



HAMILTON'S
CLIMATE ACTION
STRATEGY

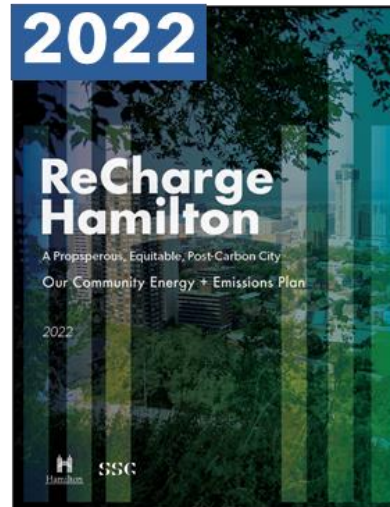
Re-Charge.
Adapt.
Engage.
Act.

Staff Presentation
Climate Change Advisory Committee
June 25th, 2024



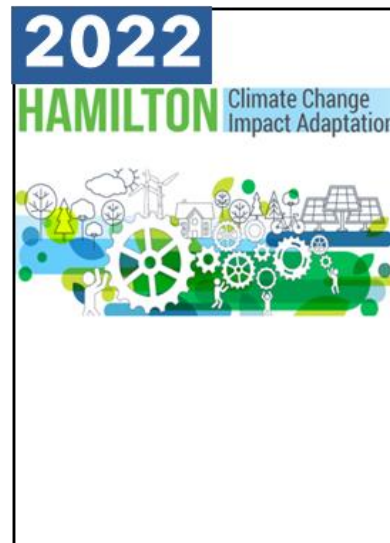
HAMILTON'S
CLIMATE ACTION STRATEGY

Re-Charge.
Adapt.
Engage.
Act.



Community Energy and Emissions Plan (CEEP)

Climate Mitigation –
Actions to reduce GHG emissions that cause climate change



Climate Change Impact Adaptation Plan (CCIAP)

Climate Adaptation –
Actions that help manage or adapt to a changing climate

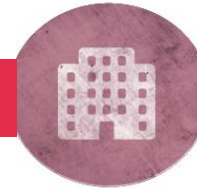


5 Low-Carbon Transformations

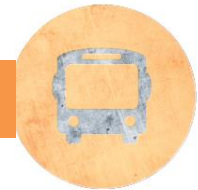
TRANSFORMATION 1: Innovating Our Industry



TRANSFORMATION 2: Transforming Our Buildings



TRANSFORMATION 3: Changing How We Move



TRANSFORMATION 4: Revolutionizing Renewables



TRANSFORMATION 5: Growing Green





4 Theme Areas for Climate Adaptation Actions

RESILIENT THEME 1: Built Environment/Systems



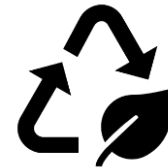
RESILIENT THEME 2: People and Health



RESILIENT THEME 3: Natural Environment, Agriculture and Water



RESILIENT THEME 4: Energy and Economy



Potential Indicators

Enabling Actions

- Annual \$ spent per project with metrics associated with each project
- Amount external grants/sources of funding received
- TBD once action/green bond assessment is completed (iterative process)

HCAS Enabling Actions	2023 Status Update	Potential Indicators	Priority	Data Quality	Data Source ^(e1)	Identified Data Champion
(Enabling Action i) Investigate and Design a Carbon Accounting Framework	IN PROGRESS - Office of Climate Change Initiatives (OCCI), PED Scope of Work currently drafted and being review internally. Proposing 6-phase approach with pilot climate prioritization through 2024 budget process and full roll-out occurring in 2025	TBD once work is completed (e.g. Division Annual GHG emisisions and budgets)				
(Enabling Action ii) Corporate Energy Reserve (revolving fund expansion)	NOT STARTED - Corporate Facilities and Energy Management (CFEM), PW	Annual \$ amount spent and broken down based on type of energy project External grants/sources of funding for corporate projects				
(Enabling Action iii) Municipal and Community Green Bond Assessment	IN PROGRESS - Financial Planning, Admin and Policy, CS Staff are currently investigating Social and Green Bond frameworks including review of any alignment with the scope of work being established under the Carbon Accountability and Budgeting Framework. Update to Council in Q1 2024. Staff capacity continue to be an issue. Consultant to be retained.	TBD once work is completed (e.g. ESG accreditation/reporting outcomes)				
(Enabling Action iv) Climate Change Reserve	COMPLETE - OCCI/PED City Council approved through 2023 Budget process a 0.25% tax levy (approximately \$2.5M annually) to fund this reserve on an annual basis	Annual reserve funding spent and associated metrics for each project.				

