

ANNUAL GREENHOUSE GAS INVENTORY



Synergy Enterprises

May 1, 2023 to April 30, 2024

Completed By	Amzy Vallenias & Chloe Shore
Email	Amzy@synergyenterprises.ca
Completed	6/2/2025



Executive Summary

Synergy Enterprises ('Synergy') is a sustainability consultancy based in Victoria, BC, working with other businesses to empower climate action. 2024 marks the 2nd year that Synergy has measured and reported its emissions. Synergy shares office space with a sister non-profit, Synergy Foundation. As a result, the energy, water and waste footprints associated with Synergy Enterprises operations are approximately 58% of the total usage for the space.

In 2024, Synergy moved from its 1,600 sq ft. office on Johnson St. to a 5,984 sq ft. office on Broughton St. This inventory includes emissions associated with the construction of the new office.

Synergy's 2024 fiscal year (FY) totaled 157 tCO_{2e}. Construction emissions resulted in 122 tCO_{2e}, with emissions in the categories purchased goods and services and capital goods. The second largest emissions source was company travel, accounting for 15% of the total footprint (23.0 tCO_{2e}).

Following travel was natural gas at 3.0% (4.67 tCO_{2e}). This is Synergy's first year measuring capital goods, fuel and energy activities, and an expanded purchased goods and services.

As a signatory of the Glasgow Declaration, Synergy Enterprises has set a target to reduce its carbon footprint 50% by 2030 based on the 2023 baseline.

Inventory Information

Company Name	Synergy Enterprises		
Contact Information	Erica Lebrun	admin@synergyenterprises.ca	(514)-567-7254
Company Description	Synergy operates from one office location in Victoria, BC. During FY 2024, Synergy moved from a 1,600 sqft office to a new 5,984 sqft office, and had 12 full time staff members.		
Reporting Period	May 1, 2023 to April 30, 2024		
Inventory Boundary	Scope 1 (Direct Emissions)		
	Natural Gas		
	Scope 2 (Indirect Emissions from Purchased Electricity)		
	Purchased Electricity (BC Hydro)		
	Scope 3 (Indirect Emissions from Other Sources)		
	Waste, Purchased Goods & Services, Capital Goods, Fuel & Energy Activities, Company Travel, Staff Commuting, Work from Home		
Scope 2 Approach	Location Based Emissions Calculation		
Consolidation Approach	Operational Control: Accounting for 100% of emissions from operations over which the company has operational control.		
Primary Measurement	Greenhouse gas emissions measured in Carbon Dioxide Equivalent (CO _{2e})		
Reporting Guidelines	Aligned with those defined in <i>The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition</i> (<i>The GHG Protocol</i> , www.ghgprotocol.org).		

Summary of Results

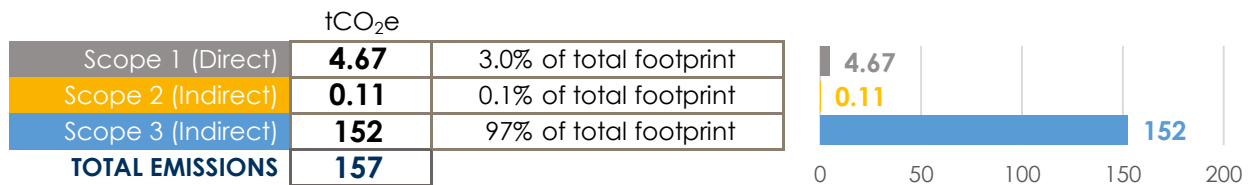
Total tCO₂e **157**

Equivalent to:

tCO₂e/FTE **13.1**

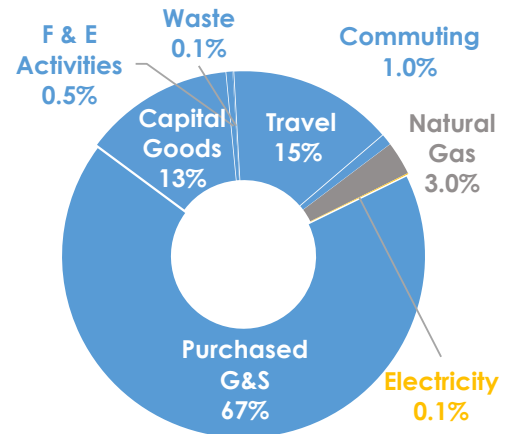
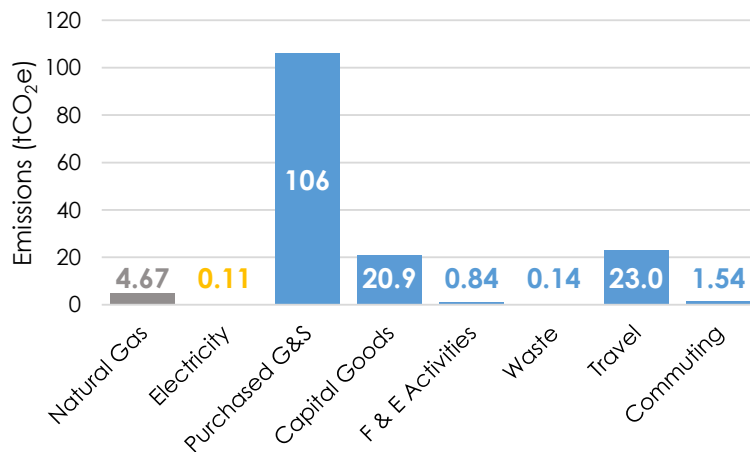
Offset Cost **\$4,667**

Carbon Footprint by Scope



Carbon Footprint By Activity

Emissions by Activity



Scope 1 Scope 2 Scope 3

Carbon Footprint Review & Reduction Targets

Over 2023 baseline

Reduction
Target

50%

by 2030

%
Increased

192%

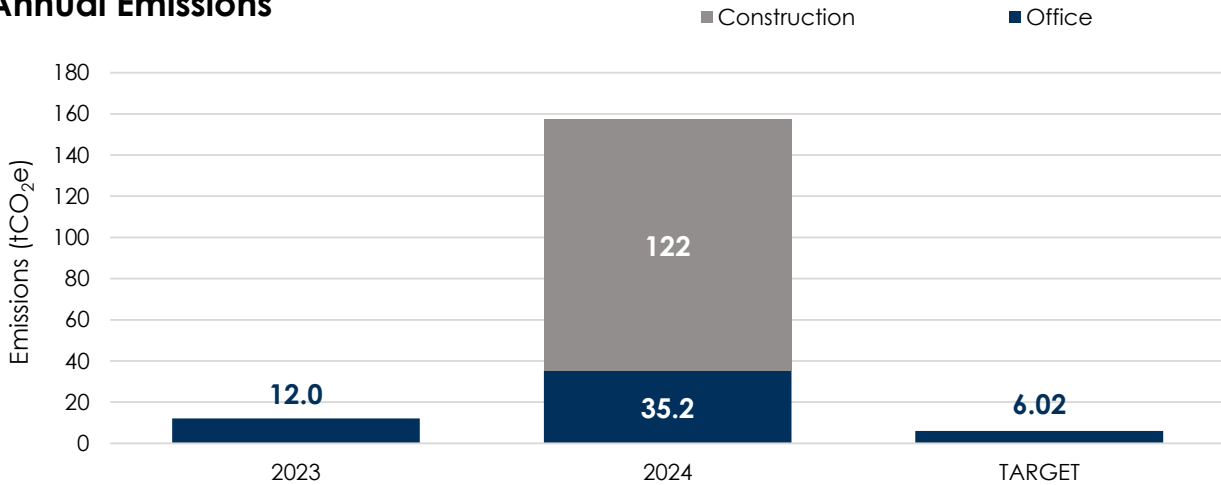
2024

Note: % increased does not include office construction

As part of their commitment as a signatory of the Glasgow Declaration, Synergy Enterprises has committed to reducing emissions 50% by 2030 based on 2023 levels.

