

REPORT TO: Climate Change and Environment Committee

DATE OF MEETING: June 20, 2024

SUBMITTED BY: Natalie Goss, Manager Policy and Research, 519-741-2200 ext. 7648

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WARD(S) INVOLVED: Ward(s) All

DATE OF REPORT: May 30, 2024

REPORT NO.: DSD-2024-278

SUBJECT: 2022 Waterloo Region Community Greenhouse Gas Inventory

RECOMMENDATION:

For Discussion.

REPORT HIGHLIGHTS:

- The purpose of this report is to provide an update on TransformWR's (our community climate action plan) progress, focussing on the [2022 community Greenhouse Gas \(GHG\) inventory](#)
- Progress updates on actions outlined in TransformWR are posted to the TransformWR Progress [Dashboard](#); launched in October 2023.
- The key finding of this re-inventory is that in 2022 there is a 12% community GHG reduction from our 2010 baseline
- This report supports **Cultivating a Green City Together: Focuses a sustainable path to a greener, healthier city; enhancing & protecting parks & natural environment while transitioning to a low-carbon future; supporting businesses & residents to make climate-positive choices.**

BACKGROUND:

Working together for more than a decade, all seven area municipalities, the Region of Waterloo, and two local organizations (Reep Green Solutions and Sustainable Waterloo Region) developed TransformWR (our community climate action plan) and prepared this 2022 progress report. The ClimateActionWR Collaborative is committed to tracking community GHG emissions on an annual basis, with full GHG inventories completed no less than every 5 years; and to publicly sharing progress on actions via a public [dashboard](#).

REPORT:

Working together for more than a decade all seven area municipalities, the Region of Waterloo, and two local organizations (Reep Green Solutions and Sustainable Waterloo Region) form Climate Action Waterloo Region. TransformWR (DSD-2021-094) is a community climate action plan endorsed by all eight municipal councils.

TransformWR Progress Dashboard

TransformWR identifies 6 Transformative Changes, twenty related strategies and seventy-eight actions. Progress on these actions is captured in the [TransformWR Progress Dashboard](#); launched in October 2023.

2022 TransformWR GHG Inventory Report

The ClimateActionWR Collaborative is committed to tracking community GHG emissions on an annual basis, with full GHG inventories completed no less than every 5 years. The 2022 [report](#) indicates:

- A 12% community GHG emissions reduction from 2010 baseline
- Overall, to reach our community 2030 target (50% reduction from baseline - “80x50”) an additional 38% GHG emissions reduction is needed between now and 2030.
- Transportation (47.2%) followed by Buildings (45.4%) contribute the most community GHGs.
- Passenger vehicles account for 31% of total community emissions.
- An overall trend towards more light passenger trucks and SUVs on the road is working against GHG reductions from improved vehicle fuel efficiencies and reduced travel times.
- Industrial, commercial, and institutional sector (ICI) emissions account for 60% of total building emissions in our community, followed by the residential sector at 40%.
- Two energy sources contribute the most to community GHGs - natural gas (39%) followed by gasoline (37%).
- Energy demand coupled with natural gas supply for space and water heating accounts for 85%-90% of all building GHG emissions.
- Livestock product demand coupled with cattle supply account for 85% of emissions within agriculture (5.8%).
- Waste (2%) emissions have grown approximately 19.2% since baseline.

Calls to Action

Transportation

- Drive less, rely on public transportation and active transportation more
- Electrify passenger vehicles

Buildings

- Use energy less and use it more efficiently
- Improve building envelopes
- Optimize heating and cooling systems
- Fuel switch for water and space heating (and cooling)

Discussion Questions:

- Are there any “calls to action” you would add or assign greater priority?
- Of the information shared, was there anything that surprised you?

STRATEGIC PLAN ALIGNMENT:

This report supports **Cultivating a Green City Together: Focuses a sustainable path to a greener, healthier city; enhancing & protecting parks & natural environment while**

transitioning to a low-carbon future; supporting businesses & residents to make climate-positive choices.

FINANCIAL IMPLICATIONS:

Capital Budget – The recommendation has no impact on the Capital Budget.

Operating Budget – The recommendation has no impact on the Operating Budget.

PREVIOUS REPORTS/AUTHORITIES:

- CSD-13-108 Community Climate Action Plan and Corporate GHG Reduction Initiatives- complete
- CSD-14-028 Climate Change Mitigation and Adaptation
- CAO-15-024 City of Kitchener Climate Action Plan Terms of Reference
- CSD-17-046 Community Climate Action Plan Progress Report
- INS-18-024 80x2050 Long Term Community GHG Reduction Target
- DSD-2021-094 Community Climate Action Plan – TransformWR Strategy