Hamilton

CORPORATE CLIMATE CHANGE TASK FORCE

Corporate Goals and Areas of Focus for Climate Change Mitigation and Adaptation

City of Hamilton
December 4, 2019

We acknowledge the City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas for the Credit First Nations.

Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.

Acknowledgements:

Thank you to the members of the Corporate Climate Change Task Force (CCCTF) for their hard work and dedication to helping move Hamilton forward towards a prosperous low carbon and sustainable future. The multi-department CCCTF included:

Dave Arsenault – Hamilton Water
Gavin Chamberlain – Corporate Services
Tom Chessman – Public Works
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Jennifer DiDomenico – Public Works
Margaret Fazio – Planning and Economic Development
Trevor Imhoff (Chair) – Healthy and Safe Communities
John Lane – Planning and Economic Development
Alissa Mahood – Planning and Economic Development
Andrea McDowell – Healthy and Safe Communities
Brian McMullen – Corporate Services
Raffaella Morello – Public Works
Scott Peck – Hamilton Conservation Authority
Jeff Poljanksi – Public Works
Shelley Rogers – Healthy and Safe Communities
Sam Scarlett – Public Works
Chris Shilton – CityHousing Hamilton

Thank you to all of the staff across the City of Hamilton that helped in the creation of this report and ongoing work you all do on a daily basis to make Hamilton the best place to raise a child and age successfully.

A special thank you for the strategic direction and guidance of our City Manager **Janette Smith** and the rest of Senior Leadership including:

Paul Johnson – General Manager, Healthy and Safe Communities Department
Dan MacKinnon – General Manager, Public Works
Jason Thorne – General Manager, Planning and Economic Development
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To accelerate the uptake of modes of transportation that are low and/or zero 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.

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To procures 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.

Goal 6 Protect and Restore the Natural Environment

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

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.

Goal 8 Diversity, Health and Inclusion

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

Goal 9 Education and Awareness

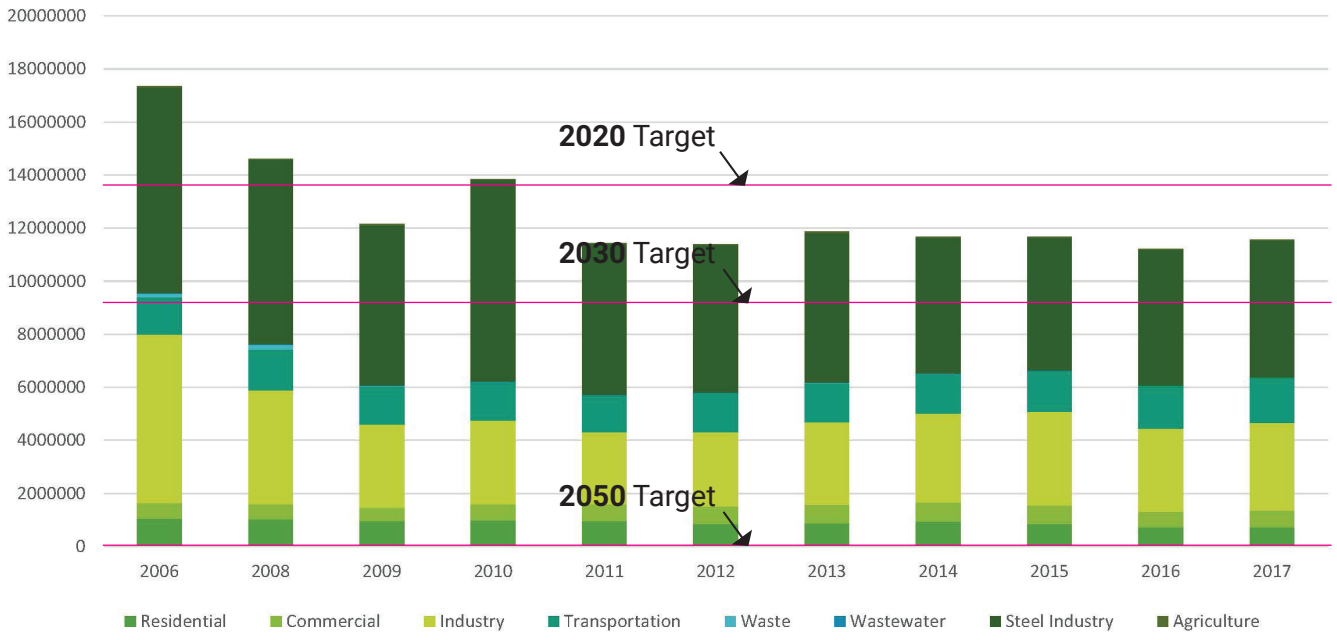
To increase the knowledge and empower City staff and the Hamilton community including business, NGO's and individual citizens while advocating to higher levels of government to take action on climate change.

Overview and Context

The City of Hamilton has been tracking and annually reporting city-wide Greenhouse Gas (GHG) emissions since 2006. Since 2006 city-wide emissions has been reduced approximately 33% or 5,780,768 tonnes carbon dioxide equivalent (tCO_2e).

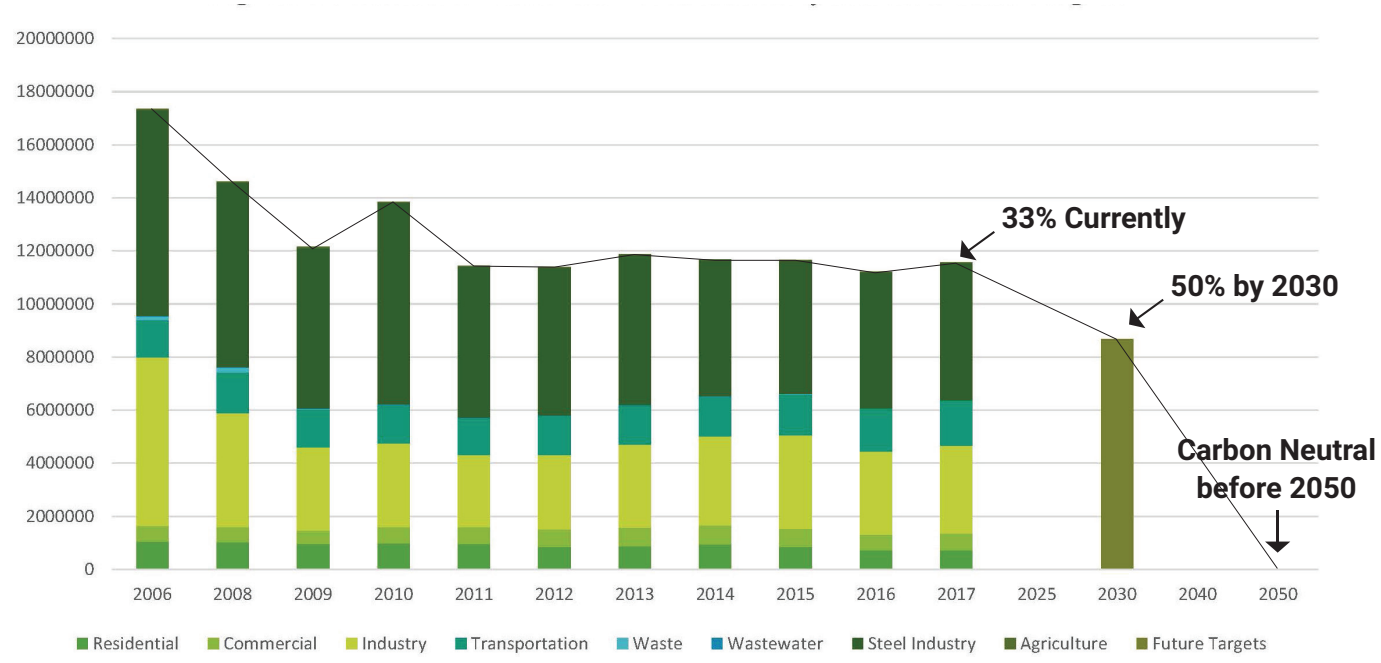
Hamilton City Council at it's meeting on March 27, 2019 ratified the motion Accelerating and Prioritizing Climate Action in Response to the Climate Emergency which set a new GHG reduction target of achieving carbon neutrality before 2050. This new target aligns with the United Nations Intergovernmental Panel on Climate Change (IPCC) scientific report that outlined global requirements to keep global warming below 1.5 degrees Celsius.

