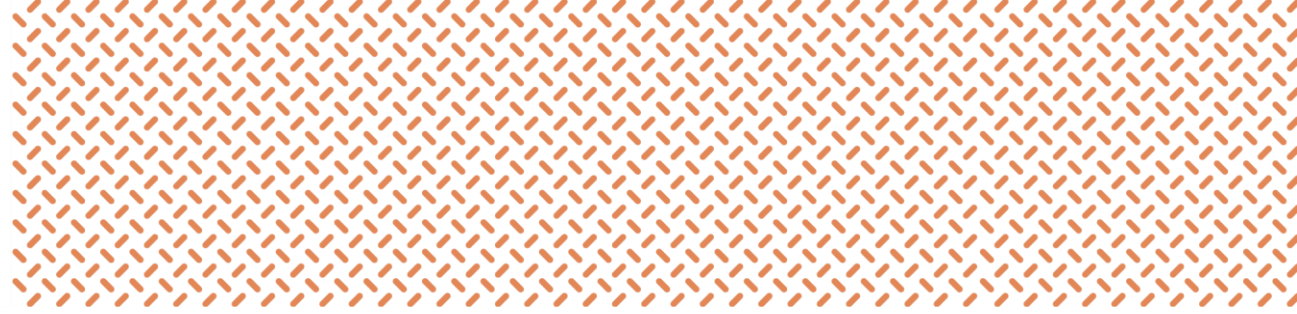




**SAULT
STE. MARIE**



City of Sault Ste. Marie Community Greenhouse Gas (GHG) Reduction Plan 2020 - 2030

Presented to: City of Sault Ste. Marie Council Meeting: December 14, 2020

Presented by: Emily Cormier, Climate Change Coordinator, FutureSSM

A Call to Action

“Climate change is the **defining issue** of our time and we must limit global warming to 1.5°C above pre-industrial levels within the next **10 years** or face **irreversible economic, environmental and social impacts**”*

Opportunity

- ✓ Public Safety Canada estimates that every dollar invested in [GHG] mitigation saves **\$3 to \$5** in recovery costs”*
- ✓ Clean innovation feeds a fast-growing global market for environmental solutions that will be worth **\$2.5 trillion** by 2022**
- ✓ Vancouver’s ‘Green Brand’ is valued at **\$31 billion**, outperforming San Francisco, Singapore, Sydney, Shanghai and Hong Kong on perceptions of sustainability”***

Sources:

*Intergovernmental on Climate Change (IPCC). (2018). Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Retrieved from: <https://www.ipcc.ch/sr15/> **Office of the Auditor General of Canada. (2016). 2016 Spring Reports of the Commissioner of the Environment and Sustainable Development. Retrieved from: www.oag-bvg.gc.ca/internet/English/parl_cesd_201605_02_e_41381.html

***Smart Prosperity. (2019). Smart Prosperity leaders call on government to help clean innovators get ideas to market, creating wealth and jobs. Retrieved from: <https://www.smartprosperity.ca/content/308>

**** Ryan, D. (2016, January 31). The \$31b 'green' branding of Vancouver. *Vancouver Sun*. Retrieved from: <https://vancouversun.com/news/local-news/the-31b-green-branding-of-vancouver/>

Plan Methodology

Program:

Partners for Climate Protection (PCP) Program (400+ participating municipalities across Canada). Includes a 5 milestone framework with the goal of implementing a climate action plan.

1. Creating a baseline emissions inventory and forecast;
2. Setting emission reduction targets;
3. Developing a local action plan;
4. Implementing the local action plan, and
5. Monitoring progress and reporting results*.



Municipal Climate Action to Date

1. Energy Conservation and Demand Management Plan (2019)	2. Strategic Asset Management Policy (2019)	3. Transportation Master Plan (2015)	4. Stormwater Master Plan & Intensity-Duration-Frequency (IDF) curve update (2015)	5. Corporate Strategic Plan (2015)
6. Parks and Recreation Master Plan (2015)	6. Asset Management Plan (2013) (updated in 2020)	7. Sault Ste. Marie Smart Energy Strategy (2012)	8. Green Fleet Plan (2011)	9. Sustainable Site Plan Guidelines (2011)
	10. Corporate GHG Emissions Inventory (2009)	11. Cycling Master Plan (2007)	12. Municipal Environmental Initiatives Committee (Green Committee) (2007)	

Northern Climate Change Network

- Sault Ste. Marie Climate Change Risk Assessment (Completed Feb. 2020)
- Community climate risks prioritised – in particular infrastructure damage

Project & Plan Overview

The GHG Reduction Plan was developed using a three-phase approach including:

Phase 1: GHG Emissions Inventory (Completed February 2020)

Phase 2: Stakeholder Engagement (Completed May 2020)

Phase 3: Plan Development (Draft Completed September 2020)

Plan Breakdown:

- Actions: 60 (**14 already in progress**). Include: Objective, Actions, Responsibility, Timeline and Performance Measures
- Resources: Supporting Programs, Policies, Legislation, and Funding

- ✓ Energy efficiency **retrofits** estimate reducing the City's annual energy costs by \$100,000 *
- ✓ 2020 energy retrofit incentives, annual energy savings and utility sponsorship: **\$106,235.40.**



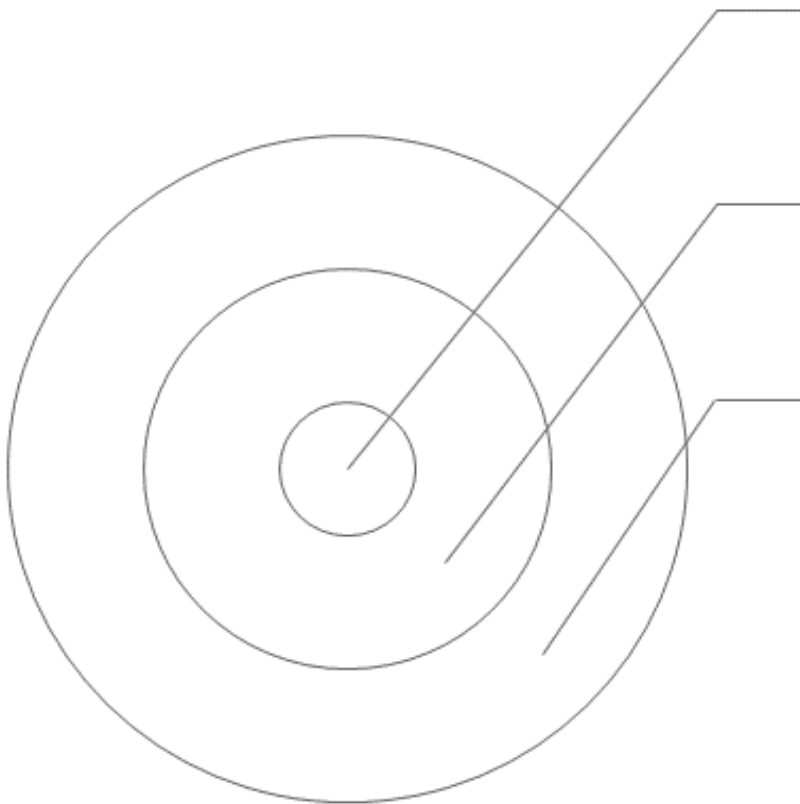
Phase 1: GHG Inventory

**Sault Ste. Marie emitted about
1,502,142 tCO₂e in 2017**

1% City of Sault Ste. Marie (10,857 tCO₂e)
56% Fleet and Equipment
34% Buildings
10% Water and Sewage
0.4% Outdoor Lighting

99% Community (1,502,142 tCO₂e)

- 69% Industrial Natural Gas
- 12% On-road transportation
- 6% Propane and fuel oil
- 6% Residential Buildings (Electricity & Natural Gas)
- 5% Commercial & Institutional buildings (Electricity & Natural Gas)
- 1% Solid Waste
- 1% Railways



Phase 2: Stakeholder Consultations

Goals:

- Identify GHG reduction opportunities and challenges in Sault Ste. Marie.

Outreach Activities:

- Presentation to Council
- IESO Retrofit Program Presentation to Facility Managers
- 1 Community Open House
- 17 1-on-1 Stakeholder Consultations
- 3 Surveys (Youth, Resident, City Green Committee)
- 4 Community Pop-Up Consultations

300+
Participants



What We Heard

BENEFITS

- Increase **awareness** about climate change mitigation;
- Reduce GHG emissions and **save money**;
- **Support** local businesses and food production;
- Increase waste diversion.

OPPORTUNITIES

- Increase **transit ridership or alternative deliveries** (e.g. On Demand – September 2019)
- Increase the adoption of electric vehicles;
- Energy conservation and **retrofits**
- Increase and **maintain green space and urban forest canopy**,

BARRIERS

- Limited resources focused on sustainability;
- High **capital costs** of energy efficiency projects;
- **Limited density** and heavy reliance on personal vehicle use

PRIORITIES

- Prioritize **energy management** in existing assets and new builds;
- Consult with local industry to understand planned GHG mitigation efforts;
- Encourage green **job development**;
- Landfill **waste diversion**

Phase 3: GHG Reduction Plan

The plan is broken down into seven key sectors, predominantly based on emission sources and reduction action opportunities.

