

MINISTRY RESPONSES

Appendix C to the ECO's Greenhouse Gas Progress Report 2016, *Facing Climate Change*

The Environmental Commissioner of Ontario (ECO) provided an advance preview copy of the **Greenhouse Gas Progress Report 2016, *Facing Climate Change*** to all government ministries prescribed under the *Environmental Bill of Rights, 1993*. The ECO invited ministries to provide a response to the report to be published online. Six ministries, listed below, choose to provide a response.

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Ministry of Agriculture, Food and Rural Affairs

The Ministry of Agriculture, Food and Rural Affairs (OMAFRA) appreciates the Environmental Commissioner of Ontario's (ECO) thoughtful observations regarding the government's focus on climate change and welcomes the opportunity to respond. OMAFRA is currently working with the agri-food sector, as well as rural communities, to transition to a low carbon economy, and is developing programs identified in the Climate Change Action Plan to assist in this transition.

OMAFRA also has a long history of working to support and improve agricultural sustainability with programs like the Farm Health Check Up, and education partnerships through stakeholder associations.

Healthy agricultural soils are essential to the environmental, economic and social health of our province. They are the foundation of long-term productivity and competitiveness of Ontario's agri-food sector, and food security for the residents of the province and the world's population. To secure that future, OMAFRA is developing a Soil Health and Conservation Strategy the goal of which is to enhance the health of the province's agricultural soils, including its ability to sequester carbon.

Further, OMAFRA's Agricultural Drainage Infrastructure Program ensures that projects do not impact provincially significant wetlands which are most crucial in climate resilience.

As part of the province's commitment to environmental stewardship, the government has supported Ontario farmers to complete more than 23,900 voluntary on-farm Environmental Farm Plan projects, representing a total investment of \$366 million in on-farm improvements since 2005.

As the ECO is aware, OMAFRA recognizes the importance of pollinator health to supporting a strong agri-food sector and a healthy environment. To support managed and wild pollinators, Ontario is implementing a comprehensive Pollinator Health Strategy which includes regulation, financial assistance programs and the development of a Pollinator Health Action Plan. The Plan will address four key stressors on pollinator health including climate change and weather, habitat loss, exposure to pesticides and bee diseases, pests and genetics.

OMAFRA supports sustainable practices which strengthen Ontario's water systems and launched the Great Lakes Agricultural Stewardship Initiative (GLASI) in February 2015, with \$16 million committed through Growing Forward 2 funding over four years. OMAFRA is also working with the Ministry of the Environment and Climate Change (MOECC), to develop a draft Lake Erie Action Plan by early 2018 that will move us towards our target to reduce phosphorus levels in Lake Erie by 40 per cent.

The ECO has expressed concerns regarding expanding corn acreage to increase ethanol production as part of efforts to meet a new renewable fuel standard. However, the complexity of a global corn trading system will not necessarily result in increased corn acreage in Ontario. For example, the sector has been able to sustain the increase in ethanol demand through dramatically increased yields, which have gone from an average of 98 bushels per acre in the 1980s to an average of 159 bushels per acre in the period

2010-2016. While significant increased demand could occur, our focus is to work diligently with the sector to ensure sustainability through best practice, efficiency and innovation.

The ECO recommends giving a higher priority to measuring and reducing methane emissions. To support that goal, OMAFRA is working with MOECC on offset protocol development to capture or reduce greenhouse gases, including methane emissions.

The agri-food sector has demonstrated a steadfast commitment to sustainable production for decades, making environmental improvements and increasing efficiencies throughout the value chain. This is clearly evidenced as Ontario agricultural emissions have remained relatively constant, if not slightly reduced over the last quarter century. Something our sector has achieved while Ontario's population has grown by nearly four million, driving dramatic increases in domestic food production, and also providing for food exports which have seen unprecedented growth, reaching \$14 Billion in 2015.

OMAFRA will continue to work proactively on climate change mitigation and adaptation issues that affect the agriculture, agri-food sector and rural communities.

Ministry of Economic Development and Growth/Ministry of Research, Innovation and Science

Dear Dr. Saxe:

Thank you for sharing an advance copy of the Annual GHG Progress Report 2016. MEDG/MRIS especially welcomes your invitation to comment on the report in advance of its release.

The ministries support your efforts to communicate the urgency of addressing climate change to Ontarians. MEDG/MRIS is committed to working with the Ministry of Environment and Climate Change toward the successful implementation of the Cap and Trade program and the Climate Change Action Plan. As you have acknowledged in Chapter 6 (Climate Change Action Plan) of your report, MEDG/MRIS, through past funding programs, supported a number of projects developing and/or commercializing clean technologies. Our Business Growth Initiative (BGI), introduced during 2016, identifies clean technologies among the sectors within which Ontario small and medium-sized enterprises (SMEs) are to be supported in scaling up into international players.

Some detailed comments focusing on Chapter 6 are presented [below] for your consideration.

Hopefully, you will find our comments to be constructive and informative. If you have any questions or wish to discuss, please feel free to contact my office.

