2023 GHG Emissions Assessment Report

LUXAVIATION GROUP

Report

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1. INTRODUCTION

Luxaviation (Luxaviation or the Company) has engaged Distill Consulting (Distill) to explore and quantify its major sources of Scope 1, Scope 2, and Scope 3 greenhouse gas (GHG) emissions across the Company's global operations for the 2023 calendar year.

In 2022, Luxaviation embarked on its inaugural GHG assessment process to identify and quantify key sources of Scope 1, 2 and 3 GHG emissions across 24 of the company's major subsidiaries including several Air Operator Certificates (AOCs), Fixed-Base Operations (FBOs), and Valcora – Luxaviation's primary fuel supplier. Distill was engaged to help the Company to determine the appropriate organisational and operational boundaries for the exercise, guide the data collection process, and calculate the company's Scope 2 and 3 GHG emissions for the 2022 calendar year. Within the 2022 GHG assessment:

- Scope 1 emissions comprised of emissions generated from the combustion of aircraft fuel across the AOCs, as compiled and calculated by Luxaviation;
- Scope 2 emissions comprised of GHG emissions associated with electricity purchased for the FBOs and Valcora; and
- Scope 3 emissions comprised six categories of emissions including purchased goods and services, capital goods, fuel and energy-related activities, upstream transportation and distribution, waste and use of sold products.

Building on learnings from the 2022 GHG Assessment process, Luxaviation's 2023 GHG Assessment was expanded to include 36 subsidiaries including additional AOCs and FBOs, along with Helicopters (HELI), the Luxaviation Management Company (LMC) and Business Aviation Support Solutions (BASS), and subsidiaries such as Luxaviation Fine Wines, Client Service Academy, Flyskills, La Fugue, and Sigma Air Mobility. The 2023 GHG Assessment also considered seven additional categories of Scope 1, 2, and 3 emissions, namely:

- Stationary combustion, mobile combustion (vehicles and mobile equipment) and fugitive emissions in Scope 1;
- District energy in Scope 2; and
- Employee commuting and working from home, downstream transportation and distribution, and downstream end of life treatment of products in Scope 3.

As in 2022, Luxaviation was responsible for collecting and providing the data from the subsidiaries to Distill for consolidation, calculation, and analysis. The final consolidated results were subsequently prepared and presented to Luxaviation for review. The results have been analysed to identify trends, gaps, and areas of opportunity for meaningful positive impact.

This report describes the methodology used to calculate Luxaviation's Scope 1, 2, and 3 GHG emissions for 2023 and provides a high-level summary and analysis of the results including comparisons to the 2022 results, and recommendations for future reporting and GHG emissions reductions.

2. METHODOLOGY

The GHG emissions reporting process for 2023 commenced with discussions between Luxaviation and Distill to revisit and confirm the operational and organisational boundaries for

reporting the Company's Scope 1, 2, and 3 emissions. A workshop was held to review the most significant sources of GHG emissions across all Luxaviation's subsidiaries.

The GHG accounting and reporting procedure for this report is informed by The Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard – Revised Edition (GHG Protocol), and the Corporate Value Chain (Scope 3) Standard. Definitions of emissions categories were also informed by ISO Standard 14064-1: 2018 Greenhouse gases – Part 1.

The GHG Protocol is the most widely used greenhouse gas accounting standard used by companies internationally and is based on the principles of relevance, completeness, consistency, transparency, and accuracy. It defines three different scopes for GHG accounting and reporting purposes:

- Scope 1 emissions are direct emissions which occur from sources that are owned or controlled by the reporting company.
- Scope 2 emissions are classified as indirect emissions from the generation of electricity that is consumed and purchased by the reporting company from a third party. This also includes emissions from district heating and cooling systems purchased from a third party.
- Scope 3 emissions comprise of a broader range of indirect emissions that are a consequence of the activities of a company but occur from sources that are not owned or controlled by the reporting company. These include emissions from upstream activities such as the extraction, production, and transportation of purchased materials, and downstream activities such as transportation of goods, and use of sold products and services. There are 15 categories of Scope 3 emissions, however, not all categories are relevant to all companies.

Six greenhouse gases covered by the Kyoto Protocol are typically considered and reported for the purposes of GHG emissions reporting. These are:

- Carbon dioxide (CO2)
- Methane (CH4)
- Nitrous oxide (N2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur hexafluoride (SF6)

The system boundaries for this reporting exercise were defined by the control approach where the Company takes responsibility for GHG emissions generated by subsidiaries over which it has partial or complete operational control.

Table 1 presents a list of Luxaviation Subsidiaries that were voluntarily included in the 2023 GHG emissions assessment.

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Table 1: List of Luxaviation Subsidiaries for 2023 GHG Emissions Assessment

	ıbsidiary Designation	Subsidiary Name	Business Unit	Region	Major Trading Entity	% Control by Luxaviation	Included in Reporting*
1	AOC-Australia	ExecuJet Australia Pty Ltd.	AOC	Asia-Pacific	Yes	100%	Scope 1 and Scope 3
2	AOC-Belgium	Abelag Aviation N.V.	AOC	Europe	Yes	100%	Scope 1 and Scope 3
3	AOC-Demark	ExecuJet Europe A/S	AOC	Europe	No	100%	Scope 1 and Scope 3
4	AOC-France	Unijet S.A.	AOC	Europe	Yes	100%	Scope 1 and Scope 3
5	AOC-Germany	Luxaviation Germany GmbH	AOC	Europe	Yes	100%	Scope 1 and Scope 3
6	AOC-Luxembourg	Luxaviation S.A.	AOC	Europe	Yes	100%	Scope 1 and Scope 3
7	AOC-Portugal	Luxaviation E.A.S.A.	AOC	Europe	Yes	100%	Scope 1 and Scope 3
8	AOC-San Marino	Luxaviation San Marino S.r.l.	AOC	Europe	No	100%	Scope 1 and Scope 3
9	**AOC-Singapore	ExecuJet Asia Private Ltd.	AOC	Asia-Pacific	No	100%	Scope 1 and Scope 3
10	AOC-South Africa	ExecuJet Aviation Pty Ltd.	AOC	Africa	Yes	100%	Scope 1 and Scope 3
11	AOC-UAE	ExecuJet Middle East Co L.L.C.	AOC	Middle East	Yes	100%	Scope 1 and Scope 3
12	AOC-UK	London Executive Aviation Ltd.	AOC	Europe	Yes	100%	Scope 1 and Scope 3
13	**BASS-Fine Wines	Luxaviation Fine Wines S.A.	BASS	Europe	No	100%	Scope 1, Scope 2 and Scope 3
14	**BASS-Flyskills	Flykskills S.A.	BASS	Europe	No	100%	Scope 1, Scope 2 and Scope 3
15	**BASS-La Fugue	La Fugue SAS	BASS	Europe	No	100%	Scope 1, Scope 2 and Scope 3
16	**BASS-Service Academy	The Luxaviation Service Academy SA	BASS	Europe	No	100%	Scope 1, Scope 2 and Scope 3
17	**BASS-Sigma Air Mobility	Sigma Air Mobility	BASS	Europe	No	100%	Scope 1, Scope 2 and Scope 3
18	BASS-Valcora	Valcora S.à.r.l.	BASS	Europe	Yes	100%	Scope 1, Scope 2 and Scope 3
19	FBO-Auckland	Air Centre One	FBO	Asia-Pacific	Yes	100%	Scope 1, Scope 2 and Scope 3
20	**FBO-Barcelona	ExecuJet Spain S.L.	FBO	Europe	No	100%	Scope 1, Scope 2 and Scope 3
21	FBO-Berlin	FJA Berlin GmbH	FBO	Europe	Yes	100%	Scope 1, Scope 2 and Scope 3
22	FBO-Brussels	Abelag Handling N.V.	FBO	Europe	Yes	100%	Scope 1, Scope 2 and Scope 3
23	FBO-Cape Town	ExecuJet Aviation Pty Ltd.	FBO	Africa	Yes	100%	Scope 1, Scope 2 and Scope 3
24	**FBO-Dubai Al Maktoum	ExecuJet Middle East Co L.L.C.	FBO	Middle East	Yes	100%	Scope 1, Scope 2 and Scope 3
25	FBO-Dubai International	ExecuJet Middle East Co L.L.C.	FBO	Middle East	Yes	100%	Scope 1, Scope 2 and Scope 3
26	**FBO-Girona	ExecuJet Spain S.L.	FBO	Europe	No	100%	Scope 1, Scope 2 and Scope 3
27	**FBO-Ibiza	ExecuJet Spain S.L.	FBO	Europe	No	100%	Scope 1, Scope 2 and Scope 3
28	FBO-Johannesburg	ExecuJet Aviation Pty Ltd.	FBO	Africa	Yes	100%	Scope 1, Scope 2 and Scope 3
29	FBO-Melbourne	ExecuJet Australia Pty Ltd.	FBO	Asia-Pacific	Yes	100%	Scope 1, Scope 2 and Scope 3
30	FBO-Munich	FJA Munich GmbH	FBO	Europe	Yes	100%	Scope 1, Scope 2 and Scope 3
31	**FBO-Paris	ExecuJet France SAS	FBO	Europe	Yes	100%	Scope 1, Scope 2 and Scope 3
32	FBO-Sydney	ExecuJet Australia Pty Ltd.	FBO	Asia-Pacific	Yes	100%	Scope 1, Scope 2 and Scope 3
33	**FBO-Valencia	ExecuJet Spain S.L.	FBO	Europe	No	100%	Scope 1, Scope 2 and Scope 3
34	**HELI-UK	Starspeed Ltd.	HELI	Europe	Yes	100%	Scope 1 and Scope 3
35	**Luxaviation Management Company (HQ)	Luxaviation Management Company S.A. (HQ)	LMC (HQ)	Europe	No	100%	Scope 1, Scope 2 and Scope 3

* This includes subsidiaries that provided partial data for the various GHG emissions categories reported. A more comprehensive list of inclusions by scope and category is provided in Table 2.
** Subsidiaries added in 2023 (not evaluated in 2022).

Table 2 provides an overview of the Scope 1, 2, and 3 emissions categories which were considered, along with details about the operational and organisational boundaries for the 2023 GHG assessment. Exclusions of applicable categories and subsidiaries were primarily driven by unavailability of data from the subsidiaries.

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Table 2: Overview of Organisational and Operational Boundaries

