Ontario's *Climate Change Mitigation* and Low Carbon Economy Act: Pious Aspirations or New Dawn?

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Abstract

The Government of Ontario has unveiled the underlying legal framework for its cap-and-trade program. Like the European Union Emissions Trading System, the proposed Act places a cap on carbon emissions and facilitates the trading of pollution allowances. The ultimate objectives of the Act are to reduce the emission of GHGs, while providing financial incentives to businesses. This article assesses the proposed Act with respect to the criteria of a robust capand trade system, including: effectiveness; comprehensiveness; transparency and fairness; and offset eligibility.

Keywords: Ontario, Climate Change Law, Carbon Emissions, Capand-Trade

Introduction

On February 24, 2016, the Province of Ontario in Canada introduced the *Climate Change Mitigation and Low-carbon Economy Act* (the "**Ontario Climate Act**"), and a *Cap and Trade Program Regulations* (the "**Regulations**") on February 25, 2016.¹ The Act and the Regulations, will undergo a 45-day public and stakeholder comment period. If passed, this legislation would formally establish a cap and trade program in Ontario, adding it to a growing roster of municipal, provincial, federal, regional, and international regimes that have embraced the cap and trade system as the instrument of choice for combating climate change.² *The Ontario Climate Act* integrates essential precepts of a cap-and trade system with unique governance innovations. The cap-and-trade program is expected to come into effect on January 1, 2017.

A cap and trade program, also known as emission trading, is a market-based mechanism to reduce greenhouse gases (GHG), under which emitters are provided economic incentives and flexibility to achieve GHG reductions. Under this approach, a regulatory body sets a cap on the specific annual carbon dioxide levels that the capped entities are allowed to emit. ³ Capped entities that emit below their annual targets, mainly companies or operators of high emitting facilities, can sell unused credits to another participant. Meanwhile, companies that cannot meet their reduction obligations can buy carbon credits to offset their emissions.⁴ In essence, carbon credit is a financial instrument that represents the removal of one ton of carbon dioxide equivalent (tCO2e) from the atmosphere.⁵ Therefore, this

¹ Proposed Climate Change Mitigation and Low-Carbon Economy 2016 (Bill 172) Act, <http://www.ontla.on.ca/web/bills/bills detail.do?locale=en&BillID=3740&detailPage=bills detail the bill> accessed March 2016. See The Cap Trade Program 03, also and Regulations, <http://www.downloads.ene.gov.on.ca/envision/env reg/er/documents/2016/012-6837 DraftReg.pdf> accessed March 03, 2016.

² While command and control instruments, such as carbon tax, focus on imposing emission reduction standards/targets by an authority that must be complied with, with sanctions resulting from non-compliance, market-based instruments include cap-and-trade schemes, offsets schemes or baseline-and-credit schemes that puts a price on GHG emissions with the purpose of reducing them. Emission trading schemes have been adopted in 12 jurisdictions across the world. These include the European Union Emissions Trading System (EU ETS), the Australian Emissions Trading System, the New Zealand Emissions Trading System, the Regional Greenhouse Gas Initiative in the Northeastern United States, the California Emissions Trading System, Alberta-Based Greenhouse Gas Reduction Program and Offset Credit System; Quebec Cap-and-Trade Scheme; and the Tokyo Emissions Trading System. Others schemes stand on the verge of commencing operations, including and the Republic of Korea's Cap-and-Trade Scheme. Chinese provinces (Hubei and Guangdong) and cities (Beijing, Tianjin, Shanghai, Chongqing, and Shenzhen) have also proposed Cap-and-Trade Schemes. China will by 2017 launch a nationwide cap-and-trade system.

³ Emissions trading under the international climate regime, as set out in Article 17 of the Kyoto Protocol, allows countries with commitments under the Kyoto Protocol to buy emission units from other countries with commitments and use them towards meeting a part of their targets.

