



GHG Inventory & Report

W. R. Swann & Co. Ltd

Swann-Morton[®] LTD



Reporting Period - 01/10/2022 to 30/09/2023

Reporting Organisation:

The activities of the W. R. Swann Group are 'The design and manufacture of surgical, craft and industrial blades and handles. The irradiation of medical equipment and ancillary products and the microbiological analysis of medical devices, their accessories and the environment'.

Person Responsible for this report:
R. Whiteley - Managing Director

Organisational Boundries:

Swann-Morton Limited (Penn, Cobb and Woodland Works), Swann-Morton (Microbiological Laboratory Services) Limited, Swann-Morton (Services) Limited, and Jewel Blade Limited (to include Swann-Morton Ltd Cygnet Works).

Reporting Boundries:

Scope 1 & 2 and the following subset of Scope 3: Upstream Transport & Distribution - Tier 1 suppliers only for Purchased Products, Waste generated, Business travel, Employee commute, Downstream Transport & Distribution, and Purchased goods & services - Tier 1 suppliers only. For criteria determined as significant emissions to the W. R. Swann Group please see Section 1.

Base Year: 1st October 2022 to 30th September 2023

As this is the first reporting year for W. R. Swann Group, there has been no change to the base year, historical GHG data or categorization that requires a recalculation of the base year.

EMISSIONS	Notes*	2022/23 CO ₂ e TOTAL Tonnes	Carbon Dioxide (Co ₂)	Methane (CH ₄)	Nitrous Oxide (N ₂ O)	Hydrofluoro carbons (weighted average) (HFCs)	Perfluoro carbons (weighted average) (PFCs)	Sulfur Hexafluoride (SF ₆)	Nitrogen Trifluoride (NF ₃)	Qualitative Uncertainty
1	Category 1 : Direct GHG emissions and removals in tonnes CO₂e.	376.29	375.33	0.51	0.42	-	-	-	-	
1.1	Direct emissions from Stationary Combustion	354.66	353.96	0.50	0.17					Low
1.2	Direct emissions from Mobile Combustion	21.63	21.37	0.009	0.248					Low
1.3	Direct process emissions and removals arise from Industrial Processes	N/A	-							
1.4	Direct fugitive emissions arise from the release of greenhouse gases in Anthropogenic Systems	N/A	-							
1.5	Direct emissions and removals from Land Use, Land Use Change and Forestry	N/A	-							
	Direct Emissions in tonnes of CO₂ from Biomass	N/A	-							
	Indirect Emissions in tonnes CO₂e.	S/NS/NA*	12,867.85							
2	Category 2 : Indirect GHG emissions from Imported Energy									
2.1	Indirect emissions from imported Electricity		1,181.26							Low
2.2	Indirect emissions from imported Energy	N/A	-							
3	Category 3 : Indirect emissions from transportation									
3.1	Emissions from Upstream Transport and Distribution for goods		1,257.75	Emissions from the transport of Purchased Goods has been calculated for Critical Suppliers Only (Category A from Approved Suppliers List QF 11.201/EF 14.004) from 2022/23.						High
3.2	Emissions from Downstream Transport and Distribution for goods		172.89							High
3.3	Emissions from Employee Commuting		155.70							Medium
3.4	Emissions from Client and Visitor Transport	NS	-							
3.5	Emissions from Business Travel		18.54	As W. R. Swann Group only started collecting data for business travel from 27/03/2023 and only have data for 6 months, we have made the decision to multiply this data by 2 to obtain a representation of 12 months.						Medium
4	Category 4 : Indirect GHG emissions from Products used by the Organisation									
4.1	Emissions from Purchased Goods		10,027.67	Emissions from Purchased Goods has been calculated for CRITICAL SUPPLIERS ONLY (Category A from Approved Suppliers List QF 11.201/EF 14.004) from 2022/23.						High
4.2	Emissions from Capital Goods	NS	-							
4.3	Emissions from the disposal of Solid and Liquid Waste		54.04							Low
4.4	Emissions from the Use of Assets	NS	-							
4.5	Emissions from the Use of Services that are not described in the above subcategories (consulting, cleaning, maintenance, mail delivery, bank etc.)		-	These emissions are included in 4.1 Emissions from Purchased Goods.						
5	Category 5 : Indirect GHG emissions associated with the Use of Products from the Organisation									
5.1	Emissions or removals from the Use Stage of the Product	N/A	-							
5.2	Emissions from Downstream Leased Assets	NS	-							
5.3	Emissions from End of Life Stage of the Product	NS	-							
5.4	Emissions from Investments	NS	-							
6	Category 6 : Indirect GHG emissions from Other Sources									
	TOTAL DIRECT & INDIRECT EMISSIONS IN TONNES CO₂e		13,244.14							
REMOVALS										
	Direct removals in tonnes CO ₂ e	N/A	-	W. R. Swann Group do not have any direct GHG removals, this section is therefore not applicable.						
STORAGE										
	Total storage as of year end in tonnes CO ₂ e	N/A	-	W. R. Swann Group do not have any GHG storage, this section is therefore not applicable.						
CARBON FINANCIAL INSTRUMENTS										
	Total Renewable Electricity purchased in kWh	N/A	-	W. R. Swann Group do not purchase renewable electricity, this section is therefore not applicable.						
Other Related Information										
Notes										
(*) Significant / Non Significant / Not Applicable										

