

## Environment

- 1. RNAO believes that an effective carbon pricing system is necessary for Ontario to meet or exceed its carbon emission targets. Will you help tackle climate change by sharing this position?**
- 2. RNs, NPs, and nursing students know that dedicated and sustainable revenue sources are needed to pay for an expansion of transit and active transportation across Ontario. Do you stand with us?**

### Carbon Pricing and Climate Change:

Climate change is real and happening today, not in the distant future. It is the result of human activity that increases the volume of greenhouse gases (GHGs) in the air. This activity has radically changed the composition of the atmosphere. The carbon dioxide concentrations have risen steadily since the start of the industrial era, when they were about 280 ppm.<sup>1</sup> Recent estimates have put concentrations over 400 ppm.<sup>2</sup> That is a 43 per cent increase. The jump is unprecedented and the levels of carbon in the air far exceed those at any time in the last 800,000 years.<sup>3</sup> This is alarming. When other GHGs besides CO<sub>2</sub> are factored in, the increase is even more worrisome - about 60 per cent from the start of the industrial era by 2012 alone.<sup>4 5</sup>

Registered nurses, nurse practitioners and nursing students 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, 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 people's health. 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 have done the least to cause global warming. Carbon reduction programs have benefits that go beyond getting rid of pollutants. For example, the closure of Ontario's coal-fired power plants not only reduced carbon emissions, it also improved air quality. Another example would be the creation of walkable, bikeable communities, which would both reduce emissions and also improve health through regularization of exercise.

Ontario has taken significant steps to reduce its carbon emissions, including the above-mentioned coal closures and the promotion of energy conservation and renewable energy. It has set greenhouse gas (GHG) reduction targets of 15 per cent below 1990 levels by 2020, 37 per cent by 2030<sup>6</sup> and 80 per cent below by 2050.<sup>7</sup> The targets are aggressive, but necessary. Economists generally agree pricing carbon emissions can help in meeting those targets. We are all carbon users, and a strong price signal, will promote necessary behaviour changes to support the environment. The government is proposing a cap-and-trade system to price carbon. That works by auctioning permits to emit carbon, with a cap on the

number of permits set to meet Ontario's emission targets. RNAO had recommended a carbon tax as a simpler and more efficient way to price carbon, but a cap-and-trade system can work as well as long as it:

- sets a low enough cap,
- starts soon enough, and
- covers as much of the emissions as possible.

The government cap-and-trade proposal would see a 2017 start and cover about 86 per cent of emissions (including electricity, transportation fuel, industry, large commercial and institutions). The timing is reasonable, and the coverage is good for a first phase. The cap could be much more aggressive, as the proposal would allow for significant growth in emissions between 2015 and 2017. More troubling, the proposal is to give industrial and institutional emitters 100 per cent of their permits for free for the first four years. The intent is in part to avoid "carbon leakage" from emitters shifting production out of Ontario to avoid paying for the fees. But would they do that when the Canadian dollar gives them such a competitive advantage?

RNAO is asking government to:<sup>8</sup>

- Proceed as proposed in 2017 with implementation of cap-and-trade
- Expand the broad coverage and go upstream as much as possible
- Make the granting of free or subsidized emission permits highly targeted and temporary. The current proposal is neither
- Set a more aggressive initial cap (i.e., limit it to 2015 emissions levels)

### **Transit and Active Transportation:**

Automobiles are a major source of pollution, particularly in urban environments. When added to congestion costs, the bill comes to billions of dollars. For example, in the Greater Toronto and Hamilton Area (GTHA), the cost in 2006 alone was estimated at \$3.3 billion to commuters and \$2.7 billion in lost economic opportunities.<sup>9</sup> For many in urban areas, there are limited alternatives to automobile use: public transit may be inadequate and opportunities for active transportation like biking and walking may be limited and unsafe. Approximately \$50 billion over 25 years (or about \$2 billion per year) is needed for transit infrastructure for the GTHA alone (*The Big Move*, the regional transportation plan developed by Metrolinx, an Ontario crown agency that manages GTHA transportation).<sup>10</sup> The Ann Golden panel has pointed the way with its transit infrastructure recommendations, which include \$300 million funding for a Kick-Start Program to deliver immediate visible improvements in service.<sup>11</sup> The medical officers of health for the GTHA have made an important contribution with their report on designing healthier transportation systems and healthier cities.<sup>12</sup> The report concluded that better community design and implementing *The Big Move* could avoid 338 premature deaths per year significantly reduce the staggering cost of congestion. It recommended that Ontario should provide long-term funding, work with Metrolinx and the municipalities to implement and optimize access to transportation options and change its policies to better support active transportation and public transit.

The government has made an important first step with its commitment to fund transit infrastructure in the Greater Toronto and Hamilton Area to the tune of up to \$15 billion over 10 years (about \$1.5 billion per year);<sup>13</sup> more funding for infrastructure, services and active transportation is necessary, as *The Big Move* called for about \$2 billion per year over 25 years. The Move the GTHA Alliance has estimated that the total unfunded costs at \$51 billion, or about \$2.5 billion per year for 20 years. After funding, the next steps are to promote transparency and accountability in governance of project choice and implementation; to support optimal choice of transit and active transportation projects; and to support expeditious implementation of those projects. The government has devoted part of the proceeds of the sale of Hydro One to transit, but this is not a sustainable strategy, as Ontario's Financial Accountability Officer pointed out: it will be a net revenue loser.<sup>14</sup> It is essential that Ontario develop sustainable new streams of revenue. Pricing carbon is one such revenue stream.