Scope		Category	Emission Sources	Operational Boundaries	Organisational Boundaries - Subsidiaries Included*
1		Stationary combustion	Generation of heat and electricity	Included - Natural gas	All except for 12, 20, 21, 24, 25, 39, 34
		Mobile combustion	Company-owned or leased vehicles	Included - combustion of fuel in jets, helicopters, vehicles, ground handling equipment and ground service equipment	Vehicles - All AOCs except for 12; All FBOs; Not applicable to BASS, HELI or LMC Mobile Equipment - All FBOs and HELI; Not applicable to AOCs, BASS or LMC
		Physical or chemical processing	Manufacture of processing of chemicals and materials	Not applicable	Not applicable
		Fugitive emissions	Emissions from the use of refrigerants	Included	All except 4, 8, 9, 12, 15, 18, 21, 24, 25, 31
2		Electricity	Purchased electricity	Included	All BASS; All FBOs except 21, 24, 25, 30; LMC; Not applicable to AOCs and HELI
		Steam	Purchased steam	Not applicable	Not applicable
		District Heating	Purchased district heating	Included	31
		District Cooling	Purchased district cooling	Included	31
3	Upstream	Purchased goods and services	Emissions associated with purchased goods and services	Included - Water supply and treatment, Purchased goods and services	Water - All except 9, 12, 15, 21, 24, 25, 30, 33 Purchased Goods and Services - All
		Capital goods	Emissions associated with purchased capital goods	Included - Capital goods	All except 12
		Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	Upstream life cycle emissions from fuel and electricity generation	Included - Transmission and Distribution (T&D) losses for purchased electricity, Well-to-Tank (WTT) emissions for purchased fuel	T&D emissions for all subsidiaries reporting purchased electricity; WTT emissions for all subsidiaries reporting fuel for stationary and/or mobile combustion; WTT emissions for all aviation fuel supplied by BASS subsidiaries (18 - Valcora) and FBOs (19, 21, 22, 23, 28-32) to non-Luxaviation entities
		Upstream transportation and distribution	Transportation and distribution of goods and services to the company	Included	BASS - 13, 18-21; FBOs - All except 22, 23, 28, 31
		Waste generated in operations	Waste management of operational waste (landfill, incineration, composting, recycling)	Included	BASS - All; FBOs - All except 24, 25, 31; LMC; Not applicable to AOC and HELI
		Business travel	Travel and accommodation of employees/contractors	Not included	An employee survey to understand how different subsidiaries track business travel was conducted in early 2024 in order to evaluate the best way to effectively capture and report on these emissions in the future.
		Employee commuting	Employee travel between home and work, home office energy consumption	Included	All
		Upstream leased assets	Operation of assets leased by the organization (as lessee) and not included in Scope 1 and 2	Not applicable	Not applicable
	Downstream	Downstream transportation and distribution	Transportation and distribution of products sold by the organization	Included	Only applicable for 13 (Luxaviation Fine Wines)
		Processing of sold products	Processing of intermediate products sold by the organization	Not applicable	Not applicable
		Use of sold products	Use of sold goods that require energy to operate	Included - combustion of fuel sold by Valcora and FBOs (to non-Luxaviation customers)	BASS - 18 (Valcora); FBOs - 19, 21, 22, 23, 28-32; Not applicable to other subsidiaries
		End-of-life treatment of sold products	Waste disposal and treatment of sold products	Included - end of life of fine wines sold by Luxaviation Fine Wines	Only applicable for 13 (Luxaviation Fine Wines)
		Downstream leased assets	Operation of assets owned by the company (as lessor) and not included in Scope 1 and 2	Not applicable	Not applicable
		Franchises	Operation of franchises not included in Scope 1 or 2	Not applicable	Not applicable
		Investments	Operation of investments not included in Scope 1 or 2	Not applicable	Not applicable

* Subsidiary numbers from Table 1 are referenced.

Luxaviation's most material emissions category was emissions from the combustion of aviation fuel, as calculated and provided by Luxaviation, which comprised the majority of the Company's Scope 1 emissions. In 2023, the Scope 1 emissions were expanded to include GHG emissions from the combustion of fossil fuels used for stationary equipment such as building heating systems and for mobile equipment such as vehicles, ground handling equipment and ground service equipment, along with fugitive emissions from the use of refrigerants.

Scope 2 emissions comprised of GHG emissions generated during the production of electricity purchased by the subsidiaries. In 2023, the Scope 2 emissions also included district heating and cooling purchased by the Paris FBO. All purchased electricity was assumed to be from the local grid and location-based emission factors were applied accordingly.

Three new categories of Scope 3 emissions were added to the GHG assessment in 2023. In addition to considering emissions associated with purchased goods and services, capital goods, fuel and energy related activities, upstream transportation and distribution, waste and the use of sold products as in 2022, the 2023 GHG emissions assessment also considered emissions associated with employee commuting and working from home, downstream transportation and distribution of sold products, and downstream end of life treatment of sold products.

It should also be noted that due to the inclusion of additional business units, subsidiaries and activities in 2023, emissions in some of the categories which were included in 2022 saw an increase. For example, there was an increase in the emissions associated with purchased goods and services driven by the inclusion of additional goods and services and additional business units (BASS, HELI, LMC). The types of purchased goods and services reported in 2023 was expanded to include office supplies, disposable plastic products, uniforms, glassware, metal flatware, ceramics in addition to the catering, flower displays, disposable paper products, electrical and electronic items reported in 2022. Capital goods included large items such as appliances, IT equipment, furniture, vehicles, construction contracts, ground handling and ground service equipment, and recycling bins.

The inclusion of aviation fuel sold by FBOs to third parties resulted in an increase in emissions associated with fuel and energy related activities and the use of sold products.

As Luxaviation does not manufacture any products, the majority of downstream emissions were found to be not applicable or not material for the Company with three key exceptions:

- Luxaviation subsidiary Valcora, which distributes aircraft fuel to Luxaviation's AOCs and also to a select number of non-Luxaviation customers;
- Various Luxaviation FBOs, which distribute aircraft fuel to a select number of non-Luxaviation customers; and
- Luxaviation Fine Wines, which stores and distributes fine wines to customers globally.

While the GHG emissions from the fuel supplied by Valcora to Luxaviation subsidiaries has been captured in the reported Scope 1 emissions, GHG emissions from the combustion of fuel supplied to non-Luxaviation customers has been reported within the Scope 3 use of sold goods emissions category. All downstream transportation and distribution emissions and downstream end of life treatment emissions included in the assessment are from Luxaviation Fine Wines.

Table 3 outlines the sources of emission factors and Global Warming Potentials (GWPs) used to calculate Scope 1, 2, and 3 emissions.

Table 3: Sources of Emission Factors and GWPs for 2023 GHG Emissions Assessment

Scope	Emissions Category	Source of Emission Factor
1	Stationary Combustion	Aviation Fuel - Eurocontrol Small Emitters Tool (Calculated by Luxaviation) Other Fuels - UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Fuel
1	Mobile Combustion	UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Vehicles, Fuel
1	Fugitive Emissions	UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Refrigerants
2	Electricity	Nowtricity.com European Environment Agency (EEA) GHG Emission Intensity of Electricity Generation in Europe Carbon Footprint Report 2023 Emission Factors Release 11 (July 2023) Australia – National Greenhouse Accounts Factors: 2023 New Zealand Government 2023 Emission Factor Guide
2	District Energy	UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Heat and Steam
3	Purchased Goods & Services	USEEIO Supply Chain GHG Emission Factors v1.2 UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Water Supply & Water Treatment
3	Capital Goods	USEEIO Supply Chain GHG Emission Factors v1.2
3	Fuel and Energy Related Activities	Carbon Footprint Report 2023 Emission Factors Release 11 (July 2023) – Transmission & Distribution Electricity UK Government GHG Reporting Conversion Factors 2023 (June 2023) – WTT Fuels
3	Upstream Transportation and Distribution	USEEIO Supply Chain GHG Emission Factors v1.2
3	Waste Generated in Operations	UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Waste
3	Employee Commuting	UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Business Travel (Land Transport) UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Homeworking
3	Downstream Transportation and Distribution	USEEIO Supply Chain GHG Emission Factors v1.2
3	Use of Sold Products	UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Fuel
3	End-of-life Treatment of Sold Products	UK Government GHG Reporting Conversion Factors 2023 (June 2023) – Waste

3. RESULTS & ANALYSIS

Luxaviation's total Scope 1, 2, and 3 GHG emissions for the 2023 calendar year were 190,538 tonnes of CO2 equivalent (tCO2e). It should be noted that all references to total emissions in this report are based on the emission sources and subsidiaries outlined in Table 1 and Table 2.