Regards,
Giles Gherson
Deputy Minister

MEDG/MRIS provided the following detailed comments on Chapter 6, section 6.3.3 (Clean Tech):

- On page 115, under Figure 3: Vicky Sharpe is now the former CEO of Sustainable Development Technology Canada
- On page 116, paragraph 2: the report may also be interested in mentioning other support groups for the cleantech sector such as the Advanced Energy Centre, Bioindustrial Innovation Canada (BIC), and the BLOOM Centre for Sustainability. Also, it should be noted that the Ontario Venture Capital Fund and Ontario Emerging Technologies fund are no longer open to applications.
- On page 116, paragraph 4: the report asserts the Ontario Government investments in clean technology innovation “often bias towards research conducted in universities and not within established companies.”
 - This could be considered true with regard to past research funding programs. However, the focus of Ministry support is changing with the implementation of the Government’s cap and

- trade program and MEDG/MRIS commitments made under the Climate Change Action Plan to provide support low-carbon innovation programs and Ontario's cleantech firms.
- It is also important to note that, under BGI, the Small Business Innovation Research Pilot is being launched. Clean technology is among the sectors where SMEs will be provided with opportunities to identify, develop, and apply innovative solutions to major public sector and public policy challenges.
 - Ontario is also highly supportive of industry-academic collaborations. Most recently, Ontario launched the \$74 million TargetGHG program with Ontario Centres of Excellence. This program will support a number of new industry-academic partnership projects aimed at developing innovative new cleantech solutions.
- Page 118, first paragraph: asks whether Greenhouse Gas Reduction Accounts investments in cleantech will be "frustrated by regulatory and procurement barriers to the use of clean tech innovations in Ontario?" We would like to note that the Ontario Government is working on modernizing Ontario's regulatory system as part of the BGI.
 - To help build a smarter regulatory environment for businesses, Ontario is updating its Open for Business strategy to include:
 - A Red Tape Challenge — a public consultation for Ontarians to identify and work with the government to reduce regulatory burdens while protecting public interest;
 - A Regulatory Centre of Excellence to identify regulatory best practices from around the globe and promote them in the province;
 - A Regulatory Modernization Committee to oversee the review of existing regulatory environment;
 - A Government Modernization Fund that will help improve service delivery and regulatory processes for businesses owners; and
 - A Regulatory Burden Reduction Team to address regulatory bottlenecks.
 - The BGI further commits to using Government procurement to enable small and medium-sized enterprises, including those in the cleantech sector, to test innovative products and services.
 - Footnote 47 of Chapter 6 references a KPMG report that was not publicly released.

Ministry of Energy

Dear Ms. Saxe:

RE: Annual GHG Progress Report – 2016

Thank you for providing the Ministry of Energy with an opportunity to respond to your 2016 Annual GHG Progress Report. We welcome and thank you for your advice and will carefully consider your comments as we continue to develop the province's next Long-Term Energy Plan to maintain a reliable supply of clean, affordable energy.

The Ministry appreciates the opportunity to provide the following response to your report.

Electricity Supply

The draft report recognizes that Ontario is moving forward with refurbishment of four nuclear units at Darlington Nuclear Generating Station and six at Bruce Nuclear Generating Station over the next 16 years.

However, the draft report states that “Additional gas-fired generation may be needed during the planned refurbishment of the Darlington and Bruce nuclear facilities between now and 2030... unless the Pickering nuclear facility is permitted to continue operating until the refurbishments are completed” under chapter two.

The Ministry disagrees with the concerns regarding the adequacy of supply. The Independent Electricity System Operator (IESO) has provided assurance that Ontario is well-positioned to meet provincial needs until the mid-2020s, even while nuclear facilities are under refurbishment.

Ontario approved a plan for the Ontario Power Generation (OPG) to complete confirmatory work and seek regulatory approvals for ongoing operation of the Pickering Nuclear Generating Station up to 2024. The IESO's Ontario Planning Outlook (OPO), which includes Pickering operating to 2024, forecasts that there are sufficient resources to meet demand. Furthermore, the OPO forecasts that Ontario's existing, committed and directed resources would be sufficient to meet the flat demand Outlook through to 2035 provided that the planned resources come into service and existing resources continue to operate.

Since the publication of IESO's OPO, Ontario has taken further steps to secure electricity supply and reduce greenhouse gas (GHG) emissions through the recently announced electricity trade agreement with Quebec. Under the agreement, Ontario will import up to 2 terawatt hours annually of clean hydro power from Quebec at targeted times when natural gas-fired generation would otherwise be used.

Cap and Trade Proceeds Recycling

The draft report references the recycling of cap and trade proceeds to electricity consumers and the estimated 3 Mt emission reduction associated with the initiative.

The 3 Mt represents “planned/committed” electricity sector initiatives that were developed following the 2013 Long-Term Energy Plan (2013 LTEP). The forecast amount of greenhouse gas (GHG) emissions savings is based on planned and committed electricity projects that have not yet been funded by electricity ratepayers.

Please note that the 3 Mt reflects reductions relative to the 2013 LTEP rather than the OPO. It is incorrect to use the OPO as the baseline.

The use of cap and trade auction proceeds to lower the cost of clean electricity would make it more competitive with traditionally cheaper fossil fuels, providing an incentive to fuel switch from fossil fuels to electricity consistent with the goals of the Climate Change Action Plan (CCAP).

The decision regarding the final approach for proceeds recycling has not been determined. A number of options are still under consideration. While the ECO’s draft report applies a level of certainty to recycling through the Global Adjustment (GA), this reflects a preliminary approach at the time of the release of the CCAP.

Fuels

The draft report refers to the “recent merger of Ontario’s main natural gas distributors” as a potential market power issue in cap and trade. This is a proposed merger of the parent companies Enbridge Inc. and Spectra Energy. Both natural gas distribution utilities have indicated they will continue to operate in Ontario as discrete entities for the foreseeable future.

The report contains a statement that both the governments of Ontario and the federal government “still subsidize fossil fuels”; however no citation or supporting evidence is offered.

The draft report also states that the Ministry of Energy is subsidizing the expansion of natural gas pipelines. Assuming this is in reference to the government’s initiative to support access to natural gas for communities currently without natural gas service, please note that the Ministry of Infrastructure is leading this initiative, supported by the ministries of Energy and Agriculture, Food and Rural Affairs.

Industrial Conservation

The draft report suggests that the lower than expected results achieved in the first five years of the IESO’s industrial electricity conservation programs illustrate the long time horizon for most industrial conservation projects. It should however be noted that the IESO is continuously looking at ways to reduce turnaround time for industrial electricity conservation projects. Through sector specific consultations, the IESO has been engaging with stakeholders on barriers to implement industrial

conservation projects. The IESO also recently implemented program changes to streamline contractual and approval processes.