Figure 1 | Hamilton's Community Greenhouse Gas Emissions Inventory



The City of Hamilton has already established an interim target of 50% reduction by 2030. In order to reach the interim target of 50% reduction based on 2006 baseline, GHG emissions will need to be reduced by approximately 2,894,138.50 tCO_2e from 2017 levels.

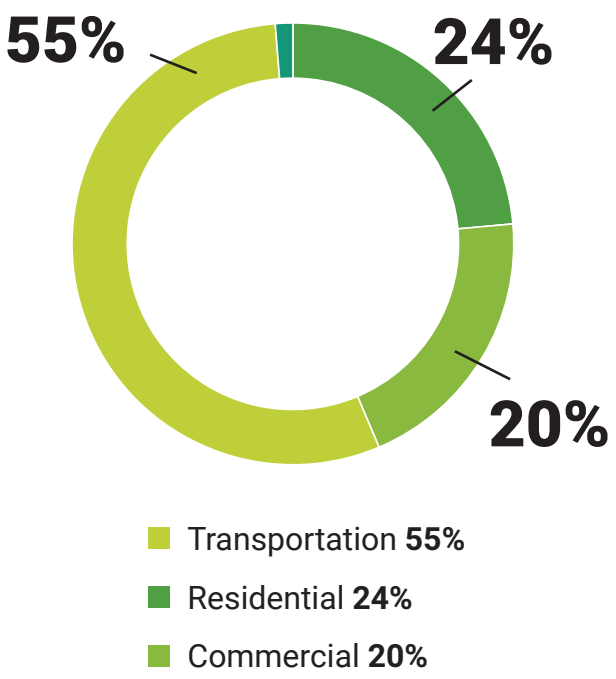
Figure 2 | Hamilton's GHG Emissions Inventory and Reduction Targets



The major GHG emission sources in Hamilton remain to be industrial emissions, specifically steel emissions at approximately 5,156,276 tCO_2e, or 45% of Hamilton's total emissions. Although the industrial and steel sector still represent the largest source of emissions, both steel and industrial emissions have reduced their emissions since 2006 by 33.5% and 47.8% respectively, whereas commercial and transportation has increased their emissions by +5.5% and +20.7% respectively from 2006 baseline emissions.

When excluding industrial emissions from Hamilton's inventory the major sources of GHG emissions are:

Figure 3 | Hamilton's Big Three Community GHG Emissions Excluding Industry



City of Hamilton's Corporate Climate Change Mitigation and Adaptation Areas of Focus

City Council declared a climate change emergency in March 2019, at that time joining 435 municipalities world-wide. Since then the total number of municipalities have reached more than 800 cities around the world, including the Government of Canada, all acknowledging the scale of the climate crisis and the need for accelerated action.

The City of Hamilton understands declaring a climate emergency is just the beginning. City Council through its climate emergency declaration directed staff to form a multi-departmental Corporate Climate Change Task Force (CCCTF). Through the CCCTF a centralized reporting approach has been created where all departments have compiled a list of their existing climate change initiatives.

The CCCTF follows corporate principles based on:

Figure 4 | Corporate Climate Change Task Force Principles

Utilizing the most current scientific reports including Hamilton's Community Climate Change Action Plan[1], Hamilton and Burlington Low-Carbon Scenario and Technical Report 2016 to 2050[2], and The Science of Climate Change: Climate Data for the City of Hamilton, Ontario[3] the CCCTF compiled departmental-wide lists of existing and future actions and conducted a gap analysis to determine new high impact areas of focus departments can take in order to enable the acceleration of low carbon and climate resilient actions to move Hamilton towards a prosperous low carbon resilient community.

[1]City of Hamilton (2015). Taking Action on Climate Change in Hamilton – A Community Plan.
Retrieved from: https://pub-hamilton.escribemeetings.com/filestream.ashx?DocumentId=117807
[2]Sustainbility Solutions Group (2018). Hamilton and Burlington Low-Carbon Scenario and Technical Report 2016 to 2050.
Retrieved from: https://pub-hamilton.escribemeetings.com/filestream.ashx?DocumentId=195803
[3]ICLEI Canada (2016). The Science of Climate Change: Climate Data for the City of Hamilton, Ontario.
Retrieved from: https://climatechangehamilton.files.wordpress.com/2017/06/the-science-of-climate-change.pdf

Corporate Goals, High Impact Actions, Areas of Focus and Indicators

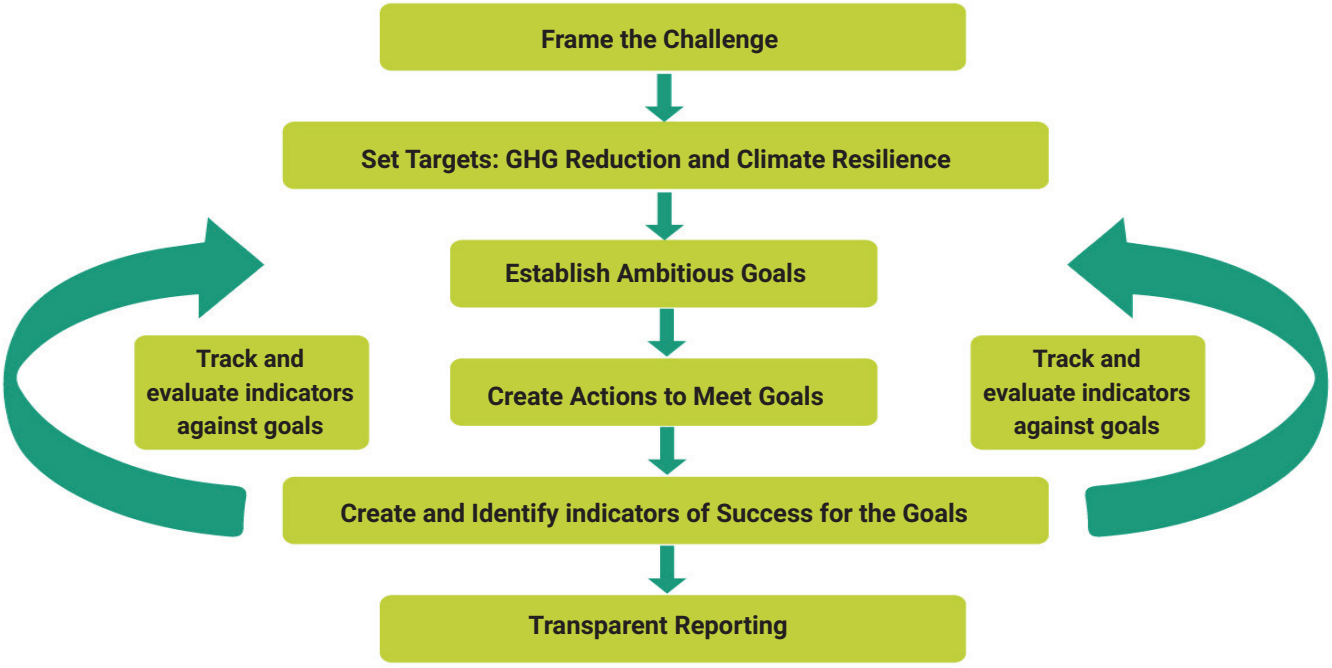
The purpose of this report is to lay the foundation for the first corporate-wide climate change reporting framework and areas of focus to empower City staff and enable the community to take action on climate change.

