



Greenhouse Gas Inventory Basis of Reporting

Spectraforce 2025

Prepared By Greenplaces, Inc.

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Introduction

Overview	This document outlines the principles, methodologies, and assumptions used by Greenplaces for evaluating the operational emissions of Spectraforce (also referred to as the reporting company) in the preparation and reporting of its Greenhouse Gas (GHG) emissions inventory. Greenplaces recommends including this basis of reporting alongside disclosures of Spectraforce's GHG emissions inventory in order to ensure the intended audience has adequate context to understand the reported emissions data.
Principles of Reporting	This greenhouse gas emissions inventory follows the Greenhouse Gas (GHG) Protocol guidance and standards (World Resources Institute [WRI], 2003, 2015, 2018) and is calculated using global warming potential (GWP) values sourced from the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) (IPCC, 2021). Any deviations from the preceding statements are documented and justified within this report.
Consolidation Approach	The Operational Control approach has been applied to determine the organizational boundaries for this GHG emissions inventory. In line with GHGP's definition of operational control, the company has authority to introduce or implement operating policies at all locations with an operational lease.
Organizational Boundaries	The reporting company had 8 operating leases active during the reporting period, all of which are considered to be within operational control. Direct emissions from fuel combustion and refrigerant gasses at these controlled locations were reported under scope 1 and indirect emissions from purchased energy were reported under scope 2 (WRI, 2018). The reporting company also had 1 colocation data centers and 3 coworking locations with designated space that were reported under scope 3 category 8.
Operational Boundaries	Refer to the Category Methodology table below for details on emissions source inclusions and exclusions.
Reporting Period	This GHG emissions inventory is an annual report that covers the period of January 01, 2025 to December 31, 2025.
Base Year & Restatements	To Greenplaces' knowledge at the time of this report, Spectraforce has not selected an official base year and does not have a base year recalculation policy.
Documentation & Review Process	Documentation provided by Spectraforce for use in GHG emission calculations is stored in their Greenplaces software account. Where available, primary data records or other activity-based data sources were collected and used to calculate GHG emissions. All data provided has been reviewed by the Greenplaces team in an attempt to resolve uncertainties and data quality issues prior to use in calculations. Decisions on whether a document was included or excluded from the GHG inventory are noted in the files management section of the Greenplaces platform.
Uncertainty Statements	The GHG emissions information reflected in this report is subject to uncertainties resulting from limitations inherent in the nature and available methods for carbon accounting. Emissions data is, by necessity, based on estimates, and the selection of different but acceptable calculation methods can result in materially different results. The estimated emissions and the methods used to calculate Spectraforce's GHG emissions are good faith estimates based on Greenplaces' interpretation of reputable third-party guidance and standards. In an effort to be transparent about the degree of uncertainty reflected in the reported GHG emissions metrics, Greenplaces applies the following uncertainty rating scale: Low: Activity data is used for most or all emissions calculations and reflects actual activity levels (eg. >80% of square footage calculated using activity data). Moderate: Activity data is used for a portion of emissions calculations, however estimations based on secondary data was required (eg. 50-80% of square footage calculated using activity data). High: More than half of the data used in calculations is from estimations, such as area-based estimations or spend-based calculations (eg. <50% of square footage calculated using activity data).

