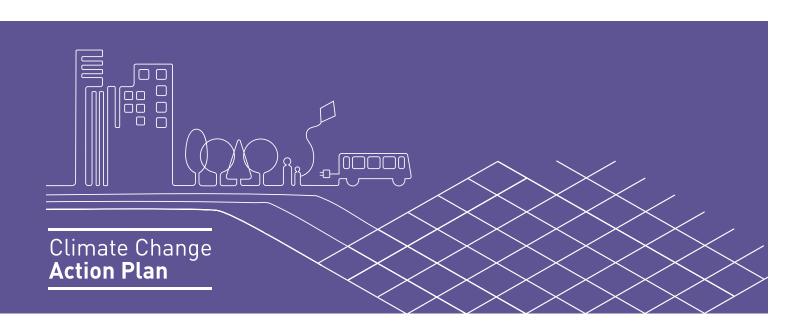
# Fighting Climate Change: Better Communities







**Kathleen Wynne**Premier of Ontario

## Premier's Message

In our economy, our lives and our climate – change is here. And Ontario is meeting it head on. With our Climate Change Action Plan, we're leading the transformation to low-carbon prosperity, coming up with creative and effective solutions to one of the most pressing challenges we've ever faced. We are building a province in which greenhouse gas reduction goes hand-in-hand with a growing and inclusive economy. We are the change the world needs.



Chris Ballard
Minister of the
Environment and
Climate Change

## Minister's Message

Like you, I know how beautiful Ontario's environment and communities are. They are worth protecting. This is why we all have a role to play in fighting climate change. The Climate Change Action Plan is already giving people and businesses more ways to cut greenhouse gas pollution while saving money on energy costs. Whether you live in Mississauga, Nepean, Timmins or Fort Erie, we are making it easier for you to protect the environment and our way of life for generations to come.

Ontario's plan to cap and invest is helping you fight climate change, use less energy and save money.

We are capping the amount of greenhouse gas pollution businesses can emit and investing the proceeds from our carbon market through the Climate Change Action Plan into projects that reduce pollution and help make life better for you. This approach guarantees reductions every year as the cap on pollution decreases at the lowest cost for families and businesses.

Our plan is reducing greenhouse gas pollution and investing in your community through energy improvements for homes, schools, municipal buildings, colleges, universities and hospitals. We are making electric vehicles a more affordable and convenient choice and cycling a safer, more accessible option.

We are also helping industries and manufacturers transform their operations and move off fossil fuels and peak-period electricity, while creating more good jobs in the cleantech sector and skilled trades. And we're helping small and medium-sized businesses reduce greenhouse gas pollution and become more energy efficient in ways that help boost their growth and make Ontario a great place to invest.

Inside you'll find information about investments happening in your community to help you save money and save the planet!

## Improving Energy Efficiency in Social Housing Apartment Buildings

Buildings are big polluters. They also use a lot of energy. In fact, they are responsible for almost 25% of Ontario's total greenhouse gas pollution.

That's why we're investing in improvements for social housing buildings across the province. This helps tenants save money on energy costs while improving comfort and reducing pollution.



"The province is providing critical funding to help Ottawa Community Housing, our largest social housing provider, modernize its buildings and greatly reduce greenhouse gas pollution. This funding will help save more money on utilities and the savings can be used to make even more improvements to buildings and tenant comfort."

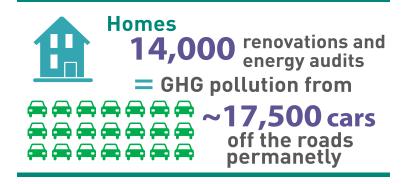
— Shelley VanBuskirk,Director, Housing Services,City of Ottawa



## Energy Audits and Home Improvements

We are investing in existing home energy audit and renovation programs to help 37,000 homeowners reduce energy bills while cutting greenhouse gas pollution.

The home improvements include replacing furnaces and water heaters, and upgrading windows and insulation. These small but mighty actions save you money on your energy bills and make your home more comfortable.



"With the help of the energy incentives, we changed our furnace, air conditioning, and switched to a smart thermostat. Through the free energy audit, we also learned about sealing windows, outlet sockets and even sealing the attic door, which really made a difference in improving the comfort of our home. With these retrofits, the savings are tremendous! Our heat and air conditioning costs have dropped so much we are just in awe!"

Zina A., homeowner, London, Ontario





We want you to take advantage of programs and rebates to reduce your energy costs and fight climate change.

Funded through proceeds from Ontario's carbon market, the Green Ontario Fund is a not-for-profit provincial agency that reduces greenhouse gas pollution in buildings and industry and stimulates the low-carbon technology marketplace.