⁴ Generally, carbon trade is a transaction whereby a buyer purchases, and a seller sells, carbon credits; while carbon markets are virtual financial marketplaces where sale and exchange of carbon credits occur. Participants in the carbon market, mostly governments and business enterprises, divide carbon credits into commodity units, which are then tracked, priced and traded, depending on the participant's relative capacity and needs vis-à-vis their targets. For detailed examination of the nature and scope of carbon finance, see D Olawuyi, *The Human Rights Based Approach to Carbon Finance* (Cambridge University Press, 2016) 31-32.

⁵ To find a common unit for this commodity, all GHGs are converted to CO₂ equivalents (CO2-eq). CO2-eqs are traded

system aims to provide flexible options for large emitters to reduce carbon emissions over time. In theory, this flexibility should decrease the overall costs of compliance with emission reduction targets. The cap on carbon emissions also incentivizes investment in clean technologies, thus facilitating the creation of new jobs and the transition to a low-carbon economy.

The Ontario Climate Act enshrines into law Ontario's ambitious plans and targets to achieve 15 percent GHG reduction below 1990 levels by 2020, 37 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050.⁶ It also establishes a Greenhouse Gas Reduction Account for deposit of all proceeds from Ontario's cap and trade program. Furthermore, based on government estimates, Ontario expects to generate approximately \$1.8-1.9 billion per year in proceeds from the cap and trade program, and will invest such proceeds in "programs that reduce greenhouse gas pollution, help save families' money and reward innovative companies by creating more opportunities for investment in Ontario."⁷

Ontario's cap-and-trade program is both ambitious and innovative. By committing to a mid-term target to reduce emissions by 37 per cent below 1990 levels by 2030, Ontario became the first province in Canada to set a mid-term greenhouse gas pollution reduction target for 2030.8 Furthermore, Ontario's cap and trade program innovatively addresses questions on how proceeds of the cap and trade program can be sustainably invested and utilized to deliver benefits to Ontarians, It establishes a finance mechanism through which proceeds from the program can be reinvested to alleviate social and environmental problems in Ontario. The Government of Ontario has already created a \$325-million Green Investment Fund that will commit to projects that will fight climate change, grow the economy and create jobs.⁹ This Fund, if effectively administered, provides realistic and long-term strategies to combine emission reduction goals with economic and social development programs such as public and green transportation; renewable energy; retrofits to improve energy

⁷ See "Ontario Introduces New Climate Change Legislation"

on carbon markets. See D Olawuyi, The Human Rights Based Approach to Carbon Finance, ibid.

^o See L Goldstein, "Cap-and-trade: The next Liberal rip-off" (*Toronto Sun*, February 25, 2016) < http://www.torontosun.com/2016/02/25/cap-and-trade-the-next-liberal-rip-off> stating that "The plan repeats almost every blunder made by Europe's decade-old cap-and-trade market, the Emissions Trading Scheme, unsurprising given the Liberals consulted with ETS bureaucrats in drafting their plan." See also K Libin, "Ontario's new cap-and-trade plan is a tawdry tax-and-spend scheme sold as a gift of 'clean air for our children" (*Financial Post*, February 25, 2016) < http://business.financialpost.com/fp-comment/kevin-libin-ontarios-new-cap-and-trade-plan-is-a-tawdry-tax-and-spend-scheme-sold-as-a-gift-of-clean-air-for-our-children> accessed February 25, 2016, stating that "The truly surprising thing about the new Ontario cap-and-trade emissions regime isn't that, when so many layers of feel-good enviro-coddling spin is stripped away, it's ultimately designed to suck what could amount to hundreds of dollars from families' pockets and funnel it into a big slush pile for the Liberals to then sprinkle treats over favored sectors. The real marvel is that it took them this long to land on the scheme."

< https://news.ontario.ca/ene/en/2016/02/ontario-introduces-new-climate-change-legislation.html> accessed February 25, 2016.

⁸ See Government of Ontario, "Ontario First Province in Canada to Set 2030 Greenhouse Gas Pollution Reduction Target: New Target Builds Momentum Toward a Low-Carbon Economy" <u>https://news.ontario.ca/ene/en/2015/05/ontario-first-province-in-canada-to-set-2030-greenhouse-gas-pollution-reduction-target.html</u>> accessed April 02, 2016.

