Quantification and reporting of greenhouse gases emissions at the organizational level in accordance with ISO 14064-1:2019

Reporting Year: 2025

Commissioned by Valland SpA to Eartha Srl

Working Group

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GHG Inventory Report

Piantedo (SO), July 2026

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1. General description of the Organization goals and Inventory objectives

1.1 Statement of the GHG Inventory Report

The Report has been prepared **according to the International Standard 14064-1** (Greenhouse gases – Part 1: Specification with guidance at the Organization level for quantification and reporting of greenhouse gas emissions and removals), prepared by the Technical Committee ISO[1]/TC 207 "Environmental management" in collaboration with the Technical Committee CEN/SS S26 "Environmental management", and published in August 2019 (EN ISO 14064-1: 2019)[2].

1.2 Report structure and format

The report has been arranged following the principles outlined in ISO 14064-1 (i.e., relevance, completeness, consistency, accuracy and transparency). The structure and format are those outlined in Chapter 9 (GHG reporting) and Annex F (GHG Inventory structure and organization) of the Standard.

According to ISO 14064-1, this Report contains **all the mandatory and** (where applicable) **recommended disclosures**, as well as the **optional disclosure** related to the **contractual instruments** for greenhouse gases (GHG) attributes (i.e., the "market-based" approach description).

Optional disclosures on offsets or other types of carbon credits, as well as GHG stored in reservoirs, are not included. The Company does not participate in any kind of carbon markets, nor does it have carbon reserves which can be used for climate change mitigation activities.

1.3 Description of the reporting Company

Founded in 2006 in Piantedo (Sondrio, Italy) at Via Roccoli N. 252, Valland SpA is a privately held, unlisted single legal entity. The Company is specialized in **designing and manufacturing high-quality, custom-engineered ball, gate and check valves, delivered all over the world**. Under the Global Industry Classification Standard (GICS)[3], Valland is categorized within the "**Energy**" sector, specifically under Sub-Industry **10101020 – Oil & Gas Equipment & Services**.

No significant changes regarding the Company's core activities, products, services, target markets, or supply chain structure have occurred during the current reporting period compared to the previous years.

Driven by a **client-centric** philosophy, Valland pairs technical expertise with continuous process optimization to deliver reliable and high-performance solutions. Throughout 2025, the Company has consolidated its role as a strategic partner across upstream exploration, production, subsea applications, transmission networks and industrial services.

Over the past **twenty years**, Valland has established a resilient network of local and international suppliers, ensuring rigorous oversight across the whole procurement and manufacturing cycle.

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1 International Standard Organization.
2 https://www.iso.org/standard/66453.html
3 https://www.msci.com/indexes/index-resources/gics

Valland's primary market consists of offshore applications in the **North Sea** region, specifically targeting **Norway** and the **United Kingdom**. This represents one of the most technologically demanding and strictly regulated areas in the global Oil & Gas sector, as it is characterized by:

- Advanced and specialized technical specifications.
- Stringent environmental and safety compliance standards.
- Severe operational conditions demanding maximum reliability, durability and safety.

The Company partners with major international operators and tier-one contractors, supplying high-performance valves designed for extraction facilities, injection systems and subsea pipelines capable of withstanding extreme temperatures, high pressures and corrosive environments.

Technological innovation is central to Valland's operational and sustainability strategies. Over the last ten years, the Company has heavily invested in **Additive Manufacturing (AM) technologies**. What began as collaborative research has matured into an internal, dedicated R&D stream encompassing both metal and polymer technologies such as:

- **Metal AM**: Binder Jetting, Laser Powder Bed Fusion (LPBF) and Wire Arc Additive Manufacturing (WAAM).
- **Polymer AM**: Fused Deposition Modeling (FDM) for standard, composite and high-performance technopolymers, alongside resin photopolymerization.

These innovative technologies are applied to valve component manufacturing and broader energy sector solutions. Valland's internal R&D department leverages decades of field experience alongside digital tools like **Finite Element Analysis (FEA)** and conducts rigorous safety assessments, including **Safety Integrity Level (SIL)** and **Safety Analysis Reports (SAR),** with strong coordination among technical stakeholders.

Behind every delivered product, there is a **network** of trusted partners and suppliers. Over the years, Valland has cultivated strong, long-term relationships across the whole value chain; These connections go beyond formal contracts: they are key to co-develop solutions, innovate and ensure timely global delivery. The Company's networks include:

- **Suppliers**, who provide essential raw materials and semi-finished products, as well as AM machines and related equipment to drive innovation.
- **Project partners**, both private companies and public organizations (e.g., Universities and Research Centres, Research and Consulting Companies, Trade and Industrial Associations, Lombardy Technology Clusters, etc.), collaborating with Valland to develop advanced materials and AM-based solutions, also through national and international research projects.
- **Distributors**, who ensure that the final products are delivered under optimal conditions and on time.
- **Clients**, who rely on final products and often become long-term collaborators in ongoing national and international projects.
- **Certification bodies and consultants** who contribute to ensuring that Valland meets safety standards and compliance requirements, including the preparation of SIL and SAR.

In spring 2024, Valland has established a strategic joint venture with the CTA Group, named "**Vision2H**", aimed at advancing **green hydrogen solutions** for global decarbonization. This partnership merges Valland's valve manufacturing and AM capabilities with CTA Group's extensive global distribution network in the chemical, petrochemical and energy sectors.

Through Vision2H, the Company has developed a pioneering **100 kW single-stack Anion Exchange Membrane (AEM) electrolyser**, with plans to scale up to megawatt-level turnkey installations by 2027. Operating on pure water or low-concentration alkaline environments, this AEM technology significantly minimizes the reliance on critical raw materials, thereby reducing the overall environmental footprint.

1.4 Company's policies and strategies for environmental sustainability

At Valland, **sustainability** is not a standalone initiative, but an integral part of daily operations. Our strategy proactively manages economic, environmental and social impacts — including human rights — across short-, medium- and long-term horizons, aimed at **preventing and minimizing negative outcomes** while generating positive value for people and the economy.

This commitment is embedded throughout the Company's business model and supply chains. The strategic priorities include:

Short term (1-2 years):

- Reducing CO_2 emissions across own operations.
- Improving energy efficiency through operational upgrades and process optimization, where possible.
- Strengthening internal sustainability education and employee awareness.
- Investing in workplace well-being and preventive health initiatives.
- Deepening collaboration within regional and national industrial clusters and associations.

Medium-term (3–5 years):

- Scaling up the AM capabilities to progressively reduce material waste.
- Advancing R&D to support energy transition, such as hydrogen solutions.
- Expanding lifecycle product design and circular economy practices.
- Promoting diversity, equity and inclusion within the own workforce.
- Aligning all the key operations with intergovernmental frameworks such as the UN Sustainable Development Goals (UN SDGs) and the European Green Deal.

Long-term (beyond 5 years):

- Become a benchmark in sustainable industrial innovation.
- Influence policy and industry standards through active participation in sustainability forums and knowledge-sharing platforms.
- Maintain a culture that balances technological excellence with social responsibility.

The Company's sustainability approach is structured around **five core pillars**:

- **Technology-led innovation**: investing in advanced technologies that enhance both the competitiveness and the contribution to sustainability. This includes expanding AM and hydrogen-related solutions.
- **Responsible use of natural resources**: minimizing the environmental footprint by optimizing resource use and integrating renewable energy sources like solar energy.

- **Circular economy practices**: prioritizing lifecycle thinking, designing for durability, reuse, recycling and responsible end-of-life management of products, where possible.
- **People-centric innovation**: people are considered as the driving force of innovation. The Company supports continuous learning and skill development, while promoting a healthy, safe and inclusive workplace.
- **Partnerships and collaboration**: cultivating long-term relationships with clients, suppliers and industrial stakeholders. The active participation in clusters enables co-creation, knowledge exchange and collective progress toward sustainability goals.

The Company focuses on areas where the greatest impact can be achieved:

- **ESG Goal 3 – Good health and well-being**:
  - Workplace health and safety.
  - Team-building activities that foster well-being.
  - Promotion of a balanced work-life culture.
  - Preventive health screenings for employees.
- **ESG Goal 7 – Affordable and clean energy**
  - Increasing the share of renewable energy in the Company's consumption mix, through the photovoltaic system.
- **ESG Goal 9 – Industry, innovation and infrastructure**
  - Strengthening the R&D department.
  - Expanding the AM capabilities.
  - Investing in cutting-edge technologies, including LPBF and hydrogen-related solutions.
- **ESG Goal 12 – Responsible consumption and production**
  - Reducing waste through prevention, recycling and reuse, where possible.
  - Enhancing resource efficiency, both internally and across the supply chain.
- **ESG Goal 13 – Climate action**
  - Reducing CO_2 emissions mainly across the internal operations.
  - Promoting sustainability education and awareness, internally and externally.

Valland's sustainability strategy aligns closely with international frameworks such as the OECD Guidelines and the **UN Guiding Principles on Business and Human Rights**. By proactively managing environmental, social and economic impacts, the Company demonstrates a steadfast commitment to corporate responsibility and ethical conduct.

Furthermore, Valland's approach continuously evolves in response to macroeconomic, social and political trends, including the global push for decarbonization, advancements in digital and AM technologies, stricter regulatory disclosure requirements and increasing societal demand for ethical business practices.

1.5 Purpose of the Report in the context of the Company's policies and strategies

Having published its annual Sustainability Report since 2022, Valland SpA released its **fourth edition** in August 2026, **covering the 2025 calendar year.** This GHG Inventory Report acts as a **technical extension** of the main Report, delivering a detailed, compliant account of the Company's carbon footprint according to internationally recognized standards.

This report is designed to:

- **Drive strategic decisions**: deliver actionable data to monitor and manage emissions, embedding climate risks and opportunities directly into corporate strategy.
- **Pinpoint emission hotspots**: map carbon-intensive areas to optimize resource use and direct sustainability investments toward high-impact short- and medium-term reductions.
- **Streamline internal planning**: Help stakeholders in tracking targets and integrate GHG metrics into risk management frameworks, setting a clear baseline for long-term sustainability commitments.

