HPG Brands

Greenhouse Gas Assessment, CY2024

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GENERAL NOTES

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EXECUTIVE SUMMARY

This greenhouse gas (GHG) assessment has been prepared by Nature Positive Ltd to estimate GHG emissions associated with the operations of HPG Brands during the reporting period 1st January 2024 to 31st December 2024.

HPG Brands (HPG) is a promotional product hard good supplier that employed approximately 1,112 full-time equivalent (FTE) employees at their nine sites in USA, Canada and Mexico; these sites had a gross internal area (GIA) of 636,769 ft^2.

GHG emissions summary

HPG Brands' total GHG emissions assessed for 2024 were 45,827 tCO_2e using the market-based method and 45,754 tCO_2e using the location-based method[1].

Absolute GHG emissions can vary over time and often correspond to the expansion or contraction of an organisation. It is therefore useful to use reporting metrics that take these effects into account to establish emissions intensity. Common emissions intensity metrics include tCO_2e per £m turnover, employees, output, or floor area. Total emissions and HPG Brands' chosen intensity metrics are presented in Table ES1.

Table ES1: GHG Summary metrics

Metric	GHG emissions (tCO_2e)	
	Market-based*	Location-based*
Total GHG emissions	45,827	45,754
GHG emissions per FTE (1,112)	41.2	41.1
GHG emissions per GIA ft^2 (636,769)	0.07	0.07

GHG emissions by scope are presented in Figure ES1. Scope 3 emissions (other indirect emissions) represent the majority of emissions at 91% (it is typically found that scope 3 emissions account for the majority of an organisation's carbon footprint).

Scope 3 emissions were predominantly from purchased goods and services, followed by scope 2 emissions (approximately 6%) from electricity consumption. Scope 1 (direct) emissions from refrigerant gas losses account and fossil fuel consumption for the remaining 3% of the carbon footprint. Further details of HPG Brand's GHG emissions can be found in Section 5.

[1] For an explanation of market-based and location-based emissions, see section 2.6.2.

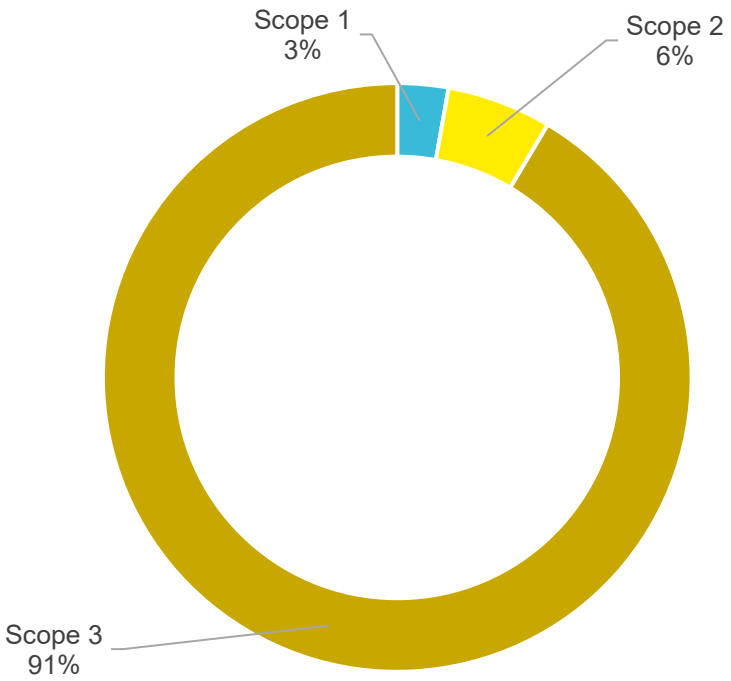

Figure ES1: Market-based GHG emissions by scope (tCO_2e)

GHG emissions for HPG Brands have overall increased from the previous 2023 assessment. For more detail please see Section 23 Comparison of annual emissions.

Table ES2: Year on year trends

Emissions source category	GHG emissions (tCO_2e)			
	2023	2024	Change tCO_2e	Change %
Mains gas	1,164	1,269	**+105**	**9%**
Refrigerant gas losses	1.4	6	**+4.4**	**302%**
Other fuels	114	191	**+77**	**67%**
Company owned vehicles	21	20	**-1.1**	**-5%**
Electricity	3,989	3,620	**-369**	**-9%**
Waste and wastewater	1,115	4,726	**+3,611**	**324%**
Water	5.0	6	**+0.5**	**10%**
Purchased goods and services	11,975	12,975	**+1,000**	**8%**
Capital goods	80	938	**+857**	**1067%**
Business travel	340	379	**+40**	**12%**
Hotels	11	14	**+3.0**	**26%**
Employee commuting	1,263	1,068	**-195**	**-15%**
Remote working	40	40	**+0.3**	**1%**
Upstream transportation & distribution	3,377	8,149	**+4,772**	**141%**
Downstream transportation & distribution	296	155	**-141**	**-48%**
Upstream leased assets	6.1	7	**+0.6**	**9%**
Use of sold products	2,176	2,025	**-151**	**-7%**
EoL sold products	6,630	10,238	**+3,608**	**54%**
Total (market-based)	**32,605**	**45,827**	**13,221**	**41%**
Market emissions per FTE	24.7	41.2	**17**	**67%**
Market emissions per GIA, m^2	0.05	0.07	**0.02**	**41%**
Total (location-based)	**32,522**	**45,754**	**13,231**	**41%**
Location emissions per FTE	24.7	41.1	**16**	**67%**
Location emissions per GIA, m2	0.05	0.07	**0.02**	**41%**

Note: all sources have included upstream emissions of T&D and WTT where relevant, those from scopes 1 and 2 are included in category 3, as per GHG Protocol.

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This GHG assessment has been prepared by Nature Positive to estimate GHG emissions associated with the operations of HPG Brands (HPG) during the reporting period 1st January 2024 to 31st December 2024.

