



**Leadership Needed on Climate  
Change: *the Environmental Protection  
Amendment Act (Greenhouse Gas  
Emissions Trading), 2009***

Submission on Bill 185 to the Standing  
Committee on General Government

November 2, 2009



## **List of Recommendations**

- 1. Endorse the KYOTOplus target of reducing Ontario's greenhouse gas emissions to 25 per cent below 1990 levels by 2020.**
- 2. Preserve the option of implementing carbon taxes, such as taxes on energy use.**
- 3. Include in the preamble of the Bill an endorsement of the environmental justice or equity principle and the precautionary principle.**
- 4. Mandate transparent public consultations on any resulting regulations that are broadly accessible, particularly to vulnerable populations.**
- 5. Amend the Bill to ensure that all greenhouse gas emission permits are auctioned, and that they do not confer a permanent right to emit.**
- 6. Strictly limit offsets to a small percentage of an individual emitter's emissions, and ensure that they are for real, verifiable, permanent reductions in greenhouse gas emissions.**
- 7. Remove the section of the Bill that generically enables regulations governing economic and financial instruments for environmental purposes. Failing this, augment it by allowing the named instruments to be distributed by auction, sale or other means that are not free of charge.**

## Introduction

The Registered Nurses' Association of Ontario (RNAO) is the professional organization for registered nurses who practise in all roles and sectors across this province. Our mandate is to advocate for healthy public policy and for the role of registered nurses in enhancing the health of Ontarians. We welcome this opportunity to present this submission on Bill 185, the *Environmental Protection Amendment Act (Greenhouse Gas Emissions Trading)*, 2009, to the Standing Committee on General Government.

We are pleased that the Bill acknowledges in the preamble the work of the Intergovernmental Panel on Climate Change and its conclusion that strong and sustained action is needed to minimize the risks due to the climate change arising from human activities.

The government has taken other steps to address climate change, including Bill 150, the *Green Energy and Green Economy Act, 2009*. This Bill is part of the government climate change plan. Bill 150 if properly supported has the potential to help transform Ontario into a greener province that would rely increasingly on clean renewable energy like solar and wind power. The Government has also issued a draft regulation under section 16 of the *Environmental Bill of Rights, 1993*, on greenhouse gas emissions reporting. This regulation would support Bill 185.

Huge changes and bold steps are required **now** to avert a climatic and humanitarian disaster. There is broad consensus that part of the solution is putting a price on greenhouse gas emissions. This would deliver more appropriate economic signals to resource users. Bill 185 would enable one approach to pricing carbon:<sup>i</sup> a cap-and-trade system.

Our submission argues for a carbon tax over a cap-and-trade system on grounds of efficiency, simplicity, transparency, comprehensiveness and speed of implementation.

In the event that the government proceeds with a cap-and-trade system, our submission identifies features that will be required to deliver adequate protection to environment and health.

### **The Need for Action on Climate Change Now**

Registered nurses are concerned about climate change because of its serious environmental and health implications. Already we are seeing severe dislocation in places like the Horn of Africa in part due to weather disturbances (e.g., drought). However, climate change also affects Ontarians' health, by contributing to extreme weather events, killer heat waves, poor air quality, and vector-, rodent-, food- and water-borne diseases. By fighting global warming, we are not merely protecting the environment – we are protecting the health of Ontarians. And we would be contributing to environmental justice, because the most vulnerable populations are the poorest in both Canada and developing countries, these are the people who did the least to cause global warming.

There is very strong agreement among most scientists that global warming is a reality, and that this warming is principally due to human activity. For example, the respected Intergovernmental Panel on Climate Change (IPCC)<sup>ii</sup> concludes that warming is

unequivocal.<sup>iii</sup> It states with a very high level of confidence that this warming is strongly affecting terrestrial biological systems.<sup>iv</sup> And it states with high confidence that marine and freshwater biological systems are being impacted.<sup>v</sup> The IPCC concludes that the indisputable rise of temperatures is very likely due to the observed increase in greenhouse gases released by human activity.<sup>vi</sup>

The combined concentration of greenhouse gases has risen sharply since the start of the Industrial Revolution in 1750: from 278 parts per million (ppm) of CO<sub>2</sub> equivalents (CO<sub>2</sub>e) to a current level of 436 ppm – an astonishing 57 per cent increase.<sup>vii</sup> This concentration has been rising at an alarming rate. We are now in a lifeboat economy. The IPCC reports that current atmospheric concentrations of two key greenhouse gases – carbon dioxide and methane – are far higher than they have been at any time in the past 650,000 years.<sup>viii</sup>