Overall Progress

Annual Emissions

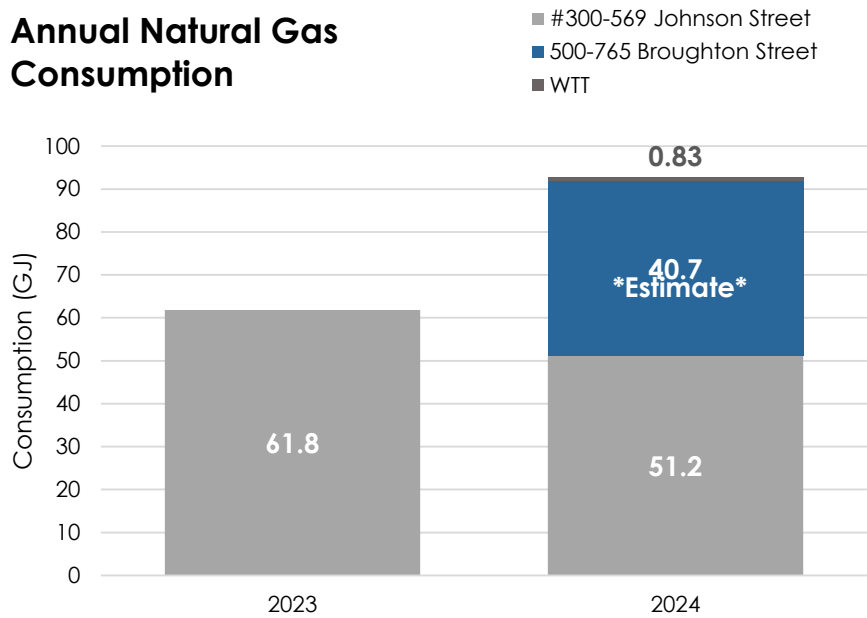


Notes on Targets

The construction of Synergy's new office space resulted in 122 tCO₂e, with Synergy's regular business activity related emissions producing 35.2 tCO₂e, a 192% increase over the 2023 baseline. This is a result of a 262% increase in travel emissions and a 191% increase in psg-km flown by Synergy staff. To meet Synergy's emission reduction targets set in alignment with the Glasgow Declaration, Synergy should focus on reducing emissions from business travel as it contributes to 45% of non-construction related emissions.

Natural Gas

Annual Natural Gas Consumption



Analysis

Synergy's natural gas use resulted in 4.67 tCO₂e, 3.0% of the total footprint. Utility data was unavailable for the Broughton street location, instead, an estimate¹ was used based on office sq ft. The estimate is not reflective of actual use, and it is recommended Synergy prioritize obtaining utility data from the new office to increase the accuracy of data reported.

tCO₂e **4.67**

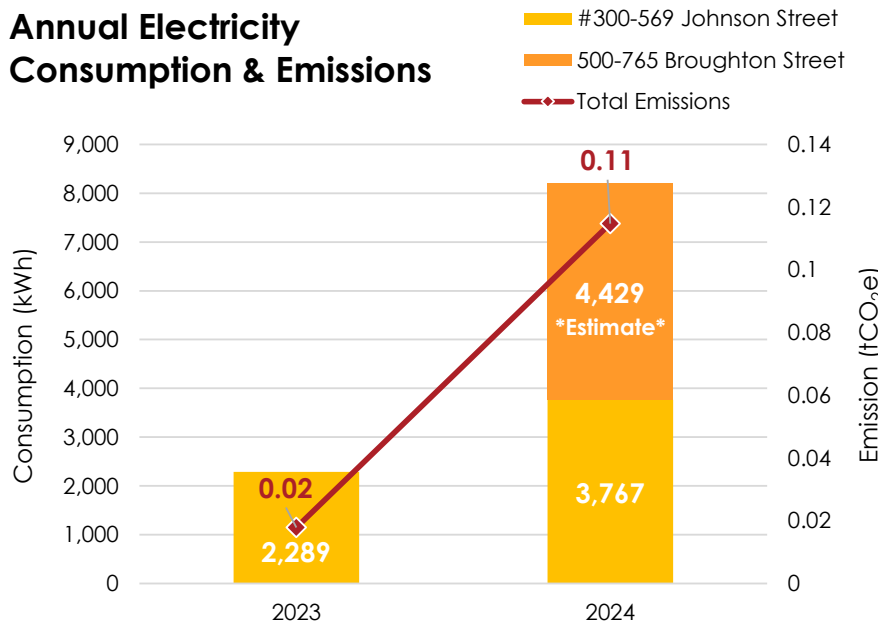
% of Total **3.0%**

GJ/ft² **0.01**

Change Since Baseline **49%**

Electricity

Annual Electricity Consumption & Emissions



Analysis

Utility data was unavailable for the Broughton street location, instead, an estimate¹ was used based on office sq ft. This estimate is not reflective of actual use.