The corporate goals, high impact actions, areas of focus and indicators listed in the subsequent pages follows the Results Based Accountability (RBA) corporately endorsed process. The RBA uses a data-driven, decision-making process to help community and organizations get beyond talking about problems and taking actions to improve the lives of the community as a whole[4].

Using science driven data from the most recent climate change reports for the City of Hamilton for both climate change mitigation and adaptation, the CCCTF prioritized a list of over 175 actions. Through a gap analysis those actions were compared to those identified existing climate change actions. The actions that were not being fully addressed were prioritized based on its impacts to reduce GHG emissions and adapt to climate change.

The establishment of the overarching ambitious goals were created from grouping the list of over 175 actions into themes. The CCCTF underwent a visioning exercise as well to further reinforce the main themes. Figure 5 below briefly describes the process of the CCCTF and how it plans to continue to be results based by annually evaluating our results through the identification and tracking of key indicators.

Figure 5 | CCCTF Process Map for Action Planning



[4] Fiscal Policy Studies.(2019). What is Results-Based Accountability.
Retrieved from: http://resultsaccountability.com/about/what-is-results-based-accountability/

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.

Community

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will work within its jurisdiction and authority to achieve a high level of environmental performance in future private sector construction.	Material reuse/recycling associated with demolitions.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Information materials and best practice guidelines related to green building practices.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Eligibility of climate change-related property improvements as part of existing financial incentive programs.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Minimum environmental performance requirements for eligibility for existing financial incentive programs.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Development fees and potential fee rebates for green development.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Award/recognition programs for green development.	Planning and Economic Development	Initiate: 2020 Report: Annually

Background Data:

- When excluding industry, residential and commercial buildings represent 44% (1,349,362 tCO_2e) of Hamilton's GHG emissions.
- Climate change threatens our existing and future infrastructure through extreme weather events and climate resilient infrastructure is needed.

Key Indicators:

- Number of new buildings achieving enhanced energy efficiency compared to minimum Ontario Building Code requirements.
- Total tCO_2e by fuel type per residential, commercial and industrial sector.

Figure 6 | 2017 Community Emissions (excluding Industry)

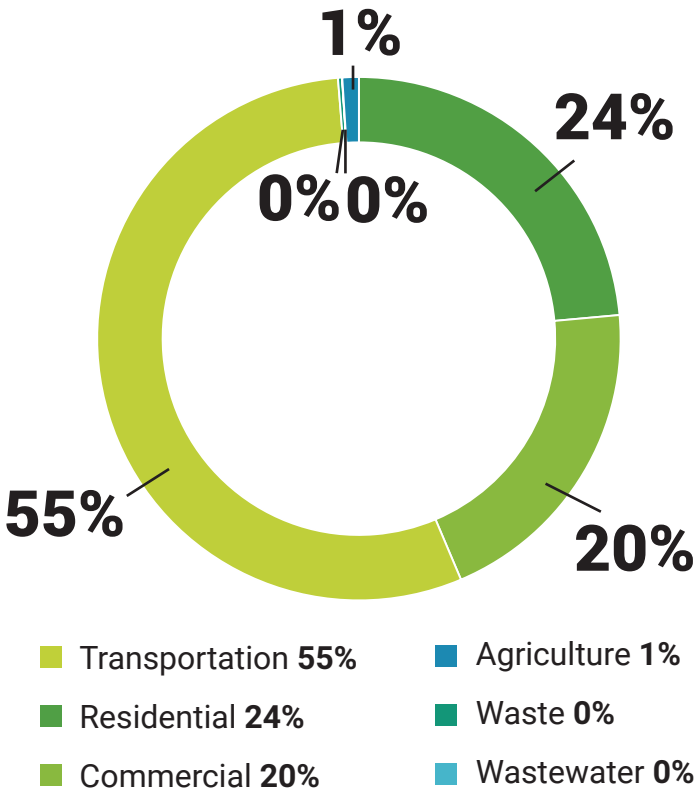
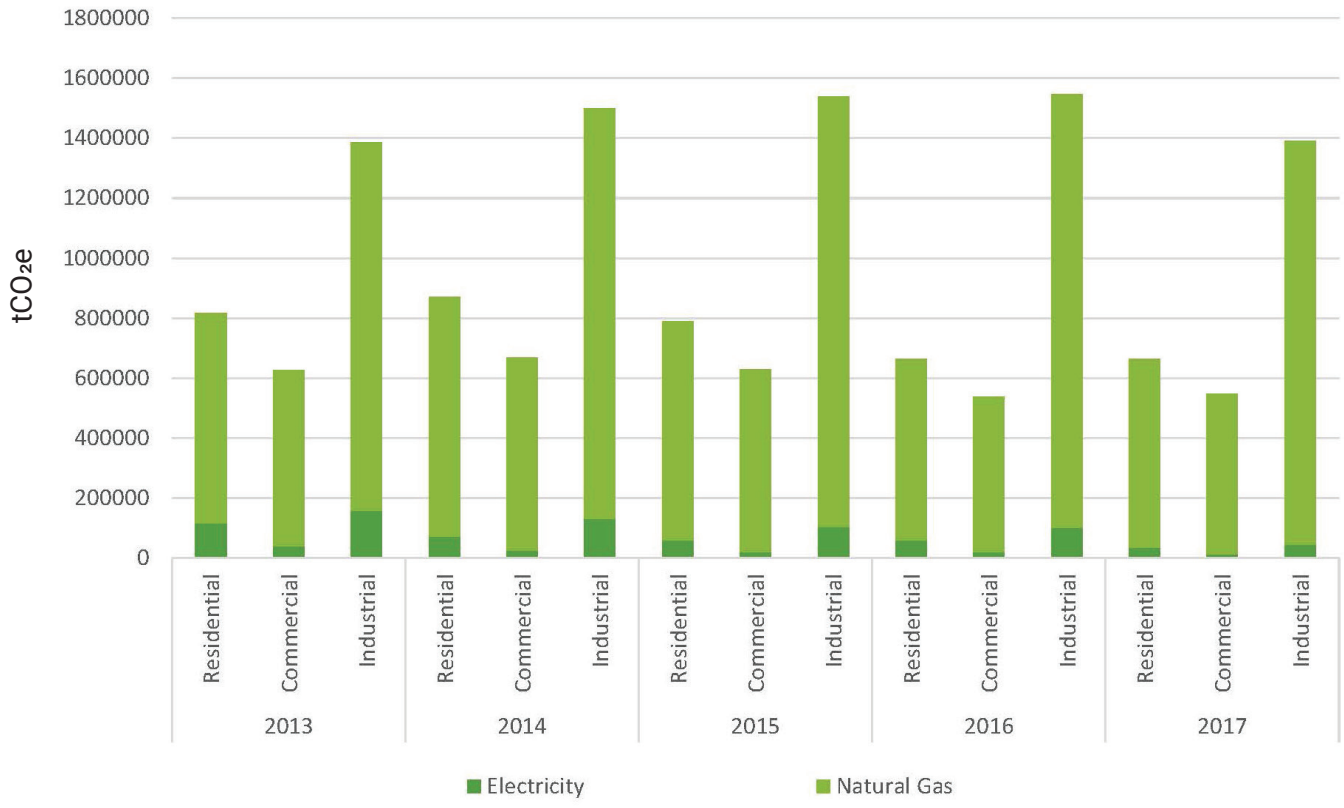