Please also note the progress the Industrial Conservation Initiative (ICI) has made to achieve peak electricity demand reductions. It is estimated that ICI delivered ~1,000 MW of reduced peak electricity demand in 2015.

Large Renewable Procurement (LRP) II

The draft report suggests that by suspending the Large Renewable Procurement (LRP) process, the Ministry of Energy has reduced the ability of Ontario's electricity system to keep GHG emissions low and to support clean tech innovation in the province.

The success of the Feed-In Tariff (FIT) and microFIT programs, and the competitive LRP I process, have made Ontario a North American leader in the development, use and manufacture of renewable energy technology and has helped make our electricity supply over 90 percent emissions-free.

Ontario is committed to investing in a clean, modern and reliable electricity system that reduces GHG emissions and provides cleaner air for this and future generations of Ontarians. The province has about 15,900 MW of renewable energy online and a further 2,300 MW contracted and under development.

Ontario continues to procure renewable energy generation under the FIT and microFIT programs. The IESO opened the FIT 5 procurement window on November 7, 2016 and will accept applications until November 25, 2016. FIT 5 has a procurement target of at least 150 MW. The IESO is currently accepting applications to the 50 MW microFIT 2016 target, and microFIT will have an additional 50 MW target in 2017.

As confirmed by the IESO in the Ontario Planning Outlook (OPO), Ontario has a strong supply of reliable power for the foreseeable future and there is no need to procure a large amount of additional power at this time.

Given this strong energy position, Ontario suspended the second round of the LRP II process and the Energy-from-Waste Standard Offer Program. This decision will both maintain system reliability and is expected to save up to \$3.8 billion in electricity system costs relative to the 2013 LTEP forecast.

Importantly, no additional greenhouse gas emissions are resulting from the suspension of LRP II.

In addition, on October 21, 2016, Ontario signed a historic agreement with Quebec for trading electricity, capacity and energy storage to help make electricity more affordable and reliable while continuing to reduce greenhouse gas emissions.

This agreement builds on the Seasonal Capacity Exchange agreement between Ontario and Quebec, which was signed in 2015. It is expected that the finalized agreement will reduce Ontario's electricity system costs by about \$70 million over the course of the agreement and will reduce electricity sector GHG emissions by approximately 1 million tonnes per year.

Ontario is committed to continuing to pursue opportunities with Quebec and other neighbouring jurisdictions, to increase the flexibility and reliability of our electricity system and reduce costs for consumers.

The government is also in the midst of developing an updated and streamlined net metering program, which will support customer choice in generating clean, renewable energy; align with value to the electricity system; and enable innovative technologies and customer-utility relationships.

The continued deployment of small scale renewables will help the province to reduce GHG emissions in support of our Climate Change Action Plan (CCAP). Small scale renewables support key CCAP priorities of low carbon buildings and transportation.

Green Investment Fund (GIF) – Audits and Retrofits

The draft report states that Ontario has not specified any expected emissions reductions associated with the expanded home energy audits and retrofits programs funded by Ontario's Green Investment Fund (GIF).

The Ministry would like to note that Ontario has previously communicated that the GIF-funded enhanced home energy audits and retrofits programs delivered by Union Gas Limited and Enbridge Gas Distribution are expected to reduce greenhouse gas emissions by 1.6 million tonnes over the lifespan of the renovations. References to the expected GHG benefits of the GIF-funded enhanced home energy audits and retrofits programs can be found at:

- February 2016 Ontario News Release (see: <https://news.ontario.ca/mei/en/2016/02/ontario-investing-100-million-to-create-jobs-and-help-homeowners-save-energy.html>)
- October 2016 Ontario News Release (see: <https://news.ontario.ca/opo/en/2016/10/helping-homeowners-cut-energy-bills-with-retrofits-and-renovations.html>).

The GIF-funded enhanced home energy audits and retrofits programs are expected to lead to GHG reductions by helping to make around 37,000 additional homes more energy efficient by providing rebates for home energy audits and retrofits. Additional benefits to homeowners include year over year energy cost savings and upgraded homes with improved values

Home Energy Rating & Disclosure (HER&D)

The draft report recognizes nearly half of the recommendations from the ECO's 2015/2016 Energy Conservation Report have been addressed, in some fashion, by the province's Climate Change Action Plan (CCAP). The Ministry would like to provide further context on the province's plan to pursue HER&D as envisioned in CCAP, rather than implementing HER&D as currently enabled under the Green Energy Act and also recommended by the ECO in the 2015/2016 Energy Conservation Report (page 90).

The Green Energy Act enables a requirement that a home's energy efficiency information be disclosed to a person making an offer to purchase a home. In June 2016, Ontario released its Climate Change Action Plan, which committed to developing a time of listing HER&D program:

“Energy audits would be required before a new or existing single-family home can be listed for sale, and the energy rating will be included in the real estate listing add some wording quote CCAP reference. These audits are intended to be provided free of charge under this plan. The Home Energy Rating and Disclosure program will improve consumer awareness by allowing homebuyers to compare homes by energy rating. It will also encourage uptake of retrofit incentive programs. To meet the expected demand for home energy auditors, Ontario will support development of energy audit training programs and will further consult before launching the program in 2019.” (page 29 of Climate Change Action Plan)

This Fall, the Ministry began engaging with key stakeholders and government partners to help inform the development of a proposed implementation plan for a HER&D program.

The Ministry’s consultation activities will help inform the need for potential regulatory and legislative amendments for a HER&D program. The Ministry estimates the regulatory and legislative amendments process could take approximately one year to complete.

The Ministry also recognizes the need to prepare Ontario for a province-wide program. Prior to program launch, the Ministry plans to undertake education and awareness activities to support successful program roll-out.

Thank you again for your report and opportunity to provide additional information.

