



# CLIMATE CHANGE MASTER PLAN

## PROGRESS REPORT SUMMARY 2022

### Overall Progress Status

#### Acceleration needed

Progress is happening but not at the scale and pace required to achieve outcomes.

### CCMP Outcomes and Summary






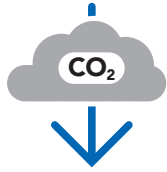
Outcomes	Summary Statement
<p><b>Reduce GHG Emissions</b></p> <p>Corporate greenhouse gas emissions are reduced by 45% by 2030, relative to 2010 levels.</p> 	<ul style="list-style-type: none"> <li>In 2020, the Region of Peel has seen a slight reduction in GHG emissions, now down to 32% below 2010 levels, but is at risk of not reaching its corporate GHG reduction target of 45% below 2010 levels by 2030 without an acceleration of reduce GHG emission actions.</li> <li>A 17,000 tCO2e reduction is needed to reach the 2030 goal, however the low-carbon transition needs to accelerate and be scaled up considerably by continuing to implement net-zero emission standards for buildings, ensuring operational plans are aligned with the CCMP, and investments are made in mitigation actions.</li> </ul>
<p><b>Be Prepared</b></p> <p>A safe, secure, and connected community is provided by ensuring regional services and assets are more resilient to extreme weather events and future climate conditions.</p> 	<ul style="list-style-type: none"> <li>The Region of Peel is still early in its journey to understand and prepare for the impacts of climate change to regional services and assets.</li> <li>There is some understanding of institutional risks, however, greater acceleration is needed to monitor, assess and manage risks to infrastructure, emergency services, and workplace health and safety to ensure greater preparedness to impacts.</li> </ul>
<p><b>Build Capacity</b></p> <p>Climate change is considered in all decision-making through organization-wide climate literacy, planning, and accountability.</p> 	<ul style="list-style-type: none"> <li>The Region of Peel has begun to increase access to evidence-based information and offer learning opportunities to increase organizational climate literacy.</li> <li>Sustaining dialogue and offering more tailored and advanced information in order to improve decision making and to better integrate climate change into regional work should be a priority.</li> </ul>

Table 1.1 continued  
**CCMP Outcomes and Summary**

Outcomes	Summary Statement
<p><b>Invest</b></p> <p>Innovative and sustainable approaches are used to finance action on climate change.</p> 	<ul style="list-style-type: none"> <li>• The Region of Peel has secured \$1.2 million in external funding and received budget approval for key pacesetter projects including \$12 million for Weaver’s Hill.</li> <li>• A formal strategy will be needed to clarify how the Region will provide sustained financing for climate change actions to meet the outcomes of the CCMP.</li> </ul>
<p><b>Monitor and Report</b></p> <p>Progress on addressing Regionally funded climate change work is consistently reported, available, and widely understood</p> 	<ul style="list-style-type: none"> <li>• The Region of Peel reports annually on CCMP progress and continuously monitors for new information, standards and guidance from the scientific community, industry and other levels of government.</li> <li>• Future efforts will need to focus on developing Key Performance Indicators for the CCMP to more accurately report and measure progress against relevant metrics and enhancing the disclosure of climate-related risks and opportunities and their linkage to strategy, risk management, governance, financial planning and capital investments.</li> </ul>



# 1. Reduce GHG

## Acceleration needed

Progress is happening but not at the scale and pace required to achieve outcomes.

Table 1.2  
**Reduce GHG accomplishments and action status**

**Status Legend**

- Action has not started
- Action is approved, funded or being implemented
- Action has been completed








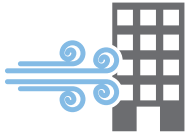
Actions	Status	Key Accomplishments / Action Status detail
Undertake deep retrofits for existing buildings	 In progress	Feasibility report for Net Zero retrofit at Weaver’s Hill completed and \$12 million approved by Council to proceed with project design.
Ensure new buildings have high energy performance	 In progress	Installed a Heat Pump Ventless Dryer at 30 Hanson as a pilot project to assess energy performance for implementation at other regional facilities.  Architectural Services contract has been awarded for the new Peel Regional Police Operational Facility and Net Zero Building Standards and Low Impact Development principles will be evaluated for incorporation into the design.  Implementation of the Feasibility Study for East Avenue is underway to meet CaGBC Zero Carbon Building Standard requirements and incorporate them into design documents to prioritize carbon emissions reductions and energy efficiency.
Generate low carbon energy	 Not started	