1. Buildings & Energy – Community
2. Buildings & Energy – Corporate
3. Transportation
4. Waste
5. Green Space
6. Economic Development
7. Municipal Leadership

Target:

The City's goal for GHG reduction is net zero by 2050. The City will take a staged approach to achieve this goal, and will focus on a GHG reduction target of 10% corporate and 5% community between 2020 – 2030, with an increasing scale of reduction target between 2030 and 2050.

Plan Guiding Principles

AFFORDABILITY

- (e.g. Reduced energy costs, economical housing)



ACCOUNTABILITY

- (e.g. Ensure sustainable development for future generations)



EDUCATION AND AWARENESS

- (e.g. Community promotion and understanding about climate change)



COMMUNITY PRIDE

- (e.g. Diversify sustainability options and improve community wellbeing)



ECONOMIC DEVELOPMENT

- Clean technology business development and eco tourism)



ENVIRONMENT / HABITAT PROTECTION

- (e.g. Protecting species at risk and forests from climate impacts)



HEALTH

- (e.g. Reduce health risks associated with climate change like asthma and Lyme disease)



FOOD SECURITY

- (e.g. Increase opportunities for local food growth and security)



Preliminary Plan Priorities

Climate Change Capacity

1. Elect **Environmental Sustainability Committee** and hold first meeting.
2. Create a climate information **webpage** on the City website.
3. Explore budgeting and funding requirements for **Year 1 priorities** and appointment of **staff resource**.
4. Undertake a **Youth** led environmental sustainability community project.
5. **Governance and Leadership**. Ensure City policies and programs **align** with supporting the GHG Reduction Plan. (e.g. Develop a **Climate Change Lens Policy**).

GHG Emissions Reduction

1. Prioritize **energy efficiency** retrofits and **zero emission fleet** opportunities.
2. **Summarize** municipal GHG reduction projects and actions by **City Department**.
3. Increase **tree planting**, and conduct an urban tree canopy study to understand **carbon offset** potential.
4. Explore the possibility of developing a community **retrofit program**.
5. Streamline City Broader Public Service Reporting (O.Reg 507/18) **energy data tracking** and monitoring process.

Financing the GHG Reduction Plan

Internal Opportunities

- 2021 Federal Gas Tax Fund: **\$4,653,755** (estimated increase of \$202,337 from 2020).
- City CDF– Green Initiatives Program: **\$50,000**
- 💡 Develop a Corporate Internal Revolving Energy Fund: (Energy savings estimated at **\$810,584**)
- 💡 Local Improvement Charge (low interest retrofit loan tied to a residential property)

External Opportunities

- **\$10 billion** Canadian Infrastructure Bank Growth Plan (\$1.5 billion for zero emission buses; \$2.5 billion for clean power; and, \$2 billion for energy efficient building retrofits)
- **\$3.3 billion** Federal Government COVID-19 Resilience Funding
- Enbridge & IESO Residential and Commercial Energy Efficiency Incentive Programs
- FCM Green Municipal Fund (Has spent **\$862 million** on municipal green projects)
- **\$300 million** FCM Community Efficiency Financing Initiative (residential retrofits)

*The City should also consider adding criteria to **capital and operating budget** requests that would review requests based on their **impact to environmental sustainability**.*



Implementation Alternatives

Scenario

Benefits

Limitations

A. Assign and/or establish a staff resource to oversee plan implementation and City environmental sustainability tasks and commitments.

Ensure task completion accountability by assigning responsibility to a specific human resource.

Require preliminary assignment of capital funds and supervision from an existing department.

B. Assign responsibility for monitoring plan implementation to Committee of Council (Environmental Sustainability Committee)

No cost for volunteer committee. Committee of council can monitor and report on progress to council.

Limited accountability as committee is volunteer.

C. Distribute specific GHG mitigation projects and tasks to existing staff.

No additional human resource cost.

Existing staff have high workloads and may not prioritize actions.

Next Steps

- ✓ Refine next years projects aimed at reducing corporate and community energy use and GHG emissions.
- ✓ Hold first Environmental Sustainability Committee meeting.
- ✓ Determine budget and funding requirements for Year One; including, the appointment and/or establishment of a staff resource.
- ✓ Work towards PCP Milestone 4 & 5 (10 Years)
 - Implementing the local action plan, and
 - Monitoring progress and reporting results.

*The GHG reduction plan is a **living document** that should be **updated and adapted regularly** to acknowledge changing technology, funding and provincial and federal legislative initiatives.*

Thank You. Questions?

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