Business as usual is not a responsible option. As the widely cited Stern Review<sup>ix</sup> points out, this would very likely cause a global average temperature rise of over two degrees Celsius from preindustrial times as early as 2035. By the end of the century, there would be at least a 50 per cent risk of the temperature rising over five degrees Celsius. To put this increase in context, our current global average is about five degrees above that of the previous ice age. Even a two degrees Celsius increase would likely have devastating effects in vulnerable areas, such as marginal areas in Africa, coral reef ecosystems and ice sheets. Further warming carries with it increased risk of dramatic climate shifts through feedback effects such as massive releases of the potent greenhouse gas methane, currently trapped in permafrost.<sup>x</sup>

Furthermore, Stern concluded that the losses to GDP from failure to act far exceeded the costs of stabilizing greenhouse gas levels. For example, estimates of the annual costs of stabilizing at 500-550 ppm CO<sub>2</sub>e centre on one per cent of world GDP (this would translate into a rise in average global temperature of two to three degrees Celsius<sup>xi</sup>).<sup>xii</sup> In contrast, the annual cost of business as usual was put at 20 per cent in per capita consumption.<sup>xiii</sup> Failure to act is not just unconscionable, it is also bad economics.

Canada and Ontario must do their share. Sadly, Canada has been one of the worst performers when it comes to reducing its carbon footprint. The latest report from Environment Canada indicates that not only has Canada failed to meet its obligations under the Kyoto protocol (which was to reduce its greenhouse gas emissions to six per cent below 1990 levels by 2008-12); Canada grossly increased its releases, and is still increasing them:

Total greenhouse gas (GHG) emissions in Canada in 2007 were 747 megatonnes (Mt) of carbon dioxide equivalent,<sup>xiv</sup> an increase of 4.0% from 2006 levels, and of 0.8% from 2004 levels. Overall, the long-term trend indicates that emissions in 2007 were about 26% above the 1990 total of 592 Mt. This trend shows a level 33.8% above Canada's Kyoto target of 558.4 Mt.<sup>xv</sup>

This is an epic and dismal failure. Ontario's performance has been somewhat better than the national average: the latest data, for 2007, show that Ontario's greenhouse gas emissions were 13 per cent higher than 1990, and 20 per cent higher than Canada's Kyoto target of six per cent below 1990 levels.<sup>xvi</sup> Ontario and Canada must do their share, and that calls for a radical shift in policy direction. The world is running out of

time; based on the work of the IPCC, climate change mitigation has refocused new medium- and long-range targets: known as the KYOTOpus campaign.<sup>xvii</sup>

### **New Targets**

Countries like Canada have missed their Kyoto targets so badly that attention now turns to the next set of targets needed to avert climate catastrophe. Because countries like Canada have lagged so far behind their obligations, RNAO has joined health and environmental groups as well as Canada's opposition parties in endorsing KYOTOpus, an undertaking to reduce greenhouse gas emissions to at least 25 per cent below 1990 levels by 2020. These would be targets that advanced countries would have to achieve in order to help stabilize CO<sub>2</sub>e levels at 450 ppm and give the planet a reasonable chance to limit average temperature rises to two degrees Celsius.

Ontario has taken steps in the right direction. Under the 2007 Climate Change Action Plan, Ontario is undertaking to reduce greenhouse gas emissions to six per cent below 1990 levels by 2014, 15 per cent by 2020 and 80 per cent below by 2050.<sup>xviii</sup> <sup>xix</sup> These are significant steps, but they still fall short of the medium-range KYOTOpus target of at least 25 per cent below 1990 emissions by 2020.

### **Putting a Price on Carbon**

There is a general consensus that there should be a price put on greenhouse gas releases, to correct for the de facto subsidy on carbon use, as users do not have to pay for the cost they impose on society and on the planet when they add to the greenhouse gas burden. This market-friendly step would serve a number of purposes:

- It would be a signal to consumers to use less of products that are more carbon-intensive.
- It would also be a signal to producers to use inputs which are less carbon-intensive.
- It would provide market incentives to investors and innovators to find and develop methods for reducing carbon emissions

It would do all this by combining all the information into one simple metric – price changes.

Bill 185 would provide for one class of approaches to pricing carbon – a cap-and-trade system, in which a fixed number of permits (corresponding to the desired level of emissions) are issued to release greenhouse gases. Users of carbon and owners of permits could exchange these permits in a market, which would establish the price for these permits.

Another approach to putting a price on carbon would be a carbon tax. Each approach has certain advantages. A cap-and-trade system would directly establish the level of emissions, and this provides a measure of certainty. Through the carbon credit system, it provides rewards for activities that reduce greenhouse gas emissions. And it is more popular with major carbon users, perhaps because they feel it will cost them less, particularly if they are successful in getting permits issued free of charge.

