



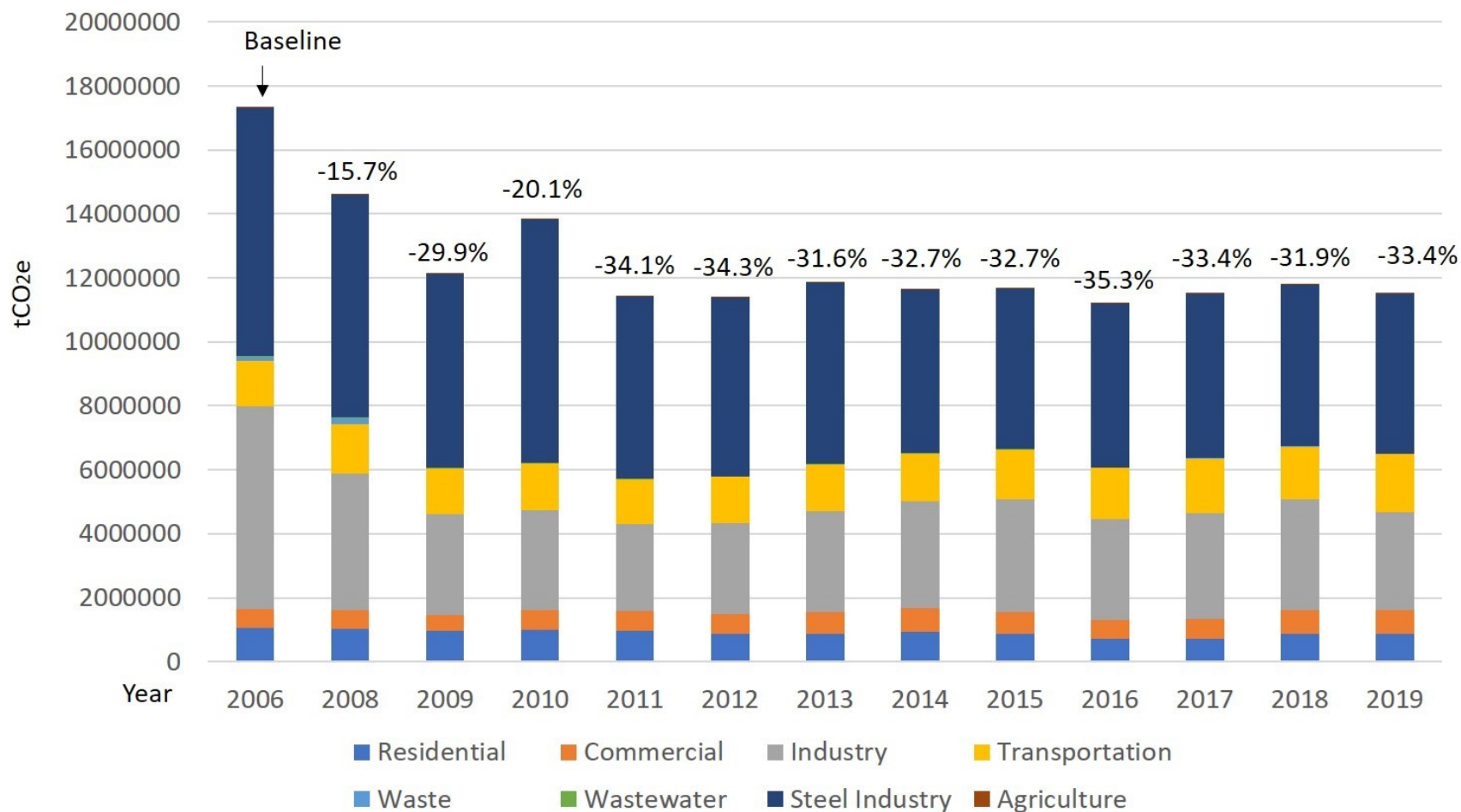
CORPORATE-WIDE CLIMATE CHANGE UPDATE 2021

General Issues Committee Meeting
December 8, 2021

- Council approves Climate Emergency Declaration Motion (19-006)
March 27, 2019
- Tax and Rate Climate Change Investments to Date*:
 - Bicycle Infrastructure: \$6.46M (2020-2021)
 - Parks/Forestry/Tree Planting: \$37.38M (2020-2021)
 - Vehicle/Equipment Electrification: \$596K (2020-2021)
 - Corporate Energy/Emission Initiatives: \$3.53M (2019-2021)
 - Stormwater Flooding/Drainage: \$9.0M (2020-2021)
 - Bay Area Climate Change Council: \$320K (2020-2021)
 - **TOTAL = ~\$57,283,800** (rounded)

*excludes climate positive actions from Transit, Facility Refurbishments/Upgrades, Composting/Waste Management, West Harbour rehabilitation, Water/Wastewater pumping station upgrades.

Hamilton's Community-Wide GHG Emissions 2006-2019



Goal # 1: Buildings

To increase the number of new and existing high performance state-of-the-art buildings that improve energy efficiency and adapt to a changing climate.

