2020 Progress Report Summary

Corporate		DEDUCE OUG	ENABLE
Climate Change Outcomes	BE PREPARED	REDUCE GHG EMISSIONS	(Build Capacity, Invest, Monitor and Report)
Results	8% 23% 46% Not Started P	38% CO ₂ 38% lanned In Progress Col	7% 29% 29% 29% ■ Unknown
Summary	 The Region of Peel is achieving scheduled milestones to address the impacts of climate change to regional services and assets. Notable progress includes the Climate Change Risk Assessment tool selection, and Green Infrastructure (GI) opportunity assessments and GI regional Roads implementation. 	 The Region of Peel is to accelerate efforts to reduce emission as the Region is not on track to reach its Reduced GHG Emissions outcome target of 45% below 2010 levels by 2030. Notable progress includes net zero emissions building feasibility studies completed, hybrid vehicles acquisitions for Regional and Police Fleets, electric vehicle charging station installations, and telecommuting, as well as the establishment of a working group planning for district energy. 	 The Region of Peel 's capacity to adapt to and mitigate the effects of climate change is progressing but needs continued traction. Notable progress includes initiated Energy and Emissions Management Plans for Water, Wastewater, and Peel Housing Corporation.
Consequences	If actions don't progress as planned, the Region risks not meeting its 2030 Be Prepared outcome and increasing exposure of assets, service, and residents to climate risks.	If actions don't progress as planned, the Region risks not meeting its 2030 Reduce GHG Emissions target.	If actions don't progress as planned, the Region risks not meeting its 2030 outcomes of planning investments for climate change work and embedding climate change into decision making.
Opportunities	Focus should be made to build capacity in areas of evidence generation to support decision making by developing the Climate Change Risk Assessment tool to ensure Regional services and assets are more resilient to extreme weather events and future climate conditions.	Focus on development and implementation of net-zero emission standards for new construction buildings, and continued traction on sustainable transportation and green fleet actions.	The Climate Change Financing Strategy must be developed and the scope of work for the Climate Change Engagement Strategy needs to be implemented.

LEGEND

STATUS (S)			
Not Started	Action has not yet started		
Planned	Action is being prepared for implementation		
In Progress	Action is being implemented		
Complete	Action has been implemented and may be ongoing		
Unknown	Not enough information available to measure progress		

COMMUNITY RESILEINCY OUTCOMES (CR)		
Disaster Ready	- Disaster Preparedness Increased	T
Health Protected	- Health-related Impacts Reduced	•
Capacity Increased	- Public Support, Commitment, Capacity and Partnerships Expanded	
GHGs Reduced	GHG's Understood and Plan in PlaceGHGs Reduced	<u></u>
Onos Neudiced	- Land Use Policy Implemented to Reduce GHG's	¥ * * *
Risks Reduced	Climate Risks Understood and Plan in PlaceClimate Risks Reduced	<u>~</u>
RISKS Reduced	- Land Use Policy Implemented to Reduce Community Vulnerability	*=
Green Infrastructure Enhanced	- Natural and Green Infrastructure Protected and Enhanced	
Investmente Made	- Investments Made	¢
Investments Made	- Financial Risks and Opportunities Disclosed	Ф