The report includes the following sections:

- Section 2: Context, reporting standards and emission scopes.
- Section 3: Methodology
- Section 4: Operational boundary, those categories assessed or not applicable and data quality.
- Section 5: GHG emissions summary
- Section 6: Comparison of GHG emissions with previous year.

1.1 Scope of work

This is a full GHG assessment, to assess scopes 1, 2 and all relevant scope 3 categories. HPG identified relevant Scope 3 categories, as well as those categories not applicable to their operations (refer to Section 4).

Table 1: GHG emissions summary

Organisation:	**HPG Brands**
Reporting Standard	**GHG Protocol Corporate**
Reporting period:	**1st January 2024 – 31st December 2024**
Consolidation approach:	**Operational control**

Scope	Emissions source category		Assessed?	tCO_2e
1	Direct emissions from owned, leased or directly controlled stationary sources that use fossil fuels or emit fugitive gases		Assessed	1,266
	Direct emissions from owned, leased or directly controlled mobile sources		Assessed	16
2	Emissions from generation of purchased energy	Location-based	Assessed	2,562
		Market-based		2,635
3 (Up-stream)	Purchased goods and services		Assessed	12,981
	Capital goods		Assessed	938
	Fuel and energy related activities	Upstream emissions from purchased fuels	Assessed	204
		Upstream emissions from purchased electricity	Assessed	807
		Transmission and distribution (T&D) losses	Assessed	178
	Upstream transportation and distribution	Outbound courier deliveries of packages	N/A	-
		Third-party transportation and storage of inbound production-related goods, including internal movement of production-related goods	Assessed	8,013
		Third-party transportation and storage of sold products to first customer	Assessed	136
	Waste generated in operations	Wastewater	Assessed	7
		Other waste	Assessed	4,719
	Business travel	All transport by air, public transport, rented/leased vehicle, and taxi	Assessed	379
		Emissions from hotel accommodation	Assessed	14
	Employee commuting	Employee transport between home and places of work	Assessed	1,068
		Emissions arising from employee homeworking and remote work	Assessed	40

	Upstream leased assets		Assessed	7
3 (Downstream)	Downstream transportation and distribution	Third-party transportation and storage of sold products to first customer not already included in upstream	Assessed	78
		Third party transportation and storage of sold products beyond first customer including retail and storage	Assessed	78
	Use of sold products		Assessed	2,025
	Processing of sold products		N/A	-
	End-of-life treatment of sold products		Assessed	10,238
	Downstream leased assets		N/A	-
	Franchises		N/A	-
	Investments		N/A	-
Total: location-based scope 2				**45,754**
Total: market-based scope 2				**45,827**

Not applicable (N/A) refers to those emissions that HPG Brands has identified as not applicable to their operations

2 CONTEXT

2.1 Why measure greenhouse gas emissions?

Greenhouse gas (GHG) emissions assessments quantify the climate impact, direct and indirect, from a business' or organisation's activities, or for specific projects, events, products or services. Colloquially known as a carbon footprint, a GHG assessment is a key tool for monitoring and reducing an organisation's climate change impact as it allows carbon hotspots to be identified, reduction targets set, and action plans formulated.

GHG assessment results can also allow organisations to be transparent about their climate impacts through reporting results to customers, shareholders, employees, and other stakeholders. Regular – at a minimum, annual – assessments allow organisations to track their decarbonisation progress over time, and to contribute to broader sustainability or corporate social responsibility (CSR) reporting.

2.2 The Kyoto Protocol GHGs

GHG assessments quantify the Kyoto Protocol greenhouse gases, as applicable, and are measured in terms of tonnes carbon dioxide (CO_2) equivalence, or tCO_2e, where equivalence means having the same warming effect ('global warming potential', or GWP) as CO_2, typically measured over 100 years (see Section 2.3).

The six original Kyoto Protocol gas groups are CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF_6) and perfluorocarbons (PFCs); nitrogen trifluoride (NF_3), a chemical released in certain high-tech industries, was added in 2013. The global warming potential (GWP) of each is presented in Table 2.

Table 2: Kyoto Protocol GHGs and their global warming potential (GWP)

Greenhouse gas/group	Chemical formula	GWP (CO_2e)
Carbon dioxide	CO_2	1
Methane	CH_4	28
Nitrous oxide	N_2O	265
Hydrofluorocarbons	HFCs	Depends on specific gas
Sulphur hexafluoride	SF_6	23,500
Perfluorocarbons	PFCs	Depends on specific gas
Nitrogen Trifluoride	NF_3	16,100

The global warming potentials above are aligned with the IPCC's Fifth Assessment Report (AR5) as per DESNZ methodology. Some UK emission factors – those for hotel stays, bioenergy, WTT bioenergy and material – are still based on the previous IPCC report, AR4. In most cases this will have minimal impact.

2.3 Methane's GWP

Methane (CH_4) is the most abundant GHG after CO_2. It has a higher heat-trapping potential than CO_2 but remains in the atmosphere for a shorter period (typically ~12 years). This means that its relative GWP depends on the reporting timeframe, which can lead to ambiguity. This is because when reporting GHG emissions, either the 20- or 100-year timeframe multiplier for methane can be used; use of the 100-year timeframe – as stipulated by the Greenhouse Gas Protocol Corporate Standard – can significantly underestimate the short-term warming impact of the emissions.

There is also evidence that methane leaks from parts of the oil and gas industry could be significantly higher than some official estimates (Alvarez *et al*., 2018), which will increase short-term atmospheric methane emissions. Again, this is not reflected in current official emissions factors.

The practical upshot is that the climate mitigation potential for any reductions in natural gas (and to some extent all fossil fuel) consumption may be considerably higher than reflected in figures derived using the most commonly used (100-year) CO_2e emissions factors.