The results of Luxaviation's 2023 GHG emissions assessment have been analysed and presented as follows:

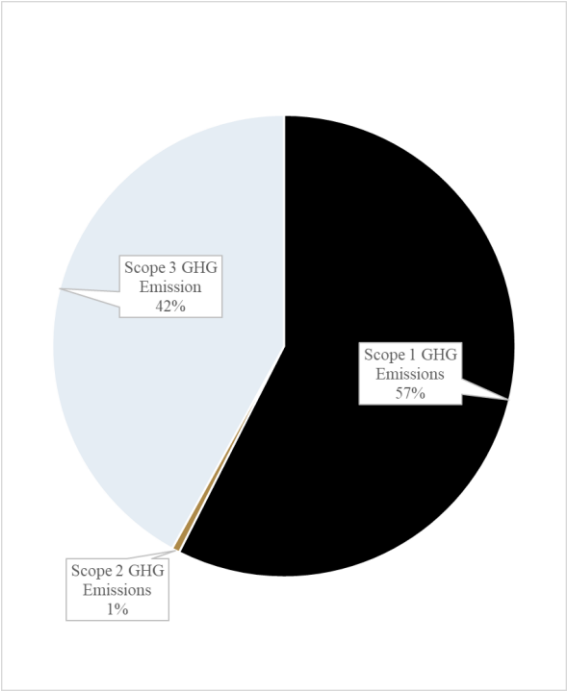
- Summary of emissions at a corporate level
- Summary of emissions by business unit
- Summary of emissions by region
- Summary of Scope 1, 2 and 3 emissions by category

Table 4: Summary of Luxaviation's GHG Emissions for 2023 and 2022 (tCO2e)

Scope	Total 2023 GHG Emissions (tCO2e)	Percentage of Total 2023 GHG Emissions (%)	Total 2022 GHG Emissions (tCO2e)	Percentage of Total 2022 GHG Emissions (%)
Scope 1*	109,524	57.5%	124,162	63.0%
Scope 2	1,037	0.5%	575	0.3%
Scope 3	79,977	42.0%	72,456	36.7%
Total GHG Emissions	**190,538**		**197,193**	

* Scope 1 emissions associated with the combustion of aviation fuel have been calculated by Luxaviation using the Eurocontrol Small Emitters Tool which produces results in tCO2, instead of tCO2e. It is therefore assumed that these Scope 1 GHG emissions do not include CH4 and N2O.

Figure 1: Total Corporate-level GHG Emissions for 2023 (percentage distribution)



Despite an increase in the number of subsidiaries considered, the inclusion of different business units with different types of activities (such as BASS, HELI, and LMC) and the addition of seven categories of emissions in 2023, Luxaviation's total GHG emissions decreased from 197,193 tCO2e to 190,538 tCO2e. This decrease is primarily driven by the decrease in fuel consumption by the AOCs from 39,695 tonnes of fuel in 2022 to 34,636 tonnes of fuel in 2023, and the decrease in fuel sold by Valcora to third parties from 15,353,623 litres in 2022 to 7,078,917 litres in 2023.

Emissions from the newly introduced categories in 2023 comprising of stationary combustion, vehicles, mobile equipment (ground handling equipment and ground service equipment), refrigeration, district energy, employee commuting and working from home, downstream transportation and distribution, and downstream end-of-life treatment of sold products altogether added 693 tCO2e to Luxaviation's GHG footprint.

Just over half (57.5%) of Luxaviation's GHG emissions are Scope 1 emissions from the combustion of fuels and refrigerants used by the Company. This result is consistent with the nature of the business and largely driven by the combustion of aviation fuel across the AOCs. The decline of 5.5% between 2023 and 2022 is attributed to the reduction in aviation fuel consumption in 2023.

As in 2022, Luxaviation's Scope 2 GHG emissions resulting from the use of purchased electricity and district energy are almost negligible, comprising only 0.5% of its total emissions.

In 2023, the percentage and amount of GHG emissions generated by the Company's upstream and downstream value chain activities, reported as Scope 3 emissions, increased by approximately 5% and 7,521 tCO2e to 42% of the total GHG footprint.

Table 5: 2023 GHG Emissions (Scope 1, 2, and 3) by Business Unit (tCO2e)

		Business Unit						
	Emission Source	**Corporate**	**AOC**	**BASS**	**FBO**	**HELI**	**LMC (HQ)**	**Total GHG Emissions (tCO2e)**
Scope 1	Aircraft Fuel Combustion		107,172.08			1,928.14		**109,100**
	Stationary Combustion		77.58		75.40		7.52	**160**
	Vehicles		39.89		120.64			**161**
	Mobile Equipment				82.55	1.56		**84**
	Fugitive Emissions		5.80	0.00	12.34	0.15	0.00	**18**
Scope 2	Electricity			0.32	1,033.94	0.22		**1,034**
	District Energy				2.87			**3**
Scope 3	Purchased Goods & Services		3,156.41	0.32	89.61	39.48	0.09	**3,286**
	Water Supply & Treatment		0.87		0.45	0.19	0.02	**2**
	Capital Goods		7.00	14.50	162.94	0.13	0.39	**185**
	Fuel & Energy Related		22,545.95	0.07	6,178.97	405.47	1.29	**29,132**
	Upstream Transportation			1.74	20.71			**22**
	Waste			0.16	21.83		0.07	**22**
	Employee Commuting	263.41						**263**
	Employee Working from Home	3.18						**3**
	Downstream Transportation			0.40				**0**
	Use of Sold Products			17,999.48	29,061.74			**47,061**
	Downstream End of Life of Products			0.02				**0**
	Subtotal Emissions	**266.60**	**133,005.58**	**18,017.01**	**36,864.00**	**2,375.33**	**9.37**	**190,538**
	% of Total Emissions	**0.14%**	**69.81%**	**9.46%**	**19.35%**	**1.25%**	**0.00%**	**100.00%**

Figure 2: 2023 GHG Emissions (Scope 1, 2, and 3) by Business Unit (tCO2e)

Approximately 70% of Luxaviation's 2023 GHG emissions were generated by its AOCs. The 13% decrease in emissions compared with 2022 related to AOCs corresponded with the decrease in aviation fuel consumption in 2023.

