

Ontario's Climate Change Action Plan and Sault Ste. Marie *Local Significance & Action Plan Summary*

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Fighting climate change presents a major economic opportunity. According to the U.S. State Department, expansion of the global green economy is forecast to be six times greater than the technology boom of the 1990s — which saw the growth of the Internet, the first smart phones, and other breakthroughs that affect everyday life today¹.

Introduction

This document was created as a resource for interested parties to learn more about how Ontario's Climate Change Action Plan impacts Sault Ste. Marie, and what opportunities exist within the plan for local businesses and residents. Information included in this document was taken directly from the 86-page Ontario Climate Change Action Plan, and either summarized or applied to the context of Sault Ste. Marie. The full Climate Change Action Plan published by the Province of Ontario can be found [here](#).

Significance of Ontario's Climate Change Action Plan to Sault Ste. Marie

Reducing emissions through "cap and trade"

Everyone in Ontario, including Sault Ste. Marie residents, will pay towards "cap and trade" proceeds one way or another. Cap and trade refers to an approach to controlling greenhouse gas emissions, the primary driver of global warming. A cap and trade system discourages carbon emissions through a complex system of credits. Ontario's new Climate Change Action Plan could cost the average household an additional \$13.00 in overall energy and fuel costs per month².

¹ Ontario Climate Change Action Plan – Introduction (page 6) <https://www.ontario.ca/page/climate-change-action-plan>

² <https://www.thestar.com/news/queenspark/2016/05/17/curbing-climate-change-in-ontario-will-cost-you-13-a-month-report.html>

In Sault Ste. Marie, this could represent an increase of between \$4.5 to 5 million per year from residents or an overall increase of approximately 2% to the total cost of energy in the City of Sault Ste. Marie. This money would go towards all initiatives in the Climate Change Action Plan.

Reducing carbon emissions through cap and trade has transitioned from a promise made by the provincial government, to a mandated financial and legislated responsibility under which all people and businesses in Ontario will be impacted.

Through the Climate Change Action Plan, the Province of Ontario has laid out its intentions for investing the proceeds of the cap and trade program. This represents financial savings and investment opportunities for Sault Ste. Marie businesses, post-secondary institutions, non-profit organizations and the municipal government. Stakeholders would be wise to review the Climate Change Action Plan and prepare for opportunities to utilize funding to reduce our carbon emissions and benefit local businesses and citizens.

Why the provincial government believes cap and trade is the best tool for Ontario

The province has indicated that such a system will allow for businesses in municipalities such as Sault Ste. Marie to make planned investment decisions around reducing carbon emissions in the coming years. Large manufacturing companies, like our local steel plant, will have flexibility in choosing a path for reductions and multi-year compliance periods working in their favour. All companies will be working towards a carbon cap and are to be committed to making the right investments to reduce emissions or trade for additional carbon credits if their goal is not reached.

As a result of cap and trade, carbon emissions could have a considerable impact on short- and long-term business plans and investment priorities for Sault Ste. Marie business operations.

Key messages from the Climate Action Plan

Ontario's Climate Change Action Plan further heightens the economic development potential behind the clean energy movement. The Plan's headlining statements and key messages reinforce the need for Sault Ste. Marie to *aggressively diversify* its economy towards clean, low carbon technology.

This transition will function not only as an economic driver and potential long term cost savings, but it will also have environmental benefits to the community such as improved air, land and water quality which is a good thing for future generations.

Areas of action

The areas of action identified in the plan are significant to Sault Ste. Marie because they represent *focus priorities* in the Government of Ontario's commitment to Climate Change. This commitment will result in short- and long-term carbon emission restrictions which will have financial impacts across all of Ontario.

The City of Sault Ste. Marie would be wise to use these areas of action to build their own strategies to address cap and trade implications. Tasking energy leaders to be proactive across the community will better position businesses to adapt their operations to access proceeds funding, preserve operation sustainability and reduce their impact on the environment.

