2012 Climate Change Actions Update
Board of Health
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Climate Change

- Changes in the climate or long-term, average weather patterns.

Key Greenhouse Gases (GHGs)

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)
- Hydrofluorocarbons (HFC’s)
- Perfluorocarbons (PFC’s)
- Sulfur Hexafluoride (SF₆)
- Nitrogen Trifluoride (NF₃)
Climate Change Linkages...
Municipalities & Climate Change

- Cities and citizens are the drivers of action on addressing climate change.
- Climate change poses risks for cities and citizens.
- Successful cities recognize the synergy between economic growth and climate change is strongest at the local level.
GHG Mitigation and Adaptation Together

**MITIGATION**
- Capture landfill gas
- Expand transit use
- Energy conservation
- Active transportation
- Better insulation
- Permeable pavement
- Reduce peak demand
- Expand tree canopy
- Etc.

**ADAPTATION**
- Sewer upgrades
- Heat alert system
- Control of invasive species
- Business continuity planning
- Etc.

Source: City of Toronto
City of Hamilton – Reduction Achievements

- 2008 – Corporate Climate Change Strategic Plan
- 2009 – GHG Inventory – Corporate and Community
- **Reduction Targets:** 10% by 2012 followed by 20% by 2020
- **Baseline:** City - 2005, Community - 2006

- In 2011, City achieved 2012 targets corporately
- In 2012, City has achieved 2020 targets corporately
- In 2011, Community has achieved 2012 and 2020 targets.

- 2012 Target
- 2020 Target
Total Greenhouse Gas Emissions Corporate and Community (2011) = 17,835,696 M tonnes (23.1% reduction from 2006)
Recommendation 1: Emissions Targets

- Have been met
- Motion to review and increase targets

- Increase targets to further actions
- 80% reduction of emissions by 2050 (IPCC)
- Use same baseline years (2005, 2006)

- Has been recognized and adopted by others – Ontario, Canadian municipalities.

- Can develop short term targets and actions corporately and with community.
Recommendation 2: Corporate Lead

Recommend: Public Works

Why?
• Energy, Buildings, Lighting, Fleets, Employee Commuting.
• Corporate Infrastructure and Assets
• Control, Influence and Data
Recommendation 3: Community Lead

Recommend: Public Health Services

Why?
• Public Health Standards (2008) – Outreach and education on climate change
• Public Health Services Business Plan – Strategic Objective 1.6 = Community Climate Change Plan
• In line with Corporate Strategic Plan – Objective 6.1
• Built community relationships: Clean Air Hamilton, Climate Champions, Community Climate Charter, Hamilton Climate Map...
Hamilton Community Action Map

Put your actions on the Map!

http://www.mapclimatechange.ca/maps.html
Hamilton Community Action Map

- Partnership with McMaster
- Map and Slideshow
- All Wards Represented, Encourage subsmissions
- Citizens and organizations submit photos and actions
- Seeing, Doing, Showing = Taking Action

http://www.mapclimatechange.ca/maps.html
Hamilton Community Action Plan

• Hamilton has a reputation for action on climate change
• 2012 – 2015 Corporate Strategic Plan
  – Strategic Objective 6.1
  – Development of a Community-Based Climate Change Action Plan

• Matching funding available through FCM Green Municipal Fund
• Requires support from Council to apply
• Capital Budget request 2014 = $140K

• No Support = No Plan, No Resources
GHG Mitigation and Adaptation Together

MITIGATION
- Capture landfill gas
- Expand transit use
- Energy conservation
- Active transportation
- Better insulation
- Permeable pavement
- Reduce peak demand
- Expand tree canopy
- Green roofs
- Heat alert system
- Control of invasive species
- Sewer upgrades
- Business continuity planning
- Etc.

Source: City of Toronto
Climate Adaptation

- Climate Change is underway and impacts are occurring.
- Even if emissions stop today, impacts and influence will still happen.

- Extreme weather – flooding, increased temperatures, increased precipitation, high winds...
- Infrastructure vulnerability
- Increased maintenance
- Insurance/reinsurance
- Preferred conditions for food, pests, illness
- Accessibility to water supply
- Safety risks
- Impacts that cross Departments and Wards in Hamilton
Recommendation 4: Adaptation

Recommend: City take action and across Departments

Why?
- 2004 – Vulnerability Study – GRIDS
- **Gap identified**
- Impacts services and community
- **Some programs:**
  - Heat Vulnerability Index, Flood Aware, SERG…
  - Emergency Response…
- **How will climate change influence these risks?**
- **How are we prepared?**
  - Planning, Health, Engineering, Financial, Emergency Response…
- **Needs examination, plan and response**