of \$1,350 to compensate for the costs imposed by the federal backstop price.

Province B has a province wide carbon price of \$15 and exempts 100% of non-utility large final emissions.

Total emissions are 175 MT

Fossil fuel emissions are 140 MT

Non-utility large final emitters produce 40 MT

The existing carbon tax of \$15 applied to fossil fuel emissions outside of large final emitters would collect \$1,500 million. But to meet the federal standard, 25% of non-utility large final emitter emissions (10MT) would have to be covered (generating \$300 million in revenue) and the remaining 100Mt of covered emissions should be subject to the \$30 federal floor - \$15 higher than the provincial tax (generating \$1,500 in revenue). Therefore, a federal fee of \$12.86 would be applied to all 140MT of fossil fuel emissions in the province, generating \$1,800 in revenue. If Province B has 10 million residents, each resident would receive a payment of \$180 from the federal government to compensate for costs imposed by the federal backstop price.

This would be a very “rough justice” approach to carbon pricing and revenue recycling. But we would hope that the very existence of a federal backstop mechanism would encourage all provinces to come forward and develop a carbon pricing system more tailored to their needs, yet compliant with the national standards.

PRESERVING INTERNATIONAL COMPETITIVENESS

Governments across the world have an obligation to act on climate change, and that realistically means putting a broad-based price on carbon emissions. In Paris, Canada agreed to important targets and actions – but it did so in coordination with other countries. This is





important because as a trading nation, Canada must balance its need to reduce emissions with the need to trade on a level playing field – especially for emissions intensive, trade exposed industries (EITEs).

With Canada's current piecemeal strategy on carbon pricing, provincial governments have implemented or announced different exemptions, credits and free allocations to help EITEs compete. However, the lack of consistency leads to a patchwork of different industry support measures and regulations, inefficiency and a more costly system overall. Industries that operate across Canada would prefer a more consistent approach. Furthermore, while provinces can exempt or compensate industries from the impact of carbon pricing systems to account for competitiveness concerns, it cannot do anything about to differentiate between imports from countries based on their level of carbon pricing. Instead of leaving this to the provinces, ***the federal government should play the lead role in handling the challenge of leveling the playing field for EITEs through border carbon adjustments (BCA).***

BCAs ensure that imports into Canada from jurisdictions without a carbon price pay a carbon tariff upon import, while goods from jurisdictions that do price carbon are exempt from this tariff. This ensures that all goods are competing on a level playing field. Similarly, Canadian exporters selling to markets that do not have a carbon price would be rebated their carbon fees for their exports.

While there are certainly vital technical details to be determined, this is something that only the federal government is able to implement, due to its constitutional and international responsibilities. Further, while some have expressed concerns that Boarder Carbon Adjustments may not be compliant with Canada's World Trade Organization obligations, a growing number of experts have made it clear that pricing carbon and implementing border adjustments falls well





within acceptable trade practices.¹⁷ Some have even gone so far as to speculate that failure to charge for carbon emissions may soon be considered an unfair subsidy.¹⁸

CARBON PRICING AND THE DEVELOPMENT AND MARKET ACCEPTANCE OF CANADIAN NATURAL RESOURCES

Climate change is a major threat, and carbon emissions must be addressed. At the same time, even as we transition to a low-carbon economy, energy resources will be significant economic drivers for many years to come, and Canada should have the opportunity to benefit economically from the development of our resources as long as we ensure that we are seeking to reduce our emissions profile and are not increasing net emissions globally. The income generated by the development of those resources will be instrumental in helping Canada transition to a lower carbon economy.

By setting an ambitious and rising carbon price, the Canadian government will demonstrate to our trade partners and the international community that we are serious about reaching our emissions targets and providing markets with a responsible product. Carbon pricing in partnership with Canada's strong regulatory system ought to generate market acceptance for our resource sector to develop and ship their products – both within and outside of Canada. The implementation of a carbon price should assist in the building of pipelines to get Canadian oil to tidewater. While it is important to acknowledge that there are many other questions when it comes to assessing pipeline safety, routes and plans, if the product being shipped has been priced correctly under a system designed to ensure Canada meets its climate change targets, then Canada should have the ability to sell our product on

¹⁷ Thomas Cottier, Olga Nartova, Anirudh Shingal, 'The Potential of Tariff Policy for Climate Change Mitigation: Legal and Economic Analysis' (2014) 48 Journal of World Trade, Issue 5, pp. 1007–1037

¹⁸ Coady, David P. and Parry, Ian and Sears, Louis and Shang, Baoping, "How Large are Global Energy Subsidies?" (March 17, 2016). CESifo Working Paper Series No. 5814. Available at SSRN: <http://ssrn.com/abstract=2766224>





world markets. In fact, the IEA World Energy Outlook’s “450 Scenario” in 2010 calculated that under a scenario where all governments moved to take policy measures that would meet the world’s two degree climate target, including imposing carbon prices of over \$120 U.S. by 2035, that Canada could still export up to 3.3 million barrels per day of oilsands derived petroleum.¹⁹ At the same time, Canada should be looking to capitalize on the global trend towards a decarbonized economy. As a leader in hydro-electric and renewable energy, Canada should be looking to ease the trade of hydro-electric power both between provinces and internationally to the US market. For example, BC’s renewable energy surplus can play a major role in helping reduce production emissions from Alberta’s oilsands. Similar opportunities to reduce emissions exist between Manitoba and Saskatchewan or Quebec and Ontario, and on a larger scale between Canada as a whole and the United States. *The implementation of effective carbon pricing systems across Canada should be used as a tool to encourage provinces to open markets to allow for non-emitting electricity imports from other provinces.*