Actions to assist low-income households

Action to assist low-income households in reducing carbon emissions is especially significant to Sault Ste. Marie. The community has a high fixed income population and, with the current economic climate, many citizens are also on social assistance programs. This is coupled with the fact that social housing is recognized by the City as being under-serviced and increased investments/focus is needed in the future. Additionally, rising energy prices are offsetting funds in low-income homes, decreasing their ability to invest in better energy systems to further reduce energy costs and carbon emissions.

It is becoming increasingly important that social housing is facilitated with a reduced long-term impact to the tax base and environment – goals which can be assisted through cap and trade programs. The government's action plan under low-income housing will not only be pivotal in decreasing carbon emissions but will also function to reduce energy costs. Supporting low-income citizens has been a large focus for the municipality and local utility influencing decisions on many levels. Taking advantage of cap and trade programs has the potential to maintain home ownership by reducing the burden of high energy costs, reduce the tax base contribution to low income housing, improve living comfort and reduce the overall impact on the environment.

Helping businesses transition in a Carbon Cap and Trade Economy

Ensuring Sault Ste. Marie businesses transition to low-carbon technologies is important not only under cap and trade policies but it also serves to preserve economic sustainability in the community. Additionally, these investments are geared to create economic stimulus and if effectively managed or leveraged, they may also increase the level of research and development (R&D), innovation and business startups in the community. Transitioning to low-

carbon technologies has suddenly become an integral component in the profitability of companies, especially those who are high emitters. As a result, cap and trade will have a meaningful impact on local companies operations and investments in decades to come.

The province has indicated support for R&D, clean technology clusters and commercialization and deployment of low-carbon technologies. \$40-60M will be made available to help coal-intensive industries to move to less carbon intensive fuels. Support of \$140-\$235M will also be made available for research in low-carbon technologies; developing low-carbon clean technology accelerators and clusters in sectors where Ontario has a competitive edge; supporting proof-of-concept projects and helping emerging low-carbon companies increase scale. Finally, up to \$875M-\$1.1B will be made available starting in 2018 to help companies transition to low-carbon technologies.

Some other interesting items from the Climate Change Action Plan with implications for Sault Ste. Marie organizations and residents include:

Everyone:

- Every single dollar from cap and trade will be invested into green projects – by law, these proceeds must be invested in project and programs that help reduce greenhouse gas pollution
- Incentives will be extended for rebates on electric vehicles
- Ontario will help homeowners purchase and install low-carbon energy technologies
- A new program to encourage households to switch out older wood stoves for new high-efficiency units
- Cap and trade proceeds will be used to offset the cost of greenhouse gas reduction initiatives to keep electricity rates affordable
- In 2019, energy audits will be required before a new or existing single-family home can be listed for sale

Businesses:

- A new, Renewable Fuel Standard will be set to increase renewable content in transportation fuels and funding to fuel distributors for high-blend sustainable biofuels and infrastructure upgrades
- Pursuing broader carbon measures with the federal government to help level the playing field with goods entering Ontario from jurisdictions without a carbon price
- Incentives for apartment building retrofits
- Incentives for businesses that want to buy low-carbon commercial vehicles and technologies to reduce emissions including electric and natural gas powered trucks, aerodynamic devices, anti-idling devices and electric trailer refrigeration

- Develop a forest carbon policy framework to clarify the role of managed Crown forests in storing carbon

Municipal

- Funding for Community Energy Plans and Climate Action plans will be made available to municipalities, First Nations and Metis communities
- Support for collaborative, community-based and data-driven approaches to carbon reduction including energy mapping
- Establish a greenhouse gas pollution reduction challenge fund for municipal and other stakeholders of \$250-\$300M starting in 2017
- Programs will reduce the amount of organic materials going into landfills
- The number of trees to be planted in urban municipalities will be doubled from \$1M to \$2M with funding for irrigation where appropriate
- Investments in safe cycling facilities in urban areas
- Eliminate minimum parking requirements for municipal zoning bylaws