We recommend that organisations with significant emissions from these sources take this into account when assessing their decarbonisation priorities.

2.4 Calculating emissions

GHG assessments require two types of data: **activity data** and **emission factors**.

Activity data represents a level of activity (such as kilowatt hours of electricity consumed, or litres of fuel combusted) contributing to the organisation's climate impact. Activity data can be primary or secondary; this is discussed further in section 2.9 below. Activity data is typically supplied by the reporting organisation.

The activity data is then used to quantify GHG emissions by applying the most relevant emission factors. An emission factor is a representative value that relates the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. Factors are typically available from government publications, independent agencies, and scientific research journals; however, the quality and accuracy of factors can vary. Factors can differ depending on the research body and/or underlying methodologies applied. It is therefore good practice to apply factors from reputable and reliable sources, such as the UK government or the US EPA.

2.5 Reporting standards

GHG assessments are typically carried out in accordance with one of two recognised standards for accounting and reporting corporate GHG emissions. The best-known is the *Greenhouse Gas Protocol Corporate Accounting and Reporting Standard* (WRI and WBCSD, 2004), developed in a partnership between the World Business Council for Sustainable Development (WBCSD) and the World Resource Institute (WRI).

The International Organization for Standardization (ISO) has also produced the ISO14064[2] series, detailing specification and guidance for the organisation and project levels, as well as for the validation and verification of emissions.

2.6 Emissions scopes

Most standards separate GHG emission sources into three categories, known as scopes. The GHG Protocol provides an overview of GHG scopes and emissions across the value chain as presented in Figure 1.

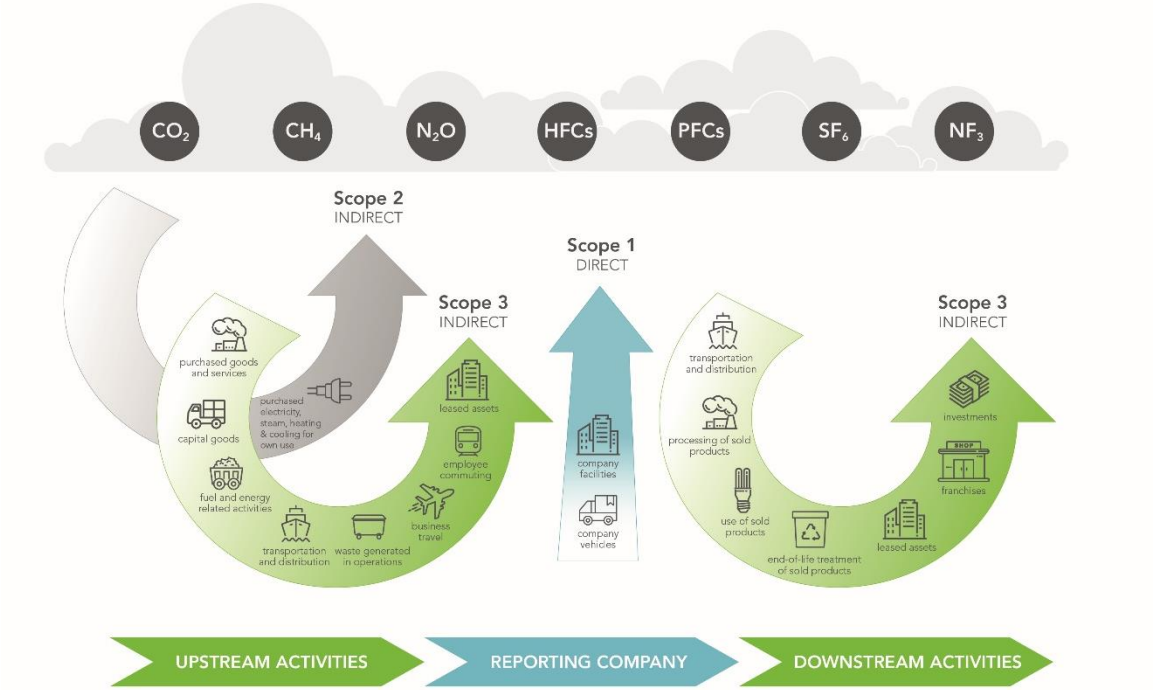

Figure 1. All-scopes schematic (adapted from the GHG Protocol)

2.6.1 Scope 1

Scope 1 accounts for direct emissions released from sources that are owned or controlled by the reporting company. It includes fuel used in vehicle fleets, fuel combustion for heating and power, and any process or fugitive emissions such as refrigerant gas leakages.

2.6.2 Scope 2

Scope 2 accounts for indirect emissions associated with off-site generation of energy purchased by the reporting organisation. This includes purchased electricity, heat, steam, and cooling.

The GHG Protocol's *Scope 2 Guidance, an amendment to the Corporate Standard* (WRI and WBCSD, 2015) states that operations in markets providing product- or supplier-specific data in the form of contractual instruments should report scope 2 emissions in two ways:

[2] ISO 14064 – *Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*

using the location-based method, and the market-based method. This is termed 'dual reporting'.

2.6.2.1 Location-based reporting

This reflects the average emissions intensity of grids on which energy (usually electricity) consumption occurs. This applies to all locations where grids are used for the distribution of energy and where electricity demand causes the need for energy generation and distribution. Grid-average emission factors are used, based on statistical emissions information and electricity output, aggregated and averaged within a defined boundary and timeframe. This includes regional, sub-national and national production grid averages.

2.6.2.2 Market-based reporting

The market-based method reflects proportional emissions from specific electricity tariffs that consumers select in the market. Under this method an energy consumer uses the emissions factor associated with the qualifying contractual instruments it purchases. Available contractual instruments vary by market, but can include Energy Attribute Certificates (EACs, which can include RECs, REGOs, and I-RECs), Power Purchase Agreements (PPAs) and other low-carbon products purchased from energy suppliers.