Through programs and rebates, the Green Ontario Fund helps people and businesses take climate action into their own hands. Green Ontario Fund programs not only reduce energy use but help grow savings and make homes more comfortable.

Visit GreenON.ca to find out how to improve your home or business – save money while saving the planet!



\$1,000s in rebates for homeowners



Installing 140,000 no-cost thermostats

850+ approved contractors and growing



"With the Smart Thermostat program, not only did we get a thermostat installed for free, but we also saved serious cash on our monthly energy bills. We really love it when the thermostat senses that we are not home and switches the system to ecomode, saving us big dollars. Never realized a smart thermostat would be that smart! Thanks again for offering us this amazing program. Awesome!"

— Jimmy C., homeowner, Mississauga, Ontario



## Helping Public Institutions Save Energy

We are helping hospitals, schools, local governments, colleges and universities lower their energy costs and improve their buildings. By cutting their greenhouse gas pollution, they can put the money they save where it makes a real difference – improved patient care, more comfortable learning environments for students, and better public services for everyone.

## Using Energy Savings to Improve Patient Care



by 2021, ~60M/year in energy-related savings that can be used towards keeping people healthy

= 40,000 cars
off our roads, by 2050

"This funding is being invested into modernizing equipment and helping improve the patient experience at Providence Healthcare and St. Joseph's Health Centre. Replacing three chillers at our two sites and making enhancements to St. Joseph's electrical system will reduce our operating costs and direct savings back into patient care."

Dr. Robert Howard, interim
 CEO, Providence Healthcare,
 St. Joseph's Health Centre and
 St. Michael's Hospital

Using Energy Savings to create healthier and more comfortable learning environments





"With this new solar PV system, the school will benefit from reduced operating costs and emissions reductions."

Clem L., Supervisor of Maintenance and Energy Management
 & Conservation, Ottawa-Carleton District School Board

## Working Together to Save You Energy and Money

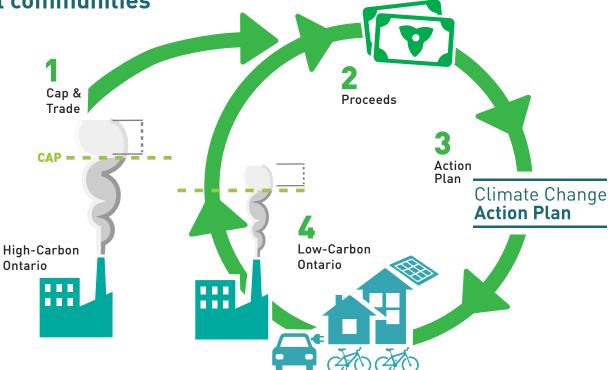
Greenhouse gas pollution is a global problem. Here in Ontario, average temperatures are projected to rise up to 3.7 C by 2050. Climate change is bringing Ontario more extreme weather, like flooding, that affects homes, damages crops and makes food more expensive.

That's why Ontario is leading the fight against climate change. The Climate Change Action Plan and the carbon market, using a cap and trade system, form the backbone of our strategy to cut greenhouse gas pollution to 15% below 1990 levels by 2020, 37% by 2030 and 80% by 2050. We'll report on the plan's implementation annually and review the plan at least every five years.

In 2017, Ontario raised \$1.9 billion through its carbon market, all of which must be invested by law in programs that lower Ontario's carbon footprint and help people and businesses transition to a low-carbon economy.

We're now part of the largest carbon market in North America with Quebec and California – a "best in class" system, reports the Environmental Commissioner. That's good news for businesses. In a linked market, businesses have more choice and lower cost options for reducing their greenhouse gas pollution, and that means lower costs for consumers – a fact supported by economic experts.

How Climate Change Action Plan and cap and trade work together to benefit communities



### Working with Indigenous Partners

Climate change is a challenge for Indigenous communities in Ontario, who depend on forests, lakes and rivers for food supplies and medicines, traditional cultural practices and their livelihoods. Remote communities are impacted as shorter winters and warmer weather results in fewer days for winter road access.

We're working together to address the challenges, ensuring Indigenous communities and organizations have the information and tools they need to determine priority actions, and collaborating to develop a better understanding of how Traditional Ecological Knowledge can help fight climate change.

We are also working with Indigenous communities and organizations to support capacity building and engagement on climate change, including identifying opportunities for Indigenous communities to benefit from the Climate Change Action Plan programs.