Electricity consumption in FY 2024 totaled in 8,196 kWh, resulting in 0.11 tCO₂e, 0.1% of the footprint.

tCO₂e **0.11**

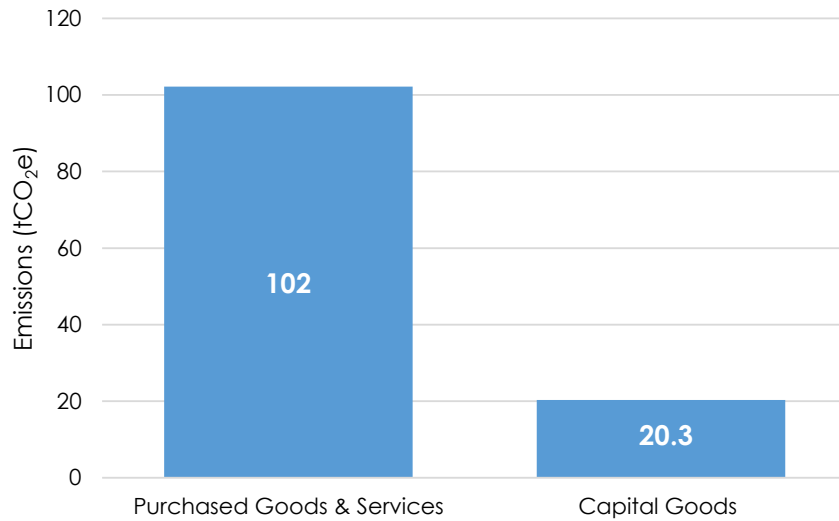
% of Total **0.1%**

kWh / ft² **1.08**

Change Since Baseline **543%**

New Office Construction

Construction Category Emissions



Analysis

FY 2024 construction activity fell into two categories, purchased goods & services (PG&S) which includes all materials and labour of the new office, and capital goods which includes large purchases and furnishings.

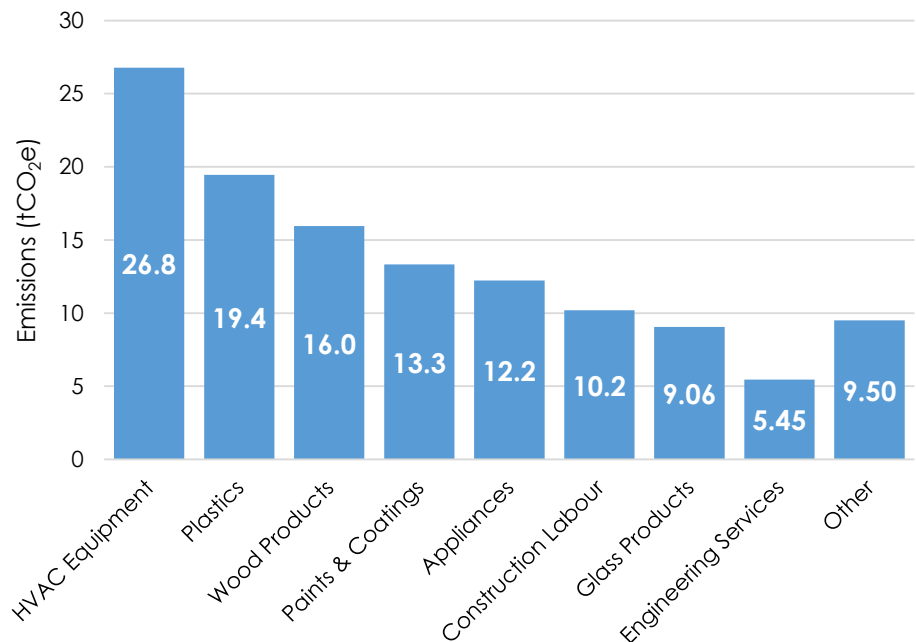
Construction emissions were the most significant portion of the FY 2024 footprint at 122 tCO₂e, 78% of the total inventory.

Analysis

The highest emission source of construction was the HVAC equipment, resulting in 26.8 tCO₂e, 22% of the construction emissions. This was followed by plastics at 19.4 tCO₂e 13% of construction emissions.

Synergy avoided 9.78 tCO₂e by purchasing second hand items like the boardroom table, reclaimed wood used for the call room tables, and recycled items such as the carpeting and chairs.