Figure 7 | Number of Buildings Achieving Enhanced Environmental Performance

Figure 8 | Electricity and Natural Gas tCO_2e by Building Sector 2013 -2017



Goal 1: Buildings

City Leading by Example

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will update the Corporate Energy Policy's GHG emissions target to align with new community targets.		Public Works	Initiate: 2020 Report: Annually
The City will update the Corporate Energy Policy so that all new corporately owned assets are built to the highest performance, best industry standards.	Integrating best practices for climate mitigation.	Public Works	Initiate: 2020 Report: Annually
	Integrating best practices for climate adaptation.	Public Works	Initiate: 2020 Report: Annually
The City will retrofit existing corporately owned assets to improve energy efficiency and reduce GHG emissions to achieve new Corporate Energy Policy targets.		Public Works	Initiate: 2020 Report: Annually

Background Data:

- Corporately owned buildings represent 30% (approx. 23,916 tCO_2e) of the City of Hamilton's corporate GHG emissions.
- Building retrofits and energy efficiency is one of the most affordable ways to reduce GHG emissions.

Key Indicators:

- Adoption of Corporate Policy Update.
- Total tCO_2e by corporately owned buildings by fuel type.
- Total energy and cost savings from corporate building retrofits annually.

Figure 9 | Corporate GHG Emissions Breakdown

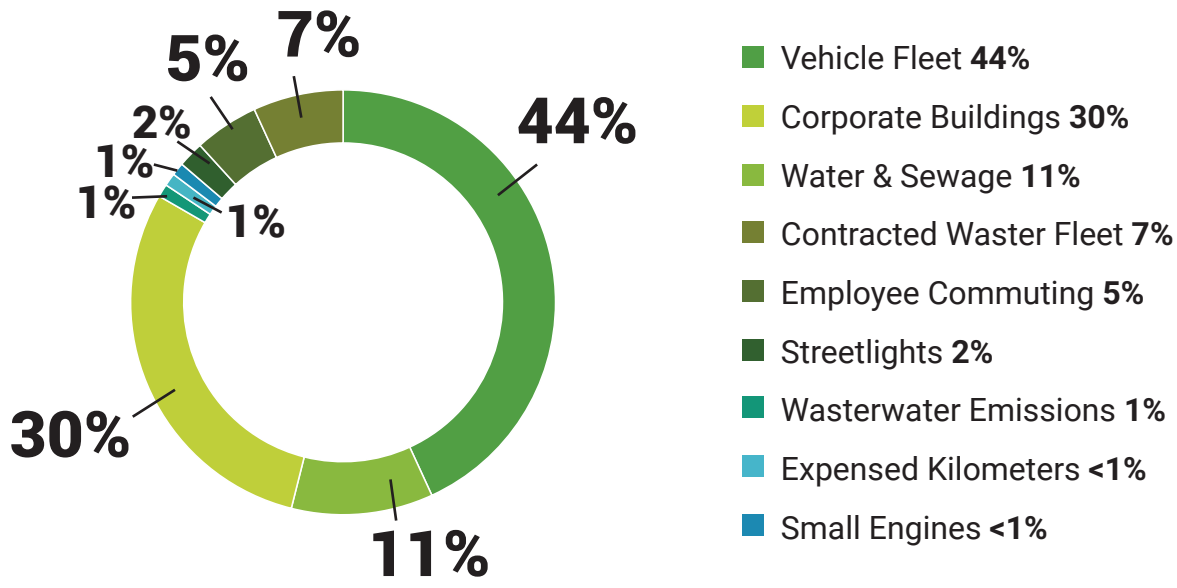


Figure 10 | Corporate Owned Buildings tCO_2e by Fuel Type 2013-2017

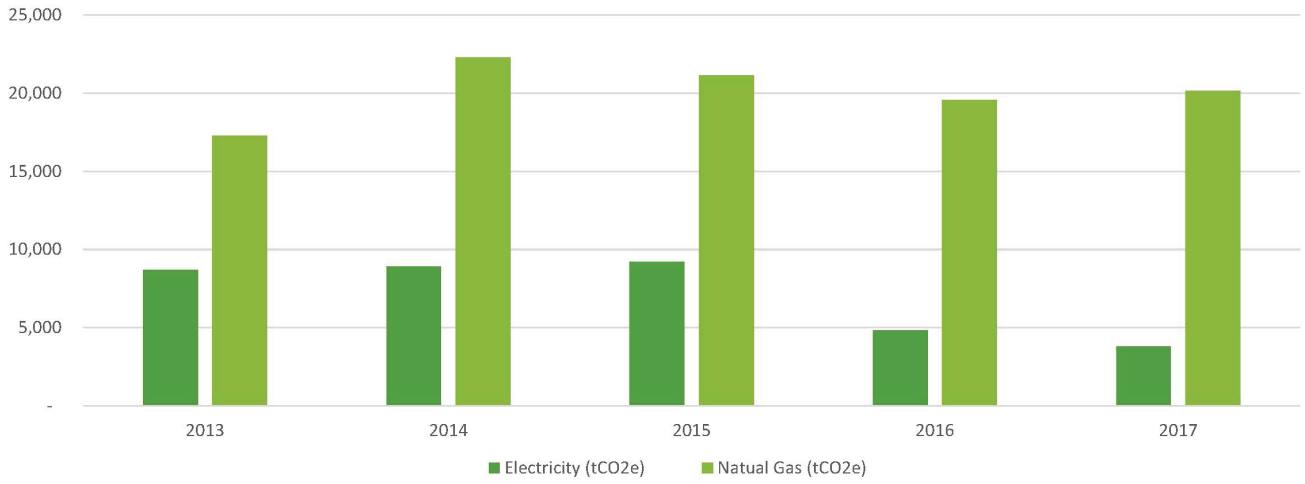
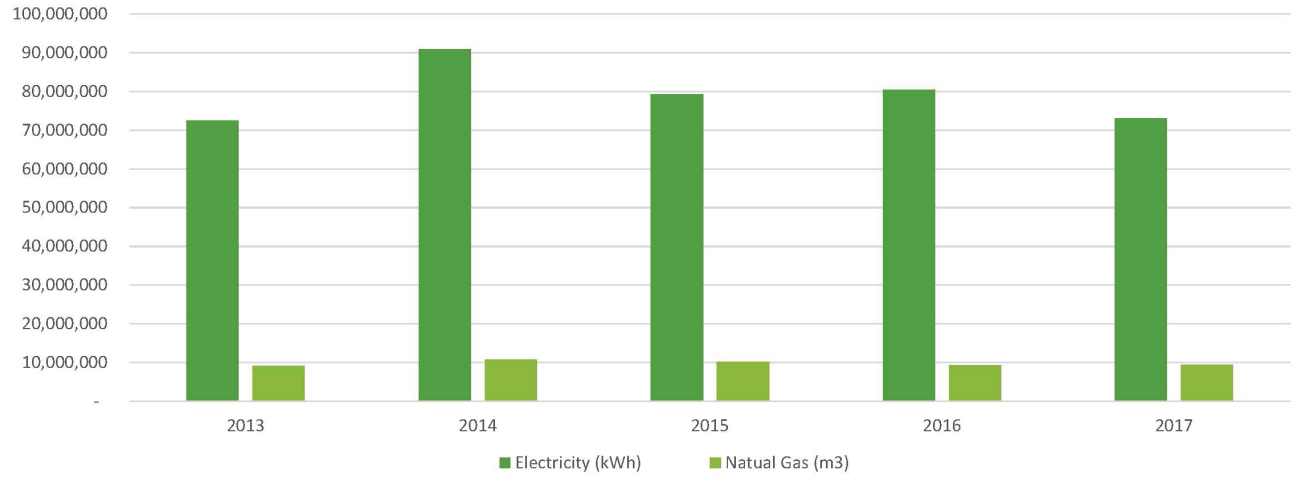