#### **Quick Fact:**

#### Did you know?

The Ontario Centre for Climate Impacts and Adaptation Resources is working with Laurentian University and the Ontario First Nations Technical Services Corporation to support over 250 First Nations participants in 60+ communities to build expertise to prepare for and fight climate change.



#### **Quick Fact:**

#### Did you know?

The Grand Council Treaty #3 Climate
Action School Project will use \$200,000
from the Province of Ontario to provide
climate action workshops using
Traditional Ecological Knowledge in
28 northern communities to help young
people take action on climate change.

Anishinabek Nation Chiefs and
Grandmother Josephine Mandamin
with Grand Council Chief Patrick Madahbee
and Minister Chris Ballard at the signing of a
Letter of Commitment between Anishinabek
Nation and the Ontario Ministry of the
Environment and Climate Change.

"I concur with Minister Ballard that Mother Earth will continue in some manner – but the human race will not survive unless we take steps to protect our environment."

— Grand Council Chief Patrick Madahbee

### 50 Million Tree Program

Trees absorb carbon dioxide, a greenhouse gas, from our atmosphere. And that's important to keep our planet healthy. As part of the broader 50 Million Tree Program, we have already planted over 250,000 trees in urban areas. Now, through continuing partnering with families, community organizations and businesses across the province we will plant 750,000 more by 2020, creating a greener, cleaner Ontario.



165 new hectares planted/year

= 300 football fields

"As a landowner, you have a resource. I personally believe we have something to offer society environmentally, recreationally, and in terms of human health. I had the opportunity to make this land more complex in a way that is more satisfying and valuable to me personally. I look forward to coming back to this land in 25 years to see what it has become."



Mark Cullen,
 Canada's Favourite
 Gardener,
 Scugog, Ontario

### Creating Jobs in the Cleantech Economy

Fighting climate change presents great opportunity for innovation. A global effort to reduce greenhouse gas pollution means more demand for low-carbon products and technologies. By investing in cleantech innovation we are creating high-quality jobs, growing new sectors, securing existing jobs and factories, and telling the world Ontario is open for husiness

The Ontario Cleantech Strategy will help companies launch products and services, find new customers, and scale up in a market that is expected to be worth \$2.5 trillion by 2022.

#### **Quick Facts:**

Ontario is a North American leader in developing, using and manufacturing clean energy.

We have the fastest growing cleantech sector in Canada.

\$377.5M+
committed to
new research,
commercialization,
and
scale-up programming
since 2013

\$8 billion annual revenue

3,000 companies 65,000 employees



## Making it Easier, More Affordable and Safer to Choose Low-Carbon Transportation

More than 1/3 of Ontario's greenhouse gas pollution comes from transportation – with most of it from cars and trucks. That's why we're making it easier to learn about, buy, and use vehicles that emit less greenhouse gas pollution.

We're putting more electric vehicles on our roads, with people from Kenora to Cornwall and everywhere in between taking advantage of our incentives to purchase or lease an electric vehicle. We're also creating a huge network of public charging stations in downtowns, along highways, and at workplaces across Ontario, so you can take your electric vehicle no matter where you need to travel.



### Incentives up to \$14,000

for eligible electric vehicles and up to \$1,000 for private charging stations

1,300+ EV chargers across the province



#### **Quick Fact:**

There are now 17,500 EVs on Ontario roads



Nearly **7,500 EVs** sold in 2017

"Driving an electric car saves money, reduces greenhouse gas emissions by up to 90% and these cars are just so much fun to drive! The government incentive programs for electric cars and charging stations are really working – it's no surprise that Ontario sold more electric vehicles in the last six months than any other jurisdiction in Canada. I am saving about \$2,000 per year on fuel alone and with literally zero maintenance, my electric vehicle is the most affordable car I have ever owned. I will never go back to gas!"

— Cara Clairman,
President and CEO of Plug'n Drive, Toronto, Ontario
(she's also an electric vehicle owner)

"Congratulations on a well thought out approach to welcoming the public into the world of electric vehicles. My family and I are starting the process to purchase an electric vehicle as our first step into this future. I can honestly say that our visit to the Electric Vehicle Discovery Centre was the tipping point in that decision."

Khalid, M.,Ottawa, Ontario

The World's First Electric Vehicle Discovery Centre



7,500+ visitors
2,500+ test drives
= 1/4 people bought an EV

37,500+ visitors to plugndrive.ca/electric-vehicle-discovery-centre

### Making it Easier to Choose Cycling

Getting people out of their cars and onto bikes goes a long way to helping us reduce greenhouse gas pollution from transportation. We are helping build more cycling lanes and bike parking.

