



Protecting our environment to improve health for all

Do you agree that Ontario must meet or exceed its greenhouse gas emission targets?

Will you push for a provincial carbon pricing system that is sufficient for the province to reach its greenhouse gas emission targets, while protecting vulnerable populations?

RNAO believes dedicated and sustainable revenue sources are needed to pay for the operation and expansion of transit and active transportation across Ontario. Do you agree?

Climate change

The evidence is clear: climate change is real, and is caused by human activity that increases the volume of greenhouse gases (GHGs) in the air.

Carbon dioxide (CO₂) concentrations in our air have risen steadily from about 280 parts-per-million (ppm) at the start of the industrial era^{1 2} to 410 ppm as of April 2017. The annual CO₂ increases in 2015 and 2016³ were the largest ever recorded since air measurements began in 1958. Today, the levels of carbon in the air far exceed those at any time in the last 800,000 years.⁴ And when other GHGs besides CO₂ are factored in, one estimate shows there were 70 per cent more GHGs in the air in 2012 than in the preindustrial era.⁵

These dramatic changes to the composition of the Earth's atmosphere have resulted in dangerous changes to the planet's temperature. Measurements from February 2017 showed the average global temperature was 1.5 C higher than in preindustrial times⁶ – the same threshold signatories of the Paris climate agreement said could not be exceeded.⁷ Without strong intervention, average temperatures are predicted to increase another 2.0-4.9 C by the end of the century.⁸ This could produce disastrous outcomes for the entire planet.

Registered nurses (RN), nurse practitioners (NP) and nursing students are concerned about climate change because of its serious environmental and health implications. We are already seeing weather disturbances causing severe population dislocation (e.g., drought in the Horn of Africa, hurricanes in the Caribbean Sea). Climate change also affects the health of Ontarians by contributing to extreme weather events, poor air quality, and the spread of diseases. By fighting climate change, we are not merely protecting the environment; we are protecting people's health. We are also fighting for environmental justice, because the most vulnerable are usually those who have contributed the least to climate change.



Ontario's GHG emissions

Table 1 shows Ontario's GHG emissions profile. It highlights a shift in the source of GHG emissions away from industry and electricity towards transportation, buildings and waste.

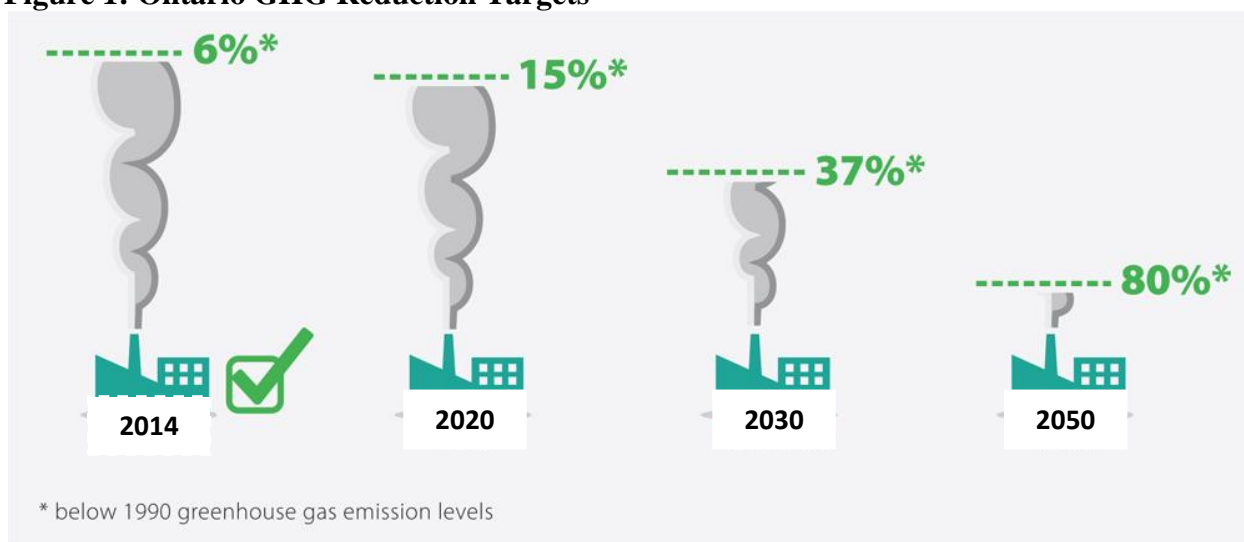
	1990	2013	% of total 1990	% of total 2013
Transportation	45.9	60.2	25%	35%
Industry	64.2	47.7	35%	28%
Buildings	27.9	32.6	15%	19%
Electricity	25.8	10.9	14%	6%
Agriculture	11	10	6%	6%
Waste	7.5	9	4%	5%
Total	182	171	100%	100%

Carbon reduction programs

Ontario has taken significant steps to reduce its carbon emissions, producing multiple benefits. For example, closing the province's coal-fired power plants not only reduced carbon emissions, it also improved air quality. The number of smog days in Ontario went from 53 in 2005 to zero in 2014 and 2015.¹⁰ Another example is the movement towards more walkable and bikeable communities, which reduces emissions from motor vehicles and promotes physical exercise.

As part of these efforts, Ontario has also set ambitious but necessary GHG reduction targets (as demonstrated in Figure 1).^{11 12}

Figure 1: Ontario GHG Reduction Targets





Carbon pricing

Economists generally agree pricing carbon emissions can help meet GHG reduction targets. A strong price signal will promote necessary behaviour changes to support the environment.