Sincerely,

Serge Imbrogno
Deputy Minister

Ministry of the Environment and Climate Change

Re: Annual Greenhouse Gas Progress Report 2016


Dear Dianne,

Thank you for providing the Ministry of the Environment and Climate Change with the opportunity to review and comment on your Annual Greenhouse Gas Progress Report.

The ministry is extremely proud of the progress we have made in the past year to advance Ontario towards a prosperous, low-carbon economy and a thriving environment that sustains healthy ecosystems and vibrant communities for all generations. The Climate Change Mitigation and Low-carbon Economy Act, cap and trade program, and Climate Change Action Plan form a comprehensive framework that will drive meaningful action in the coming years and ensure Ontario continues to lead the fight against climate change.

As we move forward with implementing this ambitious agenda, the ECO's advice is more valuable than ever. We appreciate the recommendations provided and look forward to working closely with your office in the coming years.

The ministry's response to each of the recommendations provided in the report can be found in the attached table.

As always, the ministry values your contribution to the discussion of climate change policy in Ontario, and we will carefully consider the advice in your report.

Sincerely,



Paul Evans
Deputy Minister
Ministry of the Environment and Climate Change

MOECC's General Chapter Comments and Specific Responses to the ECO Recommendations

CHAPTER 1: Why Act Now?

CHAPTER 2: Ontario's Carbon Footprint – Where are we now?

General comments

The government agrees with the Environmental Commissioner of Ontario (ECO) that climate change is an urgent problem requiring global solutions. That is why Ontario is taking strong action to reduce greenhouse gas emissions (GHG) and develop a prosperous, low-carbon economy. Building on the leading actions already undertaken – including phasing out coal-fired power, one of the largest emission reductions undertaken in North America – the province has enacted the Climate Change Mitigation and Low-carbon Economy Act, implemented a cap and trade program and released an ambitious five-year Climate Change Action Plan. Ontario has worked with partners around the world to accelerate sub-national and national action on climate change and worked to develop a strong pan-Canadian framework to reduce emissions, spark innovation and build resilience. The province also agrees with the ECO that everyone has a role to play in climate change action. The Climate Change Action Plan is designed to support Ontario businesses and households with more climate-friendly choices and assistance in adopting low-carbon technology.

Ontario appreciates the ECO's clear explanation of the significant challenges climate change poses to our province. By 2050, it is estimated that some locations in southern Ontario could experience a 3.5°C rise in mean summer temperature, but it's in winter that temperature increases would be the greatest: parts of southern Ontario could see a 4°C rise and in the province's most northern reaches, winter temperatures could rise by up to 9°C.

The effects of climate change in Ontario are already being felt. In July 2013, a severe rainstorm dropped 125 mm of rain in just a few hours over some parts of Ontario, leading to flooding and property damage estimated at \$940 million in Toronto alone — the most expensive natural disaster in Ontario history. In December of that same year, a severe ice storm resulted in \$200 million of property damage. In 2012, Ontario experienced a March so warm it led to early blooming of apple trees, followed by a severe frost in May that caused the loss of 80% of the apple crop.

The effects on infrastructure are equally apparent and costly: roads that buckle in severe heat, water mains that overflow in severe rain, hydro lines coated with heavy ice that snap and leave tens of thousands of Ontario families and businesses without power.

Climate change also affects Indigenous communities, jeopardizing First Nations and Métis ways of life, health, territories and resources. These communities depend on natural ecosystems for food supplies, and on activities such as fishing, hunting, harvesting and trapping for economic opportunities that are now being threatened by a changing climate.

The province understands the importance of fighting climate change and we are doing our part. We have already made great strides, but we know more can be done to leave a legacy of a healthy planet for our children and our children's children.

CHAPTER 3: Ontario's Carbon Footprint – Beyond the Reported Numbers

General comments

Methane is a potent greenhouse gas covered by Ontario's cap and trade program. To facilitate linking, Ontario uses the same global warming potential value for methane as is used in Quebec and California. Ontario will be working with our WCI partners with an aim to updating this parameter in the next compliance period (i.e., post-2020). For the purposes of accounting and reporting, the 100 year GWP value is the international standard for the measurement of methane and other greenhouse gases in carbon dioxide equivalents. Ontario is consistent with that standard.

ECO Recommendation	Ministry Responses
<p>1. The provincial government should report regularly to Ontarians on the province's entire climate change footprint, not only on Ontario's direct GHG emissions as calculated pursuant to international guidelines.</p>	<p>The government agrees that climate change is a global problem requiring global solutions, which is one reason Ontario is promoting cap and trade and low-carbon clean technology among our major trading partners.</p> <p>At present, consumption-based inventories are not common practice and require significant amounts of data not readily available. Ontario will continue to follow advances in international approaches to GHG accounting and will bring forward the ECO's recommendation to federal and provincial counterparts to investigate the possibility of developing consumption based accounting as a complement to the current international norms.</p> <p>In addition to work around reporting, Ontario has also committed through the Climate Change Action Plan to better understanding how land use and resource management in the province relates to greenhouse gas emissions. For example, Ontario will be working to develop a land use carbon inventory that will allow the province to assess the potential of agriculture, forestry and other land uses, such as wetlands and grasslands, to emit, remove and store carbon.</p>
<p>2. The provincial government should give a higher priority to reducing Ontario's methane and black carbon emissions.</p>	<p>Ontario agrees with the ECO that action needs to be taken to reduce black carbon. That is why the province has already taken significant action in this area through the coal closure, implementation of the greener diesel regulation and numerous actions focused on air quality management such as the NOx and SOx trading system. The Climate Change Action Plan will build on this work through initiatives focused on reducing emissions from industrial sources, heavy vehicles, and through a woodstove exchange program. For example, preliminary estimates for the woodstove exchange program estimate emissions of fine particulate matter (including black carbon, a short lived climate forcer) would be reduced by approximately 18 million kg by 2020.</p> <p>As it relates to methane, the government also agrees with the ECO that strong action needs to be taken on reducing methane, given its high global warming potential. One key action that the province has already taken is to ensure that methane from larger landfills is captured and destroyed.</p> <p>The Climate Change Action Plan builds on the commitment to further reduce emissions from the waste sector through the implementation of a proposed strategy for a Waste-Free Ontario and proposed organics management plan and actions to provide long-term soil health that will maximize long-term carbon storage while protecting long-term productivity. The Ministry of Agriculture, Food and Rural Affairs is also working closely with the Ministry of the Environment and Climate Change on offset protocol development relevant to agriculture.</p>