COMPLEMENTARY MEASURES TO PRICING: FOCUS ON INNOVATION AND CARBON RISK DISCLOSURE

Canadians for Clean Prosperity believes that pricing mechanisms are the most important and most economically efficient way for Canada to reduce its greenhouse gas emissions. But that being said, we acknowledge that there are many complementary policies and programs that may help Canada to meet its emissions reductions goals. As long as those programs are economically efficient and help enhance economic growth and competitiveness, we would

¹⁹ IEA (2010) World Energy Outlook 2010. IEA:Paris, France. p. 144





encourage governments to adopt these policies side by side with a strong carbon pricing regime. It is beyond the scope of our work to discuss all of the possible mitigation policy opportunities or the best possible environmental regulatory regime, but we did want to focus on two areas where Canadians for Clean Prosperity has been active: the role of technological innovation and the role of financial disclosure around carbon related risk.

INCENTIVIZING INNOVATION

In order to transition to a low carbon economy in a way that brings prosperity to every area of the country, Canada must improve and transform its approach to fostering innovation and helping start-ups reach scale. Canadians have already proven a tremendous talent for research and innovation that has the capacity to address major environmental challenges. In fact – Canada is well positioned to become a clean technology superpower. In fact, if Canada captured its fair share of the global clean tech market (2.6%), it would be approximately the size of the automotive industry.

To foster innovation and increase Canada’s economic productivity, Canadians for Clean Prosperity advocates:

FOCUSED GOVERNMENT LEADERSHIP

Rather than relying on big government investment, governments can play a catalyst role in fostering innovation with smart policies and leadership.

Recommendations for government:

- o Designate a minister of state with the responsibility for the clean technology industry in Canada, who can share best practices across provinces and be held accountable for measuring results.

- o Establish an office of innovation and procurement within the Treasury Board Secretariat that facilitates the procurement of new, innovative technologies in partnership within Innovation, Science, and Economic Development Canada and Public Services and Procurement Canada. The office should have a mandate to ensure that early adoption of Canadian technology is a goal of procurement policy and that procurement policies should focus on lifecycle costs rather than simply





immediate capital outflow. By acting as an early adopter of Canadian innovations, government has the opportunity to both signal the viability of new technology to industry, and allow new technology to scale-up their operations.

- o Strengthen the mandate and role of the Science, Technology and Innovation Council (STIC) to ensure its independence, to allow it to serve as a mechanism for both accountability and continual improvement in Canadian policy.
- o Prioritize market access for clean technology in trade negotiations, in order to foster a more competitive market in Canada and drive innovation while opening new markets for Canadian innovation and products.
- o Take advantage of international trade and development assistance projects to promote Canadian innovation and technology abroad.
- o Explore procurement policies similar to American programs, which mandate a minimum SME procurement portion of 20%, as well as looking for ways to ensure that Buy Canada provisions don't disqualify good Canadian firms who have implemented their solutions abroad.

IMPROVED REGULATORY ENVIRONMENT

Red tape and over-regulation stifles innovation and acts as a disincentive to investment – both from within Canada and from around the world. While regulations have an important role to play, they must be designed in a way that maximizes their protection of Canadians without dragging down our economy.

Recommendations for government:

- o Remove red tape that prevents the introduction of new technologies into the market, without sacrificing safeguards, by regularly reviewing auxiliary regulations like occupational health and safety and building codes that may accidentally restrict investment in unforeseen innovation.
- o Support for start-ups including making it easier to found and register a small business, unifying incorporation and tax registration requirements between federal





and provincial governments, and a simplifying the tax structure for small businesses in their first two years of operation.

- o Simplify grant-reporting criteria, which today is so complicated that many companies are forced to hire external grant specialists to assist them in completing grant-reporting requirements.
- o Include potential for positive impact on economy and environment in criteria for government innovation grants.
- o Ensure there are sufficient programs to help businesses in the \$1-25 million space to help established small businesses make the next step towards growth.

ACCESS TO FINANCING AND CAPITAL

Innovation often requires investment, which relies on financing and capital. Without access to funds, making major bets and changes becomes very difficult for many businesses. Improving businesses' ability to invest in innovation and commercialization will benefit not just one business, but all Canadians.