⁹ Government of Ontario, Green Investment Fund, https://www.ontario.ca/page/green-investment-fund> accessed March 03, 2016.

efficiency in homes, buildings and businesses; clean technologies and energy efficiency projects that reduce greenhouse gases while creating jobs. This holistic approach has delivered positive prospects in countries such as Romania, where proceeds of carbon credits have been utilized for social development programs.¹⁰

Furthermore, as Canada's most populous province, home to nearly 50 percent of all Canadians, it is imperative for Ontario to lead effective climate action in order for Canada to achieve its Intended Nationally Determined Contribution (INDC) to reduce GHG emissions economy-wide by 30% below 2005 levels by 2030.¹¹ Ontario's proposed program is a positive effort that, if effectively implemented, could influence and inform Canada's future climate action.

Despite its innovative approach however, the proposed Act has already received flak from commentators who consider the proposed legislation as less of a carbon-reduction plan than a public rip-off, a "feel-good enviro-coddling spin," and a false start to climate change action.¹² Many of the early criticisms and concerns regarding the *Ontario Climate Act* relate to wider debates on whether a cap and trade instrument, as opposed to carbon taxation, represents the most effective legal instrument choice for combating climate change; whether a cap and trade regime can deliver real, measurable, additional, long term and sustainable reduction of GHGs; whether a cap and trade program immorally rewards the polluter and allows trade in hot air; and whether a cap and trade program will not result in social, economic and human rights problems for the public. These debates have been extensively considered in the literature and will not be rehashed in this article.¹³ Rather, the aim of this article is to

"Rethinking the Place of Flexible Mechanisms in Kyoto's Post 2012 Commitments" (2010) Journal of Law,

¹⁰ In 2013-2014, Romania generated about 260 million Euros, and are hoping to raise another about 2 billion Euros during the 2016-2020 period, from the country's cap-and-trade program. The proceeds have been used to construct new bike lanes and metro stations. See The World Bank, *New bike lanes and metro stations in Bucharest paid for by carbon credits* http://blogs.worldbank.org/climatechange/new-bike-lanes-and-metro-stations-bucharest-paid-carbon-credits accessed March 03, 2016.

¹¹ The Government of Canada submitted its intended nationally determined contribution (INDC) to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat in May 2015. Canada intends to reduce greenhouse gas (GHG) emissions economy-wide by 30% below 2005 levels by 2030. See *Canada's INDC Submission to the UNFCCC*,

<http://www4.unfccc.int/submissions/INDC/Published%20Documents/Canada/1/INDC%20-%20Canada%20-%20English.pdf> > accessed March 03, 2016.

¹² See L Goldstein, "Cap-and-trade: The next Liberal rip-off" (Toronto Sun, February 25, 2016)

<http://www.torontosun.com/2016/02/25/cap-and-trade-the-next-liberal-rip-off> sting that "The plan repeats almost every blunder made by Europe's decade-old cap-and-trade market, the Emissions Trading Scheme, unsurprising given the Liberals consulted with ETS bureaucrats in drafting their plan." See also K Libin, "Ontario's new cap-and-trade tawdry tax-and-spend scheme sold as a gift of 'clean air for our children" plan is a <http://business.financialpost.com/fp-comment/kevin-libin-ontarios-new-cap-and-trade-plan-is-a-tawdry-tax-andspend-scheme-sold-as-a-gift-of-clean-air-for-our-children> accessed February 25, 2016, stating that "The truly surprising thing about the new Ontario cap-and-trade emissions regime isn't that, when so many layers of feel-good enviro-coddling spin is stripped away, it's ultimately designed to suck what could amount to hundreds of dollars from families' pockets and funnel it into a big slush pile for the Liberals to then sprinkle treats over favoured sectors. The real marvel is that it took them this long to land on the scheme."

¹³ See T Alton, "Introducing Carbon Taxes in South Africa" (2014) 116(1) Applied Energy, 344-354; D Olawuyi

Environment and Development 23-35; also M Sandel, Editorial, 'It's Immoral to Buy the Right to Pollute', N.Y.TIMES, 15 December 1997, page A23. See also, T. Jackson, K. Begg, S. Parkinson, 'The Language of Flexibility

and the Flexibility of Language', (1998) 10/3-4 International Journal of Environment and Pollution.

evaluate the scope and content of the Ontario Climate Act with respect to some essential criteria of a robust cap-and trade system, including: effectiveness; comprehensiveness; transparency and fairness; and offset eligibility.

This article assesses the potentials and pitfalls of the *Ontario Climate Act*. It identifies its areas of innovation and strengths, key implementation and logistical questions that may arise, and offers perspectives on how to address such gaps.

Evaluation of the Ontario Climate Act

The essential normative requirements for assessing the environmental integrity of a cap-and trade system include: effectiveness; comprehensiveness; transparency and fairness; and offset eligibility.¹⁴ This section evaluates Ontario's proposed legislation in the light of these key requirements. It aims to determine whether the *Ontario Climate Act*, in its current form, can potentially deliver measurable long term and sustainable reduction of GHGs in Ontario.

A. Effectiveness

An *ex-ante* evaluation of the effectiveness of a cap and trade program focuses on the stringency of targets set by the program and on whether the scope of the regulated GHG sources are extensive enough to drive GHG abatement from key sources.¹⁵ Therefore, the first point to address is whether the Ontario emission trading scheme adequately regulates major emission sources. The *Ontario Climate Act* in Section 1 establishes a verifiable emissions amount and sets a deadline within which capped entities must submit their emission allowances and credits, following the end of the compliance period in Section 5. The compliance period is stated in section 2 as January 1, 2017 to December 31, 2020, January 1, 2021 to December 31, 2023, and each subsequent three-year period. Section 4 describes the cost equivalent per tonne of reductions. The cap will decline by 3.7 percent over each subsequent three year-period, falling to 15 per cent below 1990 levels by 2020.

The Act is sweeping in its coverage of emission sources. The definition of 'prescribed activity' in Section 3 includes all key sectors

¹⁴ See A Radu, "Alberta's CO₂ Reduction Strategy – Assessing the Environmental Integrity of Emissions Trading Schemes" (Canadian Institute of Resources Law 2014) 7-11 <http://dspace.ucalgary.ca/bitstream/1880/50352/1/EmissionsOP45w.pdf > accessed March 03, 2016; see also Misato Sato, .Tim Laing, Simone Cooper, & Lixiang Wang, "Methods for Evaluating the Performance of Emissions Trading Schemes" (November 2015) <u>http://climatestrategies.org/wp-content/uploads/2015/11/CS-ChinaETS-Evaluation-paperfinal1.pdf;</u> World Bank, *Mapping Carbon Pricing Initiatives: Developments and Prospects* (Washington DC: World Bank, 2013); J Arlinghaus, "Impacts of Carbon Prices on Indicators of Competitiveness. Empirical Findings"

⁽OECD Environment working papers No. 87, 2015); C Munnings, R Morgenstern, Z Wang, and X Liu "Assessing the Design of Three Pilot Programs for Carbon Trading in China" (October 2014) http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-14-36.pdf accessed April 3, 2016; J Coria, A Lofgren, and T Sterner, "To trade or not to trade: Firm-level Analysis of Emissions Trading in Santiago, Chile" (2010) 91(11) Journal of Environmental Management 2126-2133.

¹⁵ See Radu, *ibid* at 24, also C Munnings, R Morgenstern, Z Wang, and X Liu, "Assessing the Design of Three Pilot Programs for Carbon Trading in China", ibid at 4.

with high historical emissions of GHGs that are already subject to Ontario's greenhouse gas emissions reporting regulation (the "Reporting **Regulation**").¹⁶ Section 14 (2) of the proposed *Ontario Climate Act* stipulates that any entity required by the Reporting Regulation to submit a report and verification statement in 2016 is a mandatory participant under the proposed cap-and-trade program. This covers a wide range of sectors across agriculture, electricity generation, iron and steel production, natural gas distribution and petroleum product supply.