CHAPTER 4: Cap and Trade

General comments

The government appreciates the ECO's assessment that "in general, the cap and trade system is reasonable and well-designed, balancing the urgent need for GHG reductions with the cost to Ontario citizens and businesses and the need to build public and non-partisan support." Ontario is committed to implementing the cap and trade program as simply as possible for stakeholders while maintaining the integrity and rigour essential to a well-functioning market. The province is also committed to working with stakeholders on the design of the program for future compliance periods. This work is underway and it will involve elements such as allocation methods, assistance levels and a re-examination of the thresholds for applications to voluntarily participate in the program as a capped emitter.

Forecasts indicate that Ontario is likely to be a net purchaser of allowances in the first compliance period. This supported the government's decision to develop and release our Climate Change Action Plan. Actions under the action plan will result in more reductions in Ontario, which will decrease the demand for allowances and credits, including those from other jurisdictions. Also, the recently ratified Paris Agreement includes provisions for internationally transferred

reductions, which is a recognition that jurisdictions may voluntarily participate in emissions trading and that national reporting frameworks need to account for such trading. Ontario's approach is consistent with the Paris Agreement which has been ratified or otherwise approved by Canada and the United States. In March 2016, both countries agreed to "work together to support robust implementation of the carbon markets-related provisions of the Paris Agreement. The federal governments, together and in close communication with states, provinces and territories, will explore options for ensuring the environmental integrity of transferred units, in particular to inform strong INDC accounting and efforts to avoid "double-counting" of emission reductions."

ECO Recommendation

Ministry Responses

3. Ontario should be more transparent about which entities are receiving free allowances, and why.

Ontario distributes allowances free of charge to prevent carbon leakage (the movement of the production of goods to another jurisdiction in response to climate change policies). While it may reduce emissions in Ontario, carbon leakage, ultimately harms both the environment and the economy, since the emissions occur anyway and Ontario loses jobs and economic activity. As the ECO rightly notes, "there is no benefit to the global atmosphere when emissions are simply shifted from one jurisdiction to another."

Allocation of allowances free of charge is, in the first compliance period, partly a transitional approach to allow large emitters time to adjust to the imposition of a price on carbon. The conversation with stakeholders about future compliance periods began in August 2016. One of the key design features being discussed is the proportion of allowances to be distributed free of charge.

Ontario is committed to ensuring maximum transparency around its cap and trade program while respecting the privacy and competitiveness concerns of businesses in the province. Consultations on allocations methods were extensive, with over 500 comments received on the policy proposal earlier this year. The Methodology for the Distribution of Ontario Emission Allowances Free of Charge gives a great deal of detail on the bases for the allocation of allowances, and it is publicly available.

4. Ontario needs a contingency plan for the possibility that California's cap and trade program may not continue to operate in its present form, and/or may not be reauthorized after 2020.

Greenhouse gas emissions are global pollutants; Ontario derives the same environmental benefit regardless of where reductions occur.

Ontario is committed to cap and trade and is confident California's program will exist well into the coming decades. Ontario will be negotiating the terms of linking with our Western Climate Initiative partners in 2017.

<p>5. The government must prioritize the approval of offset protocols to enable the creation of a timely and ample supply of high-quality Ontario offsets.</p>	<p>The government completely agrees with the Environmental Commissioner on the importance of offset protocols. Offset credits will be a key compliance option for Ontario emitters. They will also extend the incentive to make low-cost reductions to entities outside the scope of the cap and trade program to ensure all Ontarians benefit, including those in rural and northern areas. That is why Ontario initiated a project in September, in collaboration with Quebec, to adapt existing, high quality protocols for thirteen different project types. The protocols will give proponents in Ontario and other provinces the clarity to begin projects that reduce emissions or remove greenhouse gases from the atmosphere.</p> <p>Offset credits created in Ontario will decrease the flow of funds out of the province for allowances. The project is underway, and the first protocols should be ready early in 2017, with the majority of the 13 project types having complete protocols for use across Canada by early 2018. The protocols will embody the rigorous criteria set out in the Western Climate Initiative's Offsets System Essential Elements Final Recommendations (released July 2010).</p> <p>The ministry has also posted in November a regulatory proposal for the offset system that provides additional clarity on the criteria that will apply to all offset credit projects. Considering the comments on that document, the regulatory proposal will form the basis of amendments to the cap and trade regulations.</p>
<p>6. Ontario should follow the UK example and set legally binding carbon budgets well in advance, within which a cap and trade system would operate.</p>	<p>The <i>Climate Change Mitigation and Low carbon Economy Act, 2016</i>, sets out Ontario's greenhouse gas emissions reduction targets in legislation for 2020, 2030 and 2050. The cap and trade program has been identified as the main tool to achieve these targets. Actions in the Climate Change Action Plan will support Ontario businesses and households in responding to the carbon price and making the reductions in Ontario.</p>

CHAPTER 5: Spending the Money Well

General comments:

The Ministry appreciates and shares the Environmental Commissioner's desire to ensure that the proceeds of the Cap and Trade program are well spent and disbursed in a transparent and equitable manner.