1.6 Responsibility and reference contacts

The responsibility for this GHG Inventory and the GHG Inventory Report is of the **Sustainability team**, and the reference contacts are the following:

- **Dr. Luca Nonini** – Sustainability Consultant, Eartha Srl; luca.nonini@eartha.it
- **Dr. Rebecca Sansi** – Sustainability Analyst, Eartha Srl; rebecca.sansi@eartha.it
- **Dr. Alex Giorgini** – R&D Manager, Valland SpA; alex.giorgini@valland.it

1.7 Intended use and intended users

This Report is designed for **internal purposes**, i.e., top management, Sustainability team and R&D department.

1.8 Dissemination policy

The Report is primarily intended for internal use. However, it will also be made publicly available on the **Company's website**. This decision reflects **Valland's commitment to transparency** and is part of a **broader communication strategy** aimed at informing and actively engaging all the relevant stakeholders.

1.9 Historical base year and historical base year GHG Inventory

This GHG Inventory Report is the third one prepared by the Company. The **comparison** between emissions related to the **years 2023, 2024 and 2025** is therefore presented and discussed. The **chosen base year is 2023**: the methodological approach applied for 2025 and 2024 is the same as

that applied for 2023, and 2023 is the first year for which a GRI[4]-based GHG Inventory has been produced.

1.10 Reporting period and frequency of reporting

The reporting period is **January 1st, 2025 – December 31st, 2025**. The reporting frequency is annual.

1.11 Base year and review of the base year

Because of the above, the base year for comparative purposes is 2023. Any future changes in the definition of the base year may be introduced due to structural change in reporting or organizational boundaries (e.g., merger, acquisition or divestiture), shifts in the economic and technological context, change in the calculation methodologies or emission factors values, errors which could substantially influence the results, or obsolescence of the information related to the currently established base year.

1.12 Greenhouse gases included in the Report

GHG emissions have been computed for (https://www.ipcc-nggip.iges.or.jp/public/2006gl/):

- **Carbon dioxide (CO_2)**.
- **Methane (CH_4)**.
- **Nitrous oxide (N_2O)**.

1.13 Statement on verification and validation

The report **has not been verified** by a third party. However, this activity may be considered for the future to enhance the credibility and transparency of the disclosed data, as well as to align with best practices and stakeholders' expectations.

Should Valland decide to undertake a third-party verification process in accordance with **ISO 14064-3:2019** (Greenhouse Gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements[5]), the Report may subsequently be shared externally as a certified document.

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4 The GRI is based on the Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard (Revised Edition, World Business Council For Sustainable Development, WBCSD, and World Resource Institute, WRI 2004, https://ghgprotocol.org/corporate-standard), GHG Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard – Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (WBCSD and WRI, 2011, https://ghgprotocol.org/corporate-value-chain-scope-3-standard), GHG Protocol – Technical Guidance for Calculating Scope 3 Emissions (version 1.0) – Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (WBCSD and WRI, 2013, https://ghgprotocol.org/scope-3-calculation-guidance-2) and GHG Protocol Scope 2 Guidance – an amendment to the GHG Protocol Corporate Accounting and Reporting Standard (WBCSD and WRI, 2015; https://ghgprotocol.org/scope-2-guidance).

5 https://www.iso.org/standard/66455.html

2. Organizational boundaries

Valland retains **full ownership, operational and financial control** over all the facilities at its headquarters, including factories, offices and warehouses. Consequently, the Company's **organizational boundaries align exactly with its physical boundaries**.

3. Reporting boundaries

3.1 Comparison between ISO 14064-1 and GHG Protocol emissions categories

Table 1 shows the correspondence between the emissions categories defined in ISO 14064-1 and those defined in the Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard.

Table 1: Correspondence between emissions categories of the ISO 14064-1 and those of the GHG Protocol.

Reference	
ISO 14064-1	**GHG Protocol**
Category 1: Direct GHG emissions	Scope 1: Direct GHG emissions
SC 1.1[a]: Stationary combustion	C 1[b]: Stationary combustion
SC 1.2: Mobile combustion	C 2: Mobile combustion
SC 1.3: Processes	C 3: Processes
SC 1.4: Fugitive	C 4: Fugitive
SC 1.5: Land use, land use change and forestry activities	*Not available*
Category 2: Indirect GHG emissions from imported energy	Scope 2: Indirect GHG emissions from imported energy
SC 2.1: Imported electricity SC 2.2: imported energy, excluding electricity	C 1: Imported energy (electricity and other carriers)
Category 3: Indirect GHG emissions from transportation	Scope 3: Other GHG emissions
SC 3.1: Upstream transportation and distribution	C 4: Upstream transportation and distribution
SC 3.2: Downstream transportation and distribution	C 9: Downstream transportation and distribution
SC 3.3: Employee commuting	C 7: Employee commuting
SC 3.4: Clients and visitors transport	*Not available*
SC 3.5: Business travel	C 6: Business travel
Category 4: Indirect GHG emissions from used products	Scope 3: Other GHG emissions
SC 4.1: Purchased simple goods	C 1: Purchased good and services; C 3: Upstream fuel and energy related activities
SC 4.2: Purchased capital goods	C 2: Purchased capital goods
SC 4.3: Purchased services	C 1: Purchased good and services
SC 4.4: Treatment of solid and liquid waste	C 5: Waste generated in operations
SC 4.5: Leased assets	C 8: Upstream leased assets
SC 4.6: Purchased services not previously included	C 1: Purchased good and services
Category 5: Indirect GHG emissions associated with the use of products from the Organization	Scope 3: Other GHG emissions
SC 5.1: Use stage of the product	C 10: Processing of sold products; C 11: Use of sold products
SC 5.2: Downstream leased assets	C 13: Downstream leased assets
SC 5.3: End of life stage of products	C 12: End of life treatment of sold products
SC 5.4: Investments	C 15: Investments
Category 6: Indirect GHG emissions from other sources	Scope 3: Other GHG emissions
Not specified	C 14: Franchising

[a] SC: subcategory; [b] C: Category.

3.2 Emissions categories and selection criteria

This chapter includes the description of the emissions categories considered in the analysis. When considering whether to include or exclude emission sources, the following **criteria** have been taken into account:

- Activities/processes that are assumed to be **quantitatively substantial** over the total emissions.
- Ability of the Company to **monitor the emissions**.
- Sources that **contribute to the Company's vulnerability to climate-related** and reputational risks, or that present clear opportunities for emission reductions.
- Availability and **accessibility of data and information**.
- Availability, **traceability and validation of documentations** supporting the data sources.

Based on internal evaluations, Valland declares that the above criteria have not been used to exclude representative categories or subcategories. As well as for the organizational boundaries, in case of future structural changes of the Company, the above-mentioned selection criteria will be reviewed.

The following section provides a general description of the categories considered in the analysis. A detailed breakdown of the categories and subcategories included and excluded, along with the rationale for each exclusion, is presented in **Table 2**.

1. **Category 1**: direct GHG emissions: they occur from sources inside the organizational boundaries that are fully controlled by the Organization, regardless of the ownership. This includes emissions from:
    - **Stationary combustion** of any type of fuel – fossil or renewable – burnt in stationary (fixed) equipment, e.g., ovens, boilers and electricity generators, to generate heat, mechanical work or electricity.
    - **Mobile combustion** of any type of fuel – fossil or renewable – burnt in transport equipment, e.g., cars, motorcycles, freight transport vehicles like trucks or articulated lorries, used for activities/processes directly related to the Company business.
    - **Processes**: reactions taking place within the production process itself and not associated with fuel combustion, e.g., metallurgical reduction and oxidation reactions, decarburisation processes, reactions involving carbon-containing materials during manufacturing and decomposition of carbonates or other carbon-bearing substances.
    - **Fugitive**: due to intentional or unintentional release of gases or vapours into the atmosphere from industrial equipment, such as valves, flanges, pumps and pipelines.
    - **Land use, land use change and forestry** activities.

    All the **upstream** (i.e., from cradle to the Company gates) emissions associated with fuels production, emissions due to the construction of power plants/vehicles, as well as emissions allocated to fuels transport and any distribution losses are **excluded.**
2. **Category 2**: indirect GHG emissions from **imported energy** (i.e., electricity, heat, steam, cooling energy and compressed air): it refers to the **energy purchased and consumed** by the Company; all the **upstream** (from cradle to the power plant gate) emissions associated with fuels production and transport, emissions due to the construction of the power plants, as well as emissions allocated to energy transport and any distribution losses are **excluded**.

3. **Category 3**: indirect GHG emissions from **transportation**: they occur from sources located outside the organizational boundaries and are related to activities/processes not owned and not under the control of the Company. Emissions occur due to fuel burnt in transport equipment (via land, air, sea, either paid or not paid by the Company, and delivered by suppliers to the Company or by the Company to clients throughout the supply chain) for the transportation of: (i) simple/capital goods purchased/sold by the Company and (ii) people (clients and visitors, employee commuting between their home and the workplace, and business travel).

   Emissions associated with: (i) refrigeration gas leaks, (ii) fuel generation and transportation/distribution and (iii) construction of the transport equipment (vehicle and infrastructure) are excluded.

   To avoid double counting with "Category 4: Indirect GHG emissions from used products", only emissions that occur **from the tier-one supplier to the Company gates are included**, whereas all the others throughout the supply chain (i.e., among the upstream suppliers) are excluded.

4. **Category 4**: Indirect GHG emissions from **used products**: they occur from sources located outside the organizational boundaries and associated with **simple goods and services**, as well as **capital goods**[6] purchased by the Company. Simple goods can be both intermediate products and finished products used "as they are", without any preliminary transformation. The emissions are associated with all the upstream phases (**"cradle to supplier output gate"** approach): (i) extraction of raw materials, (ii) agricultural and forestry activities, (iii) materials manufacturing and processing, (iv) generation of energy carriers consumed throughout the upstream activities, (v) treatment of waste generated throughout the upstream activities, (vi) land use, land-use change and forestry activities, (vii) transportation of materials and products between suppliers and (viii) any other activities prior to the acquisition by the reporting Company. This category includes also emissions from:

   - **Treatment of solid and liquid waste** generated by the Company (services paid by the Organization to third parties).
   - **Upstream activities related to fuel and electricity** (extraction, production and transportation of fuels used by the Company; extraction, production and transportation of fuels used to generate electricity, steam, heat and cooling subsequently purchased by the Company; electricity losses due to transmission and distribution).