If an organisation does not have any such contracts (or its instruments do not meet the quality criteria), a residual mix factor, representing untracked or unclaimed energy emissions for that region, is used. If the residual mix is not available, the location-based method is applied, in which case the market-based and location-based totals will be the same.

2.6.3 Scope 3

Scope 3 includes all other indirect emissions sources not accounted for within scopes 1 and 2. The sources applicable will depend on a reporting organisation's activities but could include purchased goods and services, capital goods, business travel, commuting, waste disposal, emissions from use of company-derived products or materials, and outsourced activities such as deliveries.

The GHG Protocol's *Corporate Value Chain (Scope 3) Accounting and Reporting Standard* (WRI and WBCSD, 2011) groups scope 3 emissions into 15 categories to provide a framework to organise, understand and report these emissions.

Scope 3 activities typically contribute a significant proportion of an organisation's overall emissions.

2.7 Measuring climate impacts from aviation

To capture the overall aviation effects on climate, as well as GHG emissions, it is recommended that reporting organisations account for radiative forcing in their greenhouse gas assessment. This is a result of unfolding evidence suggesting that high altitude jet fuel combustion also provokes non-greenhouse gas climate effects; such as aviation induced clouds or soot particles. It is considered excluding emissions associated with radiative forcing would under-state the overall climate impact of flights and is therefore not recommended.

2.8 GHG accounting principles

Nature Positive's approach to carbon accounting is to follow the GHG Protocol's core principles where possible:

- Relevance: selecting an appropriate inventory boundary that reflects the GHG activities of the company and serves the decision-making needs of users.
- Completeness: accounting for all emission sources within the chosen inventory boundary, with any specific exclusions disclosed and justified.
- Consistency: aiming to collect meaningful and consistent data over time whilst transparently documenting any significant changes to data quality and/or format.
- Transparency: addressing all relevant issues in a coherent and clear manner.
- Accuracy: minimising uncertainty and avoiding systematic over- or under-quantification of emissions, and ensuring any necessary estimates or assumptions required are conservative and guided by industry standards.

2.9 Data quality and accuracy

The accuracy of a GHG assessment is directly related to the quality of the activity data provided. Primary data should be used where available: this represents actual activities during the reporting period (such as metered kWh of electricity consumed).

Secondary data – in the form of estimates, extrapolations, modelling, benchmarks, industry averages or other proxy sources – may be used when reliable primary data is not available. Assessments based largely on secondary data should be viewed as an estimate of GHG emissions impact, and actual emissions may vary significantly.

Although comprehensive primary data may not always be available for all emissions sources, in general it is good practice to continually improve the proportion of primary data over time. This applies to many scope 3 emissions sources, where primary data is unlikely to be available for an initial assessment but should be improved over time.

3 METHODOLOGY

3.1 Introduction

This report considers GHG emissions associated with the sites listed in Table 3. During the reporting period HPG employed approximately 1,112 FTEs at their nine sites with a total GIA (floor area) of 636,769 ft^2.

Table 3: Locations assessed

Site name and location	Floor area (ft^2)	FTE
BCG, Canada	4,163	11
Beacon, USA	40,472	69
Best, USA	47,400	126
Debco, Canada	181,034	174
Evans Garden Grove, USA	55,000	90
Evans Nogales, Mexico	112,700	298
Handstands, USA	50,000	84
Hub, USA	96,000	203
Mixie, USA	50,000	57
Total	**636,769**	**1,112**

3.2 Approach

On project commencement, possible emissions source scope changes were initially screened for HPG, following which a data collection form was provided and returned.

Nature Positive completed a quality assurance form to review the activity data provided. Conservative benchmarks and assumptions were used where necessary in line with good practice, and in agreement with, as described in Section 3.3.

GHG emissions were then quantified by applying the most relevant emission factors. GHG emission factors relating to the 2024 reporting year are predominantly sourced from the 2024 UK Government GHG Conversion Factors for Company Reporting (DESNZ July 2024) and from the US EPA's Emission Factors Greenhouse Gas Inventories (USEPA 2025) as appropriate. Electricity consumption outside of the UK or US uses International Energy Agency (IEA 2024) emission factors. Expenditure based analysis was informed by recent USEPA Environmental Extended Input-Output (EEIO) datasets.

Well-to-tank emissions (those associated with extraction and primary processing) for fuels and electricity, as well as transmission and distribution emissions (those associated with grid and network losses) from purchased electricity have been included. Well-to-tank

emissions have also been included for transport and distribution (freight/logistics), employee commuting and business travel. Radiative forcing (see Section 2.7) has been included for aviation.

Note, results within the tables of this report are accurate to the number of significant figures presented. Any inconsistencies in totals versus individual values are due to rounding and should not be viewed as erroneous.

HPG identified the following scope 3 categories as not applicable to their operations:

- Processing of sold products (category 10)
- Downstream leased assets (category 13)
- Franchises (category 14)
- Investments (category 15)

3.2.1 Scope 3 methods

Obtaining activity data for some scope 3 emission sources can be challenging. For example, the typical scope 3 methods for estimating GHG emissions from purchased goods and services and capital goods are listed below in descending order of accuracy:

- Supplier-specific
- Hybrid (combination of supplier-specific and average data)
- Average data (such as industry average emission factors)
- Spend-based

The goal should therefore be to move from a spend-based assessment to a supplier-specific assessment (for key goods and emission sources) over time.

Similarly, when determining freight and business travel emissions, actual fuel consumption in vehicles is the most accurate data source but will often be unavailable, in which case mass, mileage and transportation method form an adequate proxy.

In this report, due to data limitations, some categories may have been assessed with high-level or spend-based data and emissions factors with a view to refining these in future iterations. Where appropriate, this report recommends priority areas for improving activity data or supplier-specific emissions factors.