"Cycling is a sustainable way to travel and a great way to stay active, save money and have fun. 2017 was a great year for cycling in Ontario. With the green investments made through the Climate Change Action Plan, more Ontarians are getting on their bikes. I hope to see our province continue to build on the vision to create cycling-friendly roads that municipalities and people across Ontario want and deserve."

— Jamie Stuckless, Executive Director, Share the Road Cycling Coalition, Ottawa



## **Investments** to build:



**NEW** bike lanes, NEW bike parking,

and development of **NEW** cycling plans across

118 municipalities

112 bike lockers at commuter parking lots

28 bike rooms across

**26** GO Train stations in the GTA





## Creating Partnerships to Fight Climate Change

The solution to climate change is here – in the dedication, skills and expertise of partners such as schools, non-profits and businesses that design and deliver low-carbon solutions.

That's why we're partnering with organizations, institutions and businesses in your community to find new and innovative ideas to help reduce greenhouse gas pollution.

We partnered with Sustainability CoLab and its network of seven not-for-profit organizations across Ontario that help local businesses achieve emission reductions through coaching, resources, tools, networking and learning opportunities. "Our main goal is to ensure there are resources here for our future generations. Wahnapitae First Nation is happy to be the first First Nation community to join over 200 organizations in the CoLab network that are setting and achieving sustainability goals."

Cheryl Recollet,
 Director of Sustainable
 Development,
 Wahnapitae First Nation

Sustainability CoLab Network Since March 2016: 168 new businesses joined the network



20,000+ tonnes GHG emission reductions achieved

= GHG pollution from 5,300 cars off the road for a year

We partnered with EcoSchools to teach children and teachers about climate change.

This empowered and educated more people in your community to become environmental leaders through workshops, awareness campaigns and contests that integrate climate change learning and action into schoolroom activities.

14,800+ participants
ontario
eCOschools
éCOécoles
de l'ontario



"I am so proud of my students. They are only seven and eight years old and are already recognized as leaders in our school and our community."

Lynne Dubeau,
 EcoTeam lead teacher at Foyer-Jeunesse,
 CS public du Grand Nord de l'Ontario

### Climate Change Action Plan Programs and Initiatives 2017-18

#### Improving Energy Efficiency in Homes and Buildings

#### **Green Ontario Fund (up to \$377 million)**

A provincial agency that provides programs to help homeowners and businesses save money and fight climate change. Programs include: GreenON Installations, GreenON Rebates, GreenON Industries, GreenON Social Housing, GreenON Agriculture and GreenON Food Manufacturing.

#### **Hospital Energy Efficiency Program (\$64 million)**

Making hospitals more energy efficient and redirecting savings into patient care.

#### Greenhouse Gas Reduction Fund (school retrofits) (\$200 million)

Building upgrades in schools to create cleaner and less expensive facilities.

Greenhouse Gas Campus Retrofit Program (\$214+ million in grants, up to \$300 million in interest-free loans) Building upgrades on postsecondary campuses to create cleaner and less expensive facilities.

#### **Home Energy Audits and Retrofits (\$100 million)**

Enhancing existing home energy audit and retrofit programs to help homeowners reduce energy costs.

#### **Social Housing Apartment Retrofit Program (\$82 million)**

Renovating large social housing apartment buildings (150+ units) to reduce greenhouse gas pollution and improve living conditions for tenants.

#### Social Housing Apartment Improvement Program (\$575 million)

Improvements to high-rise social housing apartment buildings over four years to cut greenhouse gas pollution, save money and increase tenant comfort.

#### **Mass Timber Buildings Project**

Investing in tall-wood building demonstration projects, research, skills development and training initiatives.

#### **SMART Green (\$25 million)**

Helping small and medium-sized businesses implement upgrades to their manufacturing processes and facilities.

#### **Low-Carbon Building Skills (\$9.6 million)**

Investing in training current and future workers to become skilled in low-carbon retrofits and construction.

## Climate Change Action Plan Programs and Initiatives 2017-18

#### **Enhancing Research and Development**

#### **Target GHG (\$74 million)**

Encouraging large industrial plants to adopt leading-edge technology and supporting Ontario's cleantech entrepreneurs.

#### **Global Market Acceleration Fund (\$27 million)**

Supporting Ontario companies with proven low-carbon technologies and solutions to scale up production.

#### **Ontario Cleantech Strategy**

Supporting our growing cleantech sector in four areas: venture and scale readiness; access to capital; regulatory; and modernization, adoption and procurement.

#### Renewed Funding for Cleantech Accelerators (\$10.6 million)

Receiving renewed support to help generate new technologies and highly skilled jobs.

