



Climate Change Action Plan
Bioheat Community of Practice - Workshop

March 7, 2017

What is CCAP?

- A 5-year plan (2016-2020) to reduce greenhouse gas (GHG) emissions in Ontario.
- It sets out specific measures the province will undertake to:
 - Complement the cap and trade program;
 - Help meet its 2020 emissions reduction target*; and,
 - Establish a foundation to meet longer term targets**.
- It outlines more than 90 “Actions Items”, in eight (8) areas (listed below), many of which are multi-year commitments:
 1. Industry and business
 2. Buildings and homes
 3. Transportation
 4. Land use planning
 5. Research and development
 6. Indigenous communities
 7. Carbon neutral government
 8. Productive and sustainable society
- It is a government-wide undertaking, with multiple ministries ‘minuted’ to lead or co-lead Action Items (e.g., MTO; Energy; MRIS; OMAFRA).

* 2020 target – 15% below 1990 levels

** 2030 target – 37% below 1990 levels; 2050 target – 80% below 1990 levels

The Evolution of CCAP

Climate Change Strategy (November 2015)

- Sets out the government's vision to reduce GHG emissions to 80% below 1990 levels by 2050, and identifies the need to:
 - Reduce emissions from key sectors, including transportation and buildings
 - Demonstrate government collaboration and leadership
 - Achieve resource efficiency and productivity
 - Support industry and innovation
 - Support adaptation and resilience

Green Investment Fund (November 2015)

- A down payment of \$325M announced in 2015-16 on the cap and trade program to support a variety of initiatives
 - For example, energy retrofits in homes, new investments in electric vehicle infrastructure, help businesses reduce emissions.

The Evolution of CCAP (cont'd)

Climate Change Mitigation and Low-carbon Economy Act (passed May 2016)

- The Act establishes a long-term framework for climate action, sets out the framework for the cap and trade program, and ensures accountability and transparency. Specifically, the Act:
 - Enshrines GHG emissions targets in a statute for 2020, 2030 and 2050.
 - Establishes the Greenhouse Gas Reduction Account (GGRA).
 - Requires an annual report on the funds in and out of the GGRA.
 - Sets out the types of initiatives that can be funded from the GGRA.
 - Prescribes content that must be included in each climate change action plan including:
 - Timetable for implementing each action;
 - Estimated reduction in greenhouse gas resulting from each action;
 - Assessment of the cost per tonne of the potential reduction in greenhouse gas; and,
 - If an action could be funded, in whole or in part, from cap and trade program proceeds, the estimated amount of any such funding.

Climate Change Action Plan (June 2016)

- The 5-year strategy that identifies policies and programs to achieve near and mid-term GHG emission reduction targets.

1. Industry and Business

- **Help industries adopt low-carbon technologies** – primarily through the green bank, which will help small and large industries:
 - Identify available government programs;
 - Identify available financial supports;
 - Achieve economies of scale through project aggregation;
 - Calculate returns on investment;
 - Secure financing.
- **Help the agri-food sector adopt low-carbon technologies** – by expanding the use of innovative technologies and practices to reduce emissions in the food and beverage-processing sector and retrofitting agricultural facilities such as greenhouse and grain dryers.

2. Building and Homes

- **Existing Buildings** – funding for energy retrofits for social housing, schools, hospitals, post-secondary institutions, heritage buildings, and in multi-tenant residential buildings, rebates for low-carbon technologies in homes, wood stove replacement program, and maximizing the degree to which new incentive programs will provide an increased benefit to low-income households.
- **New Buildings** – changes to the Building Code to increase energy efficiency now, a trajectory for achieving net zero energy efficiency in small buildings by 2030, rebates for new homes built with zero or near zero emissions.
- **Energy Use** – including prioritizing GHG reductions in the next Long-Term Energy Plan, establishing renewable natural gas requirements, expanded Green Button initiative, directing a portion of proceeds back to ratepayers, and developing options to reduce the impact on residential tenants of increased energy costs from cap and trade.
- **Market Readiness** – Home Energy Rating and Disclosure requirements, support for labour training, and expanded curricula for training and credentialing in the low-carbon buildings sector.