Provincial Institutions and Post-Secondary

- The province will support post-secondary training and innovation initiatives to advance low carbon building science, technologies, materials and designs
- New and expanded training programs to help Ontario's building sector ensure it has the skilled workers needed
- A new fund to help hospitals, universities and colleges retrofit their facilities will be established
- The Ontario Public Service aims to be carbon neutral by 2018 and provincial buildings will be retrofitted and used to showcase made-in-Ontario innovations
- Funding for existing schools to improve energy efficiency and install renewable energy technologies

Indigenous Communities

- Investments with indigenous communities for energy efficiency, smart microgrids and renewable energy

Our foundation for a low-carbon future

Ontario's Green Investment Fund, a \$325M funded program announced in 2015 to fight climate change, was essentially a down payment towards the full new Climate Change Action Plan. Understanding opportunities within the Green Investment Fund and mobilizing action within

the first phase of funding is absolutely critical to setting the bar, getting the word out and establishing expertise for later stages of funding.

New approach to technology deployment

The government is changing their approach to technology deployment. This is significant to Sault Ste. Marie because it changes the business case and approach for a number of carbon reducing projects through which we adopt these technologies.

The Green Bank:

The government has recognized the limitations in financing clean energy projects and their respective ROI's has played in stimulating wide adoption and economic stimulus on many fronts. The details have yet to be released; however, the province has indicated it will be creating a green bank to coordinate investments. The green bank is intended to be established in Ontario to deploy and enhance readily available low-carbon energy technologies and reduce carbon pollution from Ontario buildings. It will help source the most cost-effective low-carbon technologies to reduce emissions in homes and businesses.

If Sault Ste. Marie were to have provincially supported financing including extended terms, low rates and incentives for clean energy projects – the growth of the energy sector and its spin-offs will undoubtedly increase as a result. This is especially significant to Sault Ste. Marie considering the low-risk investment climate which is present. Such a financing structure may prove to be the key ingredient required to motivate businesses, institutions, industry and citizens towards low-carbon technologies.

Conclusions: Taking action together

All Saultites have a role to play. Fighting climate change will require the involvement of everyone – individuals, businesses, institutions, and the municipal government, both short- and long-term. Ontario's Climate Change Action Plan sets Sault Ste. Marie on the path forward if the community acts now and follows the recommendations and opportunities provided by the Plan. Sault Ste. Marie has an opportunity to lead a climate change movement that will help transform the province – and ensure a healthy, prosperous and greener future.

Actions and Investments in Ontario's Climate Change Action Plan

*Source: [Ontario's Climate Action Plan](#)

Funding made available in 2017-18 within Action Plan

Action items with Funding	Intended GGRA Funding (Millions of \$)
Transportation (biofuels/low carbon fuels)	\$115 - 175
Transportation (EV's)	\$246.7 - 277
Transportation (cycling and walking)	\$150 - 225
Transportation (low-carbon trucks and buses)	\$215 - 290
Transportation (Southern Ontario Regional GO express rail)	\$355 - 675
Buildings and Homes (multi-tenant residential buildings)	\$680 - 900
Buildings and Homes (schools & hospitals)	\$400 - 800
Buildings and Homes (heritage buildings)	\$40 - 80
Buildings and Homes (improving homeowner choices)	\$681 - 824
Buildings and Homes (Promote low-carbon energy supply & products)	\$60 - 100
Buildings and Homes (help individuals & businesses manage their energy use and save money)	\$200 - 250
Buildings and Homes (training, workforce and technical capacity)	\$45 - 70
Land-use Planning (support municipal and stakeholder climate action)	\$270 - 325
Land-use Planning (reduce congestion and improve economic productivity)	\$10 - 20
Industry and Businesses (help industries adopt low-carbon technologies)	\$875 - 1,100
Industry and Businesses (help agri-food sector adopt low-carbon technologies)	\$50 - 115
Collaboration With Indigenous Communities	\$85 - 96
Research & Development (support innovation and commercialization of new low-carbon technologies)	\$140 - 235
Research & Development (set tax and regulatory policies that encourage innovations)	\$0 - 1
Research & Development (Support R&D through a Global Centre for Low-Carbon Mobility)	\$100 - 140
Government (Reduce emissions and energy costs across government)	\$165 - 175
Agriculture (reduce emissions from waste and move Ontario towards a circular economy)	\$20 - 30
Agriculture (increase understanding of how agriculture and natural lands emit and store carbon)	\$2 - 3
Agriculture (maximize carbon storage from agriculture)	\$30
Agriculture (understand and enhance carbon storage in natural systems)	\$.5 - 1.5
Agriculture (update environmental assessment to account for climate change)	\$0
Total investment	\$5,964 - 8,301 Billion