Table 2: List of categories and subcategories (ISO 14064-1) included/excluded and reasons for exclusion.

Reference **ISO 14064-1**	Inclusion/exclusion (yes; no)	Reason for exclusion
Category 1: Direct GHG emissions		
SC 1.1: Stationary combustion	Yes	
SC 1.2: Mobile combustion	Yes	
SC 1.3: Processes	No	No activities causing emissions are carried out.
SC 1.4: Fugitive	No	No emissions associated with this activity.
SC 1.5: Land use, land use change and forestry	No	No activities causing emissions are carried out.
Category 2: Indirect GHG emissions from imported energy		
SC 2.1: Imported electricity	Yes	

[6] Goods with extended lifetime (i.e., years, decades) that are neither transformed nor sold to another Organization or clients (e.g., equipment, machinery, buildings, facilities and vehicles).

SC 2.2: imported energy, excluding electricity	No	No activities causing emissions are carried out.
Category 3: Indirect GHG emissions from transportation		
SC 3.1: Upstream transportation and distribution	Yes	
SC 3.2: Downstream transportation and distribution	No	Complexity in obtaining the data and accuracy[a].
SC 3.3: Employee commuting	Yes	
SC 3.4: Clients and visitors transport	No	Complexity in obtaining the data and accuracy.
SC 3.5: Business travel	Yes	
Category 4: Indirect GHG emissions from used products		
SC 4.1: Purchased simple goods	Yes	
SC 4.2: Purchased capital goods	Yes	
SC 4.3: Purchased services	Yes	
SC 4.4: Treatment of solid and liquid waste	Yes	
SC 4.5: Leased assets	No	No activities causing emissions are carried out.
SC 4.6: Purchased services not previously included	No	All emissions are already included in SC 4.3.
Category 5: Indirect GHG emissions associated with the use of products from the Organization		
SC 5.1: Use stage of the product	No	Complexity in obtaining the data and accuracy.
SC 5.2: Downstream leased assets	No	No activities causing emissions are carried out.
SC 5.3: End of life stage of products	No	Complexity in obtaining the data and accuracy.
SC 5.4: Investments	No	No activities causing emissions are carried out.
Category 6: Indirect GHG emissions from other sources		
Not specified	No	No activities causing emissions are carried out.

[a] To improve the completeness, accuracy and transparency of the GHG emissions Inventory, efforts will be made for the further Inventory to consider the categories currently excluded due to both complexity in obtaining the data and level of accuracy.

4. Calculating emissions: methodological approaches and parameters

4.1 General introduction

The emissions have been calculated using a **model developed by Eartha Srl** in 2024. This tool has been prepared in the **MS Office Excel 365 environment** (file format .xlsm) and it is based on methodologies aligned with those defined in the Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard (Revised Edition, WBCSD and WRI, 2004), GHG Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard – Supplement to the GHG Protocol Corporate Accounting and Reporting Standard (WBCSD and WRI, 2011), GHG Protocol – Technical Guidance for Calculating Scope 3 Emissions (version 1.0) – Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (WBCSD and WRI, 2013), and GHG Protocol Scope 2 Guidance – an amendment to the GHG Protocol Corporate Accounting and Reporting Standard (WBCSD and WRI, 2015).

Following the GHG Protocol classification, the model allows the **quantification of the emissions for each category of Scope 1, Scope 2 and Scope 3** over a **default period of 1 calendar year**. The results can be further aggregated into different categories in accordance with ISO 14064-1; however, this operation must be performed by the user outside the model.

The tool has been developed with the aim of balancing **accuracy** and the **ease of use**, to assist the user in identifying **critical points** (i.e., **environmental hotspots**; activities/processes characterized by the highest emissions) within the value chain, and for which further data collection and more in-depth analysis may be required.

The results are presented in a separate worksheet. Emissions values are reported as both **fossil CO_2eq** and (separately) **biogenic CO_2** (biomass-related emissions) in both **absolute terms (t)** and as **fraction (%)** of the total value.

Additionally, the model shows the total absolute value, as well as the fraction of emissions values across the three different Scopes (Scope 1 + Scope 2 + Scope 3; t, %).

The tool also includes a feature that enables **storing the results for all the analysed years** in a dedicated worksheet. This functionality allows the Company to systematically archive emissions data, facilitating the development of a **comprehensive "environmental profile"** over a **multi-year period**. By providing a detailed **historical view of emissions trends** across the value chain, the model supports the definition of informed and effective reduction and mitigation strategies.

The following paragraph describes the methodological approach, including literature sources, calculation parameters and any assumptions/simplifications applied for categories and subcategories included in the Inventory, according to ISO 14064-1.

4.2 Methodology

4.2.1 Subcategory 1.1: Stationary combustion

Emissions are calculated by multiplying the **volume of fuel consumed** (dm^3) by the fuel-specific emission factors for CO_2, CH_4 and N_2O, expressed as kg CO_2/dm^3, kg CO_2eq of CH_4/dm^3 and kg CO_2eq of N_2O/dm^3, respectively. The emission factors are selected according to the type of fuel consumed and are obtained from the UK Government greenhouse gas conversion factors (Department for Environment, Food & Rural Affairs, DEFRA, 2023) [7].

4.2.2 Subcategory 1.2: Mobile combustion

Emissions are calculated using either:

- The **volume of fuel consumed**, multiplied by the corresponding fuel-specific emission factor.
- The **distance travelled**, multiplied by a vehicle-specific distance-based emission factor.

Distance-based emission factors are selected according to the vehicle category, fuel type and where available, vehicle size or engine characteristics. The factors account for CO_2, CH_4 and N_2O emissions and are expressed as kg CO_2/mile, kg CH_4/mile and kg N_2O/mile (GHG Protocol, 2017). Where fuel-consumption data are available, the fuel-based method is preferred because it provides a more direct estimate of emissions associated with actual fuel use.

[7] The DEFRA emission factors for CH_4 and N_2O are already expressed as CO_2eq through the corresponding Global Warming Potential (GWP). The GWP expresses the contribution of a gas to the greenhouse effect compared to that of CO_2, which is assumed equal to 1 and taken as reference. The GWP is calculated for a specific period (20, 100, or 500 years). In the model, all the GWP values are related to a period of 100 years and are those defined by the Fifth IPCC Assessment Report (https://ghgprotocol.org/sites/default/files/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf).

4.2.3 Subcategory 2.1: Imported electricity

Greenhouse gas emissions associated with purchased electricity are calculated by multiplying the amount of consumed electricity (kWh/year), by the relevant emission factor (kg CO_2eq/kWh). Emissions are reported according to both the location-based and market-based approach:

- **Location-based**: a **weighted average grid CO_2eq emission factor** is considered, defined according to the composition of the national electricity production "mix" in a given period. The emission factor reflects the average composition of the electricity generation mix, including fossil, nuclear and renewable energy sources (Carbon Footprint Ltd, 2023).
- **Market-based**: emissions are calculated using emission factors associated with the **contractual instruments** through which the Company purchases electricity, such as supplier-specific emission factors, **Guarantees of Origin**, or other recognised energy attribute certificates. A factor of 0 kg CO_2e/kWh may be applied to the electricity generation component only where valid contractual instruments demonstrate that the purchased electricity originates from **eligible renewable sources** and the applicable quality criteria are met. Upstream and transmission and distribution emissions are accounted for separately.
- **Residual-mix**: for electricity consumption not covered by valid contractual instruments, the market-based calculation uses the residual-mix emission factor applicable to the relevant geographical market. The residual mix represents the attributes of the **electricity remaining** after electricity supported by Guarantees of Origin or equivalent contractual instruments has been allocated to final consumers. It does not necessarily represent electricity generated exclusively from non-renewable sources, although its emission factor is **systematically higher** than the corresponding location-based factor, because a significant share of certified renewable generation has already been allocated to other consumers (Carbon Footprint Ltd, 2023).

4.2.4 Subcategory 3.1: Upstream transportation and distribution

The emissions associated with **inbound transportation, storage and warehousing services** are estimated using a **spend-based method**. The monetary expenditure (€) incurred for the transportation is multiplied by the corresponding supply-chain margin emission factor, expressed in kg CO_2e/€.

The calculation covers storage, warehousing and final inbound transportation from the first-tier supplier to the Company's gate. Transportation and distribution activities occurring further upstream in the supply chain are excluded from this subcategory as they are already included in the emission factors applied to purchased goods and services.

Because a spend-based emission factor is used, activity data such as the mass of goods transported, distance travelled, transport mode, vehicle type and warehousing technology are not required. These elements are represented indirectly through the economic input-output data underlying the emission factors (U.S. Environmental Protection Agency, EPA, 2022).

This approach provides an estimate based on **average sectoral conditions** and is therefore less specific than a fuel-, distance- or ton-km-based calculation.

4.2.5 Subcategory 3.3: Employee commuting

Emissions are calculated by multiplying the **total distance travelled by employees**, expressed in km, by the corresponding transport-mode-specific emission factor.

Emission factors are selected according to the type of vehicle or means of transport, and account for CO_2, CH_4 and N_2O emissions. According to the transport mode, factors may be expressed per vehicle-km or passenger-km. Where relevant, vehicle occupancy is taken into account to allocate vehicle emissions among passengers (DEFRA, 2023). The total distance includes journeys between employees' municipality of residence and their usual place of work over the reporting period.

4.2.6 Subcategory 3.5: Business travel

Emissions are quantified based on: (i) **type of transport/vehicle used**, (ii) **number of employees** involved and (iii) **total travelled distance** for each employee, including both outward and return journeys.

The applicable emission factors are selected according to the transport mode and may be expressed per vehicle-km or passenger-km. The factors account for CO_2, CH_4 and N_2O emissions, where applicable, and are expressed as kg CO_2/km, kg CO_2eq of CH_4/km, kg CO_2eq of N_2O/km, kg CO_2/passenger-km, kg CO_2eq of CH_4/passenger-km and kg CO_2eq of N_2O/passenger-km (DEFRA, 2023).