FBO emissions comprised almost 20% of Luxaviation's 2023 GHG inventory, seeing a significant increase from 5,305 tCO2e in 2022 to 36,864 tCO2e 2023. This increase was a result of the five additional FBOs being added to the assessment in 2023, along with the additional facility-related Scope 1 emissions, doubling of the Scope 2 emissions, and a 7.5-fold increase in Scope 3 emissions driven by the inclusion of aviation fuel sold by various FBOs and additional types of purchased goods and services. The increase in emissions reflects the progression towards more complete data collection year-over-year.

BASS emissions dropped from 20% in 2022 down to 9.5% in 2023. This substantial decrease from 39,077 tCO2e to 18,017 tCO2e, despite the addition of new subsidiaries and emissions categories within this business unit, can be attributed largely to the roughly 50% decline in the amount of fuel sold by Valcora to third parties in 2023.

The introduction of GHG emissions related to employee commuting and working from home in 2023, tracked as Corporate-level emissions, and emissions from the HELI and LMC business units collectively added 2,651 tCO2e to Luxaviation's 2023 GHG inventory. Altogether, these business units accounted for less than 1.5% of the Company's 2023 GHG footprint.

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Table 6: 2023 GHG Emissions (Scope 1, 2, and 3) by Region (tCO2e)

		Region					
	Emission Source	**Corporate**	**Africa**	**Asia-Pacific**	**Europe**	**Middle East**	**Total GHG Emissions (tCO2e)**
Scope 1	Aircraft Fuel Combustion		11,042.70	15,053.47	76,691.69	6,312.36	**109,100**
	Stationary Combustion				160.50		**160**
	Vehicles		37.32	29.33	71.61	22.27	**161**
	Mobile Equipment		24.18	14.04	36.78	9.12	**84**
	Fugitive Emissions		0.05	12.31	5.92	0.00	**18**
Scope 2	Electricity		935.98	44.22	54.28		**1,034**
	District Energy				2.87		**3**
Scope 3	Purchased Goods & Services		59.08	807.15	1,892.30	527.37	**3,286**
	Water Supply & Treatment		0.04	0.12	0.80	0.57	**2**
	Capital Goods		3.53	40.13	56.38	84.91	**185**
	Fuel & Energy Related		6,434.09	3,324.97	18,044.29	1,328.40	**29,132**
	Upstream Transportation			1.27	2.28	18.90	**22**
	Waste		2.79	16.14	3.13		**22**
	Employee Commuting	263.41					**263**
	Employee Working from Home	3.18					**3**
	Downstream Transportation				0.40		**0**
	Use of Sold Products		19,389.64	701.85	26,969.73		**47,061**
	Downstream End of Life of Products				0.02		**0**
	Subtotal Emissions	**266.60**	**37,929.40**	**20,045.01**	**123,992.98**	**8,303.90**	**190,538**
	% of Total Emissions	**0.14%**	**19.91%**	**10.52%**	**65.08%**	**4.36%**	**100.00%**

Figure 3: 2023 GHG Emissions (Scope 1, 2 and 3) by Region (tCO2e)

The analysis by region revealed once again that a majority of Luxaviation's GHG emissions were generated through its European operations. This is unsurprising as the vast majority of

the Company's subsidiaries are based in Europe. It should be noted however, that in 2023, despite the inclusion of 10 additional European subsidiaries in the GHG assessment, the total contribution of the European subsidiaries to the Company's GHG footprint declined from 79% to 65%, likely because of the reduction in the amount of aviation fuel consumed and sold between 2022 and 2023.

The contribution of the African subsidiaries to the GHG footprint rose significantly from 6% in 2022 to 20% in 2023, despite no change in the number of subsidiaries from the region being considered in the analysis.

Luxaviation's Middle Eastern subsidiaries comprised 4% of the total GHG footprint in 2023, half of the contribution they made in 2022, while the Asia Pacific region increased from 7% in 2022 to 11% in 2023.

Two notable differences between the two years were the omission of the North American subsidiaries from the 2023 GHG assessment as data was unavailable from the Sint Maarten FBO, and the inclusion of employee commuting and working from home emissions consolidated at a Corporate level instead of by region in 2023. These changes did not have a material impact on Luxaviation's total GHG footprint.

Table 7: GHG Emissions (Scope 1, 2, and 3) by Category (tCO2e), 2023 vs. 2022

SUMMARY OF LUXAVIATION 2023 GHG EMISSIONS						2022 GHG EMISSIONS
Emission Sources	**Scope 1 GHG Emissions (tCO2e)**	**Scope 2 GHG Emissions (tCO2e)**	**Scope 3 GHG Emission (tCO2e)**	**Total 2023 GHG Emissions (tCO2e)**	**% of Total**	**Total 2022 GHG Emissions (tCO2e)**
Aircraft Fuel Combustion	109,100			109,100	57.26%	124,162
Stationary Combustion	160			160	0.08%	
Vehicles	161			161	0.08%	
Mobile Equipment	84			84	0.04%	
Fugitive Emissions	18			18	0.01%	
Electricity		1,034		1,034	0.54%	575
District Energy		3		3	0.00%	
Purchased Goods & Services			3,286	3,286	1.72%	2,642
Water Supply & Treatment			2	2	0.00%	
Capital Goods			185	185	0.10%	4,417
Fuel & Energy Related			29,132	29,132	15.29%	26,158
Upstream Transportation			22	22	0.01%	68
Waste			22	22	0.01%	94
Employee Commuting			263	263	0.14%	
Employee Working from Home			3	3	0.00%	
Downstream Transportation			0	0	0.00%	
Use of Sold Products			47,061	47,061	24.70%	39,077
Downstream End of Life of Products			0.02	0.02	0.00%	
Subtotal Emissions	**109,524**	**1,037**	**79,977**	**190,538**	**100.00%**	**197,193**
% of Total Emissions	**57.48%**	**0.54%**	**41.97%**	**100.00%**		

