

## Hamilton's Climate Change Actions

Department	Initiative	Result/Outcome
City-Wide	In 2004 Hamilton joins the Partners for Climate Protection (PCP), a milestone framework for climate change action and preparedness	Achieved all 5 milestones in 2012 completing: (1) Baseline Emissions Inventory and Forecast (2) Setting emissions reduction targets (3) Develop local action plan (4) Implementing local action plan (5) monitor progress and report results
City-Wide	In 2008 City of Hamilton creates first Corporate Strategic Air Quality and Climate Change Plan	Sets GHG reduction targets and actions to address climate change
City-Wide	In 2009 City of Hamilton releases Corporate and Community GHG emissions inventory	Sets GHG reduction targets of 10% by 2012, 20% by 2020 for
City-Wide	City partnered and supported Green Venture and Environment Hamilton in a 1 year pilot program	Created climate change champion campaign enlisting 24 organizations across Hamilton
City-Wide	City of Hamilton becomes first municipality in Ontario to create a community climate change charter.	Achieved 55 organizational signatories and 440 individuals signed to a voluntary charter to take local action
City-Wide	In 2011 City of Hamilton meets 2012 and 2020 emission reduction targets	World Wildlife Fund (WWF) recognizing Hamilton as one of top ten cities in Canada taking action climate change
City-Wide	In 2013 City of Hamilton joins the Carbon Disclosure Project (CDP) global reporting platform for GHG emission inventories	City of Hamilton sets new GHG reduction targets of 20% by 2020, 50% by 2040, and 80% by 2050
City-Wide	City of Hamilton in 2015 joined the Global Covenant of Mayors, at the time the world's largest cooperative effort among Mayors and City Officials.	As a member Hamilton pledges to reduce GHG emissions and track progress and prepare for the impact of climate change
Public Works	2017 Fleet emissions reduction of 4% over base year of 2005	1,445 tonnes CO <sub>2</sub> e lower than 2005
Public Works	Green Fleet Plan was established over 10 years ago. The City has 60 hybrid vehicles in operation currently.	Hybrid vehicles used combination of battery power and gasoline making them more efficient saving money on fuel and GHG emissions.
Public Works	Transit Fleet is replacing diesel buses with Compressed Natural Gas Buses with lower GHG emissions.	Cost savings of \$0.38 per km while lowering emissions. Emissions reductions to be calculated.

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Public Works	2018 approx. 30 million kWh of renewable electricity production at the Glanbrook Landfill and Woodward Wastewater Treatment Plant	100,000 tonnes CO2e avoided annually
Public Works	2018 approx. 40,000 giga joules of Renewable Natural Gas produced at the Woodward Wastewater Treatment Plant	15 tonnes CO2e reduced annually
Public Works	Starting in 2005 completing various retrofits (LED lighting, chillers and boilers etc.) of the Street Lighting system and Arena's, Fire Stations, Police, Recreation Centres and other Corporate buildings and operations	52,325 tonnes CO2e total reduced (2005-2017)
Public Works	Corporate Energy Intensity (energy use per square foot) is down 28% from base year of 2017 vs 2005.	\$68 million in cumulative savings
Public Works	All but one of the 5 year ponds at Glanbrook Landfill have been expanded handle a 25 year storm. More raw chunk dams and ditches have been installed as preventative measures for future weather impacts.	Climate adaptation expanding stormwater ponds helps to prevent and mitigate future flooding events
Public Works	City of Hamilton's grant funding for backwater-valve replacement program.	Installation of backwater-valves to residences in order to prevent basement flooding.
Public Works	Successfully obtained funding from Federal Government Disaster Mitigation and Adaptation Fund	Funding will be used to restore and enhance our shoreline and escarpment barriers to prevent against future storm damages
Public Works	In 2018 installed anti-stagnation valves across Hamilton water distribution.	Resulted in savings over 2.1 million kWh.
Public Works	Installed inline check valve at storm/sewer outfalls.	Prevents back flow of water caused by high water levels, as well as reduced maintenance costs by approximately 90%

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Healthy and Safe Communities Department	Staff, beginning in Planning and Economic Development have been tracking Corporate and Community GHG emissions since 2006	Since 2006 city-wide emissions have been reduced by approximately 21% according to 2016 inventory.
Healthy and Safe Communities Department	In 2014 Public Health Staff undertake 14 month "Let's Talk About the Weather" campaign to develop a Community Climate Change Action Plan	Pop-ups reached over 200 people, Workshops has over 150 attendees, notices and newsletters sent to 358 individuals and 91 Neighbourhood Associations, created 8 Task Forces comprised of over 65 individuals
Healthy and Safe Communities Department	The Medical Officer of Health issues Extreme Heat and Extreme Cold alerts to the broader community including key organizations and stakeholders to provide additional services including but not limited to: shelters, extended service hours	Increases climate resiliency by providing awareness and additional services to help protect our most vulnerable populations
Healthy and Safe Communities Department	Public Health Staff led between 2014-2016 a Corporate Climate Change Adaptation Working Group undertaking corporate climate risk statement	Identified and scored climate risk statements to begin prioritizing climate adaptation actions. Achieves ICLEI's Building Adaptive Resilient Cities (BARC) Milestone 2 of 5
Healthy and Safe Communities Department	Public Health Staff partnering with Environment Hamilton, Faith and the Common Good and Community Resiliency to Extreme Weather (CREW) to complete neighbourhood level climate adaptation planning and extreme weather preparedness	Hosted several workshops completing asset mapping and emergency preparedness training
Healthy and Safe Communities Department	Pool and Splash Pad hours are extended and are free during extended heat events.	Increases climate resiliency by providing awareness and additional services to help protect our most vulnerable populations
Healthy and Safe Communities Department	Lead in partnership with Mohawk College and the City of Burlington to create regional collaborative climate change governance structure	Bay Area Climate Change Office and Bay Area Climate Change Council formed to accelerate climate change action and bring a regional approach to climate action
Planning and Economic Development	In 2004 hires third party engineering firm to undertake GRIDS Background Study: Hamilton's Vulnerability to Climate Change	Identified opportunities to proactively manage its vulnerability to climate change by looking at land use and infrastructure during the GRIDS process

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Planning and Economic Development	Planning Staff are leading the creation of Hamilton's Community Energy Plan (CEP); expected completion Q4/2020.	The CEP is an integrated, comprehensive, long-term plan to meet local energy needs while improving energy and water efficiency.
Planning and Economic Development	Planning Staff completed and Council endorsed in 2018 a comprehensive Transportation Master Plan (TMP)	Sections of TMP addresses several factors towards reducing GHG emissions and improving health through: <i>Complete-Liveable-Better (CLB) Streets, The Role of Health in the Built Environment, Future Travel Demand Modelling, Sustainability Mobility Program, and Cycle Master Plan Review</i>
Planning and Economic Development	Planning Staff leading a multi-departmental Urban Forest Strategy to protect and enhance Hamilton's urban forest.	Protecting and growing urban forests contribute to GHG and air pollutant reduction, stormwater capture from precipitation events and provides cooling during extreme heat events.
CityHousing Hamilton	Between 2017-2018 completed various energy retrofits including building automation systems, domestic hot water heating etc.	Over 674 tonnes CO2e reduction annual, reduction of water usage by over 160,000 m3/year.
CityHousing Hamilton	Throughout 2019 completing various energy retrofits at 13 high-rise apartment buildings including building envelope, mechanical equipment etc.	Estimate GHG reduction of 476 tonnes CO2e annually with approximate utility savings expected of \$100,000 annually.