Under the Climate Change Mitigation and Low Carbon Economy Act, all proceeds from Ontario's cap and trade program would be deposited into a new Greenhouse Gas Reduction Account. This account can only be used to fund projects and initiatives aimed at reducing emissions.

To ensure accountability to the public, the act requires an annual report on funds flowing in and out of the Greenhouse Gas Reduction Account, as well as a description of supported initiatives.

ECO Recommendation	Ministry Responses
<p>7. The Ministry of the Environment and Climate Change should publicly adopt a complete set of evaluation criteria for proposed GGRA expenditures and an explicit policy on how it allocates GGRA funds between competing objectives.</p>	<p>Ontario's Treasury Board makes the final funding decisions on Greenhouse Gas Reduction Account (GGRA) funds. The Minister of the Environment and Climate Change must provide a review and evaluation of initiatives to Treasury Board prior to the release of GGRA funding. The Minister of the Environment and Climate Change's review is based on the detailed evaluation criteria taken from the Climate Change Strategy, action plan and the legislation.</p> <p>The evaluation criteria Ontario developed for GGRA funding are comprehensive and designed to meet legislative requirements. This will ensure proper controls are in place for the use of cap and trade proceeds so that Ontario is able to reduce GHG emissions, create jobs and help households and businesses shift to a low-carbon economy.</p> <p>The Ministry of the Environment and Climate Change must make a report about the Minister's evaluation of initiatives that receive GGRA funding available to the public annually and will include a summary of the criteria that are used in this evaluation in the annual report.</p>
<p>8. The Greenhouse Gas Reduction Account should only be used to pay for new or expanded initiatives that will directly produce emission reductions on top of those that will be created by existing programs, by the cap and trade program and by initiatives already funded through the Greenhouse Gas Reduction Account.</p>	<p>The Climate Change Mitigation and Low-carbon Economy Act, 2016 allows for GGRA funds to be used to fund initiatives that reduce or support the reduction of greenhouse gas emissions. For example, expanding existing projects and/or programs that reduce or support the reduction of GHGs may be considered for funding from the GGRA. What is important is the demonstration that funding such initiatives achieves GHG reductions.</p> <p>The Ministry considers the actions described in the Climate Change Action Plan and the cap and trade program to be complementary.</p> <p>The Ministry will also be developing an updated baseline from which to measure the effectiveness of both the cap and trade program and the Action Plan in meeting Ontario's targets.</p>
<p>9. The government should keep detailed records of the justification for each Greenhouse Gas Reduction Account expenditure, in a form that can readily be provided to the Legislative Officers. The MOECC Minister's annual public report on the GGRA should include:</p> <ol style="list-style-type: none"> 1. A summary of the justification for each initiative funded, including: <ol style="list-style-type: none"> a. the name and sector of the recipient; b. the amount received; c. any matching funds; d. the anticipated additional GHG reductions; e. how and when it will achieve these reductions; and f. the cost-effectiveness of the reductions; and g. other material health, safety, environmental, social and economic consequences of the initiative; 2. Analysis of the total funds spent, by sector; 3. Analysis of the total GHG reductions and other public benefits achieved, by year and by sector, as a result of the GGRA investment; 4. Administrative costs funded, by agency/ ministry; 5. How long term transformative change is being balanced with the need for short term reductions; and 6. Recommendations for improvements for subsequent years. 	<p>As a requirement under the legislation, the Minister of the Environment and Climate Change must provide a review and evaluation of an initiative before any amounts are paid from the greenhouse gas reduction account in respect of that initiative. This review must consider a number of factors including the initiative's potential greenhouse gas reductions and its relationship to the action plan.</p> <p>The evaluation criteria Ontario developed for GGRA funding are comprehensive and designed to meet legislative requirements. This will ensure proper controls are in place for the use of cap and trade proceeds so that Ontario is able to reduce GHG emissions, create jobs and help households and businesses shift to a low-carbon economy.</p> <p>As outlined under the Climate Change Mitigation and Low-carbon Economy Act, the government is required to allocate proceeds in a transparent and accountable way. This includes annual progress reporting on the action plan, on the Minister of the Environment and Climate Change's evaluation of funded initiatives, and on the funds tracking in and out of the Greenhouse Gas Reduction Account.</p> <p>The report about the Minister's evaluation of initiatives that receive GGRA funding will include a summary of the criteria that are used in this evaluation.</p>

CHAPTER 6 : Climate Change Action Plan

General comments:

The government appreciates the recognition from the Environmental Commissioner of the broad scope and level of ambition in the Climate Change Action Plan, and the identification of “valuable initiatives with good longer-term emission reduction potential...”

Ontario’s Climate Change Action will help Ontario fight climate change over the long-term. Ontario will be taking action across the economy to reduce greenhouse gas emissions, and help the province move to a prosperous low-carbon economy. It is important to note that the market should drive the lowest cost reductions with cap and trade proceeds and actions in this plan helping address more costly reductions typically associated with deep, long-term energy transitions.

The Climate Change Action Plan establishes the framework for emission reductions in Ontario that will complement and support the cap and trade program. Ontario continues to work on detailed program design associated with implementation of the actions under the plan. As this work is finalized, with engagement of stakeholders and partners where appropriate, the plan will be updated to reflect any changes in proposals or greenhouse gas and cost estimates.

ECO Recommendation

Ministry Responses

10. In developing the Green Bank, the government should:
- follow the four OECD principles,
 - require it to achieve additional emission reductions in Ontario, and;
 - ensure accountability and transparency for its financial and emissions reduction results.

Ontario intends to establish an organization to rapidly deploy climate change solutions, including incentives and financing, as a key delivery agent for the Climate Change Action Plan. The organization will support households, business and industry make the transition to a low carbon economy by laying the foundation for long-term emission reductions in the province, thereby complementing the proposed cap-and-trade program.