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

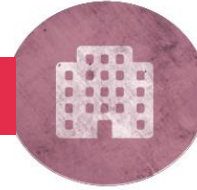
TRANSFORMATION 1: Innovating Our Industry



- Annual industrial GHG and energy use
- Ontario Energy Water Reporting Benchmark (EWRB)
- # of companies on NPRI large emitter and GHG emissions
- # of industrial companies with harmonized net-zero target/strategy
- # of 'clean-tech' companies in Hamilton
- # of trained/re-trained industrial energy professionals
- # of bursaries/subsidized training for frontline communities

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

TRANSFORMATION 2: Transforming Our Buildings



- Established Green Development Standards (may result in further indicators)
- Energy and emissions intensity of new buildings
- # of buildings achieving higher tiered standards
- MW of solar PV installed / ESA permits for Solar – community-wide
- MW of solar PV installed / ESA permits for Solar – corporate-wide
- # of building retrofits (through BHH program and others) by Ward
- Skilled workforce trends
- Building energy and GHG emissions sector trends

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

TRANSFORMATION 3: Changing How We Move



- KMs of connected active transportation networks
- KMs of total cycling infrastructure and breakdown of type
- Collision/Roadway data associated with Vision Zero
- % decarbonized HSR bus fleet and breakdown
- Transit ridership and modal splits
- # of e-mobility services and user statistics (per capita in priority neighbourhoods)
- EV charging stations per km2 and station information (i.e. consumption, time of use etc.)
- Corporate Fleet consumption by fuel type
- # of trained/re-trained low-carbon transportation technology
- # conventional parking space reduction vs # EV parking/ # bike parking etc.
- # of EV campaigns/engagement activities

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

TRANSFORMATION 4: Revolutionizing Renewables



- Long-term electricity plan (emerging metrics)
- \$ investment by utilities, IESO, province
- # Established renewable energy co-ops - MW installed, revenues, barriers etc.
- Total MW of renewable energy installed - corporate and community
- Provincial/IESO RFP for renewables
- Anaerobic Digester Feasibility Study (and new potential metrics e.x. RNG capacity)
- Green Hydrogen Feasibility Study (and new potential metrics)
- GJ of residual waste heat calculated and/or tCO₂e reduction potential
- Tonnes organics diverted from landfill broken out by sector (i.e residential, ICI etc.)

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

TRANSFORMATION 5: Growing Green



- Official Plan review with climate lens
- % new dwelling units within walking access to transit, active transportation green space etc.
- HSR ridership, targets and level of services
- # of secondary plans with alignment to net-zero target and climate resiliency objectives
- # trees planted annually – community and corporately
- % tree canopy cover and trends

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

Potential Indicators



RESILIENT THEME 1: Built Environment/Systems

- Diversion of stormwater and amounts/rates
- # of Low Impact Development (LID), features and locations
- Watershed conditions (quality, erosion etc.)
- # and type of incentives for climate resiliency
- # protective plumbing applications installed per year
- # of building retrofits including resilient measures
- % of city studied for climate hazards
- # flood related calls
- KM of sidewalk cleared and trends
- # request for snow angel program
- # of users of sustainable mobility (i.e. Smart Commute) and statistics (demographics)

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

RESILIENT THEME 2: People and Health



- # annual weather-related morbidity, mortality and hospital visits
- # of paramedic calls
- # of clients within Mobile Integrated Health (MIH) Program and service levels
- # health promotion sessions and service levels
- Website metrics and analytics
- # media releases on heat-related topics
- # high performance affordable housing units
- Shelter expansion statistics and service levels
- Housing prices across Hamilton
- # of organizations delivering emergency preparedness and/or cool kits
- # of neighbourhood groups participate in community support systems
- # of cases of vector-borne diseases and trends/risk rating

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

RESILIENT THEME 2: People and Health



- # complaints to cut grass and standing water
- # of ticks submitted to public health per year
- # of weather-related injuries/deaths to outdoor workers
- # of updated outdoor work and/or travel policies
- # of facilities providing cooling and resources during extreme heat events
- % of vulnerable populations that live within accessible distance of cooling/warming centre and/or parks
- # of heat alerts
- # of users and statistics of cooling infrastructure (facilities, splash pads, parks etc.)
- # of warnings for 'newer-to-this-area' more extreme weather events
- Time lapse between communication to community and extreme weather events
- Flow and level meters in creeks and municipal sewer networks

