



# COLUMBIA LAW SCHOOL

---

SABIN CENTER FOR CLIMATE CHANGE LAW

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

By Damilola S. Olawuyi<sup>†</sup>

March 2016

### 1. 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.<sup>1</sup> The Act and the Regulations will undergo a 45-day public and stakeholder comment period. If passed into law, this legislation would formally establish a cap and trade program in Ontario, adding Ontario to a growing roster of municipal, provincial, federal, regional, and international regimes that have embraced the cap and trade system as an instrument choice for combating climate change.<sup>2</sup> *The Ontario Climate Act* interweaves

---

<sup>†</sup> Dr. Damilola S. Olawuyi is David Sive Visiting Scholar, Sabin Center for Climate Change Law, Columbia Law School, New York. Email: do2322@columbia.edu, dsolawuyi@gmail.com.

<sup>1</sup> *Proposed Climate Change Mitigation and Low-Carbon Economy Act, 2016* (Bill 172) <[http://www.ontla.on.ca/web/bills/bills\\_detail.do?locale=en&BillID=3740&detailPage=bills\\_detail\\_the\\_bill](http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=3740&detailPage=bills_detail_the_bill)> accessed March 03, 2016. See also

*The Cap and Trade Program Regulations (Regulations)* on February 25, 2016, <[http://www.downloads.ene.gov.on.ca/envision/env\\_reg/er/documents/2016/012-6837\\_DraftReg.pdf](http://www.downloads.ene.gov.on.ca/envision/env_reg/er/documents/2016/012-6837_DraftReg.pdf)> accessed March 03, 2016.

<sup>2</sup> 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-

several essential precepts of a cap-and-trade system with governance innovations that are, at least arguably, unique. The cap-and-trade program is expected to come in force 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 governmental or regulatory body sets a cap on the specific amount of carbon dioxide (or equivalents) that capped entities or participants are allowed to emit each year.<sup>3</sup> Capped entities, mainly companies or operators of high emitting facilities, that emit below their annual targets can sell unused credits to another participant, while entities that cannot meet their reduction obligations by improving their own efficiencies are able to buy carbon credits to offset their emissions.<sup>4</sup> In essence, carbon credit is a financial instrument that represents the removal of one ton of carbon dioxide equivalent (tCO<sub>2</sub>e) from the atmosphere.<sup>5</sup> The underlying aim of this system therefore is 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.

---

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. This paper talks about market-based instruments as the main exponent of carbon pricing policies. 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.

<sup>3</sup> Emissions trading, under the international climate regime, is 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.

<sup>4</sup> 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 Damilola Olawuyi, *The Human Right Based Approach to Carbon Finance* (Cambridge University Press, 2016) 31-32.

<sup>5</sup> To find a common unit for this commodity, all GHGs are converted to CO<sub>2</sub> equivalents (CO<sub>2</sub>-eq).<sup>5</sup> CO<sub>2</sub>-eqs are traded on carbon markets. See Damilola Olawuyi, *The Human Right Based Approach to Carbon Finance*, *supra* note 4.

*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.<sup>6</sup> It also establishes a Greenhouse Gas Reduction Account into which all proceeds from Ontario's cap and trade program would be deposited. 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.'<sup>7</sup>

Ontario's cap-and-trade program is both ambitious and innovative. Apart from establishing a legal tool through which Ontario can achieve its emission reduction targets, it also creates a 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.<sup>8</sup> This Fund, if effectively administered, provides realistic and long-term strategies to combine emission reduction goals with economic and social development. This holistic approach has delivered positive prospects in countries such as Romania where proceeds of carbon credits have been utilized for social development programs.<sup>9</sup>

Furthermore, being Canada's most populous province, and home to nearly 50 percent of all

---

<sup>6</sup> 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 plan is a tawdry tax-and-spend scheme sold as a gift of 'clean air for our children'" <<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."

<sup>7</sup> See "Ontario Introduces New Climate Change Legislation"

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

<sup>8</sup> Government of Ontario, Green Investment Fund, <<https://www.ontario.ca/page/green-investment-fund>> accessed March 03, 2016.

<sup>9</sup> 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.

Canadians, climate action by Ontario is fundamental if Canada is to achieve its Intended Nationally Determined Contribution (INDC) of reducing GHG emissions economy-wide by 30% below 2005 levels by 2030.<sup>10</sup> Ontario's proposed program is a positive effort that, if effectively implemented, could influence and inform Canada's climate action over the next years.

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.<sup>11</sup>

This paper evaluates 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.

## **2. Evaluation of the Ontario Climate Act**

Radu has developed a helpful model for assessing the potential and environmental integrity of an emission-trading scheme, which includes effectiveness; comprehensiveness; transparency and fairness; and offset eligibility.<sup>12</sup> In the following sections I use this paradigm to evaluate Ontario's proposed legislation. The central aim, here, is to determine whether the *Ontario Climate Act*, in its current form, has the potential to deliver real, measurable, additional, long term and sustainable reduction in GHGs in Ontario.

---

<sup>10</sup> The Government of Canada submitted its intended nationally determined contribution (INDC) to the 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.

<sup>11</sup> 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 plan is a tawdry tax-and-spend scheme sold as a gift of 'clean air for our children'" <<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 favoured sectors. The real marvel is that it took them this long to land on the scheme."

<sup>12</sup> A Radu, 'Alberta's CO<sub>2</sub> 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.