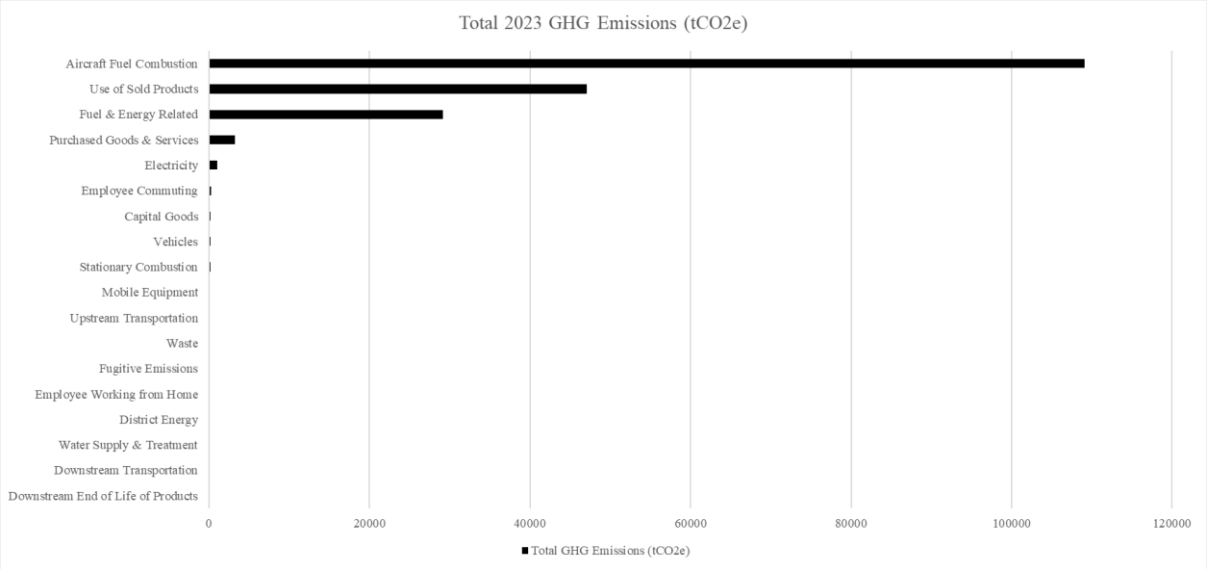
As in 2022, the top three categories of emissions in 2023 were:

- The combustion of aviation fuel;
- The use of sold products; and
- Fuel and energy related activities (not included in Scope 1 and 2).

This highlights the fact that approximately 97% of Luxaviation's 2023 GHG footprint either directly or indirectly results from aviation fuel. This included the combustion of aviation fuel used in the Company's AOCs, the combustion of aviation fuel sold by Valcora and various Luxaviation FBOs to non-Luxaviation customers, and the upstream emissions associated with extracting, refining, and transporting the aviation fuel consumed and sold by Luxaviation, known as well-to-tank (WTT) emissions.

The remaining categories altogether made up only 3% of Luxaviation's 2023 GHG footprint. It should be noted, however, that the completeness and quality of the data provided in these remaining categories is, in many cases, lower than the data related to the consumption and sale of aviation fuel, as it pertains to the Company's core business – aviation. Thus, it is likely that as the data quality and completeness in these categories increases in subsequent years, so too will their share of the emissions.

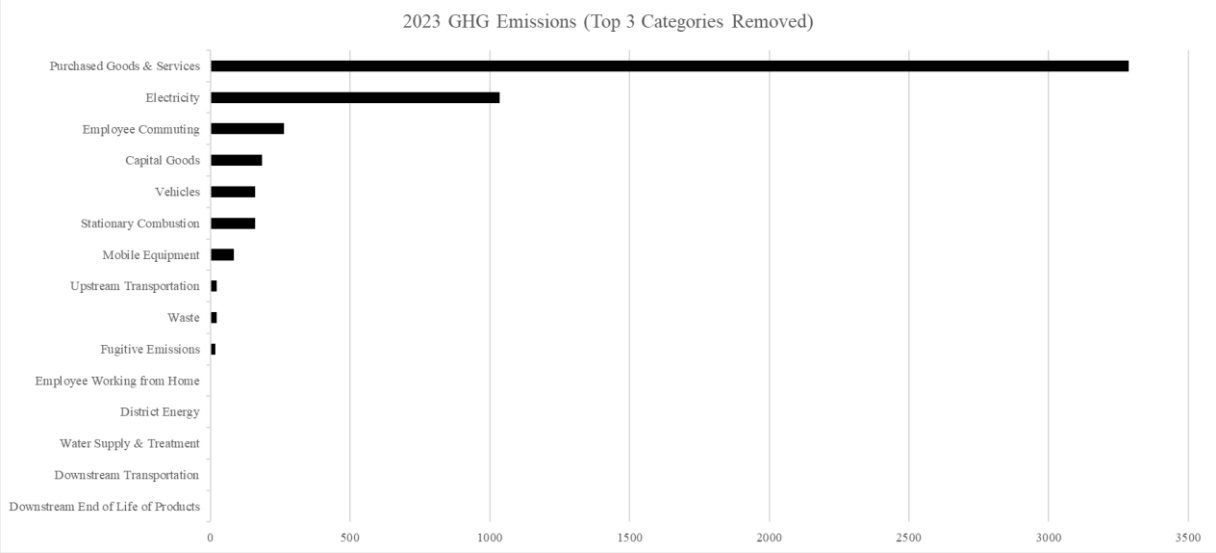
Figure 4: 2023 GHG Emissions (Scope 1, 2, and 3) by Category (tCO2e)



As the GHG emissions generated by the top three categories are much larger than the remaining categories, Figure 5 provides a more granular view of the emissions from the other categories.