3. Transportation

- **Lower-carbon fuel** – including boosting renewable content, assisting fuel distributors and piloting waste and agricultural methane as a fuel source
- **Electric Vehicles** – through rebates for EVs and home charging stations, HST relief, free overnight charging, older vehicle replacement program for low- and moderate-income households, significant investment in public charging stations, EV-ready homes and workplaces, showcase facility for EVs, and Electric and Hydrogen Vehicle Advancement Program.
- **Cycling and walking** – through accelerating Ontario’s Cycling Strategy, improved commuter cycling networks, increased cycling facilities and bike parking, and requiring cycling infrastructure be considered for all road and highway construction projects.
- **Low-carbon trucks and buses** – a low-carbon fuelling infrastructure initiative, a program to encourage the purchase of low-carbon commercial vehicles, and finding ways to increase the use of short-line railways.
- **Transit and Transportation Demand Management** – GO Regional Express Rail and funding for transportation demand management plans for municipalities and large employers.

4. Land Use Planning

- **Climate Change Policies and Practices** – including empowering municipalities, prioritizing climate change in planning decisions, requiring climate change considerations in municipal official plans, and eliminating minimum parking requirements.
- **Municipal and other stakeholder climate action** – including establishing a GHG reduction challenge fund, facilitating community energy planning and mapping.
- **Reduce congestion and improve economic productivity** – help municipalities with pilot congestion management plans, reduce single passenger vehicle trips by providing grants to implement transportation demand management plans.

5. Research and Development

- **Support innovation and commercialization of low-carbon technologies** – through funding for high-risk high-reward research for technologies, clean technology accelerator actions to de-risk, stabilize, and scale-up high-growth clean tech companies, and support for low carbon innovation focused on sectors where Ontario has a competitive advantage.
- **Set tax and regulatory policies that encourage innovation** – including R&D tax credits, accelerated capital cost allowance for investments in low-carbon technologies, and climate change regulatory requirements in approval processes.
- **Establish a Global Centre for Low Carbon Mobility** – a centre for leading expertise to support innovation, research and development of low carbon transportation technologies.

6. Indigenous Communities

- **Support First Nations communities' transition** to non-fossil fuel energy in a way that minimizes impact on the community.
- **Connect** remote communities to the provincial electricity grid.
- **Develop advanced micro-grid** solutions in First Nation communities.
- **Funding program for community-level greenhouse gas pollution reduction projects** and for community energy and climate action planning.
- **Establish First Nation and Métis Climate Change Tables** to ensure ongoing, regular discussion on shared priorities between Ontario and First Nations, and between Ontario and Métis communities.