Corporate Energy and Sustainability Policy:

- Updated Corporate GHG Reduction Targets aligning with Climate Emergency Declaration

Home Energy Retrofit Opportunity Funding:

- Passed Initial Federation of Canadian Municipalities (FCM) Community Energy and submitted full application

Revitalizing Hamilton Tax Increment Grant (RHTIG)

Program:

- High performance/green building certification eligibility

Corporate Targets:

50% by 2030

100% by 2050



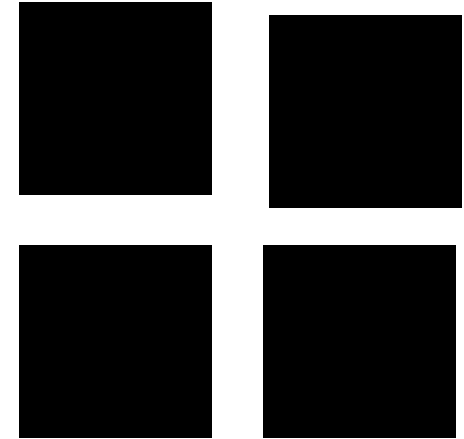
*Corporate GHG
Emissions Inventory
2019 Reduction of
43% from base year*

Goal # 2: Active & Sustainable Travel

To change the transportation modal split so that more trips are taken by active and sustainable transportation than single use occupancy vehicles

Active Transportation Infrastructure Built:

- **4.8** Kilometres of multi-use trails installed throughout 2021 (compared to 675 metres in 2020);
- **11** Kilometres of new bicycle lanes and paved shoulders installed;
- **5.4** Kilometres of upgrades to existing bike lanes completed;
- **25** ongoing cycling projects being implemented throughout 2021



Hamilton Fire Department's Innovative Online Training Software:

- \$137,000 provincial grant reducing so far 21 total days of travel, reducing GHG emissions from transportation

Goal # 3: Transportation

To accelerate the uptake of modes of transportation that are low and/or zero emissions

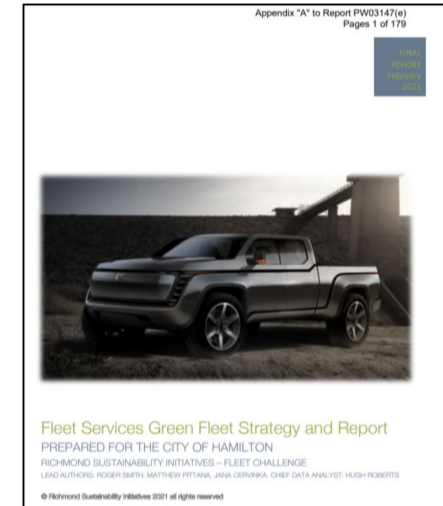
Corporate Green Fleet Strategy:

- Replacing 89 internal combustion vehicles to Battery All Electric
- Installing 49 EV charging stations;
- Pilot use of biodiesel identifying highest blend possible
- Eco-Driving & Anti-Idling awareness and training

Estimated to reduce corporate fleet related emissions by 18.4% by 2024 (excluding transit, fire, police)

HSR Piloting Ontario FIRST EVER Carbon Negative Bus:

- Diverting 450 tonnes organic waste
- Displacing 36,000 litres of diesel emissions



Goal # 4: Planning

To ensure a climate change lens is applied to all planning initiatives to encourage the use of best climate mitigation and adaptation practices.

Flooding and Drainage Master Servicing Study:

- Long-range plan to improve performance of combined sewer network and reduce flooding

Community Energy and Emissions Plan:

- Technical low-carbon model to identify actions, strategies and plans to reach net carbon zero



Urban Hamilton Official Plan Review:

- Reviewing and updating with climate lens for alignment to Provincial Policy Statement (PPS), 2020

Goal # 5: Procurement

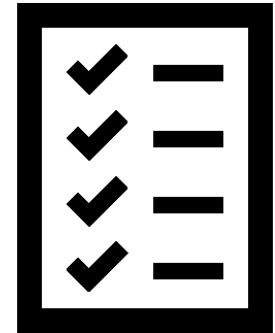
To procure goods, services and construction from vendors who conduct their business in a sustainable and ethical manner that considers equity, diversity and inclusion that contributes to the greater good of the community.

City Roster Sustainability Requirements:

- Document issued to public including RFP criteria to address sustainable procurement and climate change
- Clear message to vendors on importance of sustainability

Landscape Architectural Services (LAS) Specifications:

- Continuously look to use low carbon, recycled and re-use material for all their projects reducing embodied carbon.

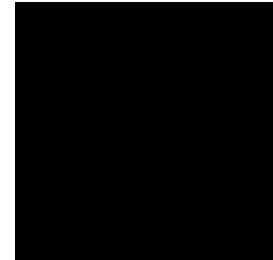


Goal # 6: Natural Environment

To increase our carbon sinks and local food production through the preservation and enhancement of the natural environmental, including local farmland.