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

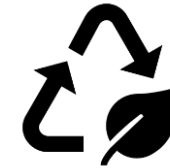
Potential Indicators



RESILIENT THEME 3: Natural Environment, Agriculture and Water

- Statistics on proposed enhancements of natural areas
- Acquisition of space converted to natural areas
- # of community tree planting events hosted
- Compensation for public trees
- Enforcement statistics (i.e fines, complaints, contractor work etc.)
- Indicators as per Urban Forest Strategy
- % equitable tree canopy cover
- Woodlot health, Invasive Species distribution (TBF State of the Forest Report)
- # community gardens and statistics (i.e. users, rainwater capture etc.)
- # of farms engaged in adaptation activities
- % food waste diverted
- Amount redirected to local programs, number of orgs participating etc.

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>



RESILIENT THEME 4: Energy and Economy

- Uptake of programs being offered on supply chain continuity
- # of businesses interested in local best practices
- Amount (MW, GJ etc.) local renewable energy generated
- # of climate resilient retrofits – corporate & community
- # of zero and/or low carbon back-up power
- Annual GHG emissions of back-up generators

Full list of Potential Indicators within the CEEP and CCIAP on the City's website here: <https://www.hamilton.ca/home-neighbourhood/environmental-stewardship/environmental-plans-strategies/hamiltons-climate>

2024 OCCI Annual Report – Draft Table of Contents

DRAFT TABLE OF CONTENTS:

Land Acknowledgement

Executive Summary

UPDATE – OCCI Priority Focus Areas

Hamilton's GHG Inventory – 2006 - 2022

Progress With Implementation of Hamilton's Climate Action Strategy

Climate Change Reserve Update

Conclusion/ Looking Ahead to 2025/26

2024 OCCI Annual Report – Draft Table of Contents

UPDATE - OCCI PRIORITY FOCUS AREAS:

Climate Governance:

- Internal CCI Steering Committee
- Extended Leadership Group
- Climate Change Advisory Committee (pic??)

Carbon Budgeting

- draft community and corporate 'fair share' carbon budget calculations

Green Buildings:

- Better Homes Hamilton Pilot Update
- Draft Net Zero Energy Performance Standard for new municipal buildings.

Urban Greening:

- Community Garden Network

Community Climate Outreach:

- Communications & Engagement Strategy
- Emerging Climate Justice Framework

2024 OCCI Annual Report – Draft Table of Contents

PROGRESS WITH IMPLEMENTATION OF HCAS:

COMMUNITY ENERGY & EMISSIONS PLAN TRANSFORMATIONS:

Low Carbon Transformation #1: Innovating Our Industry

Low Carbon Transformation #2: Transforming Our Buildings

Low Carbon Transformation #3: Changing How We Move

Low Carbon Transformation #4: Revolutionizing Renewables

Low Carbon Transformation #5: Growing Green

CLIMATE CHANGE IMPACT ADAPTATION PLAN THEMES:

Resilient Theme #1: Built Environment

Resilient Theme #2: People and Health

Resilient Theme #3: Natl Env, Ag and Water

Resilient Theme #4: Energy and Economy

PROPOSE – Each category will include highlights of both corporate and community actions

INTEGRATE – updates from both City and broader community.

2024 OCCl Annual Report – Draft Table of Contents

CLIMATE CHANGE RESERVE UPDATE:

- Progress with implementation of 2023 projects
- Projects funded in 2024

CONCLUSIONS/ LOOKING AHEAD TO 2025/26

2024 OCCI Annual Reporting Strategy

- 1) Staff Recommendation Report;
- 2) Appendix "A" - Full Annual Report; and
- 3) Appendix "B" - 2 Page Summary Report.
- 4) Appendix "C" - Full Implementation Update Table

SAVE THE DATE - GENERAL ISSUES COMMITTEE OCTOBER 16th, 2024

Questions for Discussion

Potential Indicators:

- 1) Thoughts, comments, anything missing?
- 2) Other community-wide databases, organizations and other data sets?

Table of Contents:

- 1) Thoughts, comments, anything missing?
- 2) Ideas for featured community stories? Key messages?