Calculation Methodology

Scope 1	Relevance	Methodology	Works Cited
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Fugitive Emissions	Relevant, Included	Estimated: 8 locations' refrigerant gas leakage was calculated using the area method. The area method uses a building type-specific cooling ton per square foot ratio to estimate refrigerant capacity (Haines & Myers, 2009). This is multiplied by an average gas to cooling ton ratio of 1.36 kg and an average annual leakage rate based on equipment type (Ameritech, 2022; Bjønness et al., 2019). Where refrigerant gas was unknown, HFC-134a was assumed. Activity: No activity data provided Exclusions: No known exclusions. Uncertainty: High	Ameritech, 2022 Bjønness et al., 2019 Haines & Myers, 2009 IPCC, 2021
Stationary Combustion	Relevant, Included	Estimated: 2 locations' were estimated using climate zone- and building type-specific energy usage intensities for natural gas (EIA, 2022). Activity: 3 locations provided diesel consumption data. Emission Factors: Country- and fuel-specific tank-to-wheel emission factors were used for all locations (EPA, 2025) Exclusions: 3 locations reported having no on-site fuel combustion. Uncertainty: Moderate	EIA, 2022 EPA, 2025
Mobile Combustion	Not Relevant, Excluded	Exclusions: Not relevant. Spectraforce does not own or control any mobile assets that combust fuel.	Not Relevant
Process Emissions	Not Relevant, Excluded	Exclusions: Not relevant. The reporting company does not generate process emissions.	Not relevant.
Scope 2	Relevance	Methodology	Works Cited
Purchased Electricity	Relevant, Included	Estimated: 4 locations were estimated using climate zone- and building type-specific energy usage intensities (EUI) for electricity from the US EIA (2022). Activity: 4 locations provided electricity consumption data. Emission Factors (Location-based): eGrid-specific emission factors were applied for US locations (CSDI, 2026) and country-specific emission factors were used for all other international locations (IEA, 2025). Emission Factors (Market-based): No contractual instruments were claimed, the location-based emission factors noted above were applied. Exclusions: No known exclusions. Uncertainty: Moderate	CSDI, 2026 EIA, 2022 IEA, 2025
Purchased Steam or District Heating	Not Relevant, Excluded	Exclusions: No locations were identified as using purchased steam or district heating on site.	Not relevant.
Purchased Cooling	Not Relevant, Excluded	Exclusions: No locations were identified as using purchased cooling.	Not relevant.
Scope 3	Relevance	Methodology	Works Cited
Category 1: Purchased Goods and Services	Relevant, Included	Spend-based: Transaction data from Spectraforce's general ledger for each subsidiary were mapped to an appropriate industry-specific (NAICS, 2017) spend-based emission factor from the US EEIO Supply Chain Emission Factor database (CSDI EEIOv1.4, 2025). Emission factors were adjusted for inflation using country-specific rates (World Bank, 2025) and converted from original currency to USD using conversion rates from the US Department of the Treasury (DOT) (2025). Exclusions: Transactions that were not related to physical goods or emissions-generating services (eg. taxes, bank fees, penalties, etc) are excluded. Uncertainty: High	CSDI EEIOv1.4, 2025 DOT, 2025 NAICS, 2017 World Bank, 2025
Category 2: Capital Goods	Relevant, Included	Spend-based: Transaction data from Spectraforce's general ledger for each subsidiary were mapped to an appropriate industry-specific (NAICS, 2017) spend-based emission factor from the US EEIO Supply Chain Emission Factor database (CSDI EEIOv1.4, 2025). Emission factors were adjusted for inflation using country-specific rates (World Bank, 2025) and converted from original currency to USD using conversion rates from the US Department of the Treasury (DOT) (2025). Exclusions: No known exclusions. Uncertainty: High	CSDI EEIOv1.4, 2025 DOT, 2025 NAICS, 2017 World Bank, 2025