Furthermore, in order to avoid a flood of business-as-usual allowances, Section 6 restricts emission allowances that may be submitted for a compliance period. They are allowances transferred into a compliance account as a result of a successful purchase of emission allowances offered for sale, and Ontario's annual emission allowances classified by the Minister as generated in the compliance period or an earlier year or within the first or second year following the end of the compliance period. Furthermore, the Act elaborates types of initiatives that may be funded from proceeds of the cap and trade program, of which concern energy use, land use and buildings, infrastructure, transportation, industry, agriculture and forestry, waste management, education and training, and research and innovation.

By extending its reach to a wide range of activities and sectors, the proposed *Ontario Climate Act* arguably meets the requirement of effectiveness and has strong potentials to adequately regulate key emission sources in Ontario.

B. Comprehensiveness

A sustainable emission-trading scheme must identify and encapsulate all sources of GHG emissions. As Radu rightly notes, "the extent to which the particular ETS covers sources of emissions and emission gases is a measure of the comprehensiveness of the ETS."¹⁷ Furthermore, as the Intergovernmental Panel on Climate Change (IPCC) recommends in its *Guidelines for Compiling GHG Inventories* that methodologies for estimating, assembling, documenting, and transmitting GHG inventory data must be consistent and comprehensive, regardless of the method used to produce the estimates.¹⁸

The proposed *Ontario Climate Act* identifies two types of eligible GHG emissions: CO_2 and non- CO_2 emissions. However, the Act fails to include a comprehensive list of gases that come under the non- CO_2 emissions. The Act references methane (CH₄) and nitrous oxide (N₂O), but fails to mention the wide array of other GHGs that have also been identified by the IPCC as contributors to climate change. These include hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); sulphur hexafluoride (SF₆); nitrogen trifluoride (NF₃);

¹⁶ See Section 5 of Ontario's *Greenhouse Gas Emissions Reporting Regulation*, Reg. 452/09, under the *Environmental Protection Act*, R.S.O. 1990, c. E.19. A person who owns or operates a facility at which GHG emitting activities, that are comprehensively listed in Table 2 of the Reporting Regulation, occurs is required to quantify and report GHG emissions associated with those activities as applicable under the Regulation.

¹⁷ *Ibid* at 9.

¹⁸ Intergovernmental Panel on Climate Change (IPCC), 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Hayama, Japan: Institute for Global Environmental Strategies, 2006).

trifluoromethyl sulphur pentafluoride (SF₅CF₃); halogenated ethers; and halocarbons not covered by the Montreal Protocol including CF_3I , CH_2Br_2 CHC_{13} .¹⁹

By failing to create a comprehensive list of non-CO₂ gases to be capped and regulated, the proposed *Ontario Climate Act* falls into the trap of non-specificity, a gap that could pose long-term implementation challenges. One way of ensuring specificity is for the Act to reference the comprehensive list of GHGs contained in the Reporting Regulation, some of which are also included in Canada's INDC.²⁰

C. Transparency and Fairness

A robust cap-and-trade system must adopt transparent mechanisms for creating emission allowances, setting price caps, and distributing emission allowances through auction. Transparency requires that the "rules of the game" are clarified in a fair and open manner. The *Ontario Climate Act*, arguably, incorporates robust mechanisms that, if effectively implemented, could help ensure transparency.

Section 34 of the Act sets a reasonable number of Ontario emission allowances that the Minister for Environment and Climate Change will create each year:

Year	Number of Allowance (tonnes – units?)
2017	142,332,000
2018	136,440,000
2019	130,556,000
2020	124,668,000

In Section 35, the Minister granted the power to reserve and sell five percent (5%) of all Ontario emission allowances created. Section 36 allows the Minister to auction submitted and reserved emission allowances. To provide fair and adequate notices to participants, Section 38 provides that the Minister shall provide notice of an auction or sale to the public. The minister must also provide information on the date, time, location, process, and requirements of the auction or sale.

