

Towards a Low Carbon, Climate Resilient Ontario: IISD input to MOECC's Climate Change Discussion Paper

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Summary

IISD is pleased to provide feedback in response to *Ontario's Climate Change Discussion Paper 2015* posted by the Ontario Ministry of Environment and Climate Change. We are very supportive of the clear and ambitious vision outlined in the paper, especially the proposed actions to price carbon and move Ontario towards a low-carbon, climate-resilient economy. Specific recommendations we make in this brief relate to:

- Supporting climate-friendly technology
- Low-carbon growth, buildings, and communities
- An instrument and design features for pricing carbon
- Leveraging traditional knowledge
- Recognizing the importance of adaptation
- Integrating adaptation into infrastructure investment
- Eliminating fossil fuel subsidies

Supporting scientific research to advance future technologies that can help fight climate change

Technology developers and innovators would benefit greatly from government support in bridging the “Valley of Death,”¹ the period of uncertainty most entrepreneurs face when they attempt to commercialize. Putting a price on carbon can play a key role in levelling the playing field and making new green technologies more competitive. Putting a price on carbon, whether it is through a carbon tax or a cap-and-trade system, can help support climate-friendly innovations and drive investments by recycling revenue (from the tax or the auctioning allowances) to areas like research and technology development. In the case of a cap-and-trade system, the development of a liquid offset market for businesses not covered by the cap could also provide an incentive for innovation.

Mobilizing sectoral growth while reducing carbon emissions

Agriculture, forestry and land-use planning have a significant role to play in reducing greenhouse gas (GHG) emissions, both through the generation of offsets for compliance entities in a cap-and-trade system and through increased efficiency in their practices. Examples include using more efficient fertilizer application techniques, organic farming and watershed management, including distributed water retention through wetlands.

A reference should be added to this section of the discussion paper outlining the vulnerability of many sectors, including agriculture and forestry, to the impacts of climate change. It is important to be mindful of the vulnerability of sectors in designing and promoting mitigation actions to avoid negative and unintended consequences. Synergies between mitigation and adaptation outcomes can be achieved through well-developed policies and programs, such as those related to watershed management and land-use planning. Especially for agriculture, efforts should be made to maximize the potential synergies that could arise from an integrated approach to adaptation and mitigation.

Transitioning buildings and communities to low-carbon technologies

As one of Ontario’s largest sources of emissions, there are numerous initiatives that should be implemented to reduce emissions from the buildings sector. Examples include updates to building codes to require more efficiency, “green tape” reviews to remove regulatory barriers to green building standards, and investing in education and capacity building for builders, realtors and the public. As green buildings are built or retrofitted, news releases should be issued to stimulate stories on the benefits of green buildings. This is a marketing opportunity to showcase how energy and air efficiency in buildings can benefit Ontarians through their health and cost-savings, but also through increasing climate resilience.

Revised building codes for renovations and incentive programs for everything from high-efficiency windows to furnace replacement also would provide additional emission reductions and other co-benefits. Efficiency is often referred to as the greatest clean energy resource, and as such should be a major target in addressing building emissions. Green labelling is another option. It is important to make information on building performance (e.g., labelling, audits prior to sales) more visible and accessible. Under a cap-and-trade approach, including fuel distributors under the cap (following Quebec’s and California’s approach) is a simple way to send a carbon price signal to building owners and communities. Recycling revenue from a carbon tax or the auctioning of allowances under a cap-and-trade system toward incentives for building retrofits is another option to realize buildings’ significant GHG mitigation potential.

¹Peterson, J. (2011, January 12). Energy storage, the Valley of Death and the elephant hunters. Retrieved from <http://www.renewableenergyworld.com/rea/news/article/2011/01/energy-storage-the-valley-of-death-and-the-elephant-hunters>

Putting a price on carbon

While IISD supports whatever carbon pricing mechanism is most suitable for a given jurisdiction, Ontario has a strong case in support of implementing a cap-and-trade system. First, the cap-and-trade approach is gaining international support. In the United States, the national regulations on new and existing power plants are likely to encourage more states to allow permit trading. China, Korea, Europe, Japan and other trading partners have already established or are considering cap-and-trade regimes, as the discussion paper points out.