RNAO urges the government to take all necessary steps to:

- ensure sufficient dedicated and sustainable revenue sources to pay for a substantial expansion of transit and active transportation, and
- support cost-effective and expeditious delivery of those expansions, implemented by transparent governance and informed expert opinion.

## References:

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<sup>1</sup> US Environmental Protection Agency. (2014). *Atmospheric Concentrations of Greenhouse Gases*. p. 2. Retrieved February 8, 2016 at [http://www.epa.gov/climatechange/pdfs/print\\_ghg-concentrations-2014.pdf](http://www.epa.gov/climatechange/pdfs/print_ghg-concentrations-2014.pdf).

<sup>2</sup> US Department of Commerce. Earth System Research Laboratory. (2015). *Trends in Atmospheric Carbon Dioxide: Recent Monthly Average Mauna Loa CO<sub>2</sub>*. Retrieved February 8, 2016 at <http://www.esrl.noaa.gov/gmd/ccgg/trends/mlo.html#mlo>.

<sup>3</sup> US Environmental Protection Agency. Op Cit. p. 3.

<sup>4</sup> European Environment Agency. (2015). *Atmospheric greenhouse gas concentrations*. February. Retrieved February 8, 2016 at <http://www.eea.europa.eu/data-and-maps/indicators/atmospheric-greenhouse-gas-concentrations-4/assessment>.

<sup>5</sup> RNAO. (2015). Submission on Ontario's Climate Change Discussion Paper 2015 (EBR posting 012-3452). Retrieved February 8, 2016 at [http://rnao.ca/sites/rnao-ca/files/RNAO\\_EBR\\_Submission\\_on\\_Climate\\_Change\\_3.pdf](http://rnao.ca/sites/rnao-ca/files/RNAO_EBR_Submission_on_Climate_Change_3.pdf).

<sup>6</sup> Ontario Ministry of Environment and Climate Change. (2015). *Ontario's Climate Change Strategy*. Retrieved February 8, 2016 at <https://www.ontario.ca/page/climate-change-strategy>.

<sup>7</sup> Ontario Ministry of Environment and Climate Change. (2015). *Ontario's Climate Change Discussion Paper 2015*. p. 6. Retrieved February 8, 2016 at [http://www.downloads.ene.gov.on.ca/envision/env\\_reg/er/documents/2015/012-3452.pdf](http://www.downloads.ene.gov.on.ca/envision/env_reg/er/documents/2015/012-3452.pdf).

<sup>8</sup> Full submission and recommendations at RNAO. (2015). *Cap and Trade Program Design Options: Submission to the Ministry of Environment and Climate Change: EBR Registry Number 012-5666*. Retrieved February 4, 2016 at [http://rnao.ca/sites/rnao-ca/files/Cap\\_and\\_Trade\\_Program.pdf](http://rnao.ca/sites/rnao-ca/files/Cap_and_Trade_Program.pdf).

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<sup>9</sup> Metrolinx. (2008). *Costs of Road Congestion in the Greater Toronto and Hamilton Area; Impact and Cost-Benefit Analysis of the Metrolinx Draft Regional Transportation Plan*. P. 1. Retrieved February 8, 2016 at [http://www.metrolinx.com/en/regionalplanning/costsofcongestion/ISP\\_08-015\\_Cost\\_of\\_Congestion\\_report\\_1128081.pdf](http://www.metrolinx.com/en/regionalplanning/costsofcongestion/ISP_08-015_Cost_of_Congestion_report_1128081.pdf).

<sup>10</sup> Metrolinx. (2008). *The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area*. P. 68. Retrieved February 8, 2016 at [http://www.metrolinx.com/thebigmove/Docs/big\\_move/TheBigMove\\_020109.pdf](http://www.metrolinx.com/thebigmove/Docs/big_move/TheBigMove_020109.pdf).

<sup>11</sup> Transit Investment Strategy Advisory Panel. (2013). *Making The Move: Choices and Consequences*. Retrieved January 14, 2015 at <http://www.vivanext.com/files/TransitPanel/TISAP%20Making%20the%20Move,%20Choices%20and%20Consequences%20Full%20Report.pdf>.

<sup>12</sup> Mowat, D., Gardner, C., Mckeown, D., and Tran, N. (2014). *Improving Health by Design in the Greater Toronto-Hamilton Area*. Retrieved February 8, 2016 at <https://www.peelregion.ca/health/resources/healthbydesign/pdf/moh-report.pdf>.

<sup>13</sup> Ontario Office of the Premier. (2014). *Moving Ontario Forward With Large New Investment*. Retrieved February 8, 2016 at <http://news.ontario.ca/opo/en/2014/04/moving-ontario-forward-with-large-new-investment.html>.

<sup>14</sup> Morrow, Adrian. (2015). Budget watchdog warns Hydro One sale will deepen Ontario's debt. *Globe and Mail*. October 29. Retrieved February 9, 2016 at <http://www.theglobeandmail.com/news/national/hydro-one-sale-to-hurt-not-help-ontarios-bottom-line-report/article27026080/>.