Table 1.2 continued  
**Reduce GHG accomplishments and action status**

Actions	Status	Key Accomplishments / Action Status detail
<b>Enable alignment of regional actions with transition toward diversified and decentralized energy systems</b>	 In progress	Wastewater Thermal Stability Study commenced to evaluate renewable energy availability in Peel’s wastewater infrastructure to displace natural gas for heating.
<b>Support sustainable transportation for commuting</b>	 In progress	A total of 15 Level 2 charging stations installed across regional facilities, including seven at Long Term Care centres, four at Peel Regional Police Headquarters and four publicly accessible chargers at 7120 Hurontario.
<b>Green the fleet</b>	 In progress	<p>Excessive Idling Dashboard launched to provide actionable data on fuel use, emissions, and costs to people leaders and vehicle operators.</p> <p>The expansion of EV charging infrastructure at Regional facilities is ahead of schedule and 17 hybrid vehicles were purchased despite global supply chain shortages which are affecting vehicle availability and delaying deliveries.</p> <p>Peel Regional Police obtained approval to purchase 33 additional hybrid vehicles and is one of the first police departments in Ontario to approve a pilot project for fully electric vehicles in 2022.</p>
<b>Maximize energy efficiency and energy recovery in water and wastewater systems</b>	 In progress	Renewable energy generation at Clarkson WWTP – design in progress to install a new Co-gen system to convert renewable biogas to electricity and thermal energy.



## 2. Be prepared

### Acceleration needed

Progress is happening but not at the scale and pace required to achieve outcomes.

Table 1.3  
**Be prepared accomplishments and action status**


#### Status Legend

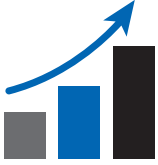
- Action has not started
- Action is approved, funded or being implemented
- Action has been completed

Actions	Status	Key Accomplishments / Action Status detail
<b>Better prepare to respond to, and raise awareness of, increased climate change-related emergencies and health impacts</b>	<span style="display: inline-block; width: 10px; height: 10px; background-color: blue; clip-path: polygon(50% 0%, 61% 35%, 98% 35%, 68% 57%, 98% 57%, 79% 92%, 50% 70%, 21% 92%, 32% 57%, 2% 57%, 39% 35%, 2% 35%); margin-bottom: 5px;"></span> In progress	The Inflow and Infiltration (I and I) Strategy continues to be implemented in three high priority areas to reduce sewage overflow through remedial measures such as downspout disconnection, removing cross connections, maintenance hole and sewer lining, as well as construction of storage tanks and larger pipes to collect the flow.
<b>Identify and manage risks to infrastructure</b>	<span style="display: inline-block; width: 10px; height: 10px; background-color: blue; clip-path: polygon(50% 0%, 61% 35%, 98% 35%, 68% 57%, 98% 57%, 79% 92%, 50% 70%, 21% 92%, 32% 57%, 2% 57%, 39% 35%, 2% 35%); margin-bottom: 5px;"></span> In progress	Completed Peel's first stormwater model for Transportation's stormwater system which will allow for the identification of flood risks, where climate change risks can be mitigated, future capacity constrains based on climate scenarios and to ensure that new development does not negatively impact our system in terms of water quality and quantity.  The development of the Risk Assessment Tool to identify climate change risks to infrastructure assets has been paused.
<b>Protect and increase green infrastructure throughout peel</b>	<span style="display: inline-block; width: 10px; height: 10px; background-color: blue; clip-path: polygon(50% 0%, 61% 35%, 98% 35%, 68% 57%, 98% 57%, 79% 92%, 50% 70%, 21% 92%, 32% 57%, 2% 57%, 39% 35%, 2% 35%); margin-bottom: 5px;"></span> In progress	A region-wide green natural infrastructure strategy is being implemented with the local municipalities and conservation authorities.

