



GLOBAL WARMING TO DATE
+1.272478652567

TIME LEFT TO +1.5°C
8:11:27:03:26:33:85

years months days hours mins secs csecs

2,462,600,625,823
TONNES OF CO₂ EMITTED

Climate Change Master Plan

2022 Annual Progress Report

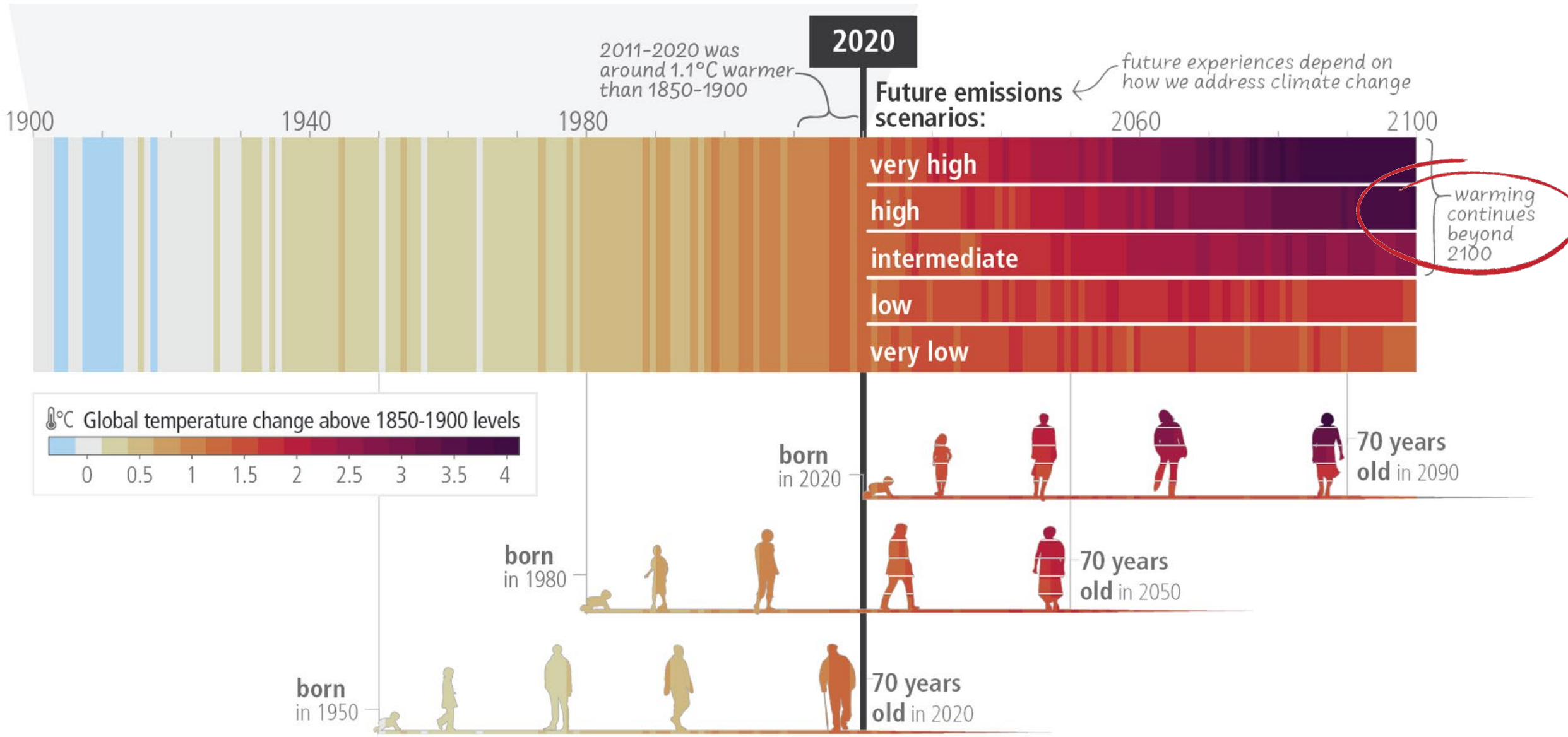
Christine Tu, M.Sc.

