

# CORPORATE CLIMATE CHANGE GOALS AND AREAS OF FOCUS

General Issues Committee  
December 4, 2019

# Council Direction

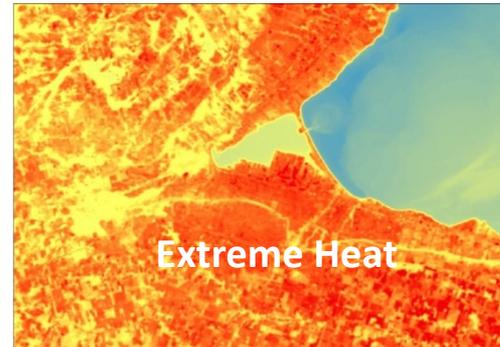
- March 27, 2019, Council approved Accelerating and Prioritizing Climate Action in Response to the Climate Emergency Motion
- June 17, 2019, Board of Health approved Report BOH19022 – Corporate Climate Change Task Force Response to the Climate Change Emergency
- June 26, 2019, Council approved the Establishment of Departmental Climate Change Workplans within the City of Hamilton Motion

# Purpose of Report

- Centralize climate change reporting
- Identify key areas of work
- Identify key indicators
- Foundation report to empower staff

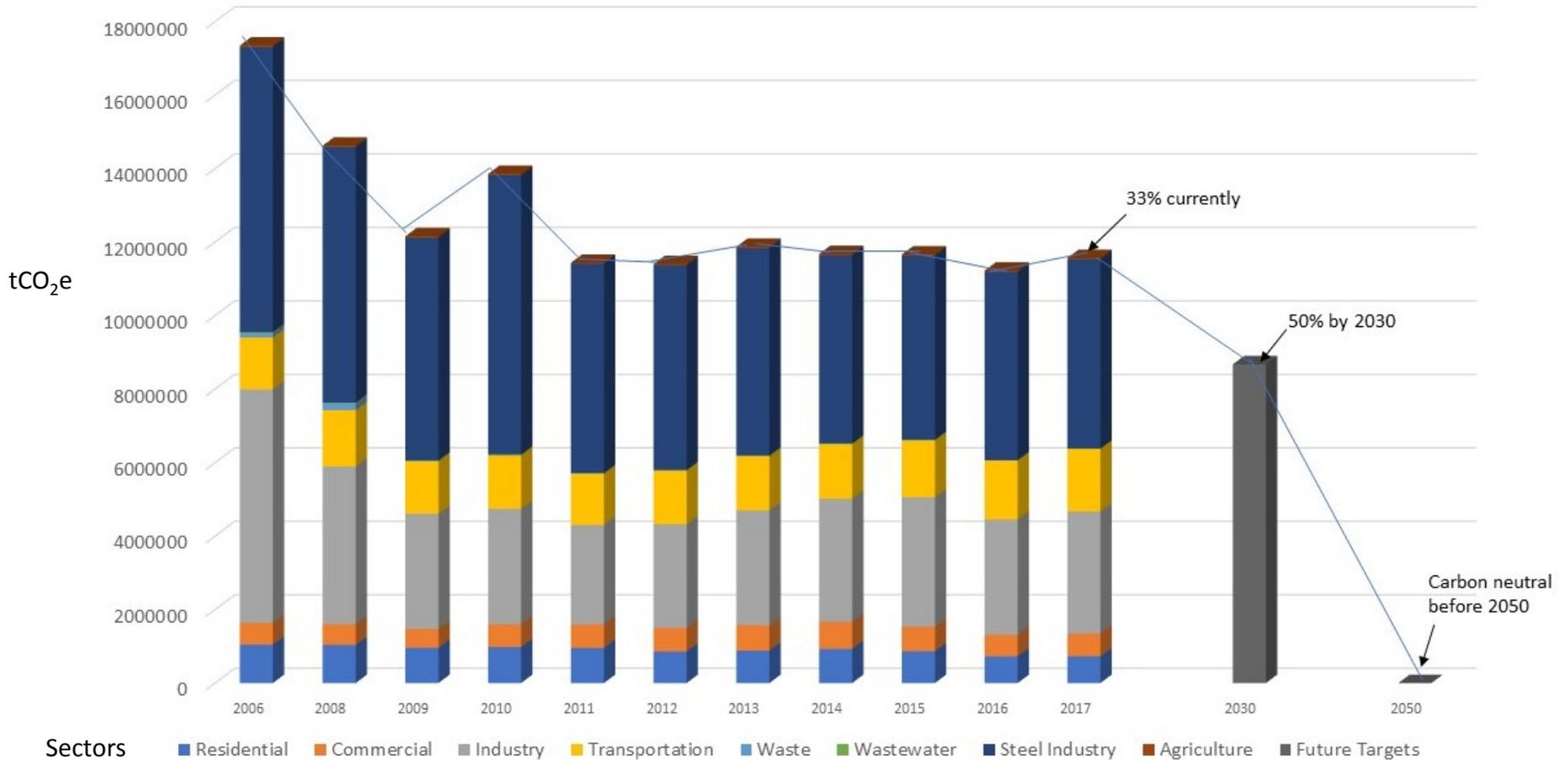
# Purpose of Report

- **\$5.3 billion** average annual investment is needed for municipalities across Canada to adapt to climate change<sup>1</sup>