Table 1.3 continued

**Be prepared accomplishments and action status**

Actions	Status	Key Accomplishments / Action Status detail
<p><b>Enhance standards, guidelines, and planning activities that pursue resilient urban design and development</b></p>	<p> In progress</p>	<p>Climate change lens applied to Growth Management and Settlement Area Boundary Expansion to 2051 through scoped sub watershed studies, agricultural impact assessments, and community greenhouse gas emissions inventories.</p> <p>Climate Change Lens integrated into Growth Management Planning prioritization tool to achieve a financially sustainable, complete community where the location and servicing of growth is optimized.</p>



### 3. Build Capacity

#### Acceleration needed

Progress is happening but not at the scale and pace required to achieve outcomes.

Table 1.4  
**Build Capacity accomplishments and action status**



#### Status Legend

- Action has not started
- ▶ Action is approved, funded or being implemented
- Action has been completed

Actions	Status	Key Accomplishments / Action Status detail
Update service level operational plans	▶ In progress	RFP issued for the development of an Energy and Emissions Management Plan for Peel Housing Corporation.
Provide tools that enable integration of climate change priorities into decision making	▶ In progress	<p>Council resolution passed for urban forest best practice guides.</p> <p>ELT approved EV Charging Station Management Policy that will allow future EV infrastructure to be part of applicable new and retrofit construction design.</p> <p>Remote work first policy enforced throughout the pandemic resulted in significant GHG emissions reductions from lower employee commuting and vehicle use.</p>

Table 1.4 continued

## Build Capacity accomplishments and action status

Actions	Status	Key Accomplishments / Action Status detail
<p><b>Communicate the need for and benefits of climate action</b></p>	<p> In progress</p>	<p>Climate Change Engagement Plan funded for Implementation in 2022.</p> <p>Hosted two online engagement sessions on the current state of climate action and how to take individual and collective action, which had almost 400 attendees, including members of the community.</p> <p>Launched updated and refreshed PCCP website to raise awareness about PCCP, relevant documents and increase its public facing presence.</p> <p>Advocated to the Province of Ontario to phase-out fossil natural gas-fired electricity generation, focus on clean and decentralized energy and to stop the development of Highway 413.</p>
<p><b>Stimulate innovative approaches to address climate change</b></p>	<p> In progress</p>	<p>A number of feasibility studies completed to evaluate the implementation of Net Zero Energy standards.</p>





## 4. Invest

### Acceleration needed

Progress is happening but not at the scale and pace required to achieve outcomes.

Table 1.5  
**Invest accomplishments and action status**

#### Status Legend

- Action has not started
- ▶ Action is approved, funded or being implemented
- Action has been completed

Actions	Status	Key Accomplishments / Action Status detail
Complete a Climate Change Financing Strategy	▶ In progress	<p>Secured \$700,000 in external funding to support feasibility studies for the implementation of innovative energy efficiency upgrades and technology at four regional facilities, including three Pacesetter Projects.</p> <p>Peel Regional Police were approved for \$10,000 in external funding to expand electric vehicle charging infrastructure.</p> <p>Reduced consumption by almost two million kilowatt hours of electricity and half a million cubic meters of natural gas at regional facilities and received \$475,000 in incentive funding.</p>



## 5. Monitor and Report




### Acceleration needed





Progress is happening but not at the scale and pace required to achieve outcomes.

Table 1.6

### Monitor and Report accomplishments and action status

#### Status Legend

-  Action has not started
-  Action is approved, funded or being implemented
-  Action has been completed

Actions	Status	Key Accomplishments / Action Status detail
Report annually on Climate Change Master Plan implementation	 In progress	Annual Climate Change Master Plan progress report completed. Climate Change Key Performance Indicators developed with Conservation Authorities.
Develop a corporate Climate Change Resiliency Performance Report	 In progress	The 2020 Corporate Greenhouse Gas Emissions Inventory has been updated and the Region of Peel has made a slight reduction.
Develop an annual Climate Related Financial Disclosure Report	 Not started	Preliminary research conducted to develop Climate Related Financial Disclosure Report.
Complete periodic science reviews	 In progress	Research on Climate Change Risks to the Movement of Goods in Peel Region completed and Economic Assessment Framework developed. Peel Public Health leadership on climate change showcased at national and international events, consultations and publications.

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