3.3 Key assumptions

Primary data was used where possible for the GHG assessment. However, where data was unavailable, efforts were made to estimate the likely associated emissions for the reported activity. Following the quality assurance phase, the following assumptions were agreed with HPG brands for the reporting year.

- No data was available relating to refrigerant gas losses for some sites; therefore, data has been assumed based on the following: 0.0125 tonne air conditioning (AC) unit per m^2, with a 2.27kg refrigerant gas charge per tonne AC weight and a 3% annual leakage, as per the Screening Method set out in Defra's 2020 reporting guidelines.

- Natural gas consumption was estimated using a benchmark of 178 kWh/m^2/annum for sites where there was no data provided, which represents typical practice for air-conditioned offices (CIBSE Guide F).
- All car journeys have been assumed as average car size.
- Wastewater is assumed to be equal to water consumption.
- Staff commuting: The data was estimated using the same approach as in the 2023 assessment. Percentages were applied to represent the proportion of staff using each mode of travel, based on total FTEs. An average commuting distance of 15 miles per FTE was assumed, in line with HPG's request.
- End of life of sold products: where weight was not stated, an average weight was applied based on received data. Based on secondary research, recycled and landfilled proportions were estimated. Where unstated, key material makeup was also assumed based on averages of data received.
- Shipments: Outbound shipment data only covered transportation from HPG to the first customer. Emissions were therefore uplifted to account for the additional leg from first customers to final customers. As distance data for outbound shipments was not available, estimated distances were applied based on 2023 values for each supplier or subsidiary. Where transport mode was not specified, it was assumed that 50% of deliveries were made by average van and 50% by truck. Due to limited data on distances for outbound upstream transport and distribution, average distances from inbound data were applied.
- Use of sold product: As 2024 data is not available, 2023 data used as a proxy as per HPG's request.
- Upstream leased assets: 2024 emissions were estimated based on 2023 data where energy consumption data was not available.
- Business travel: Where class is unknown, 'average' class was assumed.
- PGS: where purchases were not categorised by material/product, this was estimated and proportioned based on available categories, and applied spend data to EEIO[3] categories.

[3] EEIO – environmental extended input-output analysis used to assess the environmental impacts of economic activities

4 OPERATIONAL BOUNDARY AND DATA QUALITY

4.1 Data review

HPG has advised those emissions sources for inclusion for the assessment as well as those emission sources that are not considered relevant to their operations. Table 4 presents the GHG categories across all three scopes, and identifies whether they were assessed, not assessed or not applicable (NA) to the operation. It also provides a high-level data quality review, with suggested improvement actions for future GHG assessments.

A combination of primary and secondary data was considered for the assessment. Total primary data provided for the assessment was 39%.

We recommend that HPG prioritises efforts to collect primary data for all emission sources within scopes 1 and 2. Collation of primary data for scope 3 tends to be more challenging; however, efforts to obtain this data for significant scope 3 emissions sources would yield greater accuracy to the assessment.

4.1.1 Key data improvement recommendations

The following steps are recommended to improve data quality for future assessments:

- PG&S: To improve data quality, we strongly recommend requesting supplier-, product- and service-specific emissions factors for key products to better inform future reporting iterations and to track reduction progress. It is recommended that high-level spend data is reviewed and a Pareto analysis is carried out to focus initially on those product and service suppliers that are more significant for HPG.
- EoL: To enhance data quality for future reporting, it is recommended to collect the following data related to sold products, as this category has been identified as a key source of emissions, it should be a focus for future assessments:
    - Total weight of sold products and packaging: Track the total weight from the point of sale by HPG to the end-of-life after consumer use, including packaging.
    - Material composition of products: Document the key materials in each product type, along with their corresponding percentages.
    - Waste treatment methods: Record the proportion of waste treated by different methods, such as the percentage that is landfilled, recycled, or incinerated.

Table 4: Operational boundary and data quality

Ref	Emission source description	Emissions source	Boundary	Data quality review	Suggested improvement actions	Priority
1	Scope 1	Refrigerant gas losses	Assessed	Air conditioning used, primary data available for Evans Garden Grove, other sites applicable provided secondary data.	Annual monitoring of F-gas recharge for air conditioning units.	Low
		Stationary sources	Assessed	Primary data provided for natural gas in therms. Primary data provided for propane used.	-	-
		Mobile sources	Assessed	Primary data provided in terms of gallons of fuel used for company vehicles.	-	-
2	Scope 2	Electricity consumption	Assessed	Primary data provided in kWh for all sites.	-	-
3-1	Purchased goods and services (PG&S)[4]	Water	Assessed	Water: primary data provided in m3 per site.	-	-
		All other PG&S	Assessed	Other purchased goods and services: Data provided in spend per category, applying EEIOs according to category	Request product- and service-specific emissions factors from strategic suppliers to enhance future reporting and track reductions	High
3-2	Capital goods[5]	All capital goods	Assessed	Data provided in spend per category, which has been calculated using	Request product- and service-specific emissions factors from strategic suppliers to enhance future	Medium

[4] Purchased goods and services tends to be a significant emissions source for most organisations, however, water and paper tend to only account for a very minor portion of this, but often monitored by organisations for wider ESG purposes.

[5] Capital goods may be a significant emissions source, where assessed this is limited to laptops, monitors and printers.