Construction Emissions Breakdown



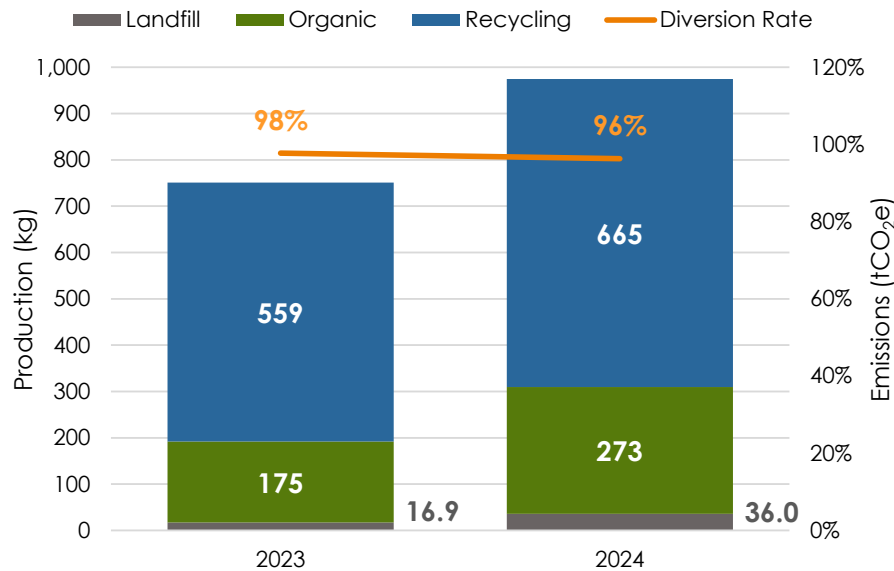
tCO₂e **122**

% of Total **78%**

tCO₂e **9.78**
tCO₂e avoided through sustainable purchasing

Waste Generation in Operations

Annual Waste Production



Analysis

Waste production increased from 751 kg to 974 kg, reflecting a larger team size and a change in office location. Despite this increase, Synergy maintained a diversion rate over 95%.

FY 2024 waste production resulted in 0.14 tCO₂e, a 41% increase over the baseline year, 0.1% of the total footprint.

tCO₂e **0.14**

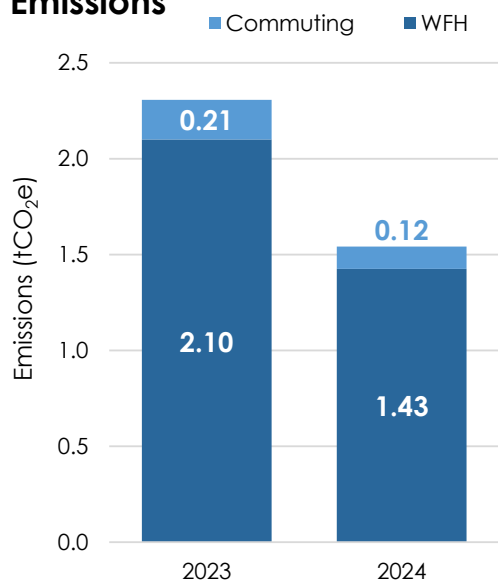
% of Total **0.1%**

 **96%**
Diversion Rate

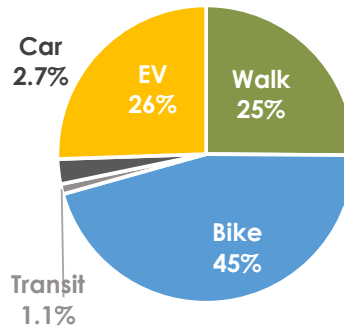
Change Since Baseline **41%**

Employee Commuting

Annual Commuting Emissions



Commuting Methods at Broughton St.



Average kgCO₂e/km **0.01**
Low-Emission Commuting % **97%**

Analysis

Commuting and WFH emissions in 2024 totaled 1.54 tCO₂e, 1.0% of the footprint.

Commuting and WFH emissions in FY 2024 decreased 44% and 32%, respectively, compared to the 2023 baseline.