Hotel stay emissions may also be included according to the destination Country, number of occupied rooms and number of nights. These data are used to apply country-specific hotel-stay emission factors and improve the completeness of the business-travel estimation[8].

4.2.7 Subcategory 4.1, 4.2 and 4.3: Purchased simple goods, purchased capital goods and purchased services

Emissions are estimated by multiplying the monetary expenditure (€) by the specific **"supply chain emission factor without margin"** related to the type of good/service purchased (EPA, 2022). These emission factors reflect emissions occurring along the supply chain between suppliers and exclude activities involving the tier-one supplier and the transportation and distribution of goods and services up to the Company gate.

The calculation is based on **sector-average economic input-output data** and therefore does not reflect the specific physical characteristics, suppliers, manufacturing technologies or geographical origins of individual purchased product or service.

Subcategory 4.1 also includes upstream emissions associated with **fuels and electricity purchased and consumed by the Company**:

- **Upstream emissions from purchased fuels**: these include extraction, production, processing and transportation of fuels used by the Company for direct combustion; emissions are calculated as the product between the volume of fuel consumed (dm^3) and the corresponding upstream emission factor (kg CO_2eq/dm^3) (DEFRA, 2023).

[8] It is assumed that the employees stay in "3-star" hotels.

- **Upstream emissions from purchased electricity**: emissions associated with extraction, production and transportation of any fuel used to generate the electricity subsequently purchased by the Company. Emissions are quantified as the product between the amount of consumed electricity (kWh) and the corresponding upstream emission factor (kg CO_2eq/kWh) (International Energy Agency, IEA, 2023).
- **Electricity transmission and distribution losses**: emissions associated with energy losses occurring during transmission and distribution between the point of generation and the Company's point of consumption. Emissions are computed as the product between the amount of energy purchased (kWh) and the transmission-and-distribution-losses emission factor (kg CO_2eq/kWh) (Carbon Footprint Ltd, 2023)[9].

4.2.8 Subcategory 4.4: Treatment of solid and liquid waste

Emissions are estimated as the product between the mass of each waste (t)[10] and a **treatment-specific emission factor** (kg CO_2eq/t) (DEFRA, 2023). Emission factors are selected according to both the waste material and the treatment route. The model includes the following treatment options: (i) disposal/purification, (ii) open-loop recycling, (iii) closed-loop recycling[11], (iv) incineration by direct combustion, (v) composting, (vi) landfill and (vii) anaerobic digestion.

Based on the waste-management data available for the reporting period, the treatment routes applied in the calculation are **open-loop recycling**, **landfill, disposal or purification and incineration**. Where an exact match for a specific waste is not available within the selected database, the emission factor for the **most comparable waste material** and treatment process is used. The proxy is selected on the basis of the physical composition of the waste, its expected treatment route and the representativeness of the available emission factor.

4.3 Types of used data

Data used for the calculation are both **primary (**from direct measurement, declared information inside the Organization) and **secondary** (from estimations, literature sources). For each subcategory, the type of used data and the corresponding source are shown in **Table 3**.

Table 3: Types of data and sources.

Subcategory (SC)	Type of data	Source
SC 1.1 – Stationary combustion	Primary	Company records/bills on fuel consumption (m^3) on a monthly, bimonthly, or quarterly basis.
SC 1.2 – Mobile combustion	Primary	Company records/bills by type of vehicle on travelled annual distance (km) or fuel

9 The emission factors available in literature are related to the location-based mechanism; therefore, it is assumed that – given the same Country of origin – the emission factors are also applicable to the market-based (including residual-mix mechanisms).

10 In the model, the waste can be classified as: (i) construction materials, (ii) electrical/electronic devices, (iii) metals, (iv) plastic materials, (v) paper and (vi) other.

11 In the open-loop recycling, the recycled material is used to produce another type of good, and the material loses its original characteristics. On the contrary, in the closed-loop recycling, the recycled material is used to produce the same type of good and it maintains its original properties.

		consumption (dm^3) for each refuelling operation.
SC 2.1 – Imported electricity	Primary	Company bills on monthly electricity consumption (kWh).
SC 3.1 – Upstream transportation and distribution	Primary	Company records on monetary expenditure (€) for each purchased good.
SC 3.3 – Employee commuting	Primary and secondary	Company records containing municipalities of residence and the corresponding number of employees.
SC 3.5 – Business travel	Primary and secondary	Company records containing the destination Country/city (for domestic travel), departure and arrival airport, number of involved employees, departure and return date.
SC 4.1 – Purchased simple goods	Primary	Company records on monetary expenditure (€) for each purchased good.
SC 4.2 – Purchased capital goods	Primary	Company records on monetary expenditure (€) for each purchased good.
SC 4.3 – Purchased services	Primary	Company records on monetary expenditure (€) for each purchased service.
SC 4.4 – Treatment of solid and liquid waste	Primary, secondary	Company records on waste quantity (kg, dm^3) and treatment route.

4.4 Model characteristics

- **Reproducibility of the results**: the model has been developed in MS Office Excel, a universally accessible program, and uses standard inputs (e.g., mass of fuel, amount of energy, monetary expenditure) with documented assumptions and emission factors. This enhances reproducibility, as other users can replicate results by applying the same inputs data and parameters.
- **Acceptability**: the model aligns with well-established global standards (GHG Protocol, ISO 14064-1) and uses recognized datasets (e.g., DEFRA, EPA, IEA), enhancing its acceptability within corporate and regulatory frameworks, as well as credibility within the sustainability and emissions accounting community. Moreover, the modular design of the model, its ease of use and the ability to integrate optional data, further support the adoption by a wide range of users.
- **Consistency with the intended use**, balancing both accuracy and ease of use in identifying emission hotspots. Through its modular structure, the tool allows for detailed analysis when more specific data are available, while providing broader overviews if input data are limited. This makes the model particularly well-suited for annual reporting, trend analysis and strategy formulation. This flexible approach makes the model a valuable tool for emissions management.
- **Economic proxy approach**: for some subcategories, such as the purchase of goods and services, the model uses economic proxies (e.g., emissions per value of monetary expenditure) rather than direct physical metrics (like the mass of purchased good and the travelled distance). While this approach simplifies data collection, it introduces a higher degree of uncertainty, as there is no guarantee that the monetary expenditure is directly correlated with the emissions intensity of a given good or service. This can be a problem if the upstream activities of the supply chain are not well-understood.

- **Lack of validation**: the model does not incorporate a mechanism to validate its outputs against real-world measurements or site-specific data. Without such validation, the model's predictive accuracy remains uncertain, particularly for emissions sources where on-the-ground data may vary considerably. In the absence of validation, the results should be interpreted with caution, particularly if used to support decision-making or external reporting.
- **Transparency and documentation**: The model is supported by detailed documentation that explains the general logic, applied methodologies and parameters, required input data and assumptions. This transparency facilitates user understanding and enables easier review and updates over time.
- **Scalability**: the model is designed to be scalable, allowing adaptation to different company sizes or industrial sectors, while maintaining a modular structure that enables customization according to the specific needs.

4.5 Emission factors: values and literature references

Table 4 reports values and references of the emissions factors used for the calculations.

Table 4: Emission factors: values, unit of measure and references.

Category (C)	Subcategory (SC)	Emission factor		
		Value	Unit of measure	Reference link
C 1: Direct GHG emissions	SC 1.1: Stationary combustion	1. Liquid petroleum gas (LPG) - CO_2: 1.555 - CH_4: 0.001 - N_2O: 0.001	 kg CO_2eq of CO_2/dm^3 kg CO_2eq of CH_4/dm^3 kg CO_2eq of N_2O/dm^3	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023
	SC 1.2: Mobile combustion	1. Car – gasoline: - CO_2: 0.391 - CH_4: $1.5 \cdot 10^{-5}$ - N_2O: $7.9 \cdot 10^{-6}$ 2. Car – diesel: - CO_2: 0.451 - CH_4: $5.0 \cdot 10^{-7}$ - N_2O: $1.0 \cdot 10^{-6}$ 3. Light vehicle – diesel: - CO_2: 0.627 - CH_4: $1.0 \cdot 10^{-6}$ - N_2O: $1.5 \cdot 10^{-6}$	 kg CO_2/mile kg CH_4/mile kg N_2O/mile kg CO_2/mile kg CH_4/mile kg N_2O/mile kg CO_2/mile kg CH_4/mile kg N_2O/mile	https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fghgprotocol.org%2Fsites%2Fdefault%2Ffiles%2F2023-05%2FEmission_Factors_from_Cross_Sector_Tools_March_2017%2520%25281%2529.xlsx&wdOrigin=BROWSELINK
C 2: Indirect GHG emissions	SC 2.1: Imported electricity	- CO_2eq: 0.316 - CO_2eq: 0.000	kg CO_2eq/kWh kg CO_2eq/kWh	https://www.carbondi.com/#electricity-factors/?view_363_search=italy&view_363_page=1 Assumption based on the concept of market-based mechanism.
C 3: Indirect GHG emissions from transportation	SC 3.1: Upstream transportation and distribution	1. Capacitors, resistors, coils, transformers, connectors and other electronic components - CO_2eq: 0.026	kg CO_2eq/€	https://catalog.data.gov/dataset/supply-chain-ghg-emission-factors-for-us-commodities-and-industries-v1-1-1