On the other hand, a carbon tax has some significant advantages over cap-and-trade:

- A carbon tax is much simpler and faster to set up, because it can make use of the existing tax system.

- A carbon tax is much cheaper to administer, again because it would use the existing tax system, and would not require monitoring and enforcement of these market exchanges.
- It is easier to cover more emissions using a carbon tax.
- To the extent that emission permits are given away, a carbon tax would provide more revenue that could be used to promote green alternatives and also reduce or eliminate other less efficient taxes.
- A carbon tax provides certainty about price (unlike a cap-and-trade system, which would face fluctuating and uncertain market prices of permits).
- A carbon tax avoids the considerable risk of cheating and gaming under cap-and-trade.
- If phasing in is desired, a carbon tax can do that through an escalating price. A cap-and-trade system could be phased in through a falling number of permits and through an expanding share of permits that are auctioned, but this is much more difficult to manage.
- In contrast, a cap-and-trade system would create an entrenched constituency to lobby and keep it in place, even if it proves to be less workable than a carbon pricing system.
- To the extent that permits are given to existing firms, cap-and-trade would be a barrier to entry to new firms. This will stifle competition and slow the pace of innovation.

The experience to date with cap-and-trade systems is mixed, and has borne out the very problems listed above. In contrast, a carbon tax has been implemented in a number of countries, including Finland and Sweden. In Canada, British Columbia<sup>xx</sup> and Quebec have successfully introduced carbon taxes.<sup>xxi</sup> The National Roundtable on the Environment and the Economy, whose members are appointed by the federal cabinet, has called for a carbon tax or similar market incentive for Canada.<sup>xxii</sup>

We urge the government to keep the carbon tax option open. If it does proceed with a cap-and-trade system, then it must take all necessary measures to minimize the considerable risks and disadvantages of cap-and-trade.

### **RNAO Response to Bill 185**

The Bill is short. Its seeming intent is to enable Cabinet to implement via regulation greenhouse gas emissions trading. This is one approach to putting a price on greenhouse gas emissions. To the extent that this would preempt a carbon tax, we are concerned.

The Bill has three parts. The first part adds a definition of greenhouse gases, listing six key greenhouse gases. It uses the same list that the federal government uses in its Greenhouse Gas Inventory when meeting its annual reporting obligations under the United Nations Framework Convention on Climate Change (UNFCCC) (the Kyoto protocol was negotiated under the UNFCCC).<sup>xxiii</sup> This makes sense.

The second part clarifies the power of Cabinet to make regulations governing economic and financial instruments for environmental purposes. Among other things, it provides for regulations to distribute instruments free of charge. It does not explicitly provide for those instruments to be distributed by auction, sale or other means that are not free of charge. Since this legislation is nominally about greenhouse gases, we do not

understand the need to include more general regulatory authority for Cabinet regarding economic and financial instruments. And we are disturbed that it is included in a way that only explicitly provides for free distribution of instruments. If it is to be included at all, it should be included with regulatory authority to distribute by means that are not free.

The third part clarifies the power of Cabinet to make regulations concerning greenhouse gases. It would allow Cabinet to write regulations to establish greenhouse gas instruments and provide for them to be distributed free or by means that are not free.

Whatever the mechanism, it must establish prices that yield sufficient reductions in emissions.

That requires the following:

### **Appropriate targets**

Ontario's current targets, set under the 2007 Climate Change Action Plan, are six per cent below 1990 levels by 2014, 15 per cent by 2020 and 80 per cent below by 2050, as noted above. We urge adoption of the KYOTOplus target of at least 25 per cent below 1990 emissions by 2020. This is the target appropriate for developed countries, if the world is to have a chance of stabilizing greenhouse gases at a level that avoids dramatic temperature rises (over two degrees Celsius). To get to 25 per cent below by 2020, Ontario should seek to reach six per cent below before 2015. The target of 80 per cent below 1990 levels by 2050 is the recognized target.

### **Carbon pricing that realizes aggressive targets**

Whatever the pricing mechanism, the resulting price must realize tough targets. Significant change is required, which means that prices must be high and rising in order to drive the desired reductions in greenhouse gas emissions. If a cap-and-trade approach is used, then the supply of emissions permits must be sufficiently restricted such that total emissions fall within the target range over time. Since we are looking for decreasing greenhouse gas emissions, the volume of permits must decline over time.