Recommendations to government:

- o Work to keep corporate taxes low, so corporations have the capital to make R&D investments.
- o Benchmark international best practices and clearly lay out financing alternatives for clean tech.
- o Develop financial tools with private sector banks that guarantee access to debt assuming key benchmarks are achieved, to enable growing companies to make long-term plans and capitalize on momentum.
- o Targeted accelerated depreciation for heavy equipment linked to investments in new clean technologies.
- o Incentivize venture capital investment by maintaining competitive capital gains rates for clean tech investment.
- o Explore sovereign backstopping for innovation-based industries similar to what EDC does for export risk.





- o Continued relaxation of securities law requirements around crowdfunding and soliciting small debt and equity investments from third parties.
- o Explore expansion of flow-through shares to additional sectors and industries.
- o Financial and business literacy training and education in secondary schools.

Finally, Canada must explore ways to generate stronger integration between business and universities. Compared with other economies that have been more successful at commercializing their research innovation, Canada's R&D professionals are disproportionately employed in post-secondary educational institutions (PSEs). Strengthened integration must foster stronger ties between businesses and universities to help technologies and innovative research move out of lab and into the marketplace, and should explore the role government grants and PSE funding could play in bridging this divide.

While innovation policy is often formulated and executed separately from climate policy, this will be a vital step to ensuring Canada can thrive in a carbon-priced global economy.

THE ROLE OF CARBON RISK DISCLOSURE

In addition to pricing current carbon emissions, markets need tools to allow investors and lenders to assess the longer-term environmental risks of their investment and lending decisions. To this end, an increasing numbers of companies have begun to voluntarily disclose their carbon footprint and report on their Environmental, Social, and Governance (ESG) performance in annual reports.

This supplements the positive steps Canada has already taken better environmental reporting. Large greenhouse gas emitters (those producing over 50,000 tonnes of carbon dioxide or equivalent) have had to report on their direct emissions since 2004. In 2010, Canadian securities regulators provided guidance to securities issuers about the kind of environmental





information they should include in their corporate reports.²⁰ And starting in 2016, pension funds registered in Ontario will be required to report whether their investment policies include ESG goals.

While these are laudable first steps, other advanced economies have gone further. The United Kingdom, for instance, requires disclosure of all direct emissions and energy related emissions for all companies listed on UK stock exchanges, while France recently passed a law requiring companies to report on climate related risks and the measures they are taking to decarbonize. In addition to asking industrial firms to report on their own carbon footprint and reduction plans, they are also requiring financial institutions and institutional investors to report on the climate risk and decarbonization plans of their investment and lending portfolios.

With the plethora of disparate actions being taken across the world, a myriad of voluntary reporting systems, such as CDP (formerly Carbon Disclosure Project) has aimed to help coordinate standards, but the absence of international governance and credibility has hindered its success.

In order for participants in the market to be able to properly assess environmental risks, whether large financial institutions or individuals who want to know the environmental performance of the companies in their pension fund or RRSP, there has to be transparent, comparable information reported by companies across the board. To that end, G-20 countries tasked the Financial Stability Board, representing the G-20 central banking and regulatory, to develop common standards for climate risk reporting. Under its chairman, Bank of England Governor (and former Bank of Canada Governor) Mark Carney asked former New York Mayor

²⁰ Canadian Securities Administrators, "Environmental Reporting Guidance," CSA Staff Notice 51-333, October 27, 2010. http://www.osc.gov.on.ca/documents/en/Securities-Category5/csa_20101027_51-333_environmental-reporting.pdf





Michael Bloomberg to **head the Task Force** on Climate-related Financial Disclosures (TCFD). The task force recently completed its Phase I report, and is due to conclude later this fall.²¹

As of now, the common themes that have emerged during consultations have been the need to make GHG emissions reporting mandatory for publicly traded companies, co-ordination of reporting systems across jurisdictions, and analysis of a company's future plans to reduce emissions and how they fit into domestic and international policy goals (such as Canada's commitment to a 30% reduction by 2030 and the global goal of restricting global warming to no more than two degrees).

While the FSB cannot mandate all G-20 countries bring in the same corporate reporting requirements, history demonstrates the strong influence they have over major international markets, and the *Government should work with Canadian regulators to ensure we are able to align with any new standards of disclosure emerging from the Financial Stability Board.*

CONCLUSION

Action on climate change requires significant, immediate and thoughtful action. As the Minister has said before – environmental progress is directly linked to our ability to preserve and foster economic prosperity, and economic prosperity is fundamentally dependent on a sustainable environment. Moving forward we encourage the government to take bold action to ensure real action to meet Canada's 2030 emissions targets, while preserving and strengthening our business and innovation environment.

²¹ Task Force on Climate-related Financial Disclosures, "Phase I Report of the Task Force on Climate-related Financial Disclosures presented to the Financial Stability Board," March 31, 2016. <https://www.fsb-tcfd.org/phase1reportdocument/>





We believe that by agreeing on the right approach to a national carbon pricing policy, Canada can make significant strides towards meeting its 2030 greenhouse gas reduction targets. When combined with complementary actions, such as new policies to better foster Canadian innovation in clean technology, and policies at the federal and provincial levels to ensure that Canadian companies and financial institutions are leaders in terms of disclosure of climate related financial risks, we believe that Canada can contribute to fighting climate change while keeping our economy strong and competitive.