Synergy achieved 97% low-emission commuting rate, with gasoline vehicle use at 2.7% of company wide commuting methods.

tCO₂e **1.54**

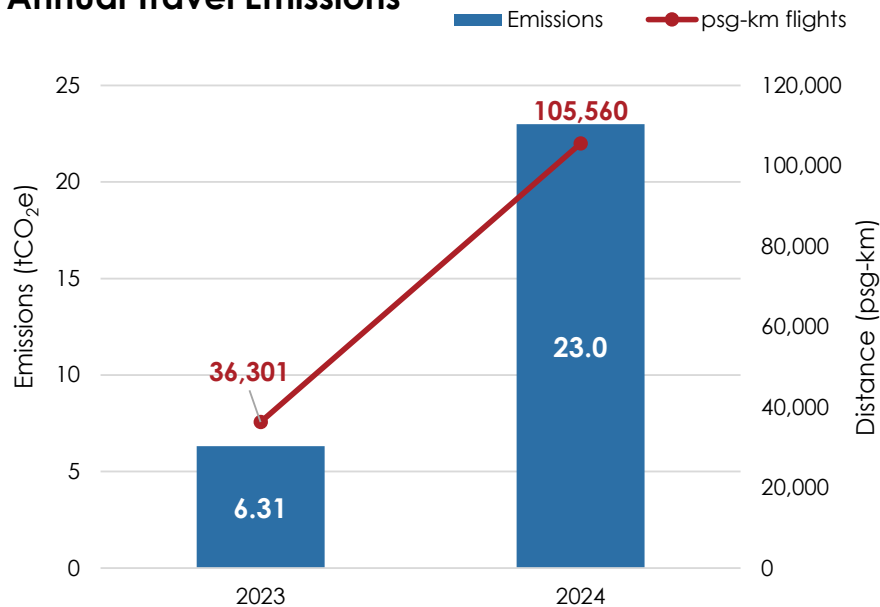
% of Total **1.0%**

tCO₂e / FTE **0.13**

Change Since Baseline **-33%**

Business Travel

Annual Travel Emissions



Analysis

Business travel was Synergy's second highest emission source at 23.0 tCO₂e, 15% of the total footprint.

This increase is a result of 43% more flights and 191% more psg-km flown by Synergy staff in FY 2024 compared with the FY 2023 baseline.

It is recommended Synergy review the travel tracking and offset purchase procedure to improve data collection in future years.

tCO₂e **23.0**

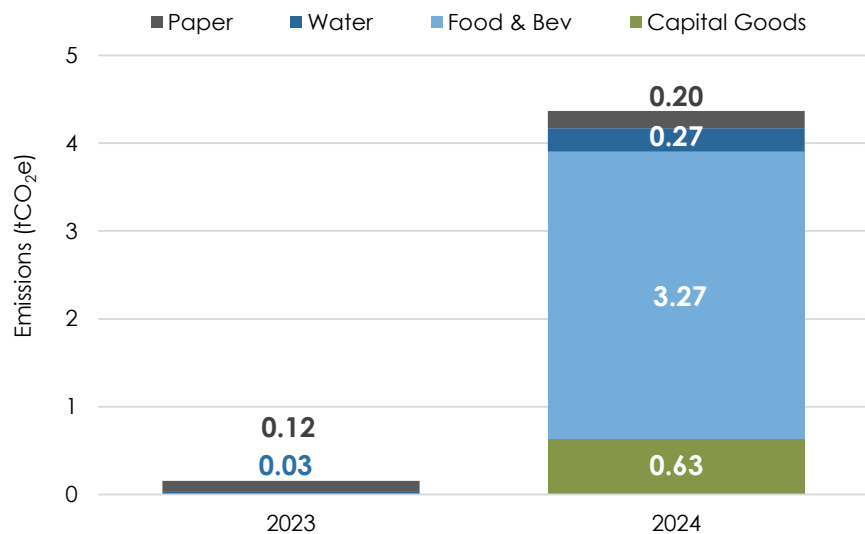
% of Total **15%**

tCO₂e / FTE **1.92**

Change since baseline **264%**

Other Scope 3

Annual Capital Goods Emissions



Analysis

Other scope 3 includes additional scope 3 emission sources under 5% of the total footprint. FY 2024 marks the first year Synergy has measured capital goods and food & bev.

Food & bev was the highest emission source at 3.27 tCO₂e, followed by capital goods at 0.63 tCO₂e.

Other scope 3 totaled 4.37 tCO₂e, 2.8% of the footprint.

tCO₂e **4.37**

% of Total **2.8%**

tCO₂e / FTE **0.36**

Conclusion

Synergy's FY 2024 totaled 157 tCO₂e. 122 tCO₂e were a direct result of constructing the new office space, with emission sources from capital goods and purchased goods and services. The second largest emissions source was company travel, accounting for 15% of the total footprint (23.0 tCO₂e), followed by natural gas at 3.0% (4.67 tCO₂e).