Ref	Emission source description	Emissions source	Boundary	Data quality review	Suggested improvement actions	Priority
				EEIO according to category	reporting and track reductions	
3-3	Fuel- and energy-related activities (not included in scope 1 or scope 2)	T&D losses[6]	Assessed	Derived from electricity consumption data	Refer to electricity consumption	-
		Upstream electricity (WTT)	Assessed	Derived from electricity consumption data	Refer to electricity consumption and mobile consumption	-
		Upstream fuels (WTT[7])	Assessed	Derived from fuel(s) consumption data	Refer to stationery fuel consumption	-
3.4	Upstream transportation and distribution[8]	Outbound courier deliveries of packages	Not applicable	-	-	-
		Upstream third-party distribution and storage of production-related goods	Assessed	Primary data provided as transport type, distance travelled in miles, and weight in kg	-	-
3-5	Waste generated in operations	Waste	Assessed	Waste provided for all sites split by type	-	-
		Wastewater	Assessed	Derived from water consumption	Wastewater discharge volume derived from water consumption is a suitable proxy	-
3-6	Business travel[8]	Business travel	Assessed	Flight data with distance travelled and class (e.g. economy/business) provided as primary data. Taxi and cars primary data provided as	-	-

[6] Transmission and distribution (T&D) losses refer to the scope 3 emissions associated with grid losses (the energy loss that occurs in getting the electricity from the power plant to the organisations that purchase it).

[7] Well-to-tank (WTT) emissions refer to the impact of the extraction, refining and transportation of primary fuels before their use in the generation of electricity.

[8] Upstream WTT emissions are included for all relevant categories, including freight, business travel, staff commuting and use of sold products

Ref	Emission source description	Emissions source	Boundary	Data quality review	Suggested improvement actions	Priority
				transport type and distance travelled.		
		Hotel stays	Assessed	Hotel secondary data provided as nights stayed and estimated country	Collect primary data (nights stayed per person) within expenses claims procedure	Low
3-7	Employee commuting[8]	Employee commuting	Assessed	No data available – estimated distance and transport mode provided by client.	Conduct employee commuting surveys to gather data on distance, mode, and frequency by transport type	Medium
		Remote working	Assessed	Homeworking days estimated based on working days spent in office per week.	Record total number of remote working days	Low
3-8	Upstream leased assets	Operations of assets leased (not included in scope 1 and 2)	Assessed	No data provided, gas and electricity usage modelled from previous year assessment averages per floor area.	Record electricity and gas consumption (kWh) per asset.	Medium
3-9	Downstream transportation and distribution[8]	Downstream third-party distribution and storage of production related goods (not already included in 3-4)	Assessed	Distribution data provided with origin and destination zip codes. All outbound shipments were delivered to customers and products were further distributed to end users (i.e. 2 layers of distributions). Uplift applied to account for the distribution from HPG customers to end users.	Aim to collect shipment data for the second later of distribution (from HPG customers to end users).	Low
3-10	Processing of sold products	Processing of intermediate products sold by downstream companies -	Not applicable	-	-	-

Ref	Emission source description	Emissions source	Boundary	Data quality review	Suggested improvement actions	Priority
		such as manufacturing				
3-11	Use of sold products[8]	End use of goods and services sold (e.g. electricity consumption)	Assessed	No data available, previous assessment used	Collect information for locations and percentage of products being sold to the locations.	**Medium**
3-12	End-of-life treatment of sold products	Waste disposal and treatment of products sold	Assessed	List of sold products and quantity sold were provided. Assumptions applied for key material, product weight and % of which is recyclable.	Record the weight of product sold, key materials and recyclable % for each product.	**High**
3-13	Downstream leased assets	Operation of assets owned and leased[9]	Not applicable	-	-	-
3-14	Franchises	Operation of franchises[9]	Not applicable	-	-	-
3-15	Investments	Operation of investments[9]	Not applicable	-	-	-
Assessment emissions based on primary data:						**39%**

HPG advises that categories 3-10 and 3-13 through to 3-15 are not applicable to their company.

[9] Not included in scopes 1 and 2

5 GHG EMISSIONS OVERVIEW

5.1 GHG emissions metrics

HPG's total GHG emissions assessed for 2024 were 45,827 tCO_2e under the market-based[10] approach and 45,754 using the location-based method.

Absolute GHG emissions can vary over time and often correspond to the expansion or contraction of an organisation. It is therefore useful to use reporting metrics that take these effects into account to establish emissions intensity. Common emissions intensity metrics include tCO_2e by turnover, employees, or GIA.

GHG emissions for market and location-based reporting, together with intensity metrics related to company activities, are presented in Table 5.

Table 5: GHG emissions metrics

Metric	GHG emissions (tCO_2e)	
	Market-based	Location-based
Total GHG emissions	45,827	45,754
GHG emissions per FTE (1,112)	41.2	41.1
GHG emissions per GIA ft^2 (636,769 ft^2)	0.07	0.07

5.2 GHG emissions by scope

HPG Brands' scope 3 (other indirect emissions) account for 91% of total emissions assessed, with the majority arising from purchased goods and services (PG&S). This is typical for many organisations, where scope 3 value chain emissions significantly exceed scope 1 and 2 operational emissions combined. On average, supply chain emissions are more than eleven times greater than operational emissions (Carbon Disclosure Project, 2021).

Scope 2 (indirect) emissions from electricity consumption were approximately 6%, scope 1 (direct) emissions from mainly mains gas but also from refrigerant gas losses account for the remaining 3% of the carbon footprint.

[10] For an explanation of the difference between market-based and location-based emissions, refer to Section 2.6.2.

Table 6: GHG emissions by scope

Scope	GHG emissions (tCO_2e)	
	Market-based	Location-based
Scope 1	1,282	1,282
Scope 2	2,635	2,562
Scope 3	41,909	41,909
Total	**45,827**	**45,754**