### **Emission permits must be auctioned**

If an emissions trading system is used for greenhouse gases, then equity and efficiency dictate that the permits be auctioned. This would avoid the bureaucratic nightmare of determining who would get the initial allocation of permits, and the potential of gaming. Proceeds may be used to reduce emissions and speed the shift to a greener, more energy-efficient economy. They may also be used in part to reduce other taxes.

### **Coverage must be as comprehensive as feasible**

There should be as little exclusion of emissions as feasible, both in terms of sectors and emitters. Carbon taxes such as taxes on energy use much more efficiently target emitters and emissions. An emission trading system must similarly be as inclusive as possible. Offsetting tax credits or other transfers may be used to deal with any resulting economic hardship in income-constrained populations.

### **Offsets, if used, must be tightly controlled**

In lieu of permits, some trading systems would allow offsets for activities that reduce atmospheric greenhouse gases in the local jurisdiction or elsewhere. This is a way of getting around the existing cap, and we would advise against their use. If used, offsets

must be strictly limited in order to allow Ontario to reach its reduction targets. We echo the advice of the Canadian Environmental Law Association in its July 27, 2009 submissions to the Environmental Registry concerning greenhouse gas emissions.<sup>xxiv</sup> If used, such offsets must only be recognized if:

- real reductions in emissions occur, above what would have happened anyway;
- they are surplus to the provider's own permits;
- reductions are verifiable;
- trades are enforceable; and
- resulting reductions are permanent (e.g., an offset for planting trees would be meaningless if that space were later paved over.)

### **Permits must not be permanent**

Because we must reduce our emissions over time, permits must not confer a permanent right to emit. Preferably, the permits would be reacquired annually, based on the existing stock.

### **Respect the principle of environmental justice or equity.**

The costs of environmental damage and climate change are disproportionately borne by lower income people, particularly Aboriginal and racialized communities. This is particularly true at the global level with climate change: it is the most vulnerable people in developing countries that are at greatest risk of inequity. Furthermore, in many cases, the solutions to environmental problems may disproportionately bear on more vulnerable populations (e.g., pricing carbon could impose proportionally higher costs on lower income people). We urge endorsement of the principle of environmental justice or equity. There are a number of definitions of environmental justice, and we suggest the following for consideration:

A condition of environmental justice exists when environmental risks and hazards and investments and benefits are equally distributed with a lack of discrimination, whether direct or indirect, at any jurisdictional level; and when access to environmental investments, benefits, and natural resources are equally distributed; and when access to information, participation in decision making, and access to justice in environment-related matters are enjoyed by all.<sup>xxv</sup>

In the case of pricing carbon, that consultation should be broad, and it also means that a transfer mechanism must be created to ensure that those of modest means are not made financially worse off as a result of implementing carbon pricing.

### **RNAO's Recommendations**

- 1. Endorse the KYOTOplus target of reducing Ontario's greenhouse gas emissions to 25 per cent below 1990 levels by 2020.**
- 2. Preserve the option of implementing carbon taxes, such as taxes on energy use.**
- 3. Include in the preamble of the Bill an endorsement of the environmental justice or equity principle and the precautionary principle.<sup>xxvi</sup>**
- 4. Mandate transparent public consultations on any resulting regulations that are broadly accessible, particularly to vulnerable populations.**

**5. Amend the Bill to ensure that all greenhouse gas emission permits are auctioned, and that they do not confer permanent rights to emit.**

**6. Strictly limit offsets to a small percentage of an individual emitter's emissions, and ensure that they are for real, verifiable, permanent reductions in greenhouse gas emissions**

**7. Remove the section of the Bill that generically enables regulations governing economic and financial instruments for environmental purposes. Failing this, augment it by allowing the named instruments to be distributed by auction, sale or other means that are not free of charge.**

The Registered Nurses' Association of Ontario thanks the Standing Committee on General Government for the opportunity to provide these recommendations that we hope will help realize the vision of a clean, green and sustainable energy future for Ontario.