<sup>1</sup>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>

# Results Based Accountability



# Goal # 1: Buildings

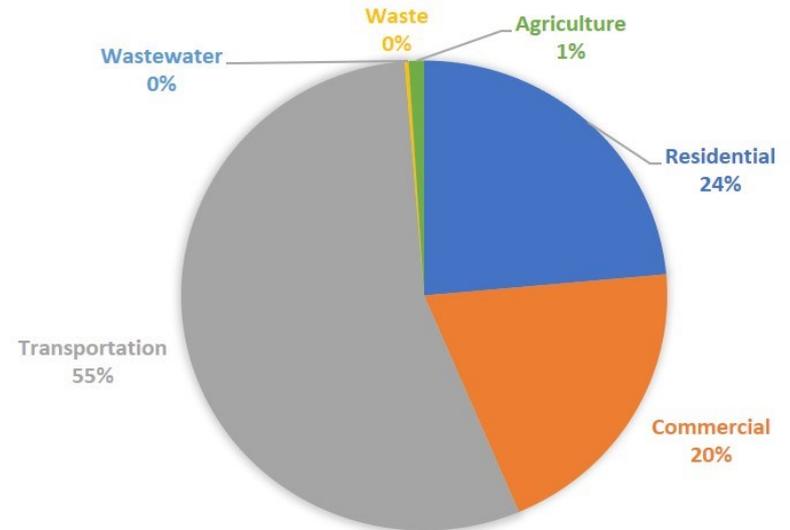
To increase the number of new and existing high performance state-of-the-art buildings that improve energy efficiency and adapt to a changing climate.

- Encourage environmental performance in future private sector construction
  - Material reuse/recycling with demolitions
  - Best practice guidelines for green building practices
  - Financial incentive programs
  - Fee rebates for green development
  - Award/recognition program

## Key Indicators

- Number of high performance buildings
- Tonnes Carbon Dioxide Equivalent (tCO<sub>2</sub>e) per building sector

Figure 1.0 2017 Community Emission Breakdown (excluding industry)