Section 1 - Reporting Boundaries and Determination of Significant Emissions:

The criteria used to evaluate the significance of indirect emissions as defined in Annex H - 3.2 of BS EN ISO 14064-1 is sector-specific guidance whereby the requirements of NHS (see 5 subset categories below) are being used for the initial quantification of Scope 3 emissions; with the addition of purchased goods and services for Tier 1 suppliers which has not been deemed significant by the NHS but has been quantified and included in the GHG Inventory.

The reporting boundaries of W. R. Swann Group include all Scope 1 & 2 emissions and the following subset of Scope 3 emissions:

- Upstream Transport & Distribution – Tier 1 suppliers only for Purchased Products
- Waste generated
- Business travel
- Employee commute
- Downstream Transport & Distribution
- Purchased goods and services – Tier 1 suppliers only

The emissions that have been excluded are currently the remainder of Scope 3 that is not listed above, as these are not currently reported due to the current NHS requirements as follows:

- Indirect GHG emissions associated with the use of products from the organisation.
- Indirect GHG emissions from products used by organisation- only Tier 1 suppliers have been quantified.
- Indirect GHG emissions from transportation - only Tier 1 suppliers have been quantified.
- W. R. Swann Group do not have any biogenic CO₂ emissions or removals and therefore this information has not been included in the GHG Inventory & Report as it is not applicable.
- W. R. Swann Group do not have any biogenic anthropogenic or biogenic non-anthropogenic emissions and therefore it is not applicable to report these emissions.

Section 2 - Quantification Approach and Reason for Determination of Uncertainty Level:

The control approach has been used to consolidate all facility-level greenhouse gas emissions and/or removals from the above facilities which are under both full financial and operational control of the W. R. Swann Group.

The GHG Quantification approach that has been used to calculate GHG emissions is the standard source data multiplied by the emissions factor from the DEFRA conversion factors as per the requirements of section 6.2 of BS EN ISO 14064-1:2019.

As this is the first reporting year, no quantification approaches have previously been used.

Section 3 - Uncertainty Assessment:

