

# ESG Data Basis of Preparation

Halma plc | Sustainability Reporting Suite 2025

Halma

**Halma plc ESG Environmental Data**  
**Basis of Preparation – year ended 31 March 2025**

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## 1. Introduction and background

This document sets out key reporting criteria for Halma's Greenhouse Gas (GHG) emissions, energy use, water, and waste-related data, as published in our Annual Report & Accounts and supplementary publications for the twelve months ended 31 March 2025 (2025), the comparative year ended 31 March 2024 (2024) and the base year for our Scope 1 & 2 targets ended 31 March 2020 (2020). This document also outlines the methodologies and assumptions taken into consideration for these disclosures.

As a quoted company incorporated in the UK, we comply with all mandatory energy and carbon reporting regulations. We have reported on all the emission sources required under the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018.

We have used the GHG Protocol Corporate Accounting and Reporting Standard (revised edition) ('GHG Protocol') and the Environmental Reporting Guidelines (March 2019) including streamlined energy and carbon reporting guidance published by the UK's Department for Business, Energy & Industrial Strategy (BEIS) to calculate and disclose our Scope 1 & 2 emissions.

Our Annual Report and Accounts can be found at [www.halma.com](http://www.halma.com).

## 2. Greenhouse gas (GHG) reporting

### a. Boundary and Scope Assessment

#### (i) Organisational boundary:

We have employed the GHG Protocol Corporate Accounting and Reporting Standard's operational control approach to define our carbon footprint boundary; included within that boundary are Scope 1, 2 and 3 emissions from manufacturing sites and offices which we own and/or operate. Where an activity falls under our operational control, we report 100% of the associated emissions. Excluded from our footprint boundary are emissions from manufacturing sites and offices which we do not own and/or operate and emissions considered de minimis by the business. Emissions from businesses in which we have non-controlling equity stakes are not included within our reported figures.

#### (ii) Operational boundary:

We have reported on all relevant Scope 1, 2 and 3 emissions sources. Relevant emissions sources include:

#### Scope 1:

- Onsite Fuel Consumption (including natural gas, oil, propane/LPG, diesel)
- Business Travel in company owned/controlled vehicles
- Refrigerants

#### Scope 2:

- Purchased electricity used within facilities that we own and/or operate

#### Scope 3:

- Category 1: Purchased goods and services (estimated)
- Category 2: Capital goods (estimated)

- Category 3: Fuel and energy rel. activities not in S1-S2 (annually calculated)
- Category 4: Upstream transportation and distribution (incorp. into Category 1)
- Category 5: Waste generated in operations (annually calculated)
- Category 6: Business travel (annually calculated)
- Category 7: Employee commuting (estimated)
- Category 11: Use of sold products (estimated)
- Category 12: End of life treatment of sold products (estimated)

See Appendix A & B for a summary of reported categories, boundaries, and assumptions.

## b. Emission factors

In line with the GHG Protocol, our Scope 1 & 2 GHG emissions have been calculated in tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) using the latest, most relevant emission conversion factors according to the countries in which we operate. 'Total GHG' direct emission factors are used. These include the global warming potential of carbon dioxide, methane and nitrous oxides.

We use the latest available emissions factors. Where updated factors are not available, the most recent year factor is utilised.

### (i) Scope 1:

Emission factors for global Scope 1 emissions were sourced from the Department for Environment, Food & Rural Affairs (Defra) - UK Government GHG Emission Conversion Factors for Company Reporting.

### (ii) Scope 2:

For Scope 2 location-based calculations, we applied the International Energy Agency (IEA) Emissions Factors.

For Scope 2 market-based calculations, we applied a zero-emissions factor to electricity supply/tariffs where Energy Attribute Certificates (EACs) or alternative acceptable sources were available to confirm the exclusivity and traceability of the green electricity we procure. For all other supply/tariffs, including those with a proportion of renewable electricity that are not backed by EACs, we apply residual emission factors where available from the Reliable Disclosure Organization (RE-DISS), and location-based emissions factors where residual factors are not available.

For both location-based and market-based calculations, we exclude renewable electricity generated on-site from our calculations.

### (iii) Scope 3:

Emission factors for Scope 3 annually calculated categories are sourced from Defra and the IEA. Emissions factor for air travel includes radiative forcing. Scope 3 supply chain emissions estimates utilise EORA global supply chain database, while Scope 3 emissions in use estimates utilise IEA factors. For further Scope 3 details, see Appendix A & B.

## c. Data collection, estimations & assumptions

### (i) Scope 1, 2 and annually calculated Scope 3 categories

Data is collected from third-party sources such as energy invoices as well as internal sources such as employee expense systems and travