



Durham Climate Dashboard

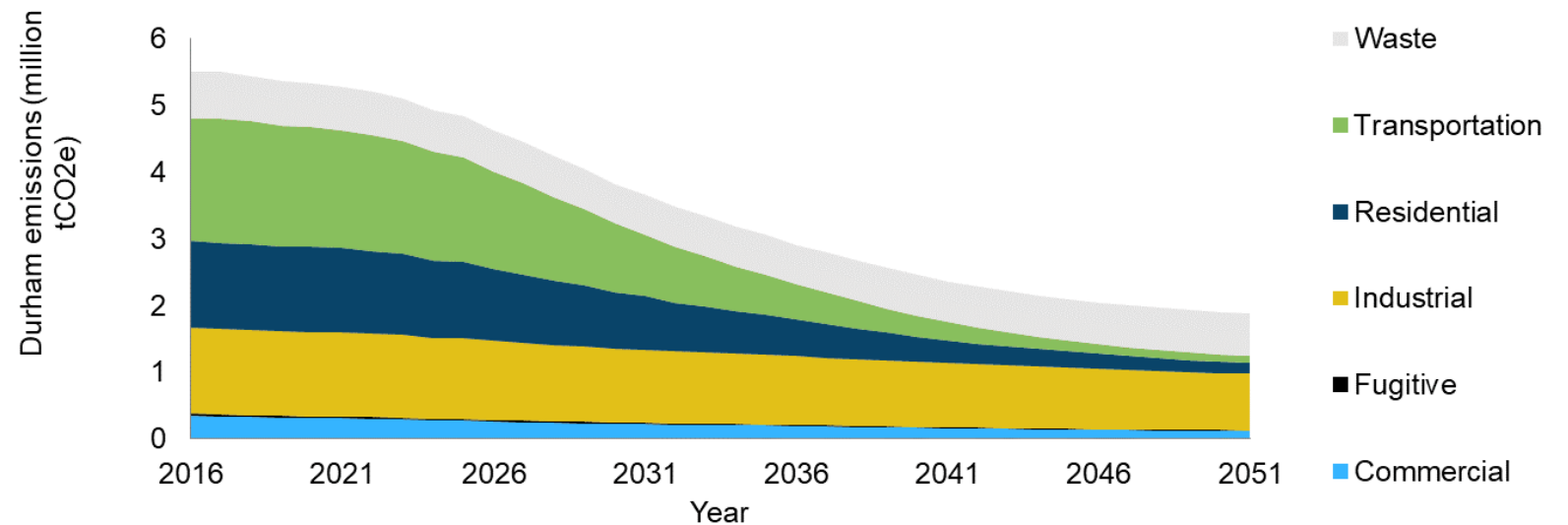
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Durham's Commitment to Climate Action

- Regional Council declared a climate emergency in January 2020
- Durham Community Energy Plan – strategy to reduce GHG emissions & seize economic opportunities related to the clean energy transition
- Presents low carbon pathway up to 2050.



Source: Durham Community Energy Plan (2018)



Durham Climate Dashboard – Key Drivers

- Support implementation of DCEP and setup Evaluation & Monitoring Framework.

Table 9. Monitoring and evaluation activities

ACTIVITY	PURPOSE	DESCRIPTION	FREQUENCY
1. Annual work plan and review	Review work to-date and set annual priority actions	Annual report with prioritized actions	Annual
2. Annual indicator report	Track effectiveness of actions	Annual report on set of indicators with an analysis of the results	Annual
3. Inventory	Update energy and GHG emissions profile	Re-calculate the GHG emissions and energy inventory	Every 2 years
4. Update the DCEP	Update the DCEP to reflect changing conditions	Review each action and the progress being achieved. Identify new actions.	Every 5 years