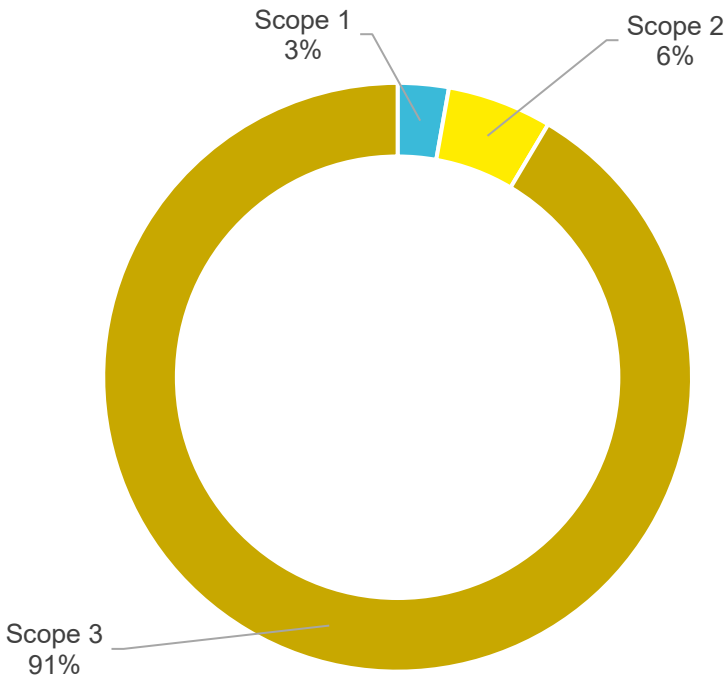

Figure 2. Market-based GHG emissions by scope (tCO_2e)

5.3 GHG emissions by category

Table 7 presents the detailed GHG emissions for the scopes, including those scope 3 categories assessed (as per the GHG Protocol), these results are further illustrated in

Figure 3.

The largest category assessed, accounting for 28% of the total, is purchased goods and services. The other key categories assessed include:

- End-of-life treatment of sold products at 22% of total emissions.
- Upstream transport and distribution at 18% of total emissions.
- Waste generated in operations at 10% of total emissions.

Table 7: GHG emissions category overview

Scope	Category name	GHG emissions (tCO_2e)	% of total
1	Direct emissions	1,282	3%
2	Purchased energy	2,635	6%
3-1	Purchased goods and services	12,981	28%
3-2	Capital goods	938	2%
3-3	Fuel and energy related activities	1,189	3%
3-4	Upstream transportation & distribution	8,149	18%
3-5	Waste generated in operations	4,726	10%
3-6	Business travel	394	1%
3-7	Employee commuting & remote working	1,108	2%
3-8	Upstream leased assets	7	<1%
3-9	Downstream transportation & distribution	155	<1%
3-11	Use of sold products	2,025	4%
3-12	End of life of sold products	10,238	22%
Total		**45,827**	**100%**

The following scope 3 categories have included WTT emissions: transportation and distribution, business travel, employee commuting and freight (transport and distribution). (Scope 3 category 3, fuel and energy related activities include WTT emissions for Scopes 1 and 2 in line with GHG Protocol reporting requirements).

HPG advises that categories 3-10 and 3-13 through to 3-15 are not applicable to their company.

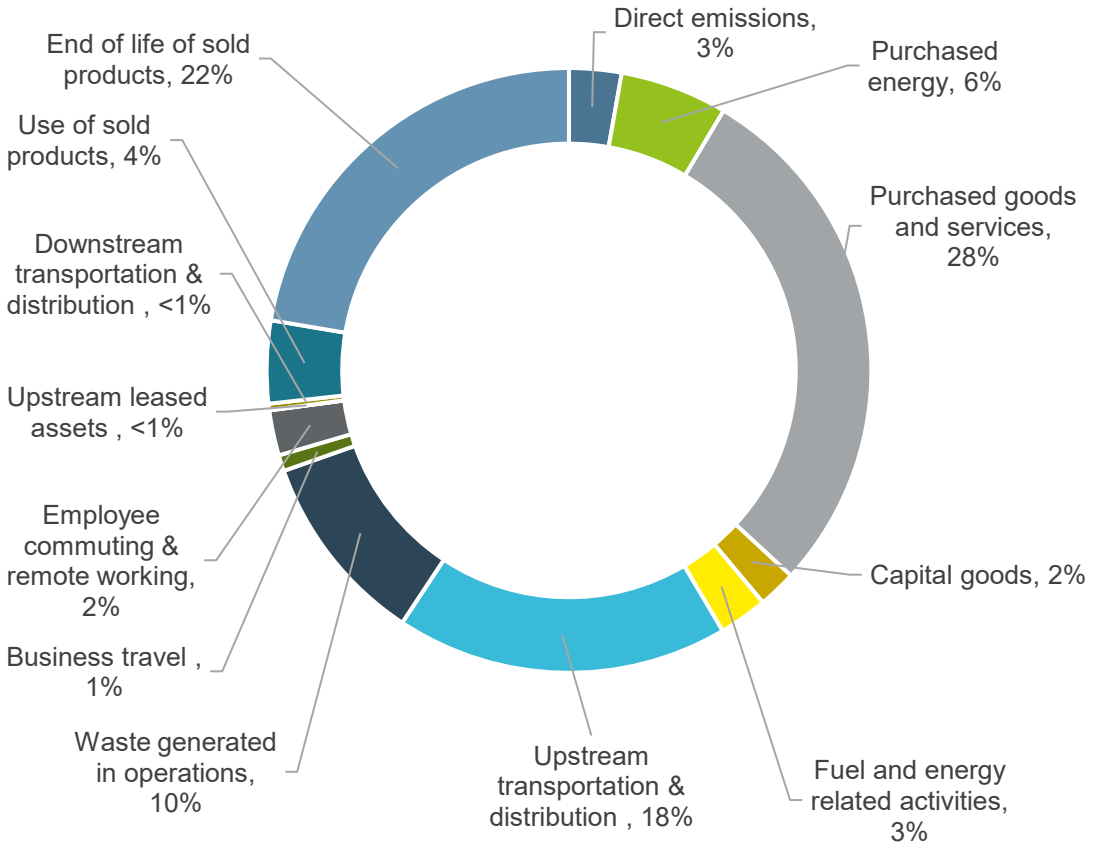

Figure 3. Market-based GHG emissions by category (tCO_2e)

5.4 GHG emissions by source category

Table 8 and Figure 4 presents GHG emissions by source relating to company activities. Total GHG emissions attributed to HPG's premises were 23,731 tCO_2e, company owned vehicles were 20 tCO_2e, business travel emissions were 394 tCO_2e, and other activities predominantly from end-of-life sold products were 21,682 tCO_2e.