As a signatory of the Glasgow Declaration, Synergy Enterprises has set an emissions reduction target of 50% by 2030 based on the 2023 baseline. To achieve this reduction, it is recommended to focus on reducing flights wherever possible, opting for low-emission alternatives if available.

Achievements

- Avoided 9.78 tCO₂e of construction emissions through sustainable purchasing choices.
- Reduced commuting and WFH emissions 33% since the 2023 baseline.

Moving Forward

- Collect heating and electricity consumption data for the new office to improve data quality and reflect actual impact of Synergy's office use.
- Review the travel tracking and offset purchase procedure to improve data collection in future years.

Data Collection & Methodologies

Emission Source	Data Type	Data Quality	Notes
Natural Gas	Invoices / N/A	17/20	This table details the type of data received from Synergy Enterprises to generate this report. Data quality is assessed on five categories: technology, time, geography, reliability and completeness. The purpose of this table is to provide further information on the values in this report and what sources were used to calculate them.
Electricity	Invoices / N/A	15/20	
Water	Invoices / N/A	17/20	
Waste	Estimate/Waste Tracking Worksheet	15/20	
Construction	Invoices	16/16	
Food & Bev	Account Summary	16/16	
Capital Goods	Account Summary	16/16	
Company Travel	Account Summary	13/16	
Paper	Account Summary	16/16	
Commuting	Staff Survey	16/16	

Information on Inventory Uncertainty

- * Waste data for the Johnson St. location was unavailable. Previous years data and FTEs were used to estimate FY 2024 production.
- * 1. Utility data for the Broughton street location were unavailable. The missing data was estimated using averages per sq ft. and FTEs.

- * Synergy Enterprises office is shared with Synergy Foundation, as a result, an ownership percentages was applied to shared office facilities to estimate Synergy Enterprises contribution.
- * Improved factors have been applied to calculate the emissions from paper. These improved factors may cause a decrease in emissions per kg of paper used.

Emissions References

- 2022 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions
https://www2.gov.bc.ca/assets/gov/environment/climate-change/cng/methodology/2021-best-practices-methodology_for_archive.pdf
- Environment Canada's National Inventory Report (1990-2021); Part 2 & 3.
https://publications.gc.ca/collections/collection_2023/eccc/En81-4-2021-2-eng.pdf
https://publications.gc.ca/collections/collection_2023/eccc/En81-4-2021-3-eng.pdf
- Department for Environment, Food & Rural Affairs (UK) Carbon Factors 2023
<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023>
- Intergovernmental Panel on Climate Change (Global Warming Potentials)
https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter07.pdf
- UK WRAP Emissions Factor Database V1 .2 (2023)
<https://www.wrap.ngo/resources/guide/scope-3-ghg-measurement-and-reporting-protocols-food-and-drink>

Policy for Base Year Recalculation:

Base year emissions, and other previous emissions, shall be retroactively recalculated if a change in organizational structure or data quality is expected to exceed a significance threshold of 10% of base year emissions. These changes may arise from structural changes such as mergers, acquisitions, divestments, outsourcing or insourcing, changes in calculation methodology and improvements in accuracy, or discovery of significant errors.

Glossary of Terms

Term	Description
Carbon Neutral	Companies are carbon neutral when they remove GHG emissions equivalent to all their scope 1, 2 and material (>5%) scope 3 emissions, usually by purchasing carbon offsets.
Emissions Factor	The volume of emissions created by an emissions producing activity (i.e. fuel combustion), calculated based on the amount of the activity (volume, distance, etc.).
GHG	Greenhouse Gas (emissions): Atmospheric gasses contributing to the greenhouse effect, including Carbon Dioxide (CO ₂), Methane (CH ₄), Nitrous Oxide (N ₂ O), etc.
GJ	Gigajoule: Unit of natural gas equal to 26.137 m ³ or 0.947 MMBtu
kWh	Kilowatt-Hour: Common unit for measuring electrical consumption
WTT	Well to Tank: Upstream emissions from extraction, processing and transport of fuel.
Net-Zero	Companies with a zero-emission carbon footprint, usually achieved by minimizing outputs and negating the remaining emissions through carbon removal activities.
psg-km	Passenger-Kilometer: Unit separating total emissions between passengers per km
tCO ₂ e	Tonnes of Carbon Dioxide Equivalent: a combined term capturing the emissions from various GHGs.

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