Second, Ontario has participated in establishing the rules of the joint Quebec-California market through its engagement in the Western Climate Initiative. The joint Quebec-California market has demonstrated its robustness and that it can send a strong price signal. Linking with this market would provide Ontario greater flexibility and economic opportunities.

It is important to note that the changes in investment decisions and consumer behaviour that a cap-and-trade system could drive would depend on how stringently the emissions cap is set. If the cap is overly generous, then permits would end up trading at a low price, and economic incentives would change only marginally. But if the cap is restrictive enough, then prices will tend to be higher, driving more meaningful changes in investment decisions and consumer behaviour. Caps should be set based on science and be stringent enough to drive real change. In addition, the planned year-over-year tightening of the cap should be clearly communicated so that business is able to make more informed investment decisions and plan effectively.

The auctioning of permits is preferable to free allocation or grandfathering provisions, since it increases the revenue from the system that can be recycled for other purposes, such as limiting the competitiveness impacts of the policy on emission-intensive, trade-exposed sectors; supporting renewable energy and/or green economy investment; and/or lowering other taxes, as was done in British Columbia with corporate and personal income taxes. Auctioning also sends a clear signal to covered sectors that their emissions have a cost, and that that cost should be reflected in their decision making.

The system should cover as many sectors and activities as possible, since broad coverage creates a level playing field for economic sectors and helps ensure that the most low-cost mitigation opportunities are realized. Coverage of the fuel distributors, mirroring the approach taken by Quebec and California, would also be desirable to send a price signal throughout the economy. Other design features, such as price floors and ceilings, offsets and provisions to permit banking, have strong implications for the prices that will emerge from the system and should be designed carefully to foster a strong price signal, albeit one that is fairly stable and predictable.

Regardless of the mechanism that is ultimately chosen, it is integral to ensure that the system is credible and stringent, that monitoring and verification are strong, that there is integrity and that a viable price for carbon emerges in Ontario.

Leveraging the traditional knowledge of First Nations and Métis communities in developing and implementing the climate change strategy and action plan

Incorporating traditional knowledge is essential in the development and implementation of climate action in Ontario. As a first step, there is a need to further raise the legitimacy of traditional knowledge for any issue, not just climate change, in the eyes of scientists. Effective design of a nation-to-nation engagement process is integral to ensure that the voices of First Nations and Métis peoples are included.

Recognizing the importance of adaptation

While there are numerous references to adaptation and resilience throughout the discussion paper, inadequate detail has been provided regarding Ontario's long-term vision for how these goals will be achieved in practice. The document focuses primarily on mitigation and does not adequately articulate the risks for the province's economy and people given the potential impacts of climate change, the benefits that can be achieved through proactive adaptation and the strategies by which these actions could be taken. As there is currently no reference to resilience in the vision statement, IISD recommends revising its wording to: "redesign and build strong carbon neutral and climate-resilient economy, communities, infrastructure and energy" (page 8). On transforming economic growth (page 16), an appropriate goal would also be to structure the economy to reduce vulnerability to the impacts of climate change (e.g., by ensuring maintenance of ecosystem services), to create greater economic opportunity for marginalized communities and to ensure Internet connectivity in remote regions to enable responsiveness in times of climate extremes.

Overall, the document misses the opportunity to provide important signals and examples on how adaptation, climate-risk management and resilience-building can really be done. Examples include:

- Promoting green infrastructure as a way of reducing risk
- Understanding and responding to climate risks in Ontario's manufacturing supply chains
- Sending a strong signal to Ontario's municipalities to look at issues like zoning, building codes, service provision—emergency services, early warning, snow removal and others—through a climate lens.

Considerable work has been done to advance adaptation efforts in the province. Although there is a stand-alone Adaptation Strategy and Action Plan, if the discussion paper purports to be a low-carbon and climate-resilient strategy, much more must be done to communicate the need for planned adaptation, the steps the province has already taken and the strategies by which greater progress could be made in the near term.

Integrating adaptation considerations into infrastructure investments²

Incorporating climate change considerations into infrastructure investments provides significant opportunities for improving long-term resilience and cost-effectiveness of government spending. IISD recommends:

- Requiring the consideration of climate projection data in all infrastructure project planning, to account for more variable and extreme weather due to climate change, thus improving infrastructure resiliency.
- Expanding and strengthening natural infrastructure, including watershed and wetland protection and restoration.
- Supporting capacity-building and municipal planning for energy sustainability.