The Ministry of the Environment and Climate Change is currently leading design of the organization and is engaging with key stakeholders, including future clients and those that will be installing low-carbon technologies, on governance structure and program delivery. As part of this process, the ministry has undertaken analyses and jurisdictional scans for similar institutional models, which have included reviewing the OECD’s advice and other materials. The ministry is also working with a third-party consultant to examine potential programs that could be offered through the organization that would deliver significant greenhouse gas emission reduction and would build on existing conservation efforts.

The ministry appreciates the Environmental Commissioner’s recommendations on the development of the organization and will work to incorporate them into the design of the new entity.

<p>11. The government should do more to discourage, and to make unnecessary, travel by petroleum-fueled vehicles. It should also stop supporting projects and processes that encourage urban sprawl.</p>	<p>The Ministry of the Environment and Climate Change agrees that addressing emissions from transportation is a priority of the Climate Change Action Plan.</p> <p>The Action Plan takes a complete approach to enhancing Ontario's entire low-carbon transportation system. The plan includes actions that: reduce emissions from the existing vehicle fleet on Ontario's roads today, promote adoption of the non-polluting vehicles now and in the future, support cycling and transit; and address the movement of goods, including by truck and rail. This comprehensive approach will put Ontario on track to reduce transportation-related emissions while also helping to reduce the fuel costs of moving people and goods.</p> <p>The Province is making significant transit investments that are helping move more Ontarians out of the cars. Through the <i>Moving Ontario Forward</i> plan, the Province is investing \$31.5 billion over 10 years for transit, transportation and other priority infrastructure projects across the province. This includes about \$16 billion in funding for priority rapid transit projects in the Greater Toronto and Hamilton Area (GTHA), including the GO RER program, the Hurontario Light Rail Transit (LRT) project in Mississauga and southern Brampton, a new LRT project in the City of Hamilton, and ongoing planning and design work for projects in the Next Wave of <i>The Big Move</i>, Metrolinx's Regional Transportation Plan for the GTHA. <i>Moving Ontario Forward</i> also includes about \$15 billion for critical infrastructure outside of the GTHA, including transit infrastructure to support extension and expansion of GO Rail service to Niagara and Kitchener. In addition to <i>Moving Ontario Forward</i>, \$16 billion worth of transit expansion and improvement projects are already complete, or being implemented, in the GTHA, including the Union Pearson Express, York VIVA BRT, Eglinton Crosstown LRT, Union Station Revitalization, and Toronto-York Spadina Subway. The province is also supporting municipal transit projects outside the GTHA, including the Ottawa LRT and rapid transit in Waterloo. In addition, sharing of provincial gas tax revenues with municipalities through the Gas Tax Program contributes to local public transit improvements, helping to get people out of their cars and onto public transit, easing traffic congestion while keeping our air clean.</p> <p>In May 2016, the Province released proposed changes to the Growth Plan for the Greater Golden Horseshoe, Greenbelt Plan, Oak Ridges Moraine Conservation Plan and Niagara Escarpment Plan and the consultation period ended on October 31, 2016. Input received will inform any revisions to the proposed plans, which we expect to release in early 2017. The proposed changes will improve the land use planning framework in the Greater Golden Horseshoe and contain new provisions to support climate change mitigation and adaptation, and the Provincial Climate Change Strategy and Action Plan, including building more compact and complete communities that support transit and active transportation, and strengthening protection of agricultural land, natural areas and water such as requirements to develop stormwater management plans.</p>
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<p>12. Government support for clean tech from the GGRA should have a direct, substantial and transparent connection to additional GHG reductions.</p>	<p>The government agrees with the Environmental Commissioner that GGRA support for clean tech must have a strong connection to additional GHG reductions. Programs funded through the GGRA will be required to track and report on progress in reducing and supporting the reduction of GHGs. Specific programs are under development but will be designed to focus on low-carbon clean technology.</p> <p>Ontario is already investing in low-carbon clean tech through the \$74 million Target GHG program being delivered by Ontario Centres of Excellence as part of the Green Investment Fund. This program will encourage large industrial plants to adopt leading-edge technology and supporting Ontario's entrepreneurs in developing creative new solutions.</p>
<p>13. Government should reduce approvals and procurement barriers to use of low-carbon clean tech innovations within Ontario, especially those that have been developed with public funds.</p>	<p>The government agrees with the Environmental Commissioner that we must minimize barriers to the adoption of low-carbon technologies. The Climate Change Action Plan specifically identifies those actions in industry and business will complemented by a modern and efficient approval process that would reduce time and costs involved in deploying low-carbon technologies.</p> <p>In addition, the Climate Change Action Plan also identified that the government will support low-carbon options through updates to our own procurement policies, and through an investment of up to \$75 million to showcase Ontario's low-carbon clean tech in public properties and buildings.</p>
<p>14. Subsidizing electricity rates should not be considered an acceptable use of GGRA funds.</p>	<p>Ontario has taken significant actions in the last few years to reduce emissions from the electricity sector, including phasing out coal, promoting increased use of renewable energy, and supporting electricity conservation. These actions have, and continue to be supported by Ontario ratepayers.</p> <p>The Ministry of Energy is working on the development of a mechanism that will reduce greenhouse gas emissions as required by the Climate Change Mitigation and Low-carbon Economy Act, while mitigating impacts on ratepayers.</p>
<p>15. A Renewable Fuel Standard regulation should include a low carbon performance standard. It should only incent the production of biofuels that are grown sustainably, without damaging natural ecosystems or biodiversity, and while building up soil carbon.</p>	<p>The ministry agrees with this recommendation, and has already incorporated lifecycle carbon performance in the greener diesel regulation.</p> <p>The ministry will be taking steps to address the recommendation in both stakeholder consultations and the design phase of the Renewable Fuel Standard. In this work, Ontario will be building on and expanding our existing renewable fuels framework by taking a modernized approach to achieving the target of a 5% reduction in GHG emissions from gasoline by 2020. Consideration will be given with regards to achieving the target in a flexible, transparent, and environmentally sound way.</p>
<p>16. The government should make public all data necessary to assess the effectiveness and cost-effectiveness of its emission reduction programs.</p>	<p>The Climate Change Mitigation and Low-carbon Economy Act establishes requirements that will provide for public transparency of Ontario's actions to reduce greenhouse gas emissions. For example, the act requires annual progress reports, including reports on implementation of the Climate Change Action Plan, use of cap and trade proceeds from the Greenhouse Gas Reduction Account, and a report on the Minister's evaluation of funding requests from the GGRA. The Ministry of the Environment and Climate Change will consider the ECO's recommendation in the development of these reports.</p>