The government is currently implementing a cap-and-trade system to price carbon. This involves creating a capped number of permits to emit carbon, in line with the province's emission targets, and auctioning them off.

The 2017 cap-and-trade program covered the bulk of emissions (including electricity, transportation fuel, industry, large commercial and institutions). This is an excellent start, but the 2017 cap was not aggressive enough, as it allowed for significant growth in emissions between 2015 and 2017.

More troubling is that the program gave most large emitters 100 per cent of their permits for free for the first four years (2017-2020) in an effort to compete with other jurisdictions that don't have carbon pricing.¹³ This is unnecessary because most Ontario producers are not emissions intensive and/or do not tend to compete with companies outside Ontario. To the extent that competition from outside Ontario is an issue, the province should pursue all opportunities to level the playing field by working with the federal government to implement border adjustments whereby imports are taxed according to their carbon content.¹⁴

In 2016, Ontario took a step back on carbon pricing by announcing it would take the harmonized sales tax (HST) off residential and small business electricity bills.¹⁵ While financial support must be offered to low income families, it is important to retain the price signal for other users to encourage them to conserve energy.

The government then cancelled \$3.8 billion in renewable energy projects in September 2016.¹⁶ This misguided effort to reduce costs will result in continued reliance on nuclear power. Environmental advocates like the David Suzuki Foundation point out that with nuclear costs rising, it would be cheaper to rely more heavily on renewable energy.

A carbon tax is another way to price carbon, and it is possible that a future Ontario government would go that route. In the event of a carbon tax, RNAO urges that it be set at a rate that helps ensure the province meets its GHG emission targets, and that it be as inclusive as possible. Whatever the carbon pricing mechanism, the revenue must be used to help fund GHG reduction efforts and protect vulnerable populations. Revenues must be managed transparently with strong public oversight.

Transit and active transportation

Automobiles are a major source of pollution, particularly in urban environments. They also cause congestion on our roadways, which costs Ontarians billions of dollars in time, vehicle operating



costs, accidents, emissions, and lost economic opportunities.¹⁷ Yet many people in urban areas have no choice but to drive, with public transit options inadequate and opportunities for active transportation like biking and walking undeveloped or unsafe.

The Big Move is the regional transportation plan developed in 2008 by Metrolinx,¹⁸ which focused on transforming transit in the GTHA. The plan was reviewed in 2013 by the Anne Golden panel,¹⁹ which urged the province to develop substantial new dedicated revenue streams to pay for the next wave of transit infrastructure, and to align the Big Move with the Growth Plan for the Greater Golden Horseshoe. The panel also recommended \$300 million funding for a kick-start program to deliver immediate visible improvements in transit service.²⁰

The Big Move was also supported by the medical officers of health for the GTHA in their 2014 report on designing healthier transportation systems and healthier cities.²¹ The report concluded that better community design and implementing The Big Move could prevent 338 premature deaths every year by increasing physical activity, reducing harmful vehicle emissions and reducing the staggering cost of congestion.²² It recommended Ontario provide long-term transit funding, work with Metrolinx and the municipalities to implement and optimize access to transportation options, and change government policies to better support active transportation and public transit.

The provincial (\$31 billion), municipal (\$1.9 billion) and federal (\$6.5 billion) governments have since stepped up with transit capital funding.^{23 24} This is a significant step forward, but another \$28.8 billion²⁵ is required to complete the construction of the rapid transit expansion for the GTHA under The Big Move. There has also been a recent scaling back of Metrolinx rapid transit plans,²⁶ and a recent report put the annual net funding gap for rapid transit construction and operation at over \$2 billion.²⁷

The government has devoted part of the proceeds from the sale of Hydro One to transit, but this is not a sustainable strategy. As Ontario's financial accountability officer pointed out, it secures some money up-front, but foregoes more in the future, leaving a net loss.²⁸ RNAO cautions against privatizing Hydro One because of this revenue loss, and because of the dangers of turning Hydro One over to private interests.²⁹

RNAO's ENVIRONMENT ASKS

- Whichever carbon pricing system is used, it must do the heavy lifting in reducing GHG emissions, and must be accompanied by a credible commitment to meeting Ontario's GHG targets
- In the case of cap-and-trade, RNAO is asking the province to:^{30 31}
 - Set the carbon cap at a level that would deliver GHG reductions on the targeted schedule or earlier
 - Only link to other cap-and-trade markets when it promotes Ontario emission standards, rather than allowing the purchase of underpriced permits from other jurisdictions
 - Make free or subsidized emission permits highly targeted and temporary - the current program of free permits is neither
- In the case of a carbon tax, if one were to be implemented, RNAO asks that:
 - The tax be set at a level that will provide incentives for carbon users to meet Ontario's GHG emission targets
 - The tax be revenue-positive, to generate targeted revenue
- In either case, RNAO asks the government to:
 - Direct carbon pricing revenues to GHG reduction and to mitigate the impact on vulnerable populations affected by higher carbon prices
 - Manage revenues transparently with strong public oversight
 - Develop a complementary suite of programs targeting all emitting sectors
- On the issue of transportation, RNAO urges the province to take all necessary steps to:
 - Work with federal and municipal partners to ensure dedicated and sustainable revenue sources to pay for ongoing operation and substantial expansion of transit and active transportation in Ontario
 - Support cost-effective and expeditious delivery of those expansions, implemented by transparent governance and informed expert opinion
 - Avoid resorting to public asset sales like the privatization of Hydro One to fund transit expansions



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