Integrating innovative green and climate-resilient solutions into a new era of infrastructure renewal can save energy, leverage nature's services to complement hard infrastructure and provide co-benefits for communities, while saving money and increasing benefits per dollar spent.

² This recommendation also appears in the Green Budget Coalition, 2014. Recommendations for Budget 2015.

Eliminating all fossil fuel subsidies in Ontario

IISD commends the Government of Ontario for eliminating the use of coal for electricity generation. An important next step in a low-carbon, climate-resilient economy is the elimination of fossil fuel subsidies. According to Organisation for Economic Co-operation and Development (OECD) data adjusted for the fiscal year (FY) 2014, Ontario currently spends an estimated CAD\$1 billion on fossil fuel subsidies through recurrent budgetary and tax measures, in addition to an estimated CAD\$1.8 billion in Global Adjustment payments to operators of peak-demand natural gas plants between November 1, 2014 and October 31, 2015.³ These measures include, by order of magnitude, an Energy and Property Tax Credit, a Reduced Aviation Fuel Tax Rate, a Fuel-Tax Exemption for Coloured Fuel, a Fuel-Tax Reduction for Railway Diesel, a Gasoline Tax Exemption for Methanol and Natural Gas, a Gasoline Tax Reduction for Propane, a Fuel-Tax Refund for Auxiliary Equipment and a Gasoline-Tax Exemption for Unlicensed Equipment (this list may not include other measures that could be considered as fossil fuel subsidies).

Fossil fuel subsidies are detrimental because they act as a barrier to the development and deployment of renewable energy technologies by (a) reducing the cost of fossil-fuel-powered electricity generation, thereby impairing the cost competitiveness of renewable energy, (b) creating an incumbent advantage, reinforcing the position of fossil fuels in the electricity system and (c) creating conditions under which investments in fossil-fuel-based technologies are favoured over renewable alternatives. For these reasons, IISD recommends eliminating all current fossil fuel subsidies in Ontario and prohibiting future fossil fuel subsidies. To do so, IISD recommends the Government of Ontario consider the following measures:

1. Implement a downward revision of the Global Adjustment payments to operators of peak-demand natural gas plants, which will translate into a fossil fuel subsidy of CAD\$1.824 million for the period November 1, 2014 and October 31, 2015.
2. Phase out the Energy Component of the Ontario Energy and Property Tax Credit, which increased by 45 per cent between 2011 and 2014, reaching an estimated CAD\$440 million in tax returns in 2014. Replace the tax credit with a targeted support measure.
3. Eliminate the Reduced Aviation Fuel Tax Rate, which in 2014 is estimated to have deprived the province of CAD\$290 million in fiscal revenues compared to a tax rate at par with the standard fuel tax rate. Although the tax on aviation fuel will reach 6.7 cents per litre by April 1, 2017, up from 2.7 cents until August 31, 2014, this rate will still be less than half the province's current standard fuel tax rate of 14.3 cents per litre.
4. Phase out the Fuel-Tax Exemption for Coloured Fuel, which amounted to an estimated CAD\$190 million in 2014 in foregone revenue, and replace it with a targeted support measure.
5. Eliminate the Fuel-Tax Reduction for Railway Diesel, which in 2014 is estimated to have deprived the province of CAD\$60million in fiscal revenues compared to a tax rate at par with the standard fuel tax rate. The current tax rate for railway diesel is 4.5 cents per litre.
6. Eliminate the Gasoline Tax Exemption for Methanol and Natural Gas, the Gasoline Tax Reduction for Propane, the Fuel-Tax Refunds for Auxiliary Equipment and the Gasoline-Tax Exemption for Unlicensed Equipment, which together amounted to an estimated CAD\$23 million in foregone revenue in 2014.

³ Adjusted data for FY2014 computes the measures identified by the OECD's *Inventory of Estimated Budgetary Support and Tax Expenditures for Fossil Fuel 2013* by using the most recent estimates provided by the Ontario Ministry of Finance *2014 Ontario Economic Outlook and Fiscal Review: Transparency in Taxation* and leaves out the measures that were since repealed or phased out, including the indirect subsidies to fossil fuels that were eliminated by the implementation of the Harmonized Sales Tax. The Global Adjustment payments estimate is provided by the Environmental Commissioner of Ontario's *2014 Annual Energy Conservation Progress Report*.

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