Figure 11 | Corporate Owned Buildings Fuel Consumption 2013-2017



Goal 2: Active and Sustainable Travel

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

Community

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will accelerate initiatives to shift a greater proportion of trips to more sustainable modes of travel including walking, cycling, transit and carpool/carshare.	Opportunities for acceleration of implementation of Transportation Master Plan, including street design standards and Vision Zero initiatives.	Planning and Economic Development, Public Works	Initiate: 2020 Report: Annually
	Opportunities for acceleration of implementation of Hamilton's cycling master plan network and cycling infrastructure, including bike share and bike parking.	Planning and Economic Development, Public Works	Initiate: 2020 Report: Annually
	Opportunities to expand car share programs including "floating car share".	Planning and Economic Development	Initiate: 2020 Report: Annually
	Update to the City's Parking Master Plan, including parking pricing, boulevard parking policies, priority parking policies.	Planning and Economic Development	Initiate: 2020 Report: Annually

Background Data:

- 2016 Census data reports that single occupancy vehicles represent approximately 67% of all the trips taken in Hamilton.

Key Indicators:

- Percent modal split of public and active transportation vs single use passenger vehicles.
- Total tCO_2e by fuel type and vehicle type.
- Total kilometers of bike lanes across Hamilton.

Figure 12 | Hamilton's 2016 Modal Split

Figure 13 | tCO_2e by Fuel and Vehicle Type

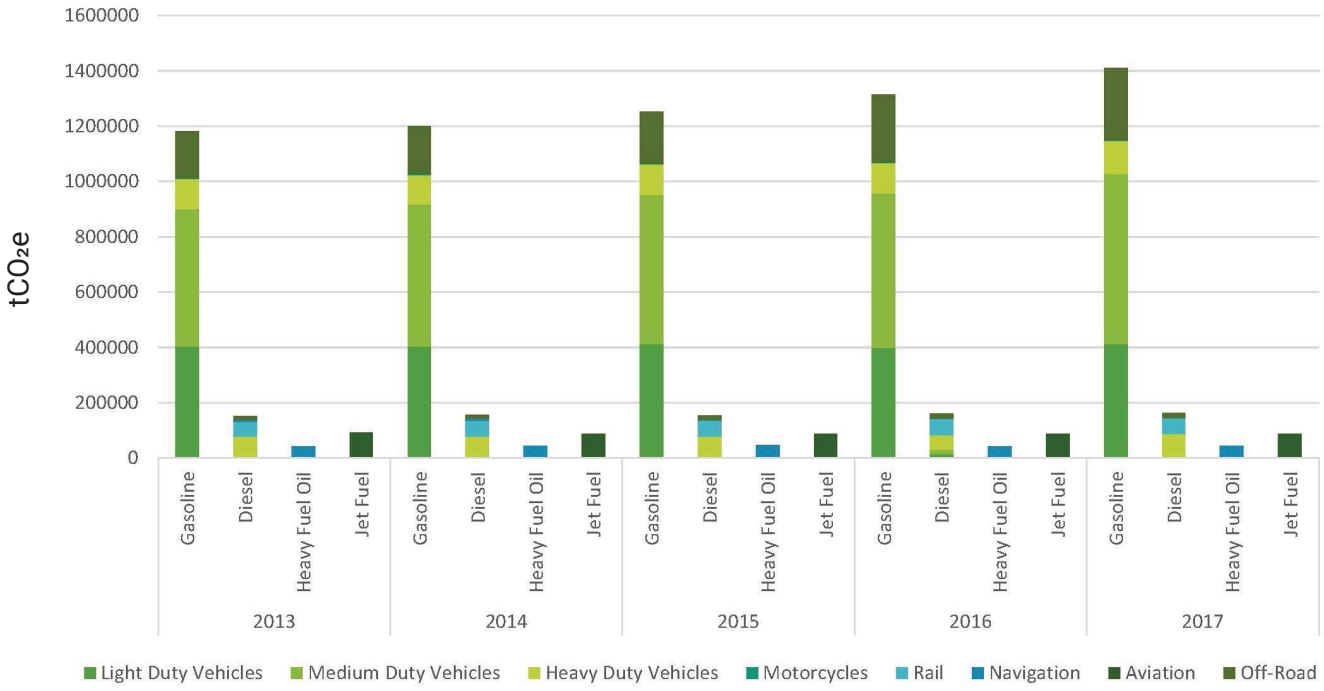
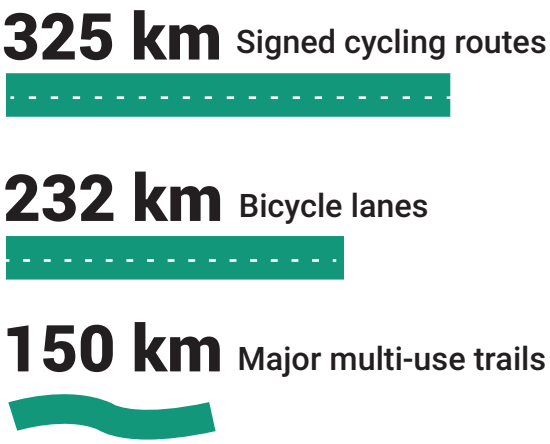