		2. Agricultural, pharmaceutical, industrial and commercial chemical products - CO_2eq: 0.014 3. Computers and related parts, conductors, measurement and communication devices - CO_2eq: 0.010 4. Road transport services - CO_2eq: 0.000 5. Office supplies - CO_2eq: 0.126 6. Clothing and leather goods - CO_2eq: 0.026 7. Various fabricated metal products - CO_2eq: 0.045 8. Plastic and rubber products - CO_2eq: 0.012 9. Professional and technical-scientific services - CO_2eq: 0.000 10. Support services for construction activities - CO_2eq: 0.000 11. Legal services - CO_2eq: 0.000		
	SC 3.3: Employee commuting	1. Car – Dimensions not available (fuel: not available) - CO_2: 0.1655 - CH_4: 0.0002 - N_2O: 0.0010	kg CO_2eq of CO_2/km kg CO_2eq of CH_4/km kg CO_2eq of N_2O/km	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023
	SC 3.5: Business travel	1. Short-haul international flight (class: not available) - CO_2: 0.109 - CH_4: $1.1 \cdot 10^{-5}$ - N_2O: $9.2 \cdot 10^{-4}$ 2. Long-haul international flight (class: not available) - CO_2: 0.159 - CH_4: $1.1 \cdot 10^{-5}$ - N_2O: $1.3 \cdot 10^{-3}$ 3. National flight - CO_2: 0.153 - CH_4: $2.2 \cdot 10^{-4}$ - N_2O: $1.3 \cdot 10^{-3}$ 4. Car – average dimensions (fuel: not available) - CO_2: 0.171 - CH_4: $1.7 \cdot 10^{-4}$ - N_2O: $1.0 \cdot 10^{-3}$ 5. Taxi - CO_2: 0.206 - CH_4: $4.6 \cdot 10^{-6}$ - N_2O: $1.7 \cdot 10^{-3}$	kg CO_2eq of CO_2/passenger·km kg CO_2eq of CH_4/passenger·km kg CO_2eq of N_2O/passenger·km kg CO_2eq of CO_2/passenger·km kg CO_2eq of CH_4/passenger·km kg CO_2eq of N_2O/passenger·km kg CO_2eq of CO_2/passenger·km kg CO_2eq of CH_4/passenger·km kg CO_2eq of N_2O/passenger·km kg CO_2eq of CO_2/km kg CO_2eq of CH_4/km kg CO_2eq of N_2O/ km kg CO_2eq of CO_2/km kg CO_2eq of CH_4/km kg CO_2eq of N_2O/ km	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023
C 4: Indirect GHG emissions from used products	SC 4.1: Purchased simple goods	1. Clothing and leather goods - CO_2eq: 0.053 2. Office supplies - CO_2eq: 0.224	kg CO_2eq/€	https://catalog.data.gov/dataset/supply-chain-ghg-emission-factors-for-us-

		3. Metallic minerals, dimensional stones and non-metallic minerals - CO_2eq: 1.043 4. Agricultural, pharmaceutical, industrial and commercial chemical products - CO_2eq: 0.420 5. Various fabricated metal products - CO_2eq: 0.318 6. Plastic and rubber products - CO_2eq: 0.294 7. Wood products - CO_2eq: 0.219 8. Plumbing fixtures, faucets, valves and other metal fittings - CO_2eq: 0.152 9. Food products, beverages and tobacco - CO_2eq: 0.714		commodities-and-industries-v1-1-1
	SC 4.2: Purchase capital goods	1. Devices and equipment for cutting tools, machine tool and rolling mills - CO_2eq: 0.245 2. Material handling equipment - CO_2eq: 0.271 3. Computers and related parts, conductors, measurement and communication devices - CO_2eq: 0.040 4. Capacitors, resistors, coils, transformers, connectors and other - CO_2eq: 0.146 5. Machinery, excluding computers - CO_2eq: 0.183	kg CO_2eq/€	https://catalog.data.gov/dataset/supply-chain-ghg-emission-factors-for-us-commodities-and-industries-v1-1-1
	SC 4.3: Purchase services	1. Support services for construction activities - CO_2eq: 0.274 2. Computer programming and systems design service - CO_2eq: 0.061 3. Storage services in warehouses and distribution centres - CO_2eq: 0.435 4. Professional and technical-scientific services - CO_2eq: 0.136 5. Rental and leasing of non-financial goods, equipment, vehicles and intangible assets - CO_2eq: 0.087	kg CO_2eq/€	https://catalog.data.gov/dataset/supply-chain-ghg-emission-factors-for-us-commodities-and-industries-v1-1-1
	SC 4.4: Treatment of solid and liquid waste	1. Washing waters/solutions Disposal/purification - CO_2eq: 0.201 2. Paper and cardboard Open-loop recycling - CO_2eq: 0.000	kg CO_2eq/t	https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023

		3. Debris/aggregates Open-loop recycling - CO_2eq: 0.985 4. Batteries Open-loop recycling - CO_2eq: 21.281 5. Wood products Open-loop recycling - CO_2eq: 0.000 6. Metal waste Open-loop recycling - CO_2eq: 21.281 7. Plastic-average Open-loop recycling - CO_2eq: 21.28 8. Waste from commercial and industrial activities Incineration - CO_2eq: 21.281 9. Medium-sized electrical and electronic equipment Open-loop recycling - CO_2eq: 21.281 Incineration - CO_2eq: 21.281 10. Mineral oil Open-loop recycling - CO_2eq: 0.000		

5. Results and discussion

5.1 GHG emissions

The fossil CO_2eq emissions for each category are shown in **Table 5**. For comparison, results are reported for 2023, 2024 and 2025 and in both absolute and relative terms (t and %, respectively).

Table 5: GHG emissions (t; %) for each category: comparison between 2023, 2024 and 2025.

Category (C)	Emissions						
	2023		2024		2025		Variation 2025-2024
	t	%	t	%	t	%	%
C 1 – Direct GHG emissions	469.4	16.2%	772.0	6.8%	916.2	17.8%	+18.7%
C 2 – Indirect GHG emissions from imported energy	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0%
C 3 – Indirect GHG emissions from transportation	130.1	4.5%	109.5	1.0%	245.2	4.8%	+123.9%
C 4 – Indirect GHG emissions from used products	2298.7	79.3%	10507.0	92.3%	4000.0	77.5%	-61.9%
Total	**2898.1**	**100.0%**	**11388.5**	**100.0%**	**5161.4**	**100.0%**	**-54.7%**

Table 6 shows the emissions for **each subcategory** for 2025 only. Results are reported in both absolute and relative terms (t, % of the total of the category and % of the total of the Inventory).

Table 6: GHG emissions (t; %) for each subcategory.

Subcategory (SC)	Category (C)	Emissions		
		t	%	
			Of the category	Of the total
SC 1.1 – Stationary combustion	C 1	910.9	99.4%	17.6%
SC 1.2 – Mobile combustion		5.3	0.6%	0.1%
SC 2.1 – Imported electricity	C 2	0.0	0.0%	0.0%
SC 3.1 – Upstream transportation and distribution	C 3	131.3	53.5%	2.5%
SC 3.3 – Employee commuting		79.2	32.3%	1.5%
SC 3.5 – Business travel		34.7	14.2%	0.7%
SC 4.1 – Purchased simple goods	C 4	2387.2	59.7%	46.3%
SC 4.2 – Purchased capital goods		911.0	22.8%	17.6%
SC 4.3 – Purchased services		701.7	17.5%	13.6%
SC 4.4 – Treatment of solid and liquid waste		0.1	0.0%	0.0%
Total	-	**5161.4**	-	**100.0%**

Table 7 shows, for each subcategory, the emissions subdivided – where possible – as **CO_2, CH_4 and N_2O** expressed as CO_2eq through the parameter **GWP** for a time period of **100 years** and equal to 1.0, 28.0 and 265.0 for CO_2, CH_4 and N_2O, respectively (IPCC Fifth Assessment Report, 2014).

Table 7: Emissions of CO_2, CH_4 and N_2O expressed as CO_2eq.

Subcategory (SC)	Category (C)	Emissions			
		CO_2 (kg)	CH_4 (kg)	N_2O (kg)	Total (t)
SC 1.1 – Stationary combustion	C 1	909622.4	792.8	504.6	910.9
SC 1.2 – Mobile combustion		5319.0	0.0	0.0	5.3
SC 2.1 – Imported electricity	C 2	0.0	0.0	0.0	0.0
SC 3.1 – Upstream transportation and distribution	C 3	-	-	-	131.3
SC 3.3 – Employee commuting		78624.8	90.5	464.8	79.2
SC 3.5 – Business travel		30405.1	2.8	254.8	34.7
SC 4.1 – Purchased simple goods	C 4	-	-	-	2387.2
SC 4.2 – Purchased capital goods		-	-	-	911.0
SC 4.3 – Purchased services		-	-	-	701.7
SC 4.4 – Treatment of solid and liquid waste		-	-	-	$6.3 \cdot 10^{-4}$
Total					**5161.4**

[a] The total value is higher than the sum of the individual GHG values because it also includes emissions associated with hotel overnight stays, whereas the emissions of the individual gases refer only to the transportation.

Total GHG emissions amounted to **5161.4** t CO_2eq in 2025, marking a substantial decrease of nearly 55% compared to 11388.5 t CO_2eq in 2024. This reduction is primarily driven by **Category 4 — indirect emissions from used products** — which declined by 62% year-on-year, from 10507.0 t CO_2eq to 4000.0 t CO_2eq, approximately. Such a marked reduction reflects a significant contraction of the upstream supply chain emissions, likely attributable to lower procurement of good and services.

A more detailed analysis at subcategory level shows that emissions from **purchased simple goods** (SC 4.1) are equal to 2387.2 t CO_2eq, corresponding to 60% of Category 4 and **46% of total emissions**. **Purchased capital goods** (SC 4.2) and **purchased services** (SC 4.3) contributed 911.0 t CO_2eq and 701.7 t CO_2eq respectively, together accounting for nearly **31%** of the Company's total footprint. Emissions associated with the treatment of solid and liquid waste (SC 4.4) are absolutely negligible.

Direct emissions (Category 1) increase from 772.0 t CO_2eq in 2024 to 916.2 t CO_2eq in 2025, raising their relative share from 6.8% to **18**% of total emissions. This category is driven almost entirely by **stationary combustion** (SC 1.1), which accounted for 910.9 t CO_2eq — 99.4% of Category 1 — while the contribution of the mobile combustion (SC 1.2) is marginal (5.3 t CO_2eq; 0.6%). The rise in direct emissions reflects **intensified operational activity** and, consequently, higher fossil fuel consumption.