### *A. Effectiveness*

The first question is whether the Ontario emission trading scheme establishes a stringent cap on emission reductions and adequately regulates major emission sources.<sup>13</sup> This question can be answered affirmatively. The *Ontario Climate Act* in Section 1, establishes a verifiable emissions amount and sets a deadline in Section 5, within which capped entities must submit their emission allowances and credits, following the end of the compliance period. The compliance period is stated in section 2 as January 1, 2017 to December 31, 2020, and 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 in each of the next three years, 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 with high historical emissions of GHGs that are already subject to Ontario's greenhouse gas emissions reporting regulation (the "**Reporting Regulation**").<sup>14</sup> Section 14 (2) of the proposed *Ontario Climate Act* provides that any entity required under the Reporting Regulation to submit a report and verification statement in 2016, with respect to greenhouse gas emissions in 2015, is a mandatory participant under the proposed cap-and-trade program. This covers a wide range of sectors cutting across agriculture, electricity generation, iron and steel production, , natural gas distribution and petroleum product supply.

Furthermore, in order to avoid a flood of non-additional or 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; Ontario emission allowances classified by the Minister as generated within a year 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. Eligible initiatives include those relating to energy use, land use and buildings, infrastructure, transportation, industry, agriculture and forestry, waste management, education and training, and research and innovation.

---

<sup>13</sup> See Radu, *ibid.*

<sup>14</sup> 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.

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.'<sup>15</sup> Furthermore, as the Intergovernmental Panel on Climate Change (IPCC) recommends in its *Guidelines for Compiling GHG Inventories*, methodologies for estimating, assembling, documenting and transmitting GHG inventory data must be consistent and comprehensive, regardless of the method used to produce the estimates.<sup>16</sup>

The proposed *Ontario Climate Act* identifies two types of eligible GHG emissions: CO<sub>2</sub> and non-CO<sub>2</sub> emissions. However the Act fails to include a comprehensive list of gases that come under the non-CO<sub>2</sub> emissions. In various portions, the Act references methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) leaving out from its definitions and scope, a wide suite of other GHGs that have been identified by the IPCC as GHGs responsible for climate change. These include hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); sulphur hexafluoride (SF<sub>6</sub>); nitrogen trifluoride (NF<sub>3</sub>); trifluoromethyl sulphur pentafluoride (SF<sub>5</sub>CF<sub>3</sub>); halogenated ethers; and halocarbons not covered by the Montreal Protocol including CF<sub>3</sub>I, CH<sub>2</sub>Br<sub>2</sub> CHCl<sub>3</sub>.<sup>17</sup>

By failing to clearly specify perhaps in the definition section, or in an appendix, a list of non-CO<sub>2</sub> gases to be capped and regulated, the proposed *Ontario Climate Act* falls into the trap of lack of specificity, a gap that could pose implementation challenges in the long-term. One way of ensuring specificity is for the Act to refer to the comprehensive list of GHGs contained in the Reporting Regulation, some of which are also captured in Canada's INDC.<sup>18</sup>

---

<sup>15</sup> *Ibid* at 9.

<sup>16</sup> Intergovernmental Panel on Climate Change (IPCC), *2006 IPCC Guidelines for National Greenhouse Gas Inventories* (Hayama, Japan: Institute for Global Environmental Strategies, 2006).

<sup>17</sup> *Ibid*.

<sup>18</sup> See Table 1 of the Reporting Regulation, see also 'Gases Covered' in Canada's INDC Submission to the UNFCCC, *supra* note 10.

### 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 guarantee transparency.

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

Year	Number of Allowance
2017	142,332,000
2018	136,440,000
2019	130,556,000
2020	124,668,000

The Minister is empowered in Section 35 to reserve and sell reserve five per cent (5%) of all Ontario emission allowances created. Section 36 allows the Minister to auction emission allowances that have been reserved by, or submitted to, the Minister. 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 in such manner as the Minister considers appropriate, setting out following information on the date, time, location, process, and requirements of the auction or sale.

Section 42 mandates the Minister to make available to the public, within 45 days following the conclusion of the auction or sale and in a manner that the Minister considers appropriate, a written summary of each auction or sale. This summary will set 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 each vintage year or category of emission allowances sold, and a description of how the emission allowances were distributed among the participants who submitted bids, without identifying which participants purchased the emission allowances.

By incorporating provisions that will ensure that clear and detailed information on market activities and transactions are transparently disclosed, the *Ontario Climate Act* can 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 from project-based mechanisms, such as the Kyoto Protocol's CDM and 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 cost possible. 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, in the proposed legislation, that a 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 requirements proponents 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 being claimed.

In designing offset regulations, it is important to adopt a lessons learned approach that draws on some of the several implementation challenges facing offset mechanisms, such as the CDM, at international level. 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.<sup>19</sup> It is particularly important to consider allegations of forceful land grabs, violation of human rights, siting and concentration of projects in poor communities, and lack of accountability by participants in carbon markets, in the execution of CDM projects. These precedents should provide some useful lessons. As the Paris Agreement recognises 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

---

<sup>19</sup> See Damilola Olawuyi, *The Human Right Based Approach to Carbon Finance*, *supra* note 4. See also Damilola 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.

disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.<sup>20</sup>

### **3. Conclusion**

The *Ontario Climate Act* is a 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 to well below 2 °C above pre-industrial levels, and to limit temperature increase to 1.5 °C above pre-industrial levels, the proposed legislation provides a new impetus for a dynamic carbon market that can stimulate progress, and herald a new dawn, in achieving this goal.

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

---

<sup>20</sup> 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/l09r01.pdf>> accessed February 25, 2016.