Category 3: Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	Relevant, Included	Calculation Method: The data type and calculation methods described for Scope 1 and Scope 2 energy sources are applicable to this category. Emission Factors: Upstream well-to-tank (WTT) emissions from direct fuel consumption were calculated using fuel-specific factors for stationary combustion (BEIS, 2025). Well-to-tank emissions from purchased electricity were calculated using country-specific factors (IEA, 2025). Lifecycle transmission and distribution (T&D) loss emissions from purchased electricity were calculated using country-specific upstream T&D loss factors (IEA, 2025). Factors sourced from BEIS (2025) are calculated using AR5 GWPs. Exclusions: The exclusions described for Scope 1 and 2 energy sources are applicable to this category. Fuel- and Energy-Related Activities emissions are only included for sources within operational control. Uncertainty: High	BEIS, 2025 IEA, 2025
Category 4: Upstream Transportation and Distribution	Relevant, Included	Spend-based: Transaction data from Spectraforce's general ledger for each subsidiary were mapped to an appropriate industry-specific (NAICS, 2017) spend-based emission factor from the US EEIO Supply Chain Emission Factor database (CSDI EEIOv1.4, 2025). Emission factors were adjusted for inflation using country-specific rates (World Bank, 2025) and converted from original currency to USD using conversion rates from the US Department of the Treasury (DOT) (2025). Transaction data related to activities where supplier-specific data was provided were excluded from spend-based calculations to ensure no double-counting occurred. Supplier-Specific: Emissions reports were provided for the following vendors: FedEx. Exclusions: No known exclusions. Uncertainty: High	CSDI EEIOv1.4, 2025 DOT, 2025 NAICS, 2017 World Bank, 2025
Category 5: Waste Generated in Operations	Relevant, Included	Estimated: Total waste generation was estimated for 7 locations using a short ton per square foot intensity which was calculated based on locations that provided activity data. All estimated waste generation data was assumed to be landfilled mixed municipal solid waste. Activity: 1 location provided activity-based waste generation data in 2023 and this was used as a proxy. Emission Factors: Waste type- and disposal method-specific factors were applied (EPA, 2025). Exclusions: Emissions from waste generated at locations outside of Spectraforce's operational control are not included in this category. Uncertainty: High	EPA, 2025
Category 6: Business Travel	Relevant, Included	Spend-based: Transaction data from Spectraforce's general ledger for each subsidiary were mapped to an appropriate industry-specific (NAICS, 2017) spend-based emission factor from the US EEIO Supply Chain Emission Factor database (CSDI EEIOv1.4, 2025). Emission factors were adjusted for inflation using country-specific rates (World Bank, 2025) and converted from original currency to USD using conversion rates from the US Department of the Treasury (DOT) (2025). Activity: No activity data was provided. Exclusions: No known exclusions Uncertainty: High	CSDI EEIOv1.4, 2025 DOT, 2025 NAICS, 2017 World Bank, 2025
Category 7: Employee Commuting (Commuters)	Relevant, Included	Activity: Employee commute emissions were calculated based on Spectraforce's employee data including home zip code and office zip code, which was used to calculate distance, their commute mode, and remote days. Employee commute distances were calculated on a per-employee basis using home zip code and office zip code data. Emission Factors: Commute-mode-specific emission factors from the US EPA (2025) were used for North American locations, and commute-mode-specific emission factors from BEIS (2025) were used for all other international locations and for ferry, hybrid and electric vehicle emissions. Exclusions: No known exclusions. Uncertainty: Moderate	EPA, 2025 BEIS, 2025