Figure 14 | Hamilton 2019 Cycling Infrastructure



Goal 2: Active and Sustainable Travel

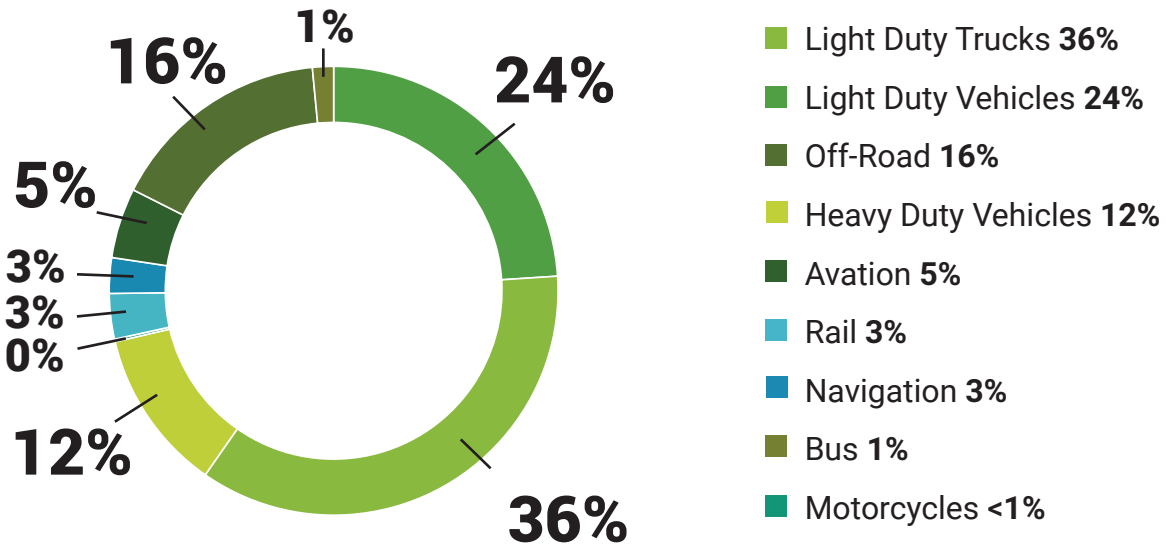
City Leading by Example

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will shift employee travel, including trips to work and trips for work purposes, away from single occupant vehicles toward more sustainable modes of travel.	Promotion of existing programs such as Smart Commute, employee transit passes and employee SOBI memberships.	All Departments	Initiate: 2020 Report: Annually
	Mileage reimbursement policies and employee benefit programs such as employee parking.	Corporate Services	Initiate: 2020 Report: Annually
	Best practices for analysis of Route Optimization.	All Departments	Initiate: 2020 Report: Annually
	Walking/cycling for delivery of city services such as parking enforcement, by-law enforcement.	Planning and Economic Development	Initiate: 2020 Report: Annually

Background Data:

- At 61% (1,036,302 tCO_2e) of total transportation emissions, light duty and medium duty single occupancy vehicles by far represents the largest city-wide transportation GHG emissions.

Figure 15 | Community Transportation tCO_2e per Vehicle Type



Goal 3: Transportation

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

Community

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will expand private Electric Vehicle (EV) infrastructure.	Opportunities for encouraging or requiring EV infrastructure as part of new development.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Opportunities for electrical connections at festival sites, frequent filming locations, and other areas where generators are commonly used.	Planning and Economic Development, Public Works	Initiate: 2020 Report: Annually

Background Data:

- In 2017 it is estimated that light duty gasoline trucks and light duty gasoline vehicles represents 60% (1,027642 tCO_2e) of total emissions from the transportation sector.

Key Indicators:

- Total number of low and/or zero emission vehicles registered within Hamilton using Ministry of Transportation data.
- Total number and map of electric vehicle charging stations across Hamilton.

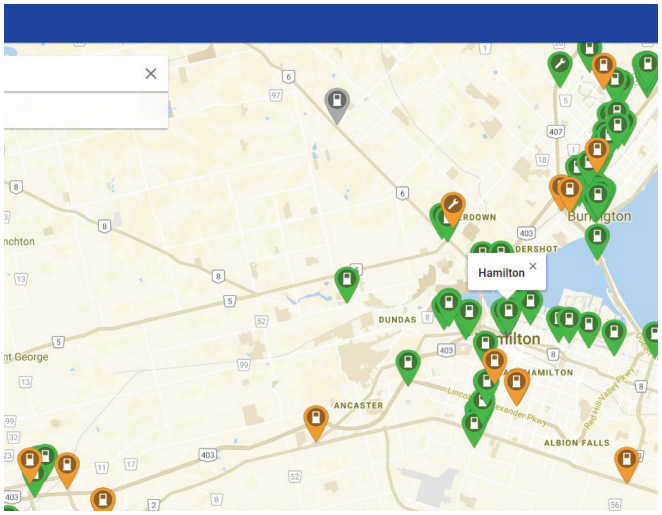
Figure 16 | 2019 Vehicle Registrations of PHEV & BEV in Hamilton

BEVs: 759

PHEVs: 1013

Source: Ministry of Transportation BEV and PHEV Ownership Output for Hamilton (2019)

Figure 17 | Location of Electric Vehicle Charging Stations Across Hamilton



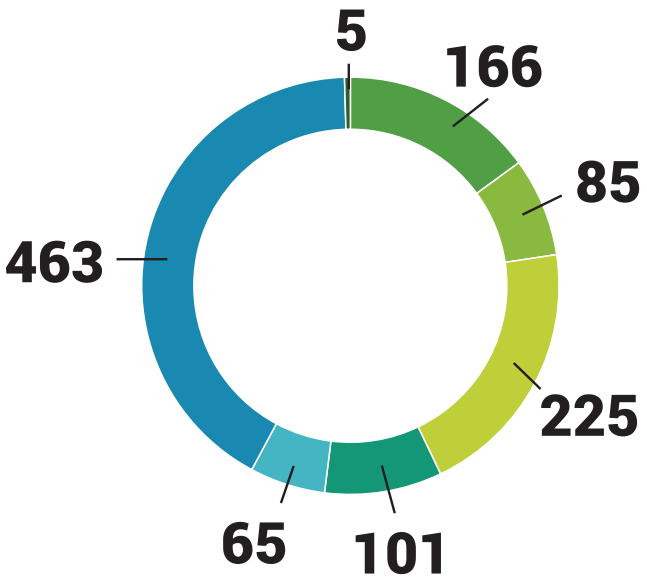
Source: PlugShare (2019)
Retrieved from: https://www.plugshare.com/

Goal 3: Transportation

City Leading by Example

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will expand public Electric Vehicle (EV) infrastructure.	Standards for EV stations at new municipal buildings.	Public Works	Initiate: 2020 Report: Annually
	Expanding EV stations in municipal parking lots, existing municipal buildings, and on-street.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Expanding EV stations in municipal facility parking lots, existing facility buildings, and on-street.	Healthy and Safe Communities	Initiate: 2020 Report: Annually
The City will transition City-owned vehicles and equipment toward low or zero emission alternatives where feasible.	Environmental performance standards in the corporate fleet policy.	All Departments	Initiate: 2020 Report: Annually
	Environmental performance requirements in city procurement processes.	All Departments	Initiate: 2020 Report: Annually

Figure 18 | Hamilton's 2017 Fleet Composition



Background Data:

- City of Hamilton's corporate fleet represents 44% (34,671 tCO_2e) of total Corporate GHG emissions.