City-Wide Tree Planting:

- 3,005 large calipers between Nov 2020 & Sept 2021
- 1,250 trees given away in Wards 3 & 5
- 200 additional trees planted through 50 Million Tree Program



Urban Forest Strategy:

- Baseline assessment of Hamilton's urban forest benefits including:
 - \$3.6 M annual energy savings
 - \$1.9 M annual stormwater management services
 - 256 tons of air pollution



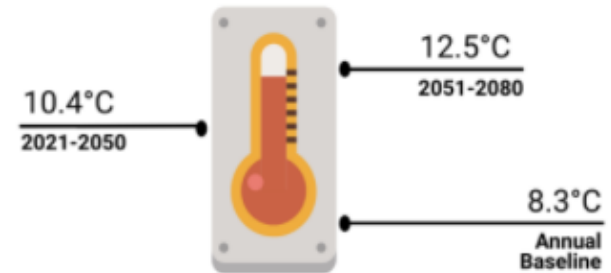
Goal # 7: Climate Adaptation

To improve Hamilton's climate resiliency by decreasing our vulnerability to extreme weather, minimizing future damages, take advantage of opportunities, and better recover from future damages.

HAMILTON Climate Change Impact Adaptation



- Conducted Community Survey and Engagement throughout 2021 getting detailed feedback from:
 - Six Environmental NGO's
 - Seven Institutional & Commercial Partners
 - Fourteen Community & Social Organizations
- **Updated Hamilton's Climate Science Report**
 - Technical regional modelling downscaled to predict local climate scenarios
- **Advancing Climate Adaptation to Extreme Heat Community Project:**
 - \$15,000 grant to pilot interventions where people need it most



Goal # 8: Diversity, Health and Inclusion

To ensure all our work promotes equity, diversity, health and inclusion and improves collaboration and consultation with all equity seeking groups, including local Indigenous Peoples.

Equity, Diversity and Inclusion Framework:

- Unanimous approval with mandatory training
- Equivalent of three Full-Time Employment (FTE) to Human Rights Division

Indigenous Natural Heritage Assessment Policy:

- Development in consultation with Indigenous communities
- Builds improved relationships with the Treaty Nations

Cultural Capacity Training:

- ~108 PHS staff completed San'yas online Indigenous Cultural Competency training
- Full City-wide roll-out throughout 2022



Goal # 9: Education & Awareness

To increase the knowledge and empower City staff and the Hamilton community including business, NGO's and individual citizens while advocating to higher levels of government to take action on climate change.

CityLAB Student/Staff Projects:

- Public Works Resilient Works
- HSRnow Accessibility
- Animating Community Driven Open Streets
- COVID-19 Effects on Parkland
- Test and Trace: Urban Waters Edition



Hamilton's Climate Change Action Website:



City of Hamilton Climate Change Action



<https://www.hamilton.ca/city-initiatives/strategies-actions/climate-change-action>

Goal # 9: Education & Awareness

To increase the knowledge and empower City staff and the Hamilton community including business, NGO's and individual citizens while advocating to higher levels of government to take action on climate change.

Advocacy to Higher Levels of Government:

- Federal Election Priorities – Impacts of Climate Change: Disaster mitigation and adaptation support for impacts or at risk of being impacted by the effects of climate change.

<https://www.hamilton.ca/government-information/federal-election/federal-priorities>

- Call to Provincial Government Interim Cap and Phase-Out of Natural Gas in Electricity Generation by 2030 (GIC 20-018)
 - Staff attending municipal working group with Pollution Probe

Community Energy and Emissions Plan

- Low Carbon Scenario Model
- Implementation Strategy
- Science based targets:
 - Actions
 - Resources
 - Indicators
- Additional climate change actions/indicators

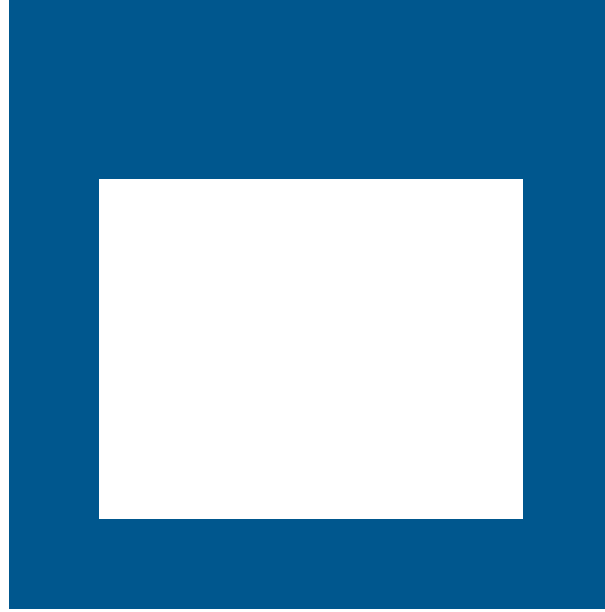
Integration
into
Departmental
Multi-Year
Budget and
Business Plan

Climate Impact Adaptation Plan

- Risks & Vulnerabilities
- Resilient Actions, Plans & Policies
- Science based targets:
 - Actions
 - Resources
 - Indicators
- Additional climate change actions/indicators



THANK YOU



QUESTIONS?