Director, Office of Climate Change and Energy Management



May 11, 2023

Action or inaction now will determine humanity's future



Peel Region is feeling the impacts of climate change



FEBRUARY - Dozens rescued from homes in Brampton after massive flood in Churchville



MAY - Derecho hits Mississauga, Brampton and became a tornado in Uxbridge - sixth costliest storm in Canadian History



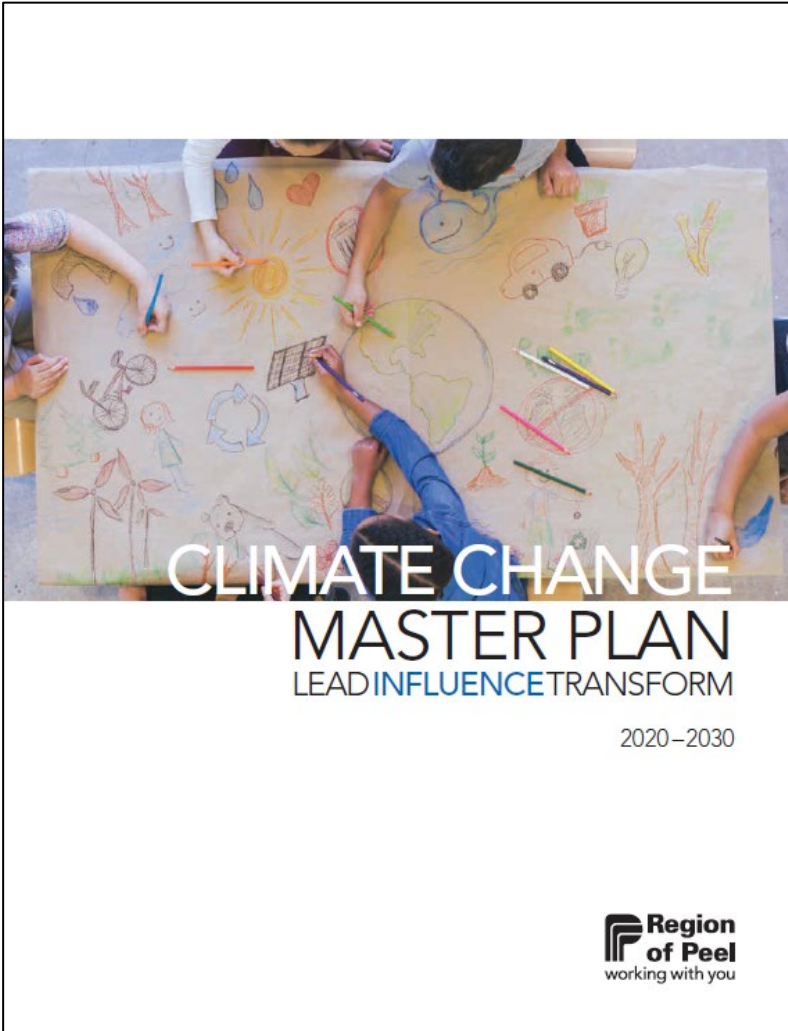
AUGUST - Brampton and Caledon see a month's worth of rain in just hours, flooding streets and farms



DECEMBER - More than a third of flights cancelled at Pearson airport; up to 100 vehicles involved in collisions on 401