Category 3, related to **indirect emissions from transportation** accounts for 245.2 t CO_2eq (**4.8**% of total emissions). This includes upstream transportation and distribution (131.3 t CO_2eq), employee commuting (79.2 t CO_2eq) and business travel (34.7 t CO_2eq). **Upstream transportation and distribution** represent the largest contributor within this category; sourcing from geographically closer suppliers could represent a viable mitigation strategy.

A more detailed analysis of **Category 3** shows that its largest component (131.3 t CO_2eq, 53% of the category) comprises two distinct emission sources. The majority (117.6 t CO_2eq) is related to **upstream fuel and energy-related activities** not already accounted for under Scope 1 or 2. This value is almost entirely attributable to the upstream emissions of LPG, reflecting extraction, refining and transport of the fuel used for stationary combustion under Category 1, as well as emissions associated with energy and distribution losses. Electricity consumption, being fully covered by Guarantees of Origin, does not contribute to this subcategory.

The remaining 13.8 t CO_2eq relates to the **transportation of raw materials and purchased goods** from suppliers to the Company's facilities. These emissions are computed using a **spend-based approach**; even if it allows for a rapid estimation of emissions in the absence of detailed transportation data, this approach introduces a **considerable degree of uncertainty**. The core assumption behind spend-based emission factors is that emissions are directly proportional to the monetary expenditure on goods transported. While this assumption may hold in certain cases, it can lead to either underestimation or overestimation of actual emissions: transporting goods over long distances by air or sea typically results in substantially higher emissions than short-distance haulage by rail or road, and such distinctions are not captured by the spend-based approach. This result should therefore be interpreted with caution; collecting primary data on transport distances, modes and mass for key suppliers would enable a transition toward an activity-based calculation method, allowing for a more accurate quantification going forward.

In terms of **mitigation opportunities**, priority should be given to reducing **LPG-related emissions** – given their combined weight across Category 1 and Category 3 – through **energy efficiency measures and progressive fuel switching.** For the residual transportation-related emissions, further reductions could be pursued through supplier proximity, transport mode optimization — favoring rail or maritime freight over road transport where feasible — and shipment consolidation, alongside improved data collection to better track progress over time.

Overall, the Company's emissions profile shows a **marked decline**, largely driven by **reduced upstream procurement emissions**. Nonetheless, **Category 4** remains the dominant driver of the impact, accounting for approximately **77% of total emissions**. This underscores the central role of upstream procurement activities in shaping the Company's overall carbon footprint, and highlights **supplier engagement** and **sustainable procurement practices** as **critical levers** for future emission reduction efforts.

With regard to the emissions associated with purchased goods and services, **several actions** could contribute to a considerable reduction of the emissions: (i) optimizing resource use by aligning purchases with actual needs and minimizing waste, (ii) prioritizing the procurement of goods with lower embedded emissions from production and logistics and, when applicable, (iii) choosing products made from recycled or renewable materials, such as FSC-certified wood, recycled plastics or recycled metals. These procurement-focused actions, together with the transport- and energy-

related mitigation measures outlined above, form a coherent set of priorities for the Company's future emission reduction strategy.

As anticipated in the analysis of Category 3, the Company's electricity consumption is fully covered by Guarantees of Origin, a mechanism that also explains why **Category 2** (indirect emissions from imported energy) results in **zero emissions** under the **market-based approach** — adopted by the Company in line with ISO 14064-1. This outcome is the result of a deliberate energy strategy.

At the end of 2023, the Company installed a **223 kWp photovoltaic system** on the warehouse roofs (524 modules of 425 Wp each), marking a significant step in reducing reliance on grid electricity. The system operates under a "partial transfer model", meaning that energy not instantaneously consumed on-site is fed into the national grid and managed through the Energy Services Manager (Gestore dei Servizi Energetici, GSE) framework. This initiative partially offsets the Company's electricity demand from the grid and enhances its renewable energy share without compromising the operations.

In 2025, approximately **42% of total electricity consumption** (129 MWh out of 304 MWh**)** is **covered by the photovoltaic system**, whereas the remaining 58% is purchased from a certified supplier guaranteeing the exclusive use of renewable sources (hydropower, wind and solar) through one-to-one contractual agreements (i.e., the market-based approach mentioned above). Physically, the electricity consumed is still drawn from the national grid, which comprises a mix of fossil and renewable sources; on a location-based basis, 2025 electricity consumption results in approximately 57.4 t CO_2eq of emissions. However, under the market-based approach, these emissions are **considered offset — albeit at different times and locations** — by an equivalent amount of renewable energy generated elsewhere, resulting in a Category 2 value of 0.0 t CO_2eq from an **accounting perspective only**.

Combined with the fact that Valland has never purchased natural gas, this energy strategy — spanning on-site generation, certified renewable procurement and the resulting zero-emission — reflects a low-carbon energy profile and reinforces the Company's commitment to continued leadership in environmental stewardship.

Table 8, **Table 9** and **Table 10** show the fraction (%) of monetary expenditures and GHG emissions related to each type of purchased simple good, services and capital good, respectively.

Analysing the relationship between the fraction of monetary expenditure and the fraction of emissions for different types of goods and services may be useful, as certain goods or services might represent a **small share of expenditures but contribute considerably to the emissions, and vice-versa**. Identifying such relations can help the Company to focus on those with the **highest emission-to-expenditure ratio**, allowing targeted reductions in areas where the environmental impact outweighs the financial input.

For this specific case, the proportionality is substantially reflected: the goods/services representing the larger fraction of monetary expenditure also represent the larger fraction of emissions. For example, for fabricated metal products, metallic minerals, dimensional stones and non-metallic minerals, the fraction of emissions is considerably higher than the fraction of monetary expenditure.

Table 8: Fraction (%) of monetary expenditure and emissions for purchased simple goods[a].

Type of purchased simple good	Fraction (%)	
	Expenditure	Emissions
Various fabricated metal products	47.3%	62.1%
Plumbing fixtures, faucets, valves and other metal fittings	46.3%	29.0%
Plastic and rubber products	1.7%	2.1%
Wood products	3.4%	3.1%
Metallic minerals, dimensional stones and non-metallic minerals	0.7%	3.1%
Agricultural, pharmaceutical, industrial and commercial chemical products	0.3%	0.5%
Clothing and leather goods	0.1%	0.0%
Office supplies	0.1%	0.1%
Food products, beverages and tobacco	0.0%	0.1%

[a] Upstream activities related to fuels and energy are excluded.

Table 9: Fraction (%) of monetary expenditure and emissions for purchased services.

Type of purchased service	Fraction (%)	
	Expenditure	Emissions
Support services for construction activities	92.6%	96.1%
Professional and technical-scientific services	7.1%	3.7%
Rental and leasing of non-financial goods, equipment, vehicles and intangible assets	0.2%	0.1%
Computer programming and systems design services	0.1%	0.0%
Storage services in warehouses and distribution centres	0.1%	0.1%

Table 10: Fraction (%) of monetary expenditure and emissions for purchased capital goods.

Type of purchased capital good	Fraction (%)	
	Expenditure	Emissions
Machinery, excluding computers	93.6%	95.1%
Capacitors, resistors, coils, transformers, connectors and other	4.6%	3.7%
Devices and equipment for cutting tools and machine tool and rolling mills	0.5%	0.7%
Material handling equipment	0.1%	0.2%
Computers and related parts, conductors, measurement and communication devices	1.2%	0.3%
Accessories for cutting tools and machine tools, rolling mills and other	0.5%	0.7%

To ensure complete transparency and interpretation, **Figure 1** and **Figure 2** show the comparison of the emissions in accordance with the GHG Protocol for 2023, 2024 and 2025. In **Figure 1**, the emissions are aggregated at the Scope level, whereas **Figure 2** shows the subdivision for the Scope 3 categories (§ **Table 1**).

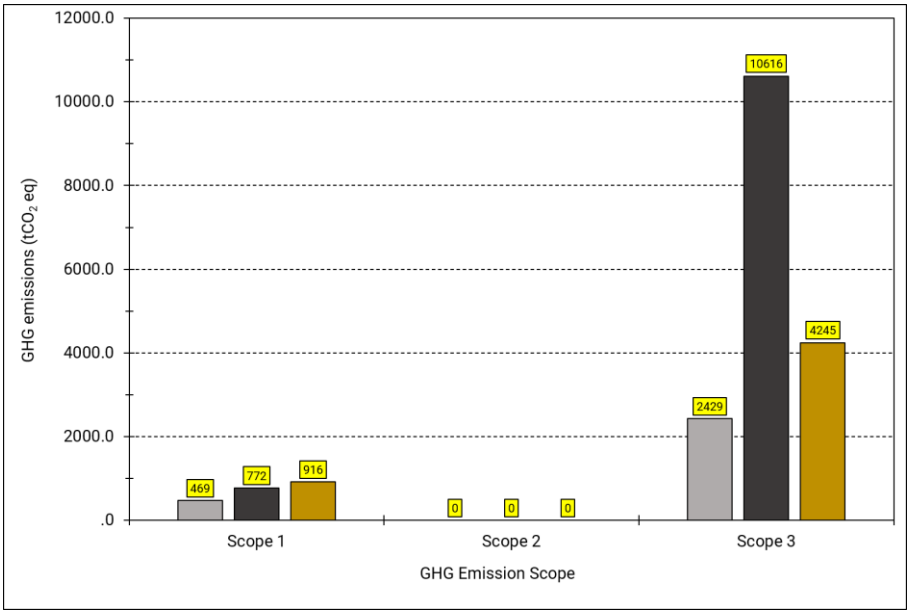

Figure 1: GHG emissions: comparison between 2023 (light grey), 2024 (dark grey) and 2025 (gold).