7. Carbon Neutral Government

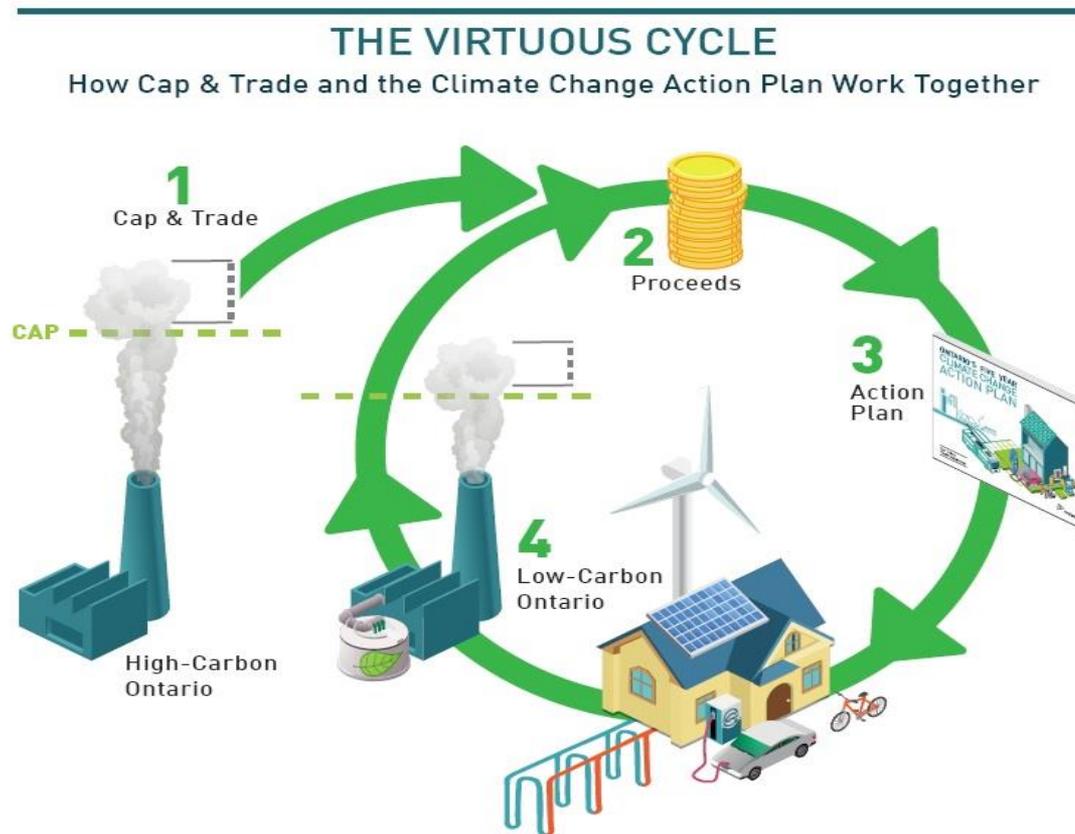
- **Reduce emissions** in provincial government buildings through energy efficiency retrofits.
- **Increase the Ontario government's GHG reduction target** to 50 per cent below 2006 levels by 2030.
 - The government currently has reduction targets relative to 2006 levels of 19% by end of 2014 and 27% by end of 2020.
- **Telecommuting** for Ontario Public Service (OPS) staff.
- **Green Government vehicles:** purchase or lease of plug-in-hybrid and battery electric passenger vehicles for the OPS fleet where possible.
- **Energy performance contracts across the OPS.**
- **Showcase clean-tech expertise** through demonstration of low-carbon technologies in public properties and buildings
- **Low-carbon procurement** – OPS Procurement Directive will be reviewed to consider the full carbon lifecycle of products.
- **Reform existing policies and programs** that support fossil fuel use and fossil fuel-intensive technologies.

8. Productive and Sustainable Society

- **Move Toward a Circular Economy** – implement the Building the Circular Economy strategy, which calls for zero waste in the province and zero greenhouse gas pollution from the waste sector.
- **Achieve a resource-efficient and sustainable Forest and Lands Sector** – including through the development of a land use carbon inventory, forest carbon policy, and addressing climate change through the Ontario Wetlands Strategy, Far North Land Use Strategy, and the Ontario Grasslands Initiative.
- **Maximize Carbon Storage from Agriculture** – Agricultural Soil Health and Conservation Strategy to maximize long-term carbon storage in soils and protect long-term productivity.
- **Update Environmental Assessments to Account for Climate Change.**

How the Cap and Trade Program Fits In

- CCAP complements the cap and trade program by guiding the reinvestment of proceeds to achieve GHG reduction and manage cost impacts.



Cap and Trade (cont'd)

Auctions

- First auction (unlinked) is on March 22, 2017.
- Ontario will link with California and Quebec in 2018.

MOECC's Projected Allowance Revenue	2016-17	2017-18	2018-18	2019-20	2020-21
Forecasted Proceeds (millions)	478	1,891	1,822	1,809	1,819

Proceeds

- All proceeds from the cap and trade program must be used to reduce GHG emissions, and will be used to fund most of the CCAP action items.
- The GGRA will house these proceeds, which will be generated from the auction of allowances to regulated sectors (e.g., industry, electricity and fuels).
- Proceeds must be in place before allocations can occur.

Questions?