Appendix I 2020-2030 Climate Change Master Plan: 2020 Annual Progress Report BE PREPARED **Overall Progress Summary Statement** The Region of Peel is achieving scheduled milestones to A safe, secure, and address the impacts of climate change to regional services and 23% connected community is assets. provided by ensuring Notable progress includes the Climate Change Risk Regional services and assets Assessment tool selection, and Green Infrastructure (GI) are more resilient to extreme opportunity assessments and GI regional Roads weather events and future implementation. climate conditions. If actions don't progress as planned, the Region risks not meeting its 2030 Be Prepared Consequences outcome and increasing exposure of assets, service, and residents to climate risks. Focus should be made to build capacity in areas of evidence generation to support decision making by developing the Climate Change Risk Assessment tool to ensure **Opportunities** Regional services and assets are more resilient to extreme weather events and future climate conditions. **Expected Outputs Key Accomplishments** CR **ACTION:** Better prepare to respond to, and raise awareness of, increased climate change-related emergencies and health impacts Emergency partners aligned Public Health Vulnerability Assessment Updated Plans in place to respond to weather related Post weather event communication plan drafted. emergencies **ACTION:** Identify and manage risks to infrastructure assets Climate Change Regional Infrastructure Risk Infrastructure risk assessment Assessment tool selected and assessment planning underway Climate Change risks integrated into asset Water & Wastewater Climate Risk Assessment Piloted management RFP for Climate Change Risk & Adaptation of Infrastructure designed to withstand impacts Enterprise Asset Management Program initiated Flood mitigation plan for priority areas continued Risks and plans disclosed New sanitary sewer design and construction standards implemented **ACTION:** Enhance standards, guidelines, and planning activities that pursue resilient urban design and development Public Works Stormwater Design Criteria and Plan to have resilience lens applied to new Procedural Manual updated infrastructure Peel 2041 Official Plan Review, Climate Change Draft Data on hazards, vulnerabilities, and risks Policies and Discussion Paper completed maintained Climate change integrated to growth allocation planning Climate hazards integrated into land use Climate change integrated in technical studies for planning policy Settlement Area Boundary Expansion Study **ACTION:** Protect and increase green infrastructure throughout Peel Green Infrastructure expanded throughout Initiated tree inventory and green infrastructure asset Peel management plan for regional roads and

Inventory of natural infrastructure across landbased assets

Plan to protect and maintain Green
Infrastructure

Green Infrastructure expanded in areas with

water/wastewater facilities.

Urban Forest Best Management Guide initiated

Stormwater Servicing Master Plan in progress

Green Infrastructure capital projects implemented,

GI opportunity assessment initiated for Peel Living and

the greatest need

■ Not Started ■ Planned ■ In Progress ■ Complete ■ Unknown

LTC sites.

Appendix I 2020-2030 Climate Change Master Plan: 2020 Annual Progress Report REDUCE GHG EMISSIONS **Summary Statement Overall Progress** The Region of Peel is to accelerate efforts to reduce emission as the Region is not on track to reach its Reduced GHG Emissions outcome target of 45% below 2010 levels by 2030. Corporate greenhouse gas Notable progress includes net zero carbon building feasibility emissions are reduced by studies completed, hybrid vehicles acquisitions for Regional 45% by 2010, relative to and Police Fleets, electric vehicle charging station 2010 levels installations, and telecommuting, as well as the establishment of a working group planning for district energy. If actions don't progress as planned, the Region risks not meeting its 2030 Reduced Consequences Emissions target. Focus on development and implementation of net-zero emission standards for buildings, **Opportunities** and continued traction on sustainable transportation and green fleet actions. **Expected Outputs Key Accomplishments** CR **ACTION:** Undertake deep retrofits for existing buildings and Ensure new buildings have high energy performance Site Prioritization Tool for emissions reductions updated Prioritize energy intensive buildings to be 15-years of energy related state of good repair (SOGR) retrofitted projects identified Facilities prioritized for GHG Emissions Reduction (00) Potential Align plans for retrofit with state of good Net zero emissions retrofit feasibility study was completed repair schedule for Headquarters site (Suite A) and another was initiated for an affordable housing site (Weaver's Hill) Develop net zero standards for all new buildinas Net zero emissions feasibility study was completed for a (co) Construct new buildings to achieve a netnew construction affordable housing site (East Avenue) zero missions standard **ACTION:** Generate low carbon energy Install solar PV and geo-exchange systems Renewable natural gas from waste facility plan completed as buildings are retrofitted $\{CO_{2}\}$ Feasibility studies of new and existing buildings Install solar PV and geo-exchange systems considered low carbon energy generation options. as buildings are constructed **ACTION**: Enable alignment of Regional actions with transition toward diversified and decentralized energy systems Convene and coordinate partners Lakeview district energy planning work group formed and 2021 workplan completed Develop a strategy for diversified and Updated advocacy position statements decentralized energy **ACTION:** Support sustainable transportation for commuting Transitioned workforce during COVID-19 to teleworking Encourage teleworking (\widetilde{co}_{2}) resulting in significant GHG reductions. Promote Sustainable Transportation 6.5 km of active transportation infrastructure planned for Strategy to support mode shifting 2021 **ACTION:** Green the fleet Installed 13 publicly accessible EV charging stations Retrofitted 12 public works trucks with hybrid technology Purchased 84 Ford Utility Electric Hybrid vehicles for Peel Implement green the fleet strategy (co) Police Purchased 8 hybrid ambulances for paramedics **ACTION:** Maximize energy efficiency and energy recovery in water and wastewater systems Implement the Wastewater Energy Security Energy and Emission Management Plan for water and • (CO_2) Strategy wastewater in progress. Participated in Water Smart Irrigation Program Optimize the treatment and transmission of Implemented the Water Efficiency Indoor Water water supply Assessment Program and the Equipment Replacement Program for businesses. 10.1-14 ■ Not Started Planned In Progress Complete Unknown