#### The Green Focus on Innovation and Technology (GreenFIT) (\$10 million)

Greening government operations by purchasing clean technologies, while validating innovative companies to help drive early sales.

#### **Low-Carbon Innovation Fund (\$25.8 million)**

Supporting emerging technologies in areas such as energy generation and conservation, new biofuels, transportation or carbon capture and usage technologies.

#### **Engaging Governments and Strengthening Partnerships**

#### Municipal GHG Challenge Fund (~\$104 million)

Supporting municipalities in developing climate change projects to reduce greenhouse gas pollution.

#### Sustainability CoLab Network (\$1 million)

Supporting the network in helping small and medium-sized businesses reduce emissions through coaching, resources, tools, networking and learning opportunities.

#### Ontario Climate Change Impacts and Adaptation Resources (\$5 million)

Supporting First Nations communities in building expertise to prepare for and fight climate change.

## Climate Change Action Plan Programs and Initiatives 2017-18

#### **Indigenous Partnerships Initiative**

Working with Indigenous partners to establish shared priorities and support capacity on climate change issues.

#### **Promoting Electric Vehicles**

#### **Electric Vehicle Chargers Ontario (\$20 million)**

Working with partners to create a network of public electric vehicle charging stations across Ontario.

#### **Electric Vehicle Incentive Program (up to \$160 million)**

Providing financial incentives to eligible applicants when they purchase or lease an eligible new EV.

#### **Workplace Electric Vehicle Charging Incentive Program (\$5 million)**

Increasing the number of workplace charging spaces to make it easier to own and use electric vehicles.

#### **Electric Vehicle Discovery Centre (\$1 million)**

A first-of-its-kind facility that lets Ontarians test drive electric vehicles.

#### **Electric and Hydrogen Vehicle Advancement Partnership**

Facilitating collaboration between auto industry partners to encourage adoption of low-carbon vehicles.

#### **Permanent Green Plate Program**

Providing electric vehicles owners with free access to provincial high-occupancy vehicle and toll lanes.

#### **Modernizing Transit, Active Transportation**

#### **GO Regional Express Rail (\$13.5 billion)**

Transforming the GO rail network by providing faster and more frequent service with electrification of core segments of the network, including Union Pearson Express.

#### **Ontario Municipal Commuter Cycling Program (\$93 million)**

Building cycling lanes and infrastructure to make cycling a safer and more convenient activity.

#### **Green Commercial Vehicle Program (up to \$170 million)**

Incentives for the purchase of alternative fuel commercial vehicles and for fuel saving devices.

## Climate Change Action Plan Programs and Initiatives 2017-18

#### **Electric School Bus Pilot (up to \$8 million)**

A pilot program to study using electric school buses to give students a safe clean transit option.

#### **Preserving Agriculture, Lands and Forests**

#### 50 Million Tree Program (\$380,000)

Planting 50 million new trees to restore forest cover on suitable lands, supporting ecological sustainability and carbon sequestration and doubling the number of trees planted in urban areas from 1 to 2 million.

#### Land Use Carbon Inventory (\$750,000)

Developing a Land Use Carbon Inventory to increase our understanding of how agriculture, forestry and other land uses emit and remove carbon from the atmosphere.

#### **Wetlands Conservation Strategy**

A strategy to guide wetlands conservation across the province, including actions that support carbon sequestration.

#### **Grassland Stewardship Initiative**

Developing a program to create, enhance and maintain 30,000 hectares of grasslands by 2036.

#### **Forest Carbon Policy**

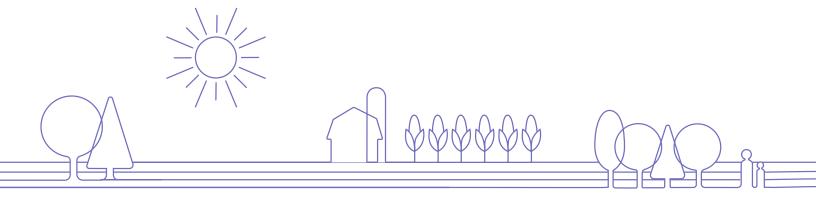
Examining the role of managed Crown forests in climate change mitigation and developing forest carbon policy to support government climate change efforts.

#### **Ontario's Food and Organic Waste Framework**

Actions the province, municipalities, the industrial, commercial and institutional sectors and the waste management sector will take to reduce food and organic waste, and greenhouse gas emissions from landfill.

To read our Minister's Climate Change Action Plan Progress Report 2017 or for more information on climate change visit **ontario.ca/climatechange**.

For more information on how you can save money and fight climate change visit **GreenON.ca**.



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