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- i In the literature, pricing greenhouse gases is referred to as putting a price on carbon.
- ii The IPCC is a scientific intergovernmental body established by the World Meteorological Organization (WMO) and the United Nations Environmental Programme (UNEP) in 1988. Both WMO and the UNEP are United Nations organizations.
- iii Intergovernmental Panel on Climate Change. (2007). *Climate Change 2007: Synthesis Report*. 30.
- iv Ibid. 33.
- v Ibid. 33.
- vi Ibid. 39.
- vii European Environment Agency. (2009). *CSI 013 – Atmospheric greenhouse gas concentrations – Assessment published Mar 2009*. Retrieved November 1, 2009 from <http://dataservice.eea.europa.eu/atlas/viewdata/viewpub.asp?id=4149>.
- viii Intergovernmental Panel on Climate Change. (2007). Op. cit. 37.
- ix Stern, N. (2006). *Stern Review: The Economics of Climate Change*. HM Treasury.
- x Stern, N. Op. cit. iii, iv.
- xi Stern, N. Op. cit. v.
- xii Stern, N. Op. cit. xiv.
- xiii Stern, N. Op. cit. x.
- xiv “Each greenhouse gas has a different potential to contribute to warming. Scientists assign each gas a “global warming potential” (GWP), based on the gas' ability to contribute to climate change. Carbon dioxide is set as the baseline with a global warming potential of 1 (for example, the GWP for methane (CH<sub>4</sub>) is 21).” Footnote quoted from following Environment Canada (2009) reference.
- xv Environment Canada (2009). *Canada's 2007 Greenhouse Gas Inventory*. Accessed October 28, 2009 at [http://www.ec.gc.ca/pdb/ghg/inventory\\_report/2007/som-sum\\_eng.cfm](http://www.ec.gc.ca/pdb/ghg/inventory_report/2007/som-sum_eng.cfm).
- xvi Environment Canada (2009). *National Inventory Report: 1990 – 2007: Greenhouse Gas Sources and Sinks in Canada*. April. 515. Data from *Report*. Percentages calculated from these data by RNAO.
- xvii For further information on KYOTOpus and to see a list of participating organizations, see *KYOTOpus* at <http://www.kyotoplus.ca/>.
- xviii Ontario Ministry of the Environment. (2008). *Ontario's Climate Change Action Plan: Creating Our Sustainable Future*. 2. Accessed October 31, 2009 from <http://www.ene.gov.on.ca/publications/6874e.pdf>
- xix Ontario Ministry of the Environment. (2007). *Ontario Greenhouse Gas Emissions Targets: A Technical Brief*. June 18. Accessed October 31, 2009 from <http://www.ene.gov.on.ca/en/air/climatechange/reduction.php>.

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**xx** Fowlie, J. and Anderson, F. (February 2008). "B.C. introduces carbon tax: Province is first jurisdiction in North America to have consumer-based carbon tax, *Vancouver Sun*, February 19, 2008. Retrieved November 1, 2009 from

<http://www.canada.com/vancouvernews/news/story.html?id=ecea1487-507c-43ef-ab88-5a972898e0b7&k=38130>.

<sup>xxi</sup> Song, V. (January 2008). "The Price of Polluting," *Calgary Sun*, January 13. Retrieved November 1, 2009 from <http://cnews.canoe.ca/CNEWS/Science/2008/01/14/4772140-sun.html>.

<sup>xxii</sup> NTREE recommends a carbon tax, or a cap-and-trade system, or a combination of both. National Round Table on the Environment and the Economy. (January 2008). *Getting to 2050: Canada's Transition to a Low-Emission Future*, retrieved January 16, 2008 from <http://www.nrtee-trnee.ca/eng/publications/getting-to-2050/Getting-to-2050-low-res-eng.pdf>. See also David Suzuki Foundation. (January 2008). *Suzuki Foundation urges government to adopt NRTEE carbon price recommendations*, retrieved November 1, 2009 from <http://www.davidsuzuki.org/latestnews/dsfnews01070801.asp>.

<sup>xxiii</sup> Environment Canada. (2009). *Monitoring, Accounting and Reporting on Greenhouse Gases*. Retrieved November 1, 2009 from [http://www.ec.gc.ca/pdb/ghg/ghg\\_home\\_e.cfm](http://www.ec.gc.ca/pdb/ghg/ghg_home_e.cfm).

<sup>xxiv</sup> Canadian Environmental Law Association. (2009). *Re: Discussion Paper: A Greenhouse Gas Cap-and-Trade System Ontario – EBR Registry No. 010-6740; Environmental Protection Amendment Act, (Greenhouse Gas Emissions Trading) 2009 – EBR Registry No. 010-6467*.

<sup>xxv</sup> Cited in Filcak, R. (undated). *On the distribution of the environment benefits and adverse impacts: the environmental justice and vulnerability of people in risk*. "As participants of the 1st workshop on *Improving Environmental Justice in Central and Eastern Europe* we developed the following definition of environmental justice relevant for the CEE region in December 2004."

<sup>xxvi</sup> There are different formulations of the precautionary principle. For example, "When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof. The process of applying the precautionary principle must be open, informed and democratic and must include potentially affected parties. It must also involve an examination of the full range of alternatives, including no action." - *Wingspread Statement on the Precautionary Principle*, Jan. 1998, retrieved April 20 October 10, 2008 from <http://www.sehn.org/wing.html>.