Key Indicators:

- Total number and percent of low and/or zero emission vehicles within Hamilton's fleet.

- Light Duty (Gas) **463**
- Heavy Duty (Diesel) **225**
- Bus (Diesel) **166**
- Medium Duty (Diesel) **101**
- Bus (CNG) **85**
- Medium Duty (Gas) **65**
- Light Duty (Gas) **5**

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.

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will ensure future land use and development supports climate change mitigation and resiliency.	Climate change evaluation framework/ lens as part of GRIDS2 and the Municipal Comprehensive Review.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Energy and Environmental Assessment Report requirement for new development proposals.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Adoption of Community Energy Plan.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Low Impact Development guidelines within the City's Comprehensive Engineering Guidelines, Site Plan guidelines and zoning standards.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Climate change evaluation framework/ lens for future infrastructure master plans.	Public Works	Initiate: 2020 Report: Annually

Background Data:

- All planning decisions that influence the built environment has a direct impact on a city's GHG emissions and overall climate resiliency.

Key Indicators:

- Number of planning initiatives that include climate change evaluation/lens.

Figure 19 | Map of City of Hamilton

Source: City of Hamilton Open Data Portal (2019)

Goal 5: Procurement

To procures 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.

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
Update and modify procurement/ purchasing policies to include scoring components for enhanced environmental performance including both climate change mitigation and adaptation, and support for testing innovative technologies.	Minimum environmental performance for standard construction documents.	All Departments	Initiate: 2020 Report: Annually
	Updating City Roster and Request for Proposal with climate change lens.	All Departments	Initiate: 2020 Report: Annually
	Investigate products/materials with climate change lens.	All Departments	Initiate: 2020 Report: Annually

Background Data:

- Procurement process can be used as a strategic function to support the city and community's priorities of reducing GHG emissions and adapting to a changing climate.

Key Indicators:

- Total number of completed contracts that invoked updated clauses to achieve key climate change mitigation and adaptation outcomes.
- Amount of solid waste diverted from landfills as result of packaging, construction waste management, and material re-use requirements included in City contract documents.

Goal 6: Protect and Restore the Natural Environment

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

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will ensure future land use and development supports climate change mitigation and resiliency.	Adoption of the Urban Forest Strategy.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Develop guidelines for private land tree planting, tree replacement, permeability and lot cover to update City's Comprehensive Engineering Guidelines and Site Plan Guidelines.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Develop guidelines for public land tree planting, tree replacement, permeability and lot cover to update City's Comprehensive Engineering Guidelines and Site Plan Guidelines.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Green standards for city-owned parking facilities.	Planning and Economic Development	Initiate: 2020 Report: Annually
Investigate incorporating green assets into existing asset management plans as per O.Reg. 588/17: Asset Management Planning For Municipal Infrastructure.		Public Works	Initiate: 2020 Report: Annually

Background Data:

- Hamilton has a 35% tree canopy cover target and through the Urban Forest Strategy research urban tree canopy is at approximately 21%.
- The natural environment and green infrastructure can help reduce climate change impacts such as extreme weather while also sequestering carbon from the atmosphere.

Key Indicators:

- Percent complete of incorporating green infrastructure into Asset Management Plan.
- Number of Urban Forest Strategy actions initiated.

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.

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will undertake a city-wide climate vulnerability and risk assessment through ICLEI Canada's Building Adaptive and Resilient Cities (BARC) framework.	Update existing climate risk statements.	Healthy and Safe Communities	Initiate: 2020 Report: Annually
	Collect comprehensive background data.	Healthy and Safe Communities	Initiate: 2020 Report: Annually

Background Data:

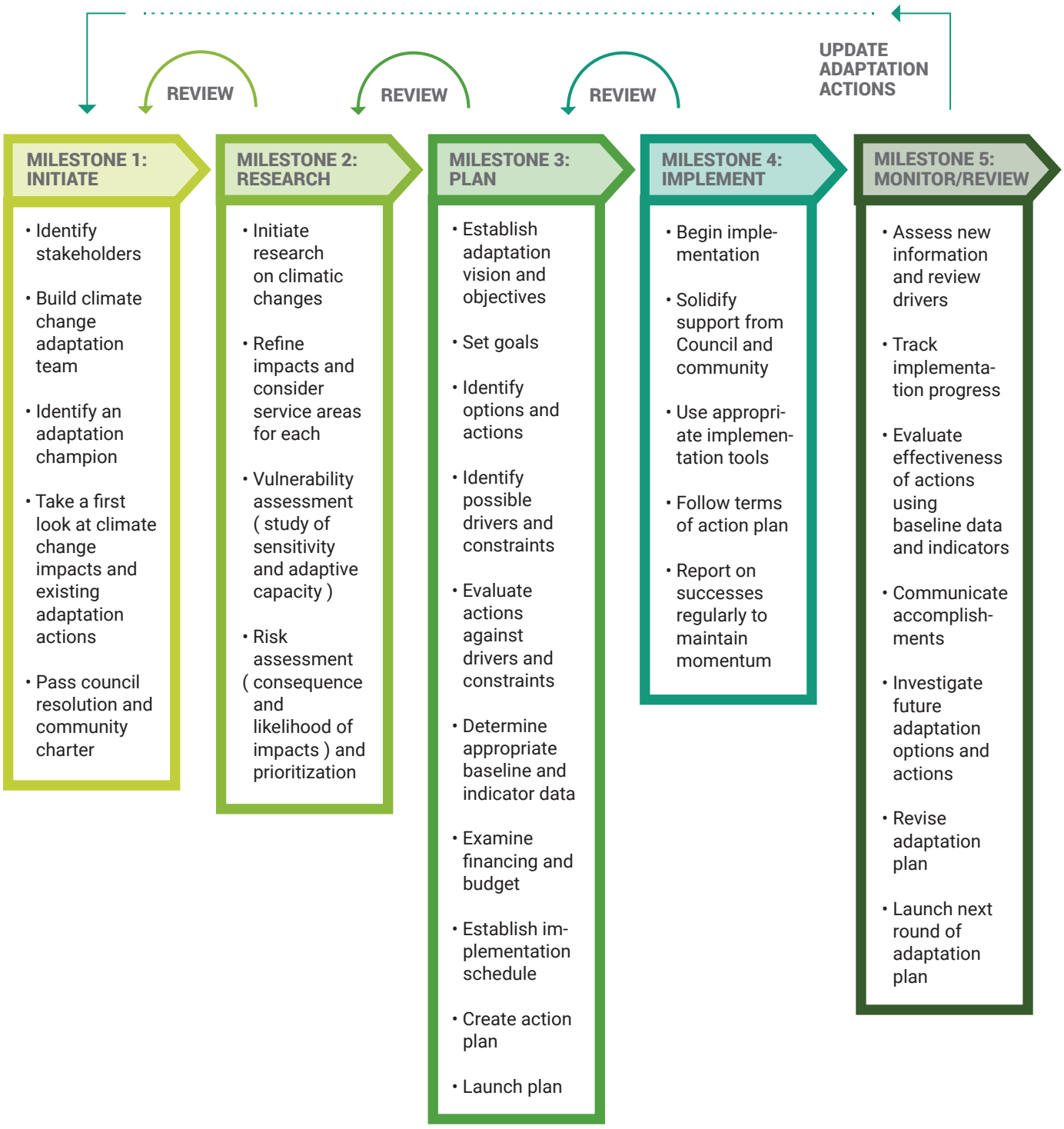
- Climate change is projected to increase the intensity, duration and frequency of extreme weather events.
- Insurance Bureau of Canada recent report by Green Analytics estimates that across Canada an average annual investment of $5.3 billion is needed for municipalities to adapt to climate change.[5]
- Hamilton is already experiencing climate change impacts through flooding, extreme heat, increase freeze-thaw cycles damaging infra structure, increase vector-borne disease, etc.