Ministry of Transportation

Dear Dr. Saxe:

Thank you for the opportunity for the Ministry of Transportation (MTO) to review and respond to the 2016 ECO Annual GHG Progress Report. The ministry appreciates the opportunity to provide the following response to your report.

MTO is committed to doing its part to support the province's Climate Change Strategy and 5-year Climate Change Action Plan. The ministry will be rolling out a suite of programs and policies to further support green technology, transition to lower-emitting vehicles on Ontario's roads, and create more opportunities for cycling in the province, among other initiatives. As we develop and implement these measures, MTO will continue to collaborate and consult with stakeholders, businesses, and industry partners.

Transportation and Land-use Planning

Emissions from the transportation sector have remained relatively stable since 2005, in part due to transit investments, the introduction of ethanol regulations, growth planning, and improved fuel economy standards. However, as you acknowledge in your report, there has been an increase in vehicle-kilometres travelled resulting from growth and development patterns and how people in Ontario have chosen to live, work, and play.

In addition to current land-use planning measures, the Climate Change Action Plan outlines several transportation-related actions which support good community planning including supporting municipal congestion management plans and providing grants for municipalities and employers to implement transportation demand management plans.

As the province moves forward with implementing the Climate Change Action Plan over the next several years, MTO will work with ministries, municipalities and stakeholders to strengthen climate change policies in the municipal land-use planning process, reduce congestion and improve economic productivity.

Multi-modal Transportation

MTO is collaborating with other ministries and stakeholders to prepare long-range, multi-modal transportation plans and strategies to provide options and support more efficient movement of people and goods. Currently, MTO has two such plans under development, in the Greater Golden Horseshoe and in Northern Ontario. Both of these plans will consider climate change in their development and recommendations for resilient transportation systems and mitigation of GHG emissions understanding the distinct geographical and socio-economic pressures of the regions.

Transit Investments

As you note in your report, the Climate Change Action Plan allocates funding to GO Regional Express Rail (RER), the province's plan to provide faster and more frequent service on the GO Transit Rail network with electrification on core segments, including the Union-Pearson (UP) Express. In addition to this funding, the Action Plan includes many measures that support increased transit mode share, such as municipal and employer transportation demand management plans, cycling infrastructure, and the various land-use planning actions which encourage compact, mixed-use communities.

Since 2003, the Province has invested more than \$21.8 billion in public transit in Ontario, including more than \$10.8 billion in GO Transit. The Province also supports municipal transit through the Gas Tax Program, a guaranteed source of funding for eligible municipalities to improve and expand their transit service. Since 2004, the Province has committed \$3.4 billion to Ontario municipalities through the Gas Tax Program. Further, through the *Moving Ontario Forward* plan, the province will make \$31.5 billion available over 10 years for investments in priority infrastructure projects across the province, including \$13.5 billion for GO RER.

Black Carbon

MTO acknowledges the report's analysis of the contribution of black carbon (soot) from the transportation sector. The actions outlined in the Climate Change Action Plan are primarily aimed at reducing GHG emissions; however, many initiatives will also result in the reduction of emissions of black carbon from transportation. For example, green commercial vehicle incentives, low-emission fueling infrastructure, and the electric school bus pilot will all address transition from soot-producing fuel. Combined with the federal standards for heavy vehicle emissions, the transportation sector is making good progress on reducing emissions of black carbon.

Adaptation

As noted in your report, the impacts of climate change are already here. MTO recognizes the importance of planning for the effects of climate change and building resilience into the ministry's operations – both now and in the long-term.

MTO actions to address adaptation include: researching climate change impacts to ensure that transportation infrastructure can remain operational through extreme weather events; planning and designing the province's transportation network for resilience; and, assessing the effectiveness of planning and design tools. MTO is also working with other ministries on Ontario's plan for adapting to climate change and becoming more resilient which will be released in 2017.

Thank you again for the opportunity to review your report and provide a response.

Sincerely,

Stephen Rhodes
Deputy Minister of Transportation

Treasury Board Secretariat

Chapter 5

Section: 5.3.1 (Choosing what to fund)

Page: 94

Current statement: The Minister's evaluation must be provided to Treasury Board, but is not required to be available to the public; the only public reporting requirement is that the Minister report annually on the evaluations that have been submitted to Treasury Board. The lack of detailed, transparent criteria for eligible initiatives and expenditures could threaten the cap-and-trade program's integrity and effectiveness and open the door to using cap-and-trade proceeds as general public funds.

TBS Response: Even before the publication of the annual report, some of these details will be made public through the tabling of the Estimates.

Chapter 6

Section: 6.3.3 (Clean Technology) – 4. Will the effect of a GGRA investment in clean tech be frustrated by regulatory and procurement barriers to the use of Ontario clean tech innovations in Ontario?

Page: 118

Current statement: Public sector procurement rules can also impede uptake of innovative technology, by preventing public sector tenders from stipulating levels of performance that only one or two companies can meet.⁴³⁵ It will be important for the government to reduce these barriers in order to increase the pace of GHG emission reductions, and to allow Ontario low-carbon clean tech companies to sell their innovations domestically.

TBS Response: The Procurement Directive allows the government to stipulate the performance requirements necessary to meet the government's business needs.