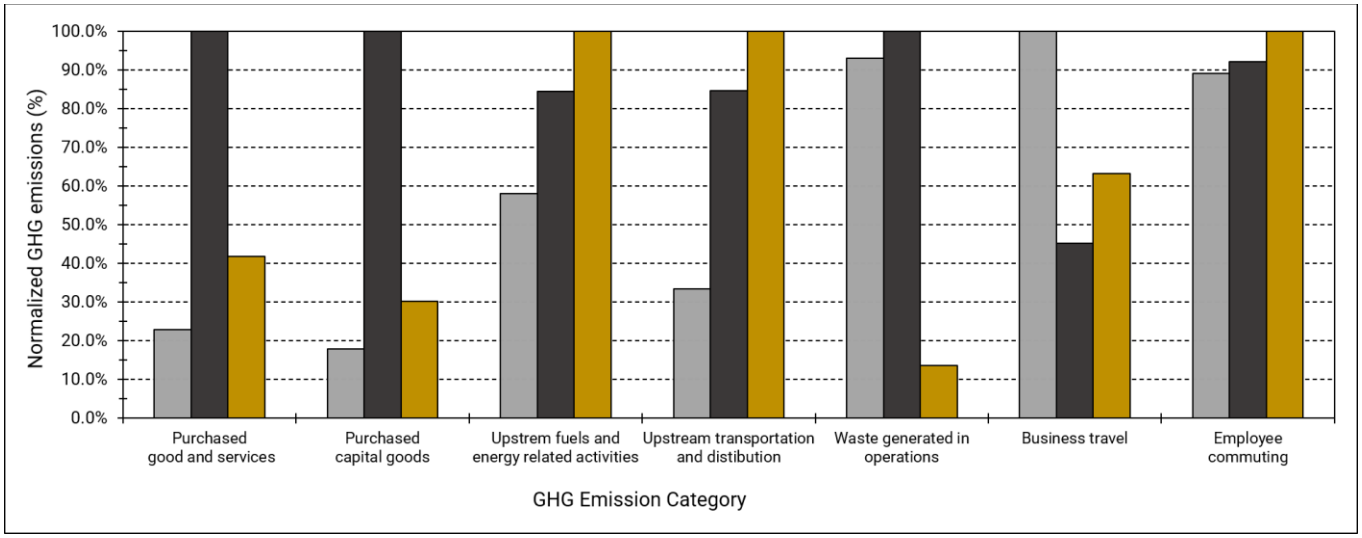

Figure 2: GHG emissions (Scope 3): comparison between 2023 (light grey), 2024 (dark grey) and 2025 (gold).

As shown in **Figure 2**, the year 2025 exhibits higher GWP values than the previous years for employee commuting and upstream transportation of both raw materials and fuels. However, GWP values remain lower than 2023 and 2024 for the most significant Scope 3 categories, namely purchased goods and services and capital goods. This indicates that, despite the increase observed in some minor categories, the **overall trend is mainly driven by the reduction in the categories contributing to the largest share of Scope 3 emissions**.

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5.2 Energy intensity and emissions intensity indicators

During the reporting period, the **total energy consumption** is equal to **777239 MJ** (215900 kWh), including the **purchased electricity**[12] (**653886 MJ**; 181635 kWh), **LPG for heating** the AM warehouse (**49912 MJ**; 585 m^3)[13], as well as **gasoline** (**1335 MJ**; 45 dm^3)[14] and **diesel fuel** (**72106 MJ**; 1945 dm^3)[15] for the Company vehicles. Compared to 2024, there is an increase in electricity consumption and LPG for heating, but a decrease in fuel use for the Company vehicles.

The **energy efficiency** is evaluated through the **energy intensity indicator**, computed as the ratio between the total energy consumption, expressed as **"primary energy"** in **tons of oil equivalent**[16] (toe), and the total monetary expenditure (€) for the purchase of goods, services and capital goods (most important categories in terms of emissions; upstream fuel and energy activities excluded).

For the 2025 reporting period, the energy intensity indicator is equal to **1.1×10^{-6} toe/€**, compared with **6.7×10^{-6} toe/€ in 2024 and 2.1×10^{-5} toe/€ in 2023**. This corresponds to a **decrease** of approximately **83.6% compared with 2024 and 94.8% compared with 2023**.

The trend therefore shows a **substantial improvement in energy intensity over the three-year period**, meaning that significantly less primary energy is consumed per euro spent on the relevant categories of goods, services and capital goods.

Similarly, the **emissions intensity indicator** is calculated as the ratio between total GHG emissions (Scope 1 + Scope 2 + Scope 3) and the total monetary expenditure (€) for the purchase of goods, services and capital goods.

For 2025, the emissions intensity is equal to **2.9×10^{-4} t CO_2eq/€**, compared with **2.6×10^{-4} t CO_2eq/€** in 2024 and **3.1×10^{-4} t CO_2eq/€** in 2023. The indicator therefore increased by approximately 11.5% compared with 2024, while remaining approximately 6.5% lower than in 2023.

The three-year trend shows an overall improvement compared with 2023, although emissions intensity increased moderately in 2025 compared with 2024. The 2024 value therefore represents the lowest emissions intensity over the three-year period.

The increase recorded in 2025 indicates that the **reduction in the relevant expenditure has been proportionally greater than the reduction in total GHG emissions**. As a result, the amount of GHG emissions associated with each euro spent has increased by approximately 11.5% compared with 2024. Nevertheless, emissions intensity remained approximately 6.5% below the 2023 level, confirming an overall improvement over the three-year period.

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12 Self-produced energy through the photovoltaic system is not included in the calculation as it is renewable, with an environmental impact equal to 0.0 kg CO_2/kWh for the use phase.

13 A lower heating value of LPG derived from literature and equal to 23.70 kWh/m^3 is applied.

14 A lower heating value of gasoline derived from literature and equal to 8.24 kWh/dm^3 is applied.

15 A lower heating value of diesel derived from literature and equal to 10.30 kWh/dm^3 is applied.

16 Ton of oil equivalent (toe) is a conventional unit of energy used to express and compare the energy content of different energy sources on a common basis. One toe corresponds to the amount of energy released by the complete combustion of one ton of crude oil. 1 toe = 41.87 GJ = 11.63 MWh.

6. Inventory quality management

6.1 GHG information management procedure

All information used in the preparation of the GHG Inventory Report is managed in line with the **general principles outlined in ISO 14064-1**, namely relevance, completeness, consistency, accuracy and transparency. Additionally, the Company's internal criteria for including or excluding specific categories and subcategories (§ 3.2 Emissions categories and selection criteria) are carefully applied. These procedures are designed to support the primary objective of the Inventory: ensuring the quality and reliability of the data. Errors and omissions are **systematically identified** and corrected to maintain consistency.

6.2 Document retention and record keeping

The Company follows a structured approach to ensure the effective collection and storage of all the data required for the Inventory. All the data are handled in full compliance with the Company's internal procedures for GHG information management, particularly those relating to document retention and record keeping. This ensures the **traceability, integrity and accessibility of information** essential for consistency, verification and long-term maintenance of the Inventory.

6.3 Uncertainty analysis

GHG Inventories are inherently subject to uncertainty, which can be broadly categorized into: (i) **scientific uncertainty** and (ii) **due to estimation**.

Scientific uncertainty is generally beyond the scope of Company-level inventory efforts, as it arises when the underlying processes driving emissions or removals are not fully understood.

Estimation uncertainty is subdivided as **model uncertainty** (i.e., linked to the choice and structure of mathematical equations/approaches) and **parameter uncertainty** (i.e., related to the quality and accuracy of input data). Parameter uncertainty is classified as **systematic** (biases due to faulty methods or equipment) or **statistical** (random errors due to natural variability in measurements). While systematic biases are harder to quantify, they can be identified and mitigated through robust data quality systems. Statistical uncertainty, on the other hand, can be measured through repeated sampling or analysis of empirical data.

For this GHG Report, the statistical parameter uncertainty is estimated using the **GHG Protocol uncertainty tool**[17]. The tool is based on the so-called "first order error propagation method", which allows to mathematically combine the uncertainties associated with individual parameters (such as activity data and emission factors) in order to obtain an aggregated uncertainty value for the overall Inventory. The method is based on the following assumptions:

- Errors in each parameter are normally distributed (i.e., Gaussian distribution).
- There are no biases in the estimator function (i.e., the estimated value is the mean value).
- The estimated parameters are not correlated (i.e., the parameters are fully independent).

[17] https://ghgprotocol.org/sites/default/files/tools/ghg-uncertainty.xlsx

- Individual uncertainties in each parameter is lower that 60% of the mean.

In the tool, the uncertainty is calculated for both **direct and indirect (i.e., estimated) measured emissions**. Then, the tool provides an aggregated uncertainty value for the total of all the direct and indirect measured emissions, ranking it according to a summary scale based on quantitative confidence intervals, which represents the range of variability within which the real value of emissions is expected to exist. Finally, the level of accuracy of the results (emissions) is determined as follows (**Table 11**):

Table 11: Level of accuracy of the results.

Level of accuracy	Interval (I) as percentage of mean value
High	-5.0% ≤ I ≤ +5.0%
Good	±5.0% < I ≤ ±15.0%
Fair	±15.0% < I ≤ ±30.0%
Poor	I > 30.0%

For the current Inventory, all the emissions are estimated. The uncertainty is computed according to:

- Activity data (e.g., quantity of fuel used).
- Uncertainty of the activity data (confidence interval, expressed as percentage).
- Emission factor values.
- Uncertainty of the emissions factor values (confidence interval, expressed as percentage).

Overall, the uncertainty value is equal to **± 5.8% (level of accuracy: good)**. This indicates **good quality of the data** used and demonstrates that the emissions estimation process is carried out with **methodological rigor**. For the estimated total emissions of **5161.4 t CO_2e**, this uncertainty corresponds to a **tolerance of approximately ±300 t CO_2eq.** Moreover, this level of accuracy provides a reliable basis for the Inventory, making it suitable for sustainability reporting, transparent communication with the stakeholders and the development of decarbonization strategies based on trustworthy data. Further information on input data and emission factors can be found in **Annex A1**.

7. Mitigation activities

No mitigation activities are actually put in place; purchasing of verified carbon credits from certified offset projects or supporting low-carbon technologies or partnerships that contribute to global emission reductions might be considered in the future.

8. Variations in the methodological approach

Any integrations or improvements to the current version of the model may be introduced for the following years, also according to any change in the reporting boundaries (§ 3. Reporting boundaries).