Category	Level of Uncertainty	Reason for Determination of Uncertainty Level
a) Direct GHG emissions and removals - Scope 1 emissions	Low	Data quantified is compiled from actual consumption figures of kWh which is obtained from submetering and invoices from energy providers. The meters used to collect data are also calibrated. Where figures have been obtained from energy providers this is considered to be of low uncertainty as it is regulated by financial accountancy auditors. Additionally, the energy figures are documented within the Energy Management/Data Collection Plan which is subject to audit by our Notified Body as part of our ISO 14001 and ISO 50001 accreditation. Figures for fuel consumption of company vehicles derive from of individual vehicle mileage which is recorded on a mileage log and retained by the Accounts Dept. As identified in section 5.2.4 (category 1 - d) if any fugitive emissions from refrigeration leaks were to occur, they would be included in this category; this would be considered to be of low uncertainty as the refrigeration units are serviced by qualified engineers who provide the service reports which state whether any leaks have occurred.
b) Indirect GHG emissions from imported energy - Scope 2 emissions	Low	Data quantified is compiled from actual consumption figures of kWh which is obtained from submetering and invoices from energy providers. The meters used to collect data are also calibrated. Where figures have been obtained from energy providers this is considered to be of low uncertainty as it is regulated by financial accountancy auditors. Additionally, the energy figures are documented within the Energy Management/Data Collection Plan which is subject to audit by our Notified Body as part of our ISO 14001 and ISO 50001 accreditation.
c) Indirect GHG emissions from transportation - Scope 3 transportation:		
Business Travel	Medium	The data obtained for business travel is considered to be medium uncertainty as personnel complete the form to the best of their knowledge, however some estimations are still made regarding distances of travel. Control measures are in place in the existing EELSAMS system, EELWI 14.029, Employee use of Vehicles for Business which outlines requirements for personnel when leaving site for business purposes.
Employee Commute	Medium	Employees provide their mode of transport and postcode which is calculated to quantify the distance travelled which is the multiplied by the DEFRA emissions factors, however we cannot be certain of the exact routes taken to get to and from work. Control measures are in place in the existing EELSAMS system, EELM 5.1, Travel Plan which encourages employees to use alternative means of transport where possible to get to work.
Upstream (Tier 1 suppliers only – Purchased Products) & Downstream Transportation & Distribution:	High	Data quantified is compiled from estimations and not exact figures in the quantification method, for example, distance travelled in the downstream distribution categories are estimated by using the KM from each leg of the journey multiplied by the appropriate emissions factor, multiplied by the emissions factor of the mode of transport for each leg of the journey multiplied by the weight of the goods. We cannot be certain of the exact distances of each leg, only the distance between the delivery address and the destination the goods were collected from, and all the stops for each leg of the journey.
d) Indirect GHG emissions from products used by the organisation	High	Data is quantified using either the average data method or, where DEFRA conversion factors are not available/product mass is unknown, the spend based method. The mass of product has been obtained from Upstream - Transport & Distribution of Purchased Products. The spend based method has used the data from Supplier Turnover Report. As these methods have been used to quantify this category it is considered to be of high uncertainty as it is not specific to individual suppliers and is also, at this stage, only tier 1 suppliers.
e) Indirect GHG emissions associated with the use of products from the organisation	N/A	As identified in section 5.2.1 we have identified that emissions associated with the use of products sold by W. R. Swann Group shall not be included in scope, only the transportation and distribution associated with the sale of the products which shall be included in section C of this section (5.2.4). As this category has not been included the uncertainty has not been assessed as it is not applicable at this time.
f) Indirect GHG emissions from other sources - waste generated and associated sources from landfill, and water	Low	The data is obtained from waste carrier documentation which is required to be completed accurately to ensure the correct method of waste disposal is undertaken according to the current environmental legislation which is identified within the ISO 14001 and ISO 50001 (EELSAMS) System.

This GHG Inventory & Report has been prepared in accordance with BS EN ISO 14064-1:2019.

The GHG Inventory & Report of GHG Emissions for W. R. Swann Group has been verified by BSI to an organisational level carbon footprint report to a reasonable level of assurance.

<https://www.swann-morton.com/uploads/ISO-14064-1-Verification-Opinion.pdf>

The emissions within the GHG Inventory & Report have been quantified utilizing the GWP values from the most appropriate IPCC report - DEFRA Greenhouse Gas Reporting: Conversion Factors 2023 or appropriate specific emission factor referenced below.

www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023

Life Cycle Assessment | Cobalt Institute - This is the Emission Factor we have used for Cobalt 60, which is for Cobalt metal and is 28.2kg CO₂e. This emission factor has then been multiplied by 2 to give a conservative estimation of emissions from converting the Cobalt metal to Cobalt 60.