Category 7: Employee Commuting (Remote)	Relevant, Included	Estimated: Emissions from natural gas and electricity consumption were calculated on a per employee per day basis using the methodology described in Anthesis' Estimating Energy Consumption & GHG Emissions for Remote Workers white paper (2021). Average remote working days were calculated on a per location basis using assumptions provided by Spectraforce. Greenplaces assumed all home office locations were heating using natural gas. Emission Factors: Emissions from remote work electricity consumption were calculated using eGrid-specific emission factors for US locations (CSDI, 2026), and country-specific emission factors were applied to all other locations (ECCC, 2025; IEA, 2025). Emissions from remote work natural gas consumption were calculated using country-specific natural gas emission factors (ECCC, 2025; EPA, 2025; IEA, 2025). Exclusions: No known exclusions. Uncertainty: Moderate	Anthesis, 2021 EPA, 2025 ECCC, 2025 IEA, 2025
Category 8: Upstream Leased Assets	Relevant, Included	Coworking spaces Estimated: 2 locations were estimated using climate zone- and building type-specific energy usage intensities (EUI) for electricity and natural gas from the US EIA (2022). 3 locations' refrigerant gas leakage was calculated using the area method. The area method uses a building type-specific cooling ton per square foot ratio to estimate refrigerant capacity (Haines & Myers, 2009). This is multiplied by an average gas to cooling ton ratio of 1.36 kg and an average annual leakage rate based on equipment type (Ameritech, 2022; Bjønness et al., 2019). Where refrigerant gas was unknown, HFC-134a was assumed. Activity: 1 locations provided total building electricity and natural gas consumption data which was allocated to Spectraforce based on pro-rata share percentage. Emission Factors: Country- and fuel-specific tank-to-wheel emission factors were used for all natural gas locations (EPA, 2025; ECCC, 2025). For electricity, eGrid-specific emission factors were applied for US locations (CSDI, 2026) and province specific emission factors for Canadian locations (ECCC, 2025). Exclusions: No known exclusions. Co-location Data Center Activity: The operational hours, average load, and capacity were provided for each rack and PUE was assumed (Statista, 2026) to calculate total kWh of consumption. eGrid-specific emission factors were applied (CSDI, 2026).	CSDI, 2026 ECCC, 2026 EPA, 2025 Statista, 2026
Category 9: Downstream Transportation and Distribution	Not Relevant, Excluded	Exclusions: Not relevant. The reporting company does not produce or sell any physical products, so there is no downstream transportation and distribution of sold products to account for.	Not Relevant
Category 10: Processing of Sold Products	Not Relevant, Excluded	Exclusions: Not relevant. The reporting company does not produce any physical products.	Not relevant.
Category 11: Use of Sold Products	Not Relevant, Excluded	Exclusions: Not relevant. The reporting company does not produce any physical products.	Not relevant.
Category 12: End-of-Life Treatment of Sold Products	Not Relevant, Excluded	Exclusions: Not relevant. The reporting company does not produce any physical products.	Not relevant.
Category 13: Downstream Leased Assets	Not Relevant, Excluded	Exclusions: Not relevant. The reporting company does not have any downstream leased assets.	Not relevant.
Category 14: Franchises	Not Relevant, Excluded	Exclusions: Not relevant. The reporting company does not operate any franchises.	Not relevant.
Category 15: Investments	Not Evaluated	Exclusions: Not included in assessment.	Not relevant.

GHG Inventory Results

Emissions by Scope (mT CO₂e)

Scope	Location-based Method	Market-based Method
Scope 1	31.83	31.83

Scope 2	634.79	634.79
Scope 3	5,457.17	5,457.17
Total	6,123.79	6,123.79

Emissions Intensity Metrics (mT CO₂e per Unit)

Unit	Location-based Method	Market-based Method
per thousand sq.ft. (64)	95.31	95.31
per employee (1,313)	4.66	4.66

Scope 1 Emissions by Category (mT CO₂e)

Fugitive Emissions	25.03
Stationary Combustion	6.80
Mobile Combustion	-
Process Emissions	-
Total Scope 1	31.83

Scope 2 Location-based Emissions by Category (mT CO₂e)

Purchased Electricity	634.79
Purchased Steam or District Heating	-
Purchased Cooling	-
Total Scope 2 (Location-based)	634.79

Scope 2 Market-based Emissions by Category (mT CO₂e)

Purchased Electricity	634.79
Purchased Steam or District Heating	-
Purchased Cooling	-
Total Scope 2 (Market-based)	634.79

Scope 3 Emissions by Category (mT CO₂e)

Purchased Goods and Services	2,304.14
Capital Goods	236.73
Fuel- and Energy-Related Activities	218.41
Upstream Transportation & Distribution	2.85
Waste Generated in Operations	392.25
Business Travel	745.95
Employee Commuting (Commuters)	1,358.44
Employee Commuting (Remote)	184.22
Upstream Leased Assets	14.18
Downstream Transportation & Distribution	-
Processing of Sold Products	-
Use of Sold Products	-
End of Life Treatment of Sold Products	-
Downstream Leased Assets	-
Franchises	-
Investments	-
Total Scope 3	5,457.17