9. Additional information

There is no additional information to declare.

10. Annexes

10.1 A1: Uncertainty analysis

Table A1.1 shows the data used to estimate the uncertainty for the indirect measured emissions.

Table A1.1: Data used to estimate the uncertainty.

	Activity Data	Unit used to measure Activity Data	Uncertainty of activity data (a) (Confidence interval expressed in ± percent)	GHG emission factor	Unit of GHG emission factor	Uncertainty of emission factor (Confidence interval expressed in ± percent)	CO_2 emissions in metric tonnes	Uncertainty of calculated emissions	Certainty Ranking	Auxiliary Variable 1	Auxiliary Variable 2
Source description											
S C 1.1: Stationary combustion	585000.0	dm^3	+/- 0.0%	1.5570	kg CO2eq/dm^3	+/- 5.0%	910.8	+/- 5.0%	High	45.5	2074.1
S C 1.2: Mobile combustion	19677.0	km	+/- 0.0%	0.3893	kg CO2eq/km	+/- 5.0%	7.7	+/- 5.0%	High	0.4	0.1
S C 1.2: Mobile combustion	630.0	km	+/- 0.0%	0.2433	kg CO2eq/km	+/- 5.0%	0.2	+/- 5.0%	High	0.0	0.0
S C 1.2: Mobile combustion	9981.0	km	+/- 0.0%	0.2803	kg CO2eq/km	+/- 5.0%	2.8	+/- 5.0%	High	0.1	0.0
S C 2.1: Imported electricity	181639.7	kWh	+/- 0.0%	0.0000	kg CO2eq/kWh	+/- 0.0%	0.0	+/- 0.0%	High	0.0	0.0
SC 3.1: Upstream transportation and distribution	60.0	€	+/- 0.0%	0.0264	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.1: Upstream transportation and distribution	70.0	€	+/- 0.0%	0.0102	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.1: Upstream transportation and distribution	23109.0	€	+/- 0.0%	0.0264	kg CO2eq/€	+/- 15.0%	0.6	+/- 15.0%	Good	0.1	0.0
SC 3.1: Upstream transportation and distribution	32.0	€	+/- 0.0%	0.1261	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.1: Upstream transportation and distribution	1072.0	€	+/- 0.0%	0.0142	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.1: Upstream transportation and distribution	293442.0	€	+/- 0.0%	0.0448	kg CO2eq/€	+/- 15.0%	13.1	+/- 15.0%	Good	2.0	3.9
SC 3.1: Upstream transportation and distribution	59.0	€	+/- 0.0%	0.0122	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.1: Upstream transportation and distribution	1555.0	€	+/- 0.0%	0.0000	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.1: Upstream transportation and distribution	1745.0	€	+/- 0.0%	0.0000	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.1: Upstream transportation and distribution	10526.0	€	+/- 0.0%	0.0000	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.1: Upstream transportation and distribution	268.0	€	+/- 0.0%	0.0000	kg CO2eq/€	+/- 15.0%	0.0	+/- 15.0%	Good	0.0	0.0
SC 3.3: Employee commuting	475160.4	km	+/- 15.0%	0.1666	kg CO2eq/km	+/- 5.0%	79.2	+/- 15.8%	Fair	12.5	156.7
SC 3.5: Business travels	5686.8	km	+/- 10.0%	0.1725	kg CO2eq/km	+/- 5.0%	1.0	+/- 11.2%	Good	0.1	0.0
SC 3.5: Business travels	4687.8	km	+/- 10.0%	0.2081	kg CO2eq/km	+/- 5.0%	1.0	+/- 11.2%	Good	0.1	0.0
SC 3.5: Business travels	43867.8	km	+/- 10.0%	0.1097	kg CO2eq/km	+/- 5.0%	4.8	+/- 11.2%	Good	0.5	0.3
SC 3.5: Business travels	158095.1	km	+/- 10.0%	0.1542	kg CO2eq/km	+/- 5.0%	24.4	+/- 11.2%	Good	2.7	7.4
SC 3.5: Business travels	1406.0	km	+/- 10.0%	0.1610	kg CO2eq/km	+/- 5.0%	0.2	+/- 11.2%	Good	0.0	0.0
SC 3.5: Business travels	2.0	room x night	+/- 10.0%	12.2000	kg CO2e/room x night	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	6.0	room x night	+/- 10.0%	8.7000	kg CO2e/room x night	+/- 15.0%	0.1	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	11.0	room x night	+/- 10.0%	53.5000	kg CO2e/room x night	+/- 15.0%	0.6	+/- 18.0%	Fair	0.1	0.0
SC 3.5: Business travels	3.0	room x night	+/- 10.0%	13.2000	kg CO2e/room x night	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	26.0	room x night	+/- 10.0%	63.8000	kg CO2e/room x night	+/- 15.0%	1.7	+/- 18.0%	Fair	0.3	0.1
SC 3.5: Business travels	2.0	room x night	+/- 10.0%	6.7000	kg CO2e/room x night	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	13.0	room x night	+/- 10.0%	13.2000	kg CO2e/room x night	+/- 15.0%	0.2	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	12.0	room x night	+/- 10.0%	0.0000	kg CO2e/room x night	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	10.0	room x night	+/- 10.0%	14.3000	kg CO2e/room x night	+/- 15.0%	0.1	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	18.0	room x night	+/- 10.0%	0.0000	kg CO2e/room x night	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	4.0	room x night	+/- 10.0%	0.0000	kg CO2e/room x night	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	10.0	room x night	+/- 10.0%	10.4000	kg CO2e/room x night	+/- 15.0%	0.1	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	7.0	room x night	+/- 10.0%	24.5000	kg CO2e/room x night	+/- 15.0%	0.2	+/- 18.0%	Fair	0.0	0.0
SC 3.5: Business travels	4.0	room x night	+/- 10.0%	16.1000	kg CO2e/room x night	+/- 15.0%	0.1	+/- 18.0%	Fair	0.0	0.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	181639.7	kWh	+/- 0.0%	0.0499	kg CO2eq/kWh	+/- 10.0%	9.1	+/- 10.0%	Good	0.9	0.8
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	585000.0	dm^3	+/- 0.0%	0.1855	kg CO2eq/dm^3	+/- 10.0%	108.5	+/- 10.0%	Good	10.9	117.8
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	9755.1	€	+/- 0.0%	0.2238	kg CO2eq/€	+/- 15.0%	2.2	+/- 15.0%	Good	0.3	0.1
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	4656545.2	€	+/- 0.0%	0.3184	kg CO2eq/€	+/- 15.0%	1482.6	+/- 15.0%	Good	222.4	49457.7
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	168328.4	€	+/- 0.0%	0.2940	kg CO2eq/€	+/- 15.0%	49.5	+/- 15.0%	Good	7.4	55.1
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	27528.3	€	+/- 0.0%	0.4201	kg CO2eq/€	+/- 15.0%	11.6	+/- 15.0%	Good	1.7	3.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	4559407.6	€	+/- 0.0%	0.1516	kg CO2eq/€	+/- 15.0%	691.1	+/- 15.0%	Good	103.7	10745.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	71196.0	€	+/- 0.0%	1.0427	kg CO2eq/€	+/- 15.0%	74.2	+/- 15.0%	Good	11.1	124.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	335260.9	€	+/- 0.0%	0.2187	kg CO2eq/€	+/- 15.0%	73.3	+/- 15.0%	Good	11.0	121.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	8273.4	€	+/- 0.0%	0.0529	kg CO2eq/€	+/- 15.0%	0.4	+/- 15.0%	Good	0.1	0.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	3285.0	€	+/- 0.0%	0.7141	kg CO2eq/€	+/- 15.0%	2.3	+/- 15.0%	Good	0.4	0.1
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	189576.5	€	+/- 0.0%	0.1363	kg CO2eq/€	+/- 15.0%	25.8	+/- 15.0%	Good	3.9	15.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	2465178.2	€	+/- 0.0%	0.2736	kg CO2eq/€	+/- 15.0%	674.6	+/- 15.0%	Good	101.2	10238.1
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	1648.1	€	+/- 0.0%	0.0610	kg CO2eq/€	+/- 15.0%	0.1	+/- 15.0%	Good	0.0	0.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	4403.2	€	+/- 0.0%	0.0875	kg CO2eq/€	+/- 15.0%	0.4	+/- 15.0%	Good	0.1	0.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	1900.6	€	+/- 0.0%	0.4354	kg CO2eq/€	+/- 15.0%	0.8	+/- 15.0%	Good	0.1	0.0
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	4732503.2	€	+/- 0.0%	0.1831	kg CO2eq/€	+/- 15.0%	866.5	+/- 15.0%	Good	130.0	16894.5
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	232891.3	€	+/- 0.0%	0.1465	kg CO2eq/€	+/- 15.0%	34.1	+/- 15.0%	Good	5.1	26.2
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	6243.5	€	+/- 0.0%	0.2706	kg CO2eq/€	+/- 15.0%	1.7	+/- 15.0%	Good	0.3	0.1
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	59913.0	€	+/- 0.0%	0.0397	kg CO2eq/€	+/- 15.0%	2.4	+/- 15.0%	Good	0.4	0.1
SC 4.1, 4.2 and 4.3: Purchased goods and services and capital goods	25499.7	€	+/- 0.0%	0.2452	kg CO2eq/€	+/- 15.0%	6.3	+/- 15.0%	Good	0.9	0.9
SC 4.4: Disposal of solid and liquid waste	0.31	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.01	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	1.40	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.18	t	+/- 10.0%	0.2010	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.04	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.78	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.56	t	+/- 10.0%	0.2010	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.01	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	1.72	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	1.21	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	39.77	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.10	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.04	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.32	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	1.90	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.11	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	3.32	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.90	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.10	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.01	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.00	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	2.13	t	+/- 10.0%	0.2010	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.13	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	20.86	t	+/- 10.0%	0.0000	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.25	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0
SC 4.4: Disposal of solid and liquid waste	0.12	t	+/- 10.0%	21.2808	kg CO2eq/t	+/- 15.0%	0.0	+/- 18.0%	Fair	0.0	0.0