Durham Climate Dashboard – Key Drivers

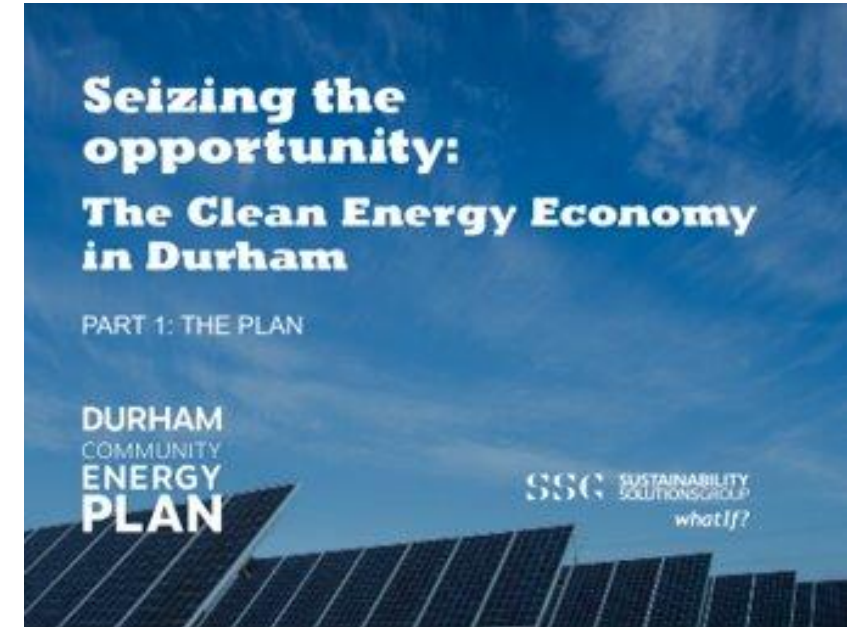
- Need to develop data collection process
- Review and assessment of DCEP actions
- Facilitate public reporting & transparency on climate action



Durham Climate Dashboard

Objectives:

- Monitor the Durham Community Energy Plan's (DCEP) progress towards achieving climate targets.
- Track climate initiatives and facilitate ongoing evaluation of progress in achieving GHG emission reductions.



Kausal: digital-based platform that enables municipalities to communicate progress of climate plans, manage data, and support collaboration around climate action.

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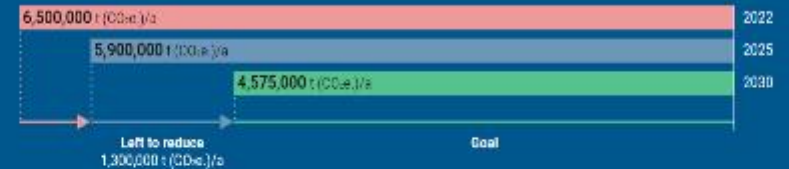
Monitoring & Evaluation
Platform

Actions & Indicators

Data Collection & Display

Total regional community-wide GHG emissions

In response to Regional Council's climate emergency declaration, in 2021 the Region adopted new community GHG targets, which are: 10% below by 2025, 30% by 2030, and 100% by 2050 from 2019 levels to align with the federal government's 2050 net zero commitment.



Total regional GHG emissions

Pathways



Home & Building Efficiency

Building emissions contribute towards 53% of Durham's total community-wide emissions. This includes residential, commercial, institutional, and industrial buildings. Transitioning to high performance standards in new and existing buildings will be a critical part of Durham's low-carbon pathway.



Energy Generation

Durham's low carbon pathway involves fuel switching from fossil fuel sources of energy such as natural gas and gasoline to zero emissions electricity. This is why it is critical to ensure access to carbon-free electricity to achieve Durham's emission reduction targets.



Sustainable Transportation

Onroad transportation emissions totalled 33% of the Region's total, which is mainly attributed to gasoline powered cars and trucks. Achieving Durham's emission targets requires shifting to more sustainable modes of transportation, by supporting walking, cycling, public transit, and adoption of EVs.



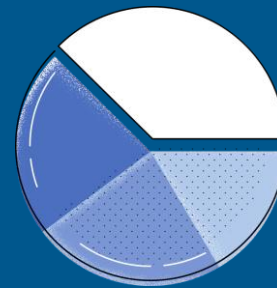
Low Carbon Pathways & Measures

Homes & Building Efficiency	Local Energy Generation & Distribution	Transportation Efficiency
<ul style="list-style-type: none">▶▶▶ 1. Increase efficiency of new homes2. Increase efficiency of ICI buildings3. Retrofit homes built prior to 19804. Retrofit homes built between 1980 and 20175. Retrofit commercial and industrial	<ul style="list-style-type: none">▶▶▶ 6. Install heat pumps7. Install net metered solar PV8. Install solar hot water9. Develop ground-mount commercial solar PV▶▶▶ 10. Develop district energy11. Develop energy storage12. Develop wind13. Develop renewable natural gas	<ul style="list-style-type: none">14. Expand transit15. Electrify transit16. Increase cycling & walking infrastructure17. Increase rideshare18. Establish car free zones19. Electrify municipal fleet▶▶▶ 20. Electrify personal vehicles21. Electrify commercial vehicles

Note: Measures 6. Install heat pumps (35%), 10. Develop district energy (15.7%), 1. Increase efficiency of new homes (14.2%) and 20. Electrify personal vehicles (11.2%) account for three quarters of the total GHG reductions.

Durham Climate Dashboard: Demo

Link: [Durham Climate Dashboard Demo.mp4](#)





Thank You!

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