Approximately a \$6 to 8 billion dollar investment over the next 5 years

Ontario Climate Action Plan Summary

Reducing Emissions Through Cap & Trade

In April 2015, Ontario announced its intention to join the cap and trade system under the Western Climate Initiative, partnering with other jurisdictions, including Quebec and California, and making carbon pricing a cornerstone in Ontario's fight against climate change.

The **"cap"** sets a maximum limit on the amount of greenhouse gas pollution that regulated emitters collectively can produce. Each year, the cap is lowered, requiring industry and other greenhouse gas polluters, such as natural gas distributors and other fuel suppliers, to reduce their emissions.

The **"trade"** refers to a market where companies can buy or sell "allowances," or pay others to reduce emissions on their behalf, in order to comply with the cap in the cheapest and most efficient way.

Cap and trade allows the market – not government – to set the carbon price.

Estimates of cost per tonne are based on the amount of proceeds directed to the action divided by an estimate of the cumulative emissions reductions over the anticipated period of impact of that action.

Cap and trade fights climate change by giving polluters an incentive to cut emissions, since they must pay for the pollution they are responsible for.

Cap and trade lets the market decide where emissions can be reduced across linked jurisdictions with the least cost while guaranteeing the environmental outcome required, which is to cut the pollution that is causing climate change.

Ontario's cap and trade program is expected to generate proceeds of approximately **\$1.8 to \$1.9 billion** each year.

Why the Province feels Cap and Trade the Best Tool for Ontario?

A cap and trade system has been chosen over other carbon pricing schemes because cap and trade provides companies with the flexibility – such as multi-year compliance periods – to choose the compliance path that aligns with their business plans and investment decisions.

Headlining Statements of Action Plan

Fighting climate change presents a major economic opportunity. According to the U.S. State Department, expansion of the global green economy is forecast to be six times greater than the technology boom of the 1990s — which saw the growth of the Internet, the first smart phones, and other breakthroughs that affect everyday life today.

This action plan will create jobs. It will help provide business certainty and a stable investment climate, improve productivity and promote innovation.

The plan creates competitive conditions for the adoption of low-carbon technology.

Ontario's cap and trade program generates revenue and is a cornerstone in the fight against climate change. This action plan helps define how cap and trade auction proceeds will be spent.

Areas of Action

Establishing a green bank that would help homeowners and businesses access and finance energy-efficient technologies to reduce greenhouse gas pollution from buildings.

Creating a cleaner transportation system by addressing greenhouse gas pollution from cars on the road today.

Halting the ongoing rise in building-related emissions by giving Ontarians more choices, incentives and tools to make the right energy choice for their homes and businesses, by providing better information about energy use by buildings and homes, and by making new buildings increasingly energy efficient over time.

Making Ontario one of the easiest and most affordable jurisdictions in North America for homeowners and businesses to install or retrofit clean-energy systems.

Supporting a carbon market that drives the lowest cost greenhouse gas emission reductions.

Working in partnership with First Nations and Métis communities to address climate change.

Building on progress, leading by example and acting on opportunities to make government operations carbon neutral.

Ensuring natural, agricultural, and forested lands are used in ways that are efficient, sustainable and enhance the removal and storage of carbon from the atmosphere while working with Ontario's waste sector to leverage different practices and technologies to capture greenhouse gas pollution that would otherwise be released into the air.