Key Indicators:

- Number of milestones achieved through the BARC framework.

[5]FCM(2019). Investing in Canada's Future: The Cost of Climate Adaptation. Retrieved from: https://data.fcm.ca/documents/focus/investing-in-canadas-future-the-cost-of-climate-adaptation-summary.pdf

Figure 21 | ICLEI Canada's BARC Milestones



Goal 8: Diversity, Health and Inclusion

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

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will work to enhance collaboration and consultation with the public and all marginalized groups, includinglocal Indigenous people on climate change and protecting the environment.	Identification of existing and future initiatives to enhance local Indigenous consultation.	All Departments	Initiate: 2020 Report: Annually
	Implement corporate public engagement policy and toolkit when ready.	All Departments	Initiate: 2020 Report: Annually

Background Data:

- Working in collaboration with Indigenous people will not only strengthen the cause, but it works within the scope of Hamilton's Urban Indigenous Strategy that identifies the City's commitment on consultation and reconciliation creating meaningful relationships.
- An equitable and diversity lens on climate change actions will help to prevent unjust impacts to our most vulnerable populations.
- Climate change action can also achieve many community-wide objectives that can improve public health and social equity.

Key Indicators:

- Number and percent of staff trained on Indigenous Cultural Training.

Goal 9: Education and 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.

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will train its staff and subject matter experts on best practices related to climate change mitigation and climate change resiliency.	Training and education for building managers and facility staff on building and facility operations.	All Departments	Initiate: 2020 Report: Annually
	Training and education for Building Division staff on green building standards and best practices.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Partnerships, including CityLab, to undertake research and develop best practices.	All Departments	Initiate: 2020 Report: Annually
	General level of climate change training and onboarding.	All Departments	Initiate: 2020 Report: Annually
The City will advocate to higher levels of government for actions to address climate change.	Infrastructure funding.	City Manager's Office	Initiate: 2020 Report: Annually
	Ontario Building Code requirements for new development.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Development of the regional frequent transit network.	Planning and Economic Development	Initiate: 2020 Report: Annually
	Expand existing provincial/federal funded retrofit programs to include improved energy efficiency.	TBD	Initiate: 2020 Report: Annually
	Advocate to Ministry of Environment, Conservation and Parks to udpate stormwater sewer and water design standards.	Planning and Economic Development, Public Works	Initiate: 2020 Report: Annually

High Impact Actions	Areas of Focus for Further Work	Department Lead	Reporting Timeline
The City will train its staff and subject matter experts on best practices related to climate change mitigation and climate change resiliency.		Healthy and Safe Communities	Initiate: 2020 Report: Annually
The City will advocate to higher levels of government for actions to address climate change.		Healthy and Safe Communities	Initiate: 2020 Report: Annually

Background Data:

- City-wide GHG emissions are approximately at 33% reduction based on 2006 baseline with new targets of 50% by 2030 and carbon neutral before 2050.
- Overall corporate emissions only represent less than 1% of city-wide emissions and a large behavioural shift needs to occur across the community to meet our targets.

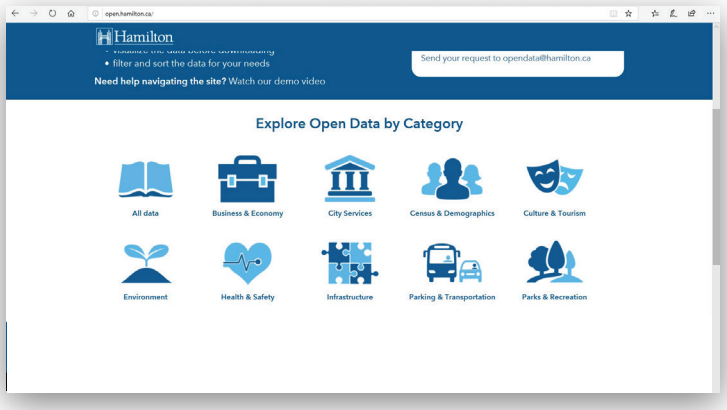
Key Indicators:

- Annual percent GHG emission reduction by sector across the City of Hamilton.
- Number of new climate change initiatives across the City of Hamilton through online data portal.
- Number of building managers, staff and inspectors trained on best practices related to climate change mitigation and adaptation.

Figure 22 | 2017 GHG Emission Reduction by SectorComposition

2017 GHG Reductions	
Residential	30.53%
Commercial	+5.55%
Industry	47.77%
Transportation	+20.73%
Waste	93.66%
Wastewater	97.92%
Steel Industry	33.53%
Agriculture	25.27%
Total Community	**33%**
Total Corporate	**38%**

Figure 23 | Hamilton's Existing Data Portal



Source: City of Hamilton Open Data Portal (2019)

Conclusion

The City of Hamilton is committed to fighting climate change, reaching our GHG emissions reduction targets and climate resiliency goals with all internal and external partners, including local Indigenous people. It will take a concerted effort from all levels of government, organizations, businesses, institutions and academia to ensure Hamilton city-wide reaches its GHG reduction targets and effectively adapts to a changing climate.

Climate change has and continues to be a priority for the City of Hamilton. Hamilton joined the Partners for Climate Protection in 1994 and has achieved the past established milestones and targets. The climate emergency declaration re-affirms the City's commitment and directs staff to centralize and accelerate climate change work across all departments. Appendix "B" to Report CMO19008/HSC19073 is a centralized list of existing actions each department is already working on that addresses climate change.

Climate change action not only helps to meet the City's GHG reduction targets and increase our climate resiliency, but also provides several co-benefits that help to meet Hamilton's other priorities including but not limited to:

- Reduction of GHG emissions through single use vehicles and improving active and sustainable forms of transportation helps to improve air quality, decreases chronic health diseases such as obesity and reduces sedentary lifestyle and improves overall health and well-being of Hamilton's population;

- Construction of high-performing buildings is an opportunity to increase good quality and paying jobs, while also saving money on energy prices through building energy retrofits. Ensuring an equity lens is included will also help to improve vulnerable populations standard of living and overall well-being; and

- Conducting a climate vulnerability and risk assessment will help to identify current and future risks caused by climate change which will save millions of dollars on infrastructure costs and business continuity disruptions.

This report, along with the list of actions and key indicators is meant to be dynamic as scientific evidence and technology quickly evolves. This centralized climate change report is the first of many annual reports the City will use to transparently track the success of actions and utilize the information to make better informed decisions across the entire corporation and the community.

For more information on this report, progress of the actions or data associated with this report please contact climatechange@hamilton.ca or (905) 546-2424 x1308.


CIBC