8.2-15

Climate Change Master Plan Summary



2020-2030 timeframe

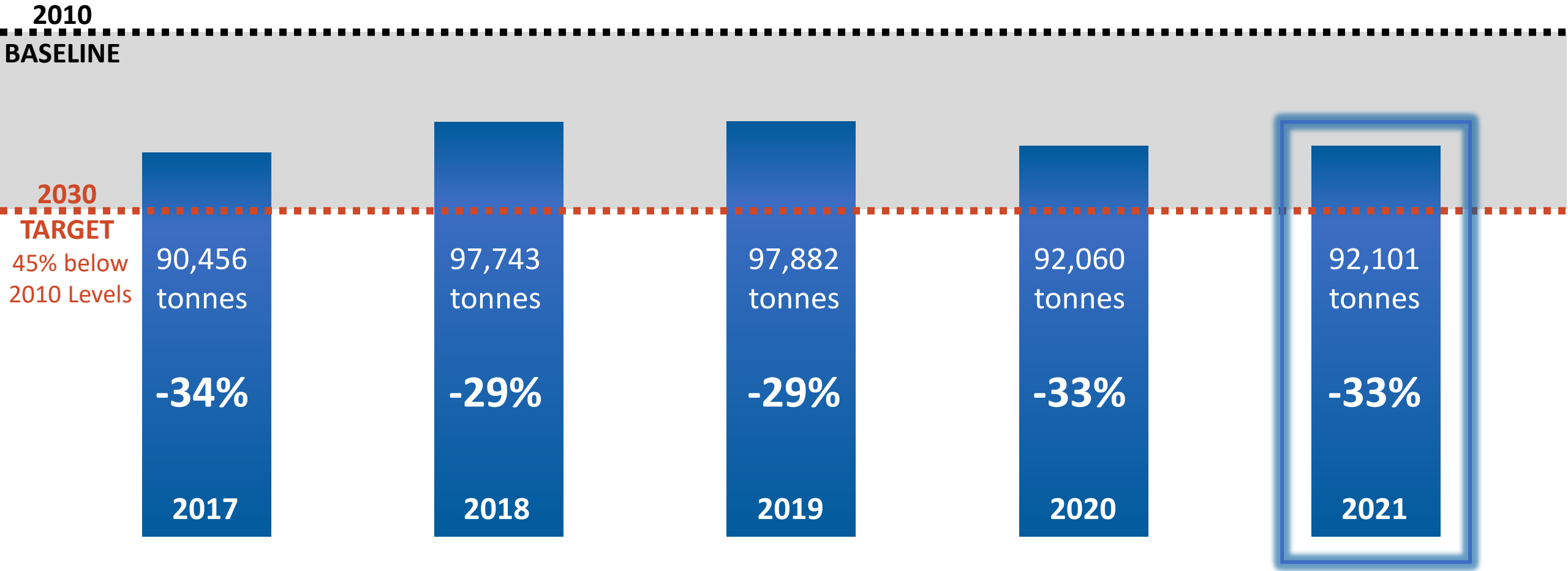
20 Actions to achieve 5 Outcomes:

- Build Capacity
- Invest
- Monitor and Report
- **Reduce GHG Emissions**
- **Be Prepared**

\$300-\$400 million incremental investment

- \$85 million in estimated cumulative operational savings by 2030

GHG Emissions are holding steady



16,600 tonnes to go...

Reduce GHG Emissions

► 2022 PROGRESS HIGHLIGHTS

- Net Zero Emissions Building Standard for New Construction in full effect
- Assessed grid and site electricity capacity for fuel switching and more Electric Vehicle charging
- Quantified heat from wastewater to inform future low carbon district energy projects including DE Lakeview
- Helped affordable housing leverage energy conservation programs