Actions to Assist Low-Income Households

These actions will build on a number of programs that are already available to help low-income energy consumers. For example, the Ontario Electricity Support Program, launched in January 2016, provides low-income consumers with a monthly on-bill credit to reduce their electricity bill; and Ontario's Low-Income Energy Assistance Program provides a one-time grant for an electricity or natural gas bill if a low-income consumer is temporarily unable to make ends meet in an emergency situation.

Ontario intends to continue to invest in social housing retrofits.

The province wants to ensure the impact of carbon pricing is not passed on to tenants who are not able to make capital improvements to their buildings. Ontario will consult on and develop options to reduce the impact on residential tenants of increased energy costs from cap and trade. It will also work to ensure building owners have access to energy-efficiency retrofit programs, such as boiler replacements and geothermal technology.

Further, the province will offer a rebate to low and moderate-income households to help replace their older cars with new or used electric or plug-in hybrid vehicles.

Helping Businesses Transition in a Carbon Priced Economy

Support significant emissions reductions by large final emitters and small and medium enterprises by providing funds to offset the cost of low-carbon technologies

Support research and development, clean technology clusters and commercialization and deployment of low-carbon technologies

Provide transitional allowances to industry to help them transition to lower carbon technology while they reduce greenhouse gas pollution.

The delivery model will be finalized in consultation with existing utilities during summer 2016, with the goal of beginning to provide services in the second half of 2017.

Our Foundation for a Low Carbon Future

The 2015 Fall Economic Statement committed a \$325-million down payment through Ontario's Green Investment Fund.

The action plan will serve as the foundation for making annual investment decisions and will be consulted on each time investment decisions are made.

New Approach to Technology Deployment

Ontario intends to establish a green bank to deploy and finance readily available low-carbon energy technologies to reduce carbon pollution from Ontario buildings. The green bank will help source the most cost-effective low-carbon technologies to reduce emissions in homes and businesses.

Energy conservation programs have benefited many consumers in Ontario, but this ongoing trend of emissions growth calls for bolder action.

The green bank will work to significantly reduce greenhouse gas from energy intensive heat and cooling sources like old gas boilers, inefficient electric baseboard heaters, and oil furnaces – while significantly increasing the use of available technologies like solar, air-source heat pumps, geothermal systems, vehicle-to-grid energy systems, and energy storage systems.

The Green Bank is Intended to:

Help households understand and determine what government grants and other incentives are available for each prospective project, and help people calculate payback periods and returns on investments.

Provide households with assistance to secure flexible low-interest financing to help pay for greenhouse gas-reducing energy improvements in their homes – with special provisions to support low- and modest income households.

Support large commercial and industrial projects, or projects that require scale to be financed privately, by working with commercial banks to help aggregate projects to reduce risk.

Overall Action Areas in the Climate Change Action Plan:

Transportation

Increase the availability and use of lower-carbon fuel

Increase the use of electric vehicles

Support cycling and walking

Increase the use of low-carbon trucks and buses

Buildings and Homes

Improve energy efficiency in multitenant residential buildings

Set lower-carbon standards for new buildings

Improve energy efficiency in schools and hospitals

Promote low-carbon energy supply and products

Reduce emissions from heritage buildings

Help individuals and businesses manage their energy use and save money

Help homeowners reduce their carbon footprints by supporting additional choice

Training, workforce and technical capacity

Land-Use Planning

Strengthen climate change policies in the municipal land-use planning process

Support municipal and other stakeholder climate action

Reduce congestion and improve economic productivity

Industry and Business

Help industries adopt low-carbon technologies

Help the agri-food sector adopt low-carbon technologies

Collaboration with Indigenous Communities

Collaborate with Indigenous communities

Research and Development

Support innovation and commercialization of new low-carbon technologies

Set Tax and Regulatory Policies that Encourage Innovations

Support research and development through a Global Centre for Low-Carbon Mobility

Government

Reduce emissions and energy costs across government

Agriculture, Forests and Land

Reduce emissions from waste and move Ontario towards a circular economy

Increase our understanding of how agricultural and natural lands emit and store carbon

Maximize carbon storage from agriculture

Understand and enhance carbon storage in natural systems

Update Environmental Assessments to Account for Climate Change