Appendix I 2020-2030 Climate Change Master Plan: 2020 Annual Progress Report **ENABLE Summary Statement Overall Progress** The Region of Peel 's capacity to adapt to and mitigate the effects of climate change is progressing but needs continued traction. **Build Capacity** Notable progress includes initiated Energy and Emissions Management Plans for Water, Wastewater, and Peel Housing Invest Corporation. **Monitor and Report** If actions don't progress as planned, the Region risks not meeting its 2030 outcomes of planning Consequences investments for climate change work and embedding climate change into decision making. The Climate Change Financing Strategy must be developed and the scope of work for the **Opportunities** Climate Change Engagement Strategy needs to be implemented. **Expected Outputs** S **Key Accomplishments** CR BUILD CAPACITY: Climate change is considered in all decision-making through organization-wide climate literacy, planning, and accountability. **ACTION:** Develop service area climate change operational plans Identify responsibilities, timelines, and resource Energy and Emissions Management Plans for Water, requirements Wastewater, and Peel Housing Corporation in Develop operational plans that will guide CCMP **ACTION:** Provide tools that enable integration of climate change priorities into decision making Develop set of future scenarios Water and wastewater risk assessment pilot \bigcirc produced several climate change projections and risk Prepare guide for the integration of climate change scenarios into business plans, standards, and guidelines **ACTION:** Communicate the need for and benefits of climate action Climate Change Engagement Strategy scope of work Develop and implement an engagement strategy for developed key audiences ()Post weather event engagement plan developed • Public health vulnerability assessment (see Be Further inform discussions on climate change Prepared) **ACTION:** Stimulate innovative approaches to address climate change Urban Forest Best Practice Guide initiated (See Be Communicate and incentivize evidence based best \bigcirc prepared) practices • IESO Embedded Energy Manager Program INVEST: Innovative and sustainable approaches are used to finance action on climate change **ACTION** Complete a climate change financing Strategy Develop framework for how actions of the CCMP Climate change risk assessment software tool are budgeted into long term capital planning selection & SOP development \$ Consider innovative financing tools External funding sought and obtained (IESO energy management program, NRCan funding) Consider external funding MONITOR and REPORT: Progress on addressing Regionally funded climate change work is consistently reported, available, and widely understood **ACTION** Report annually on CCMP implementation Provide status report on progress toward outcomes Annual progress report completed **ACTION** Develop a corporate climate change resiliency performance report Report on how the Region is performing relative to Collaborated with Partners to develop framework to the climate change resiliency scorecard report performance on climate change **ACTION** Develop an annual climate-related financial disclosure report Publish an annual comprehensive report on the Region's response to climate change **ACTION** Complete periodic scientific reviews Corporate and community GHG inventory Review climate science and implications for the completed. Region Risk assessments in progress ■ Not Started Planned In Progress Unknown Complete