# Goal # 1: City Leading By Example

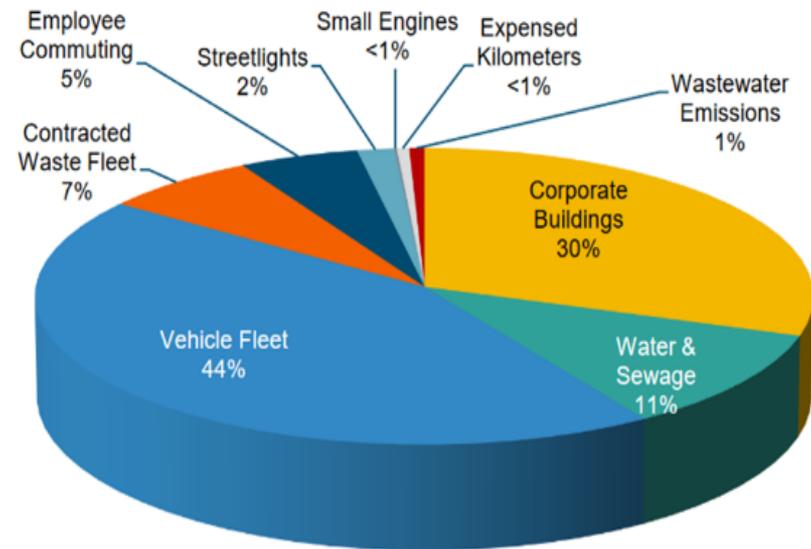
To increase the number of new and existing high performance state-of-the-art buildings that improve energy efficiency and adapt to a changing climate.

- Update Corporate Energy Policy
  - Align targets with community
  - Build all new high performance buildings
  - Retrofit existing buildings

## Key Indicators

- Corporate policy updates
- tCO<sub>2</sub>e corporate assets
- Total energy and cost savings

Figure 2.0 2017 Corporate Emissions Breakdown



# Goal # 2: Active & Sustainable Travel

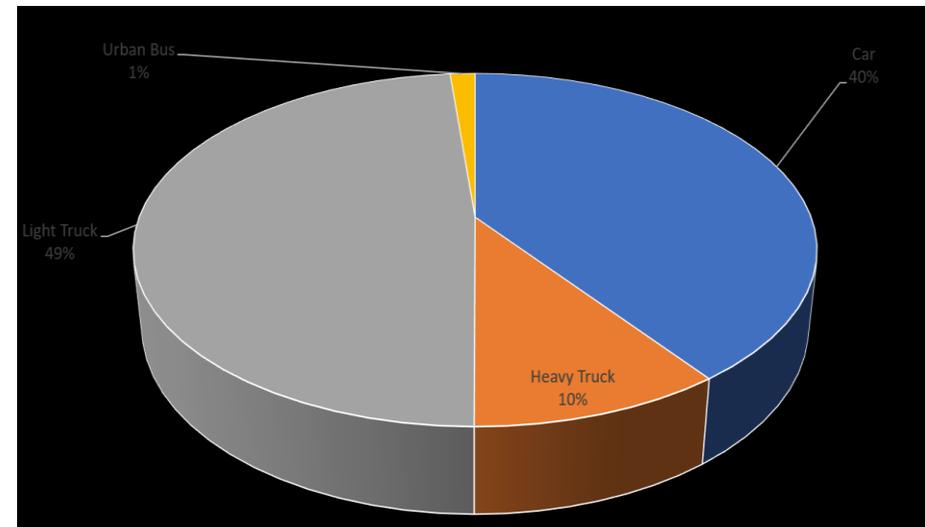
To change the transportation modal split so that more trips are taken by active and sustainable transportation than single use occupancy vehicles

- Accelerate initiatives to shift modes of travel
  - Transportation Master Plan
  - Vision Zero initiatives
  - Hamilton's Cycling Master Plan
  - Car Share programs
  - City's Parking Master Plan

## Key Indicators

- Percent Modal Split
- Total tCO<sub>2</sub>e by fuel and vehicle type
- Total kilometers of bike lane

Figure 3.0 2017 Community Transportation Emissions Breakdown



# Goal # 2: City Leading By Example

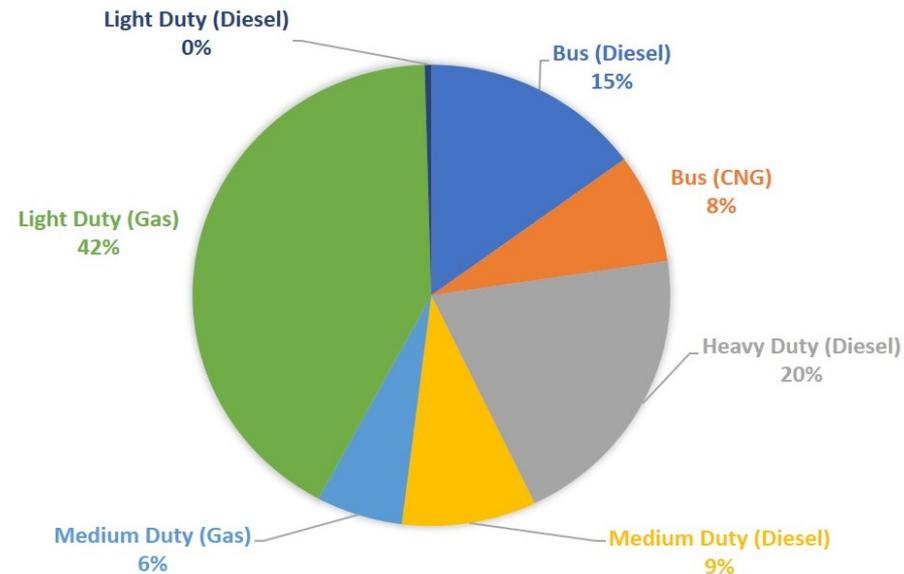
To change the transportation modal split so that more trips are taken by active and sustainable transportation than single use occupancy vehicles

- Shift employee travel to more sustainable modes
  - Further promote existing programs
  - Mileage reimbursement policies
  - Route optimization
  - Walking/cycling for service delivery

## Key Indicators

- Departmental fuel consumption
- Corporate total tCO<sub>2</sub>e by fuel and vehicle type

Figure 4.0 2017 Corporate Fleet Composition



# Goal # 3: Transportation

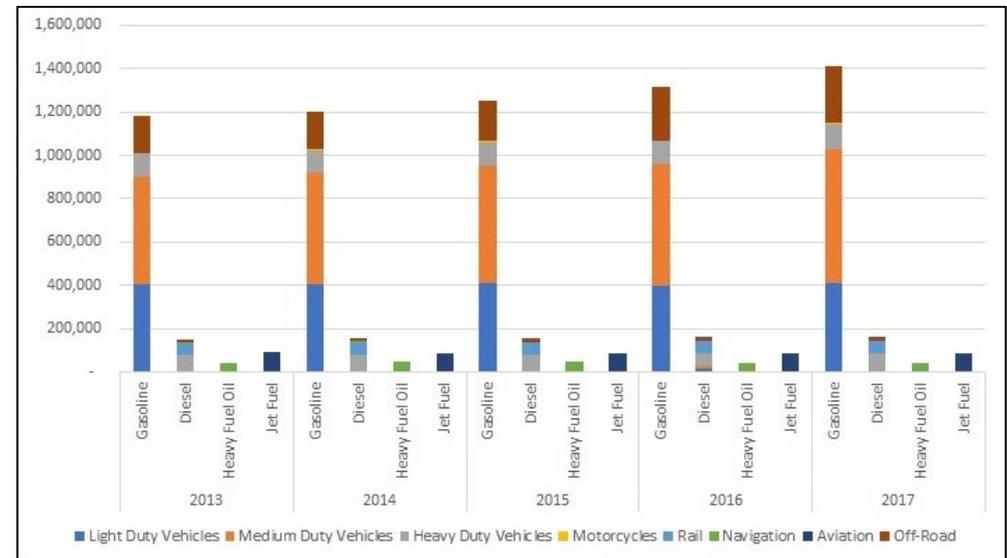
To accelerate the uptake of modes of transportation that are low and/or zero emissions

- Expand private Electric Vehicle (EV) infrastructure
  - Encouraging new development uptake
  - Opportunities for electrical connections at special events

## Key Indicators

- Number city-wide registered low emissions vehicles in Hamilton
- Total number and map of EV charging stations

Figure 5.0 Community Transportation Emissions by Vehicle Class and Fuel 2013-2017



# Goal # 3: City Leading By Example

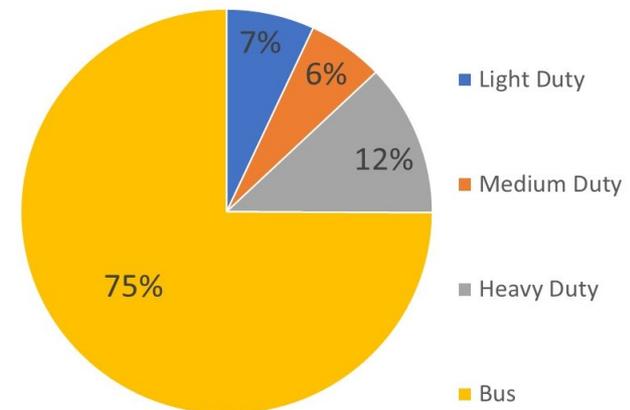
To accelerate the uptake of modes of transportation that are low and/or zero emissions

- Expand public Electric Vehicle (EV) infrastructure
  - Standards for EV stations at new municipal buildings
  - Expanding EV stations in municipal parking lots
  - Expanding EV stations at facilities
- Transition City-owned vehicles and equipment to low or zero emissions where feasible
  - Environmental performance standards in Corporate Fleet Policy
  - Environmental performance requirements in city procurement processes

## Key Indicators

- Number community low emissions vehicles
- Total number and map of EV charging stations

Figure 6.0 Corporate Emissions by Vehicle Type



# 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.

- Ensure future land use and development supports climate mitigation and resiliency
  - Climate change evaluation framework for GRIDS2 and MCR
  - Energy and Environmental Assessment Report for new development
  - Adoption of Community Energy Plan
  - Low Impact Development within City's Engineering and Site Plan Guidelines and zoning standards
  - Climate change evaluation framework/lens for future infrastructure master plans

## Key Indicators

- Number of planning initiatives including climate change framework/lens

Figure 7.0 City of Hamilton Boundary



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# 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.

- Update and modify procurement/purchasing policies to include scoring components for environmental performance
  - Minimum performance for construction documents
  - Updating City Roster and Request for Proposals with climate change lens
  - Investigate products/materials with climate change lens

## Key Indicators

- Total number of completed contracts that invoked updated environmental performance clauses
- Amount of solid waste diverted from landfills

# Goal # 6: Natural Environment

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

- Expand urban tree canopy and urban permeability
  - Adoption of Urban Forest Strategy
  - Guidelines for private land tree planting, replacement, permeability and lot cover
  - Guidelines for public land tree planting, replacement, permeability and lot cover
  - Green standards for city-owned parking facilities

## Key Indicators

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

Figure 8.0 Existing Hamilton Park Feature



# Goal # 7: Climate Adaptation

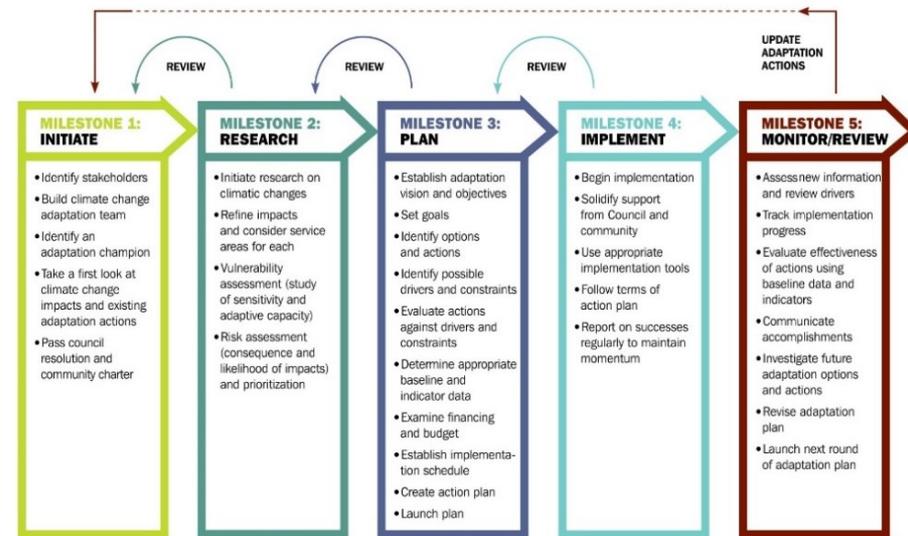
To improve Hamilton's climate resiliency by decreasing our vulnerability to extreme weather, minimizing future damages, take advantage of opportunities, and better recover from future damages.

- City-wide climate vulnerability and risk assessment through ICLEI Canada's Building Adaptive and Resilient Communities (BARC) Framework

## Key Indicators

- ICLEI Canada's Building Adaptable Resilient Cities (BARC) milestones

Figure 8.0 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.

- Enhance collaboration and consultation with the public and all marginalized groups, including local Indigenous people on climate change and protecting the environment
  - Identification of existing and future initiatives to enhance consultation
  - Implement corporate public engagement policy and toolkit when ready

## Key Indicators

- Number and percent of staff trained on Indigenous Cultural Training



Source: [corvallisadvocate.com](http://corvallisadvocate.com)

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# 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.

- Train staff and subject matter experts on climate change best practices
  - Training building managers and facility staff and operations
  - Training Building Division staff on green building standards
  - Partnerships, including CityLab, to undertake research
  - General staff training and onboarding
- Advocate to higher levels of government for action on climate change
  - Infrastructure funding
  - Ontario Building Code
  - Regional frequent transit network
  - Minister of Environment, Conservation and Parks stormwater sewer and water design standards

# Goal # 9 Cont'd...

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.

- Complete Sustainable Neighbourhood Action Plan (SNAP) pilot program for the North End Neighbourhood to build capacity and empower action at the neighbourhood level
- Develop internal and community-based Hamilton climate change website and data portal as a one stop shop destination for climate change

## Key Indicators

- GHG emission reduction by sector
- Number of new climate change initiatives
- Number of trained staff

Figure 10.0 GHG Emissions Reduction by Sector

	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	<b>33%</b>
Total Corporate	<b>38%</b>