Figure 5: 2023 GHG Emissions (Scope 1, 2, and 3) by Category (tCO2e)

*Top 3 Categories Removed for Clarity



Results from the most material categories are discussed in more detail as follows:

- Aircraft Fuel Combustion - Unsurprisingly, 57% of Luxaviation's 2023 GHG footprint was directly attributed to the combustion of aviation fuel in its AOCs. There was a marginal decrease in emissions corresponding to a decrease in fuel consumption from 39,695 tonnes in 2022 to 34,635 tonnes of fuel in 2023.
- Use of Sold Products - A quarter of the Company's total GHG emissions came from the combustion of aviation fuel sold by Valcora and various Luxaviation FBOs to non-Luxaviation customers. The overall increase in emissions corresponded to inclusion of fuels sold to third parties through FBOs, which was partially offset by a significant reduction in fuel sold by Valcora from 15,353,623 litres in 2022 to 7,078,917 litres in 2023.
- Fuel & Energy Related Activities - 15% of the Company's GHG footprint resulted from the WTT emissions associated with the aviation fuel consumed by Luxaviation's AOCs and the fuel sold to non-Luxaviation customers through the FBOs and Valcora, along with the transmission and distribution of purchased electricity and the WTT emissions for other purchased fossil fuels such as natural gas, diesel, petrol and liquid propane gas (LPG) used in stationary equipment, mobile equipment and vehicles controlled by the Company. The increase in GHG emissions in this category was largely due to the inclusion of aviation fuel sold to third parties through FBOs and the inclusion of fuels used for stationary and mobile combustion.
- Purchased Goods & Services – The inclusion of additional subsidiaries and types of goods and services in 2023 resulted in a significant increase in the emissions related to purchased goods and services. It should be noted that a decision was made to shift the calculation approach from a hybrid of spend-based and activity-based in 2022 to fully spend-based in 2023. This change was made in an effort to obtain a more complete data

set that would be more reflective of the Company's major activities, based on the feedback received from the subsidiaries in 2022 related to the difficulty of obtaining weights and quantities for the activity-based method. However, it should be recognized that in general, the spend-based method produces less accurate results than the activity-based method and therefore there is a trade-off between accuracy and completeness in this category.

- Electricity – GHG emissions associated with purchased electricity roughly doubled in 2023, most likely due to the inclusion of eight additional subsidiaries which were not part of the assessment in 2022.
- Employee Commuting - Of the new Scope 3 categories added in 2023, emissions from employee commuting were the most significant - generating 263 tCO2e of GHG emissions. An employee survey was disseminated to all employees to collect data for the employee commuting and working at home calculations. It should be noted that 108 responses were received out of a total of 1,067 employees worldwide. 81 reported commuting to work by car, bus, train, or motorcycle, 17 by Electric Vehicles (EVs) and another 10 by walking or bicycling to work. Based on the response rate of approximately 10%, which is quite normal for the first few years of data collection, actual employee commuting emissions are expected to be much higher than currently reported. The data quality was high for the most part, however, there were some inconsistencies and inaccuracies in the self-reported data provided, identifying areas for improvement in future assessments.
- Capital Goods - Despite the inclusion of additional subsidiaries and types of capital goods in 2023, there was a significant decrease in the emissions in this category. Once again, a decision was made to shift the calculation approach from a hybrid of spend-based and activity-based in 2022 to fully spend-based in 2023 in order to obtain a more complete data set to reflect the Company's capital purchases. This resulted in 26 subsidiaries being able to report on capital goods in 2023 versus nine subsidiaries in 2022. It is possible that decrease in emissions in this category were a result of less capital spending in 2023 or may be related to the change in calculation approach.
- Vehicles – Emissions generated by passenger vehicles and vans, including ground service equipment as reported by the FBOs and AOCs generated 161 tCO2e in 2023. This was a new emissions category introduced to Luxaviation's Scope 1 emissions in 2023.
- Stationary Combustion – 160 tCO2e of emissions were generated by the use of natural gas as reported by seven Luxaviation subsidiaries globally. This was a new emissions category introduced to Luxaviation's Scope 1 emissions in 2023.
- Mobile Equipment – 84 tCO2e of mobile equipment emissions were primarily generated by different types of ground handling equipment such as tugs, tow tractors, baggage carts, air stairs, etc. as reported by the FBOs and HELI operations globally.
- Upstream Transportation – There was a reduction in the emissions associated with upstream transportation and distribution in 2023. The shift to a spend-based approach in 2023 versus the activity-based approach taken in 2022 led to a more complete data set, with spend data being provided by 12 subsidiaries in 2023 versus activity data being provided by only 3 subsidiaries in 2022.

- Waste – Total emissions associated with waste in decreased in 2023, corresponding to a decrease in the amount of waste being reported from 331 tonnes of waste in 2022 to 126 tonnes of waste in 2023. As many of the subsidiaries were unable to obtain waste data in 2023, the actual emissions associated with waste are expected to be significantly higher than reported.

4. RECOMMENDATIONS

Luxaviation's inaugural 2022 GHG emissions assessment provided a strong foundation and important insights into the most significant sources of indirect GHG emissions produced by the Company. Building upon the results, learnings, and recommendations from the 2022 GHG assessment, Luxaviation was able to expand the scope of the 2023 GHG assessment by including 12 additional subsidiaries and seven additional emissions categories across all three scopes. The result was a more complete and accurate assessment of Luxaviation's global GHG footprint.

As one would expect, there were some gaps in the data and in the quality of the data submitted by some of the subsidiaries in a few of the emissions categories.

It is important for companies to continue to build on and strengthen their GHG data collection and reporting year-over-year in order to better understand their progress and impacts, inform their priorities, and to provide stakeholders with relevant and transparent disclosures.