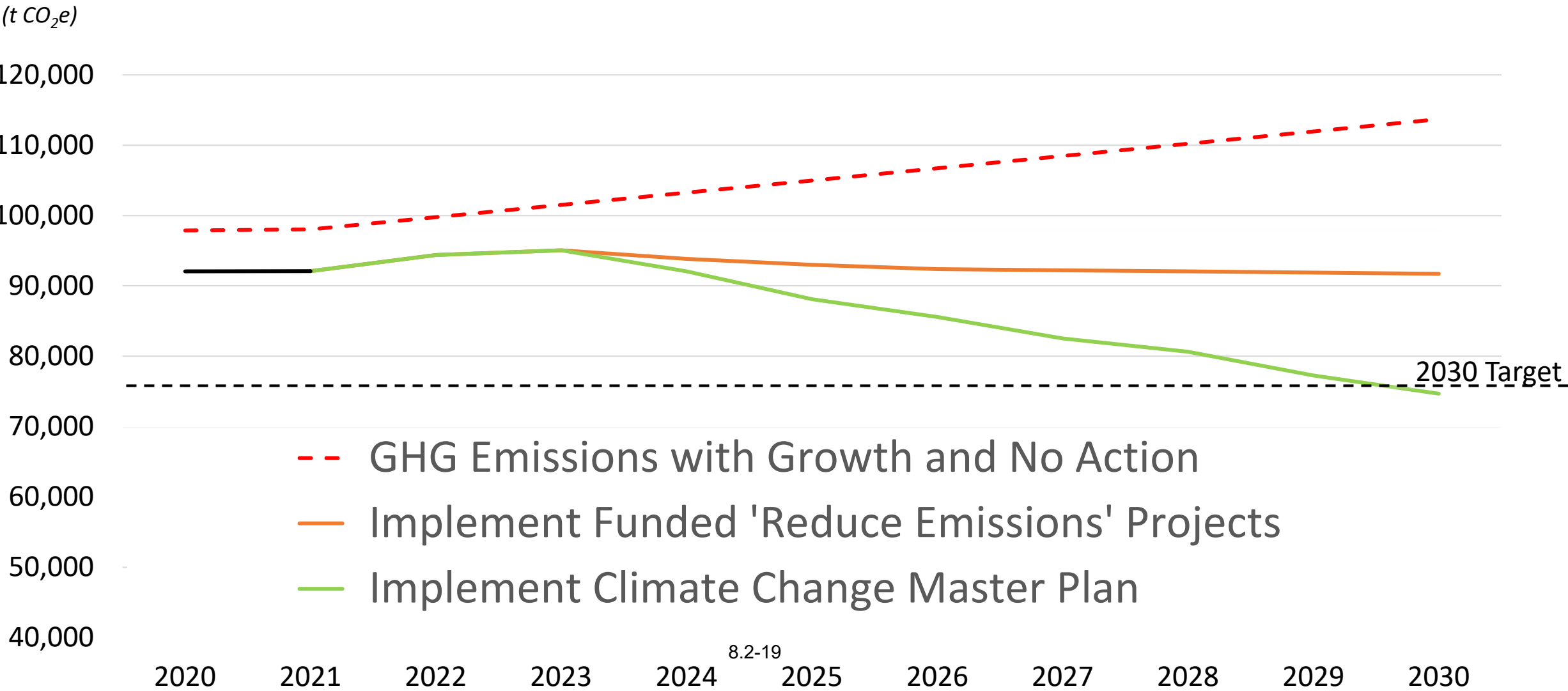
“Knowledge is becoming experience enabling actions to accelerate and scale.”

8.2-18



Source: The Pointer

Corporate GHG Emissions with Inaction, Funded Actions and Planned Actions



Reduce GHG Emissions

► CHALLENGES AND OPPORTUNITIES AHEAD

- Currently funded projects won't achieve 2030 target
- Fuel switching requires costly and lengthy electrical service upgrades
- Continued advocacy for clean, reliable and affordable electricity

“Achieving the target will require increased prioritization and resource allocation”



Be Prepared

► 2022 PROGRESS HIGHLIGHTS

- Green infrastructure further embedded into asset management
- Future climate impacts being considered in new facility designs
- Completed I&I Remediation commitments
- Completed Extreme Heat Emergency Response and Critical Services Review

“Advancing projects that reduce known climate risks and impacts”



Source: Credit Valley Conservation



Be Prepared

► CHALLENGES AND OPPORTUNITIES AHEAD

- Many unknowns & uncertainties – What assets to prioritize? How much will it cost?
- How do we measure adaptation progress?
- How can adaptation and green infrastructure advance equity and protect vulnerable members of our community?

“Climate risks and costs still need to be fully understood to inform and integrate adaptation strategies”



Source: The Toronto Star



Source: Credit Valley Conservation

Invest Build Capacity Monitor and Report

- Completed the Climate Change Engagement plan
- Council approves \$40 million for climate change action
- \$350,000 in external funding secured for EV chargers
- Collaborated with Conservation Authorities on KPIs

“Funding for immediate priorities ensures climate opportunities are not lost”



2023-2024 Climate Change Roadmap



- Energy and Emissions Management Plans
- Enterprise Climate Change Risk Assessment
- Levels of Service Review
- Climate Change Financing Strategy
- Climate Emergency Innovation Projects
- Peel Climate Emergency Response Plan

Lead Influence Transform!

- Peel Climate Change Partnership
- Centre for Community Energy Transformation
- Peel Residential Energy Program
- Tamarack Institutes Climate Change Transition Cohort

“To have a greater impact, the Region must have a larger presence in the community”

8.2-25



Source: Pembina Institute



Source: David Suzuki Foundation

Thank you. Questions?