# Collaboration Structure and Next Steps

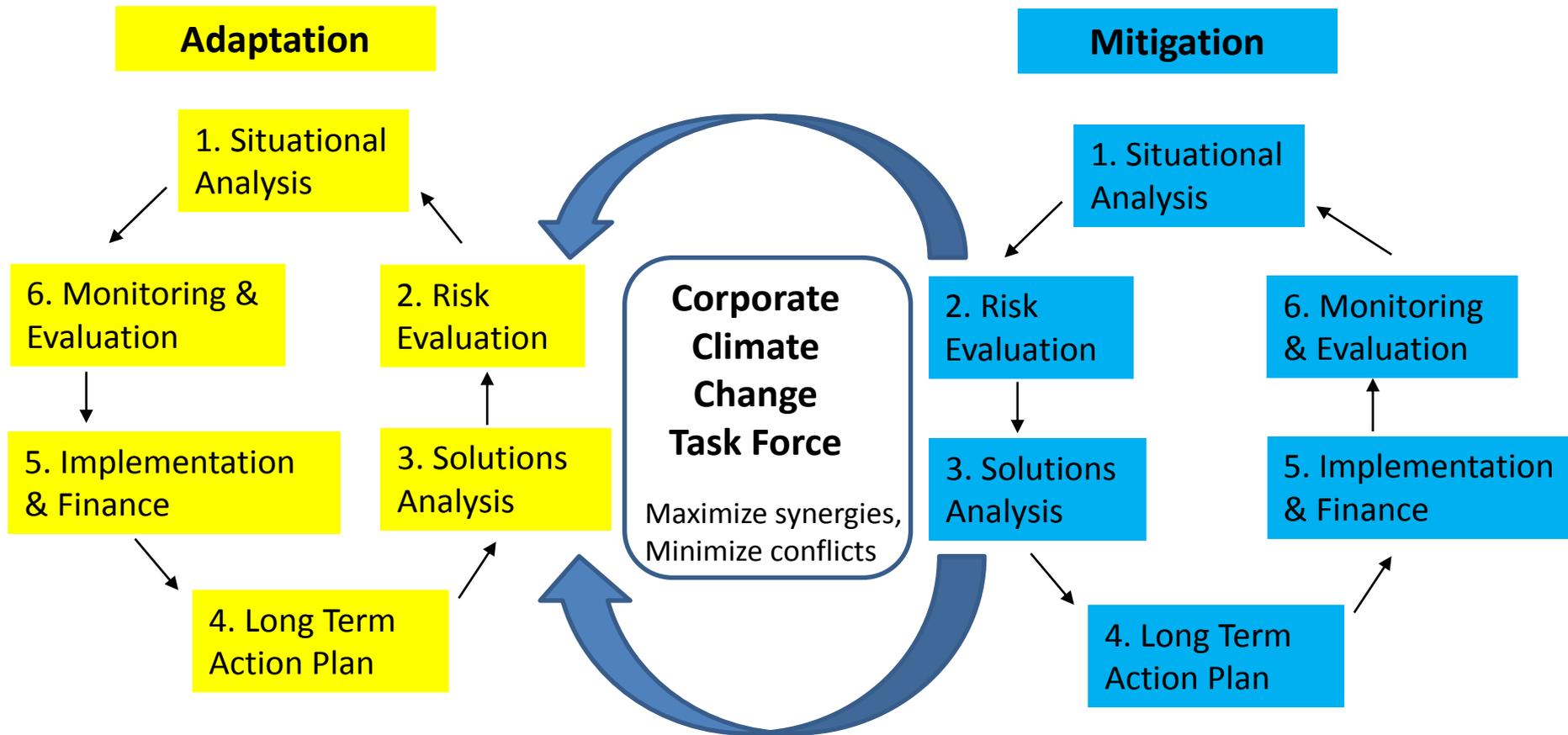
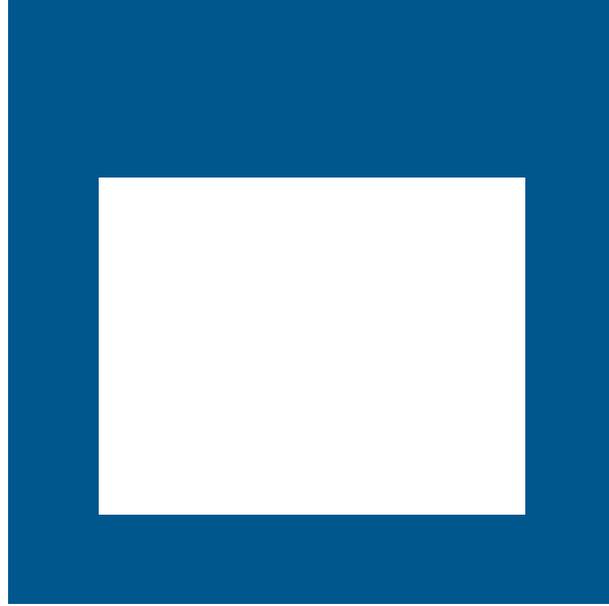


Diagram Adapted from: Simon Fraser University Adaptation to Climate Team (ACT) (2019). Retrieved from: [http://act-adapt.org/wp-content/uploads/2018/12/LCR\\_conceptual\\_model.final\\_.pdf](http://act-adapt.org/wp-content/uploads/2018/12/LCR_conceptual_model.final_.pdf)



THANK YOU