Table 8: GHG market emissions by source category

Activity	GHG emissions (tCO_2e)	Subtotal (tCO_2e)
Premises		
Natural gas	1,269	**23,731**
Refrigerant gas losses	5,8	
Electricity	3,620	
Water	4,726	
Waste and wastewater	5.5	
Purchased goods and services	12,975	
Capital goods	938	
Propane	191	
Company owned vehicles		
Car – diesel	19	**20**
Car – petrol	<1	
Business travel		
Flights	177	**394**
Road and public transport	203	
Hotel stays	14	
Other		
Transport and Distribution	8304	**21,682**
Employee commuting	1,068	
Remote workings	40	
Use of sold products	2,025	
EoL sold products	10,238	
Upstream leased assets	6.7	
Total		**45,827**

All fuels, company owned vehicles, business travel, employee commuting and transportation & distribution include WTT. Electricity includes T&D and WTT.

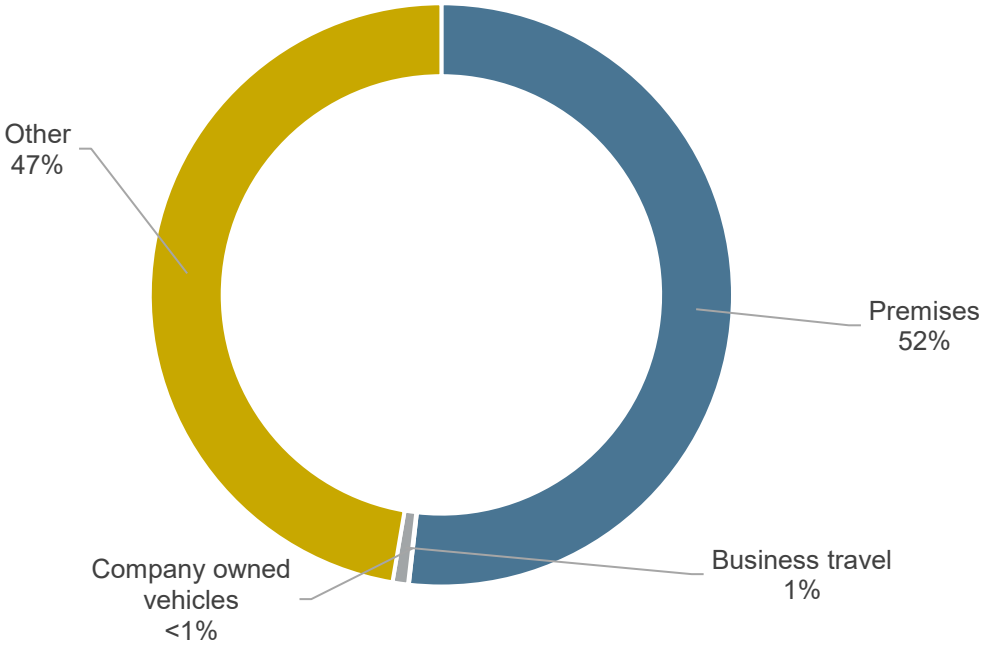

Figure 4. Market-based GHG emissions by source (tCO_2e)

6 COMPARISON OF ANNUAL EMISSIONS

Table 9 compares GHG emissions from HPG's current (2024) and previous (2023) GHG assessments. The increase in reported emissions reflects the HPG's commitment to broadening the scope of their carbon assessment across all its activities. Additional relevant categories assessed included:

Overall, there has been an increase in total emissions, mainly due to an increase in upstream transportation and distribution, waste and wastewater, EoI sold products, and purchased goods and services.

Table 9: Comparison of 2023 & 2024 GHG emissions (market-based)

Emissions source category	GHG emissions (tCO_2e)			
	2023	2024	Change tCO_2e	Change %
Mains gas	1,164	1,269	**+105**	**9%**
Refrigerant gas losses	1.4	5.8	**+4.4**	**302%**
Other fuels	114	191	**+77**	**67%**
Company owned vehicles	21	20	**-1.1**	**-5%**
Electricity	3,989	3,620	**-369**	**-9%**
Waste and wastewater	1,115	4,726	**+3,611**	**324%**
Water	5.0	5.5	**+0.5**	**10%**
Purchased goods and services	11,975	12,975	**+1,000**	**8%**
Capital goods	80	938	**+857**	**1067%**
Business travel	340	379	**+40**	**12%**
Hotels	11	14	**+3.0**	**26%**
Employee commuting	1,263	1,068	**-195**	**-15%**
Remote working	40	40	**+0.3**	**1%**
Upstream transportation & distribution	3,377	8,149	**+4,772**	**141%**
Downstream transportation & distribution	296	155	**-141**	**-48%**
Upstream leased assets	6.1	6.7	**+0.6**	**9%**
Use of sold products	2,176	2,025	**-151**	**-7%**

Emissions source category	GHG emissions (tCO_2e)			
	2023	2024	Change tCO_2e	Change %
EoL sold products	6,630	10,238	**+3,608**	**54%**
Total (market-based)	**32,605**	**45,827**	**13,221**	**41%**
Market emissions per FTE	24.7	41.2	**17**	**67%**
Market emissions per GIA, m^2	0.05	0.07	**0.02**	**41%**
Total (location-based)	**32,522**	**45,754**	**13,231**	**41%**
Location emissions per FTE	24.7	41.1	**16**	**67%**
Location emissions per GIA, m2	0.05	0.07	**0.02**	**41%**

All fuels, company owned vehicles, business travel, employee commuting and transportation & distribution include WTT. Electricity includes T&D and WTT.

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