
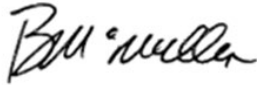




Hamilton

INFORMATION REPORT

TO:	Mayor and Members General Issues Committee
COMMITTEE DATE:	October 16, 2024
SUBJECT/REPORT NO:	2023 Annual Energy Report (PW21049(c)/FCS24050) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Linda Campbell (905) 546-2424 Ext. 2810 Tracy Zmudczynski (905) 546-2424 Ext. 5356
SUBMITTED BY:	Indra Maharjan Director of Corporate Facilities & Energy Management Public Works
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SIGNATURE:	

COUNCIL DIRECTION

As part of the City’s Corporate Energy and Sustainability Policy (PW14050(a)) staff are directed to provide an annual energy report highlighting the progress and results of various City energy initiatives and commodity hedging agreements.

INFORMATION

The City of Hamilton’s 2023 Annual Energy Report is attached as Appendix “A” to Report PW21049(c)/FCS24050. The Report provides a summary of energy usage, performance comparisons and cost savings initiatives for the calendar year 2023. This includes details on conservation efforts to reduce energy consumption and greenhouse gas emissions.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

Previously there were two separate reports related to annual energy results. Based on feedback at Audit Finance & Administration Committee in 2023 to simplify the annual energy reporting and avoid duplication of information. A single Annual Energy Report now comprises three parts, as the energy-related results overlap with commodity and rate optimization activities and resulting greenhouse gas emissions inventory.

They are:

1. Energy Report Results
2. Corporate Report on Commodity Hedging and Rate Activities
3. Corporate Greenhouse Gas (GHG) Inventory Report

The City's Corporate Energy and Sustainability Policy has the following long-term targets in place, which will require collaborative and focused actions to achieve.

Table 1: Corporate Energy and Sustainability Targets

Year	Energy Intensity Reduction Targets	Emissions Reduction Targets
2020	20%	20%
2030	45%	50%
2050	60%	100%*

In the Energy Results section, energy intensity (energy usage in equivalent kilowatt hours per square foot) is the key performance indicator for corporate buildings; as of 2023, it has declined by 29% from the base year of 2005. The report includes updated results for the City's overall utility consumption and costs, other key performance metrics and energy conservation project updates.

Table 2: 2023 Energy Intensity Comparison in Equivalent kilowatt hours per Square Foot (ekWh/sqft)

Energy Intensity	2005	2022	2023	2023 vs 2005	2023 vs 2022
City Total (ekWh/sqft)	45.69	33.21	32.40	-29%	-2%

Table 3: 2023 Combined Energy Usage Comparison (Electricity and Natural Gas) in equivalent kilowatt hours (ekWh)

	2005	2022	2023	2023 vs 2005	2023 vs 2022
Total Combined Energy (ekWh)	400,722,256	361,676,039	369,617,838	-8%	2%
Total Energy Cost (\$)	\$27,177,303	\$29,165,903	\$31,625,422	16%	8%

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The Corporate Report on Commodity Hedging and Rate Activities is presented under its own section in the report. This report has been integrated into the Annual Energy Report to provide the required information on a timelier basis and within its relevant context.

The primary objectives for the City's commodity price hedging program are as follows:

1. Adhere to statutory requirements.
2. Promote financial flexibility.
3. Limit financial risk exposure.

There are some specific reporting requirements related to commodity hedging, and they are addressed in the report, but specifically that the General Manager, Finance and Corporate Services, shall report to Council at least once each fiscal year with respect to any and all energy commodity price hedging agreements and other energy commodity agreements in place. The report shall contain, at a minimum, all requirements as set out in O. Reg. 653/05 (as it exists from time to time) and shall include:

1. A statement about the status of the energy commodity price hedging agreements during the period of the report, including a comparison of the expected and actual results of using the agreements;
2. A statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all the agreements entered during the period of the report are consistent with this Energy Commodity Policy relating to the use of financial agreements to address commodity pricing and costs;
3. An overview of any agreements with contract agents (including, without limitation, actual costs, services provided and frequency of use) and a statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all these agreements are consistent with this Energy Commodity Policy with respect to the use of contract agents;
4. An overview of any co-operative energy purchasing initiatives and / or agreements and a statement by the General Manager, Finance and Corporate Services, indicating whether, in his opinion, all these agreements are consistent with this Energy Commodity Policy with respect to the use of co-operative energy purchasing;
5. Such other information as Council may require; and
6. Such other information as the General Manager, Finance and Corporate Services, considers appropriate to include in the report.

The 2023 Treasurer's Annual Statement on Commodity Price Hedging is included as Appendix "B" to Report PW21049(c)/FCS24050.

Finally, the report on the Corporate Greenhouse Gas Emission Inventory for calendar years 2022 and 2023 are also presented within the 2023 Annual Energy Report under its own section. The changes to the Broader Public Sector Reporting regulations (O.

Reg. 25/23) required energy and emissions reporting to include both years in 2024 submission, and prior-year data for all future reports. Data compiled for the greenhouse gas emissions inventory had previously been one year behind the energy intensity, energy usage and other related energy data.

The overall results of the Corporate Emissions Inventory for 2023 was a reduction of 36% as compared to the base year of 2005. The emissions inventory is impacted by both energy usage and energy emissions intensity factors. Rising electricity emissions factors have increased corporate emissions relative to 2021. Efficiency projects have limited the impact of the electricity emissions factor increase on total emissions to just 5% year-over-year.

Table 4: 2023 GHG Emissions Inventory Comparison in tonnes CO2e

Sector	2022 Total CO2e	2023 Total CO2e	2023 vs 2005	2023 vs 2022
City Wide Total	74,835	78,487	-36%	5%

The report was shared with internal stakeholders including Office of Climate Change Initiatives (OCCI) and PW Asset Management/Fleet for their feedback and further use of information available in this report.

APPENDICES AND SCHEDULES ATTACHED

Appendix “A” to Report PW21049(c)/FCS24050 – 2023 Annual Energy Report

Appendix “B” to Report PW21049(c)/FCS24050 – 2023 Treasurer’s Annual Statement on Commodity Price Hedging