Key recommendations for ongoing improvements to future reporting include the following:

- Expanding the Number of Subsidiaries - While excellent progress was achieved this year in expanding the number of Luxaviation subsidiaries included in this assessment, it is recommended that the Company continue to pursue the inclusion of all subsidiaries that fall within the Company's (full or partial) control in future assessments. This will further strengthen the reporting by improving the completeness, transparency, and accuracy of Luxaviation's corporate GHG inventory.
- Including Business Travel Emissions - The 2023 GHG assessment considered all categories of GHG emissions that would pertain to Luxaviation, with the exception of Business Travel as this data was not readily available. Through the employee survey conducted in 2024, Luxaviation was able to collect data to understand the extent of business travel throughout the Company and where the data was being recorded (locally vs. centrally). The survey also provided interesting insights into the purpose of the business travel, the modes of transportation used, and whether emissions from business travel were being partially or fully offset. 102 employees indicated that they travelled for business in 2023, which indicates that business travel will likely be a material source of emissions for the Company. It is recommended that Luxaviation use the results of the 2023 survey to develop an internal process to record and extract business travel data for the purposes of calculating GHG emissions related to business travel in the next GHG assessment and on an ongoing basis.
- Continuing to Refine Data Quality and Quantity - As expected in the earlier stages of GHG reporting, there were some gaps in the data and data quality, with some subsidiaries providing partial data and others unable to provide data in certain categories for various reasons. While data related to vehicles, mobile equipment, and aviation fuel

seemed to be fairly complete and thorough, certain areas of improvement were identified through the analysis:

- Several subsidiaries reported being unable to provide facility-related data related to stationary combustion, refrigerants, electricity and municipal water. It is recommended that these subsidiaries further engage with their building managers to track and report this data on an annual basis.
- Most subsidiaries were unable to provide complete data related to waste management. It is recommended that all subsidiaries engage with their building managers to establish a program to track waste segregation and collection data on a regular basis.
- Emissions generated by the downstream end-of-life treatment for sold products in 2023 were estimated based on an assumption that all glass, cardboard and plastic packaging reported by Luxaviation Fine Wines was being appropriately recycled by end users at its end-of-life. This is an optimistic estimate and is not possible to validate without data from the end users. One recommendation is to begin to engage with end users of the product to understand how they dispose of the materials, and to implement programs that encourage end users to recycle the materials as appropriate. Luxaviation may also consider implementing an extended producer responsibility (EPR) or take-back program to ensure that the materials are being reused and recycled as effectively as possible.

- Collecting Activity-Based Data – In 2023, emissions related to purchased goods and services, capital goods, and upstream and downstream transportation and distribution were calculated based on the amount spent on these goods and services using spend-based emissions factors. This approach was taken to obtain a more complete assessment of the GHG footprint associated with these activities as most subsidiaries are not currently tracking activity-based data in the format required. It should however be noted that using spend-based factors is considered to be a less accurate method of measuring GHG emissions than applying activity-based factors to activity-based data such as such as weights of goods and services and modes and distances of transporting goods. Furthermore, because the spend-based method is solely proportional to the costs of the goods and services, it does not provide a clear way of tracking the impact of transitioning to more sustainable goods, suppliers and supply chains. It is recommended that Luxaviation work to develop systems to track and collect activity-based data in key categories, to improve the accuracy of the GHG emissions related to these activities and to measure the impact of any changes within its supply chain.
- Revisiting Capital and Purchased Goods & Services - It is recommended that Luxaviation review its annual procurement spending in more detail to determine whether there are other relevant purchased and capital goods and services that should be added to future assessments.
- Strengthening and Streamlining Data Collection - In general, it is recommended that Luxaviation continue to strengthen and streamline its reporting practices by putting in place systems to proactively collect centralized GHG data on an ongoing basis. Data should be collected in the required format (e.g., by weight, etc.) for ease of reporting and

be tracked in ways that are meaningful for future comparison and analysis (e.g., by region, business unit, etc.).

Based on the findings of Luxaviation's 2023 GHG emissions assessment, key recommendations for reducing the Company's overall GHG emissions and increasing its positive environmental impact include the following:

- Lowering Fuel-Related Emissions - With approximately 97% of Luxaviation's total GHG emissions associated either directly (57% Scope 1) or indirectly (40% Scope 3) with the aviation fuel consumed by the aircraft it operates or the aviation fuel it distributes, the most meaningful action that Luxaviation can take to reduce its GHG footprint and fight climate change is to transition as rapidly and effectively as possible to lower-emissions fuel sources such as Sustainable Aviation Fuel (SAF) and/or synthetic fuels made of carbon dioxide and hydrogen. While the technology and availability associated with these alternative fuels ramps up, the Company may support positive impact by investing in high quality carbon offsets through nature-based solutions and technologies, and processes that improve fuel efficiency and reduce the amount of fuel consumption within its operations.
- Purchased Goods & Services – Outside of fuel-related emissions, purchased goods and services made the most significant contribution to Luxaviation's 2023 GHG footprint. Furthermore, the transportation and distribution of these goods and services to Luxaviation also generate emissions. It is recommended that Luxaviation continue to analyse its purchasing and freight habits to identify ways to reduce their supply chain emissions over time.
- Electricity – In 2023, Luxaviation subsidiaries were responsible for over 1,000 tCO2e of GHG emissions resulting from the generation of purchased electricity. It is recommended that Luxaviation explore ways to reduce their electricity-related emissions by reducing electricity consumption, switching to more renewable sources of electricity, and considering programs such as Power Purchase Agreements (PPAs) and Renewable Energy Credits (RECS), where possible.
- Employee Commuting – Based on the data collected in the employee survey, Luxaviation employees commuting to the office generated 263 tCO2e of GHG emissions in 2023. As these results were based on a response rate of approximately 10% of the total employee base, the actual emissions would likely be closer to 2,630 tCO2e if extrapolated to include the entire workforce. In comparison, employees working from home only generated 3 tCO2e of GHG emissions in 2023. It is recommended that Luxaviation continue to improve the tracking and reporting of data related to employee commuting and consider programs such as increased home or hybrid working and public transit, carpooling and/or EV incentives to encourage and assist employees in reducing their commuting-related emissions.

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