Section 42 requires the Minister to make a written summary of each auction or sale available to the public within 45 days following its conclusion,. This summary sets out key information such as the lowest bid price accepted, registered participants who submitted bids in the auction or sale, details regarding the number of emission allowances sold, the number of emission allowances sold for each vintage year or category, and a description of how the emission

¹⁹ Ibid.

²⁰ See Table 1 of the Reporting Regulation, see also 'Gases Covered' in Canada's INDC Submission to the UNFCCC, *supra* note 10.

allowances were distributed among the bidders, without identifying the participants.

By incorporating provisions ensuring that clear and detailed information on market activities and transactions are transparently disclosed, the *Ontario Climate Act* has the potential to stimulate trust and protect access to information rights.

D. Offset eligibility

Flexibility is very important in combating climate change. By allowing participants to utilize international credits generated by project-based mechanisms - such as the Kyoto Protocol's CDM and its Joint Implementation (JI) mechanism - toward fulfilling part of their domestic obligations, emission reduction schemes can provide opportunities for participants to achieve emission reduction at the least possible cost. Section 7 of the Ontario Climate Act provides that offset credits may be submitted for a compliance period. In order to create a robust offset credit program in Ontario, it is envisaged that separate offsets regulation will be proposed later in 2016 if the climate change legislation passes. According to the Ontario Climate Act, the offsets regulation will describe the required conditions which must meet to be able to create, verify and register offset credits for use in Ontario's greenhouse gas cap and trade program, including requirements for protocols. Protocols set out the requirements to demonstrate the offset criteria such as ownership, and that proposed offsets are real, additional, verified, unique, permanent, and enforceable, to ensure that offset projects produce the emission reductions claimed.

In designing offset regulations, it is important to adopt a lessons-learned approach that draws on some of the implementation challenges facing offset mechanisms seen on the international level with the Clean Development Mechanism (CDM). Studies show that failure to introduce human rights safeguards in carbon actions and projects may exacerbate human rights violations and create complex challenges and risks for a cap-and-trade system.²¹ It is particularly important to consider how allegations of forceful land grabs, violation of human rights, siting and concentration of projects in poor communities, and lack of accountability by project participants, have stifled the overall efficacy of the CDM. These precedents should provide some useful lessons. New international policy recognizes the importance of these considerations. For instance, the Paris Agreement states the following in its preamble:

Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as

²¹ See D Olawuyi, *The Human Rights Based Approach to Carbon Finance, supra* note 4. See also D Olawuyi, *Climate Justice and Corporate Responsibility: Taking Human Rights*

Seriously in Climate Actions and Projects (2016) 34: 1 JOURNAL OF ENERGY & NATURAL

RESOURCES LAW, 1-18; United Nations Environment Program, *Climate Change and Human Rights* (UNEP 2015) 9-10; and International Bar Association, Climate Change Justice and Human Rights Task Force Report, *Achieving Justice and Human Rights in an Era of Climate Disruption* (International Bar Association 2014) 147-153.

gender equality, empowerment of women and intergenerational equity. $^{\rm 22}$

Conclusion

The Ontario Climate Act is timely, comprehensive and positive legislation with far more strengths than weaknesses. Coming at a time when the world is looking to hold the increase in the global average temperature well below 2 °C above pre-industrial levels and 1.5 °C above pre-industrial levels, the proposed legislation provides a new impetus for a dynamic carbon market that can stimulate significant progress, heralding a new dawn in achieving this goal.

The efficacy of the proposed legislation can be further improved if it is infused with procedural and accountability safeguards to address human rights risks and concerns that will inevitably arise in carbon offset projects. The legislation, and its accompanying regulations, should establish inspection panels and a dispute resolution mechanism through which emission reduction actions and projects that violate existing environmental and human rights laws can be identified and screened out from credit trading.

²² Emphasis added. United Nations Framework Convention on Climate Change (UNFCCC), The Paris Agreement, Conference of the Parties, Twenty-first Session Paris, 30 November to 11 December 2015, <https://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf> accessed February 25, 2016.