Additional Metrics

Metric	Quantity	Unit
Upstream Scope 3 Emissions	5,457.2	mT CO ₂ e
Downstream Scope 3 Emissions	0.0	mT CO ₂ e
Carbon Offset Credits	-	mT CO ₂ e
Electricity Consumption	917.9	MWh
Renewable Electricity	0.0	MWh
% Renewable Electricity	0.00%	Percent

Total Energy Consumption	950.6	MWh
Hazardous Waste Generation	0.0	Pounds
Non-Hazardous Waste Generation	1,467,768.5	Pounds
Total Waste Generation	1,467,768.5	Pounds
Waste Recovered/Diverted	136,397.0	Pounds
% Waste Diverted	9.29%	Percent
Water Consumption	25,470.66	Gallons (US)

Works Cited

- AmeriTech. (2022). How Many Pounds of Freon Does your Home AC Need?. AmeriTech Air Conditioning & Heating. <https://ameritechfl.com/how-many-pounds-of-freon-does-your-home-ac-need/#:-:text=The%20general%20guideline%20used%20when,10%2D20%20pounds%20of%20refrigerant>.
- Anthesis. (February 2021). Estimating Energy Consumption & GHG Emissions for Remote Workers. Retrieved March 1, 2024.
- Bjønness, K. L., Gustafsson, T., Ishikawa, J., & Maione, M. (2019). Emissions of fluorinated substitutes for ozone depleting substances. International Panel on Climate Change. https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/3_Volume3/19R_V3_Ch07_ODS_Substitutes.pdf
- Cornerstone Sustainability Data Initiative. (2026). eGRID2024 (1.0.0) [Data set]. Cornerstone Sustainability Data Initiative. <https://doi.org/10.5281/zenodo.18968658>
- Department for Business, Energy & Industrial Strategy. (2025). Greenhouse Gas Reporting: Conversion Factors 2025. Government of the United Kingdom Department for Business, Energy & Industrial Strategy.
- Energy Information Administration. (2022). 2018 Commercial Buildings Energy Consumption Survey (CBECS). <https://www.eia.gov/consumption/commercial/>
- Environment and Climate Change Canada. (2025). National Inventory Report 1990–2023: Greenhouse Gas Sources and Sinks in Canada.
- Haines, R. W., & Myers, M. E. (2009). HVAC Systems Design Handbook (5th ed.). McGraw Hill.
- Ingwersen, W., & Young, B. (2025). Supply Chain Greenhouse Gas Emission Factors for U.S. Commodities (1.4.0-rc.1). Cornerstone Sustainability Data Initiative. <https://doi.org/10.5281/zenodo.17080881>
- Intergovernmental Panel on Climate Change. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.
- Intergovernmental Panel on Climate Change. (2021). Sixth Assessment Report The Earth's Energy Budget, Climate Feedbacks and Climate Sensitivity Supplementary Material. Retrieved March 1, 2024.
- International Energy Agency. (2025). Emission Factors 2025. <https://www.iea.org/data-and-statistics/data-product/emissions-factors-2025>.
- North American Industry Classification System. (2017). North American Industry Classification System 2017 Manual. <https://www2.census.gov/library/reference/naics/publications/2017-NAICS-Manual.pdf>
- United States Department of the Treasury. (2025). Treasury Reporting Rates of Exchange, Date Range: 12/31/2025 – 12/31/2025.
- United States Environmental Protection Agency. (2025). GHG Emission Factors Hub. United States Environmental Protection Agency. <https://www.epa.gov/climateleadership/ghg-emission-factors-hub>
- World Bank. (2025). A Global Database of Inflation. <https://www.worldbank.org/en/research/brief/inflation-database>.
- World Resources Institute. (2003). GHG Protocol Corporate Accounting and Reporting Standard. Greenhouse Gas Protocol.
- World Resources Institute. (2015). GHG Protocol Scope 2 Guidance. Greenhouse Gas Protocol.
- World Resources Institute. (2018). Technical Guidance for Calculating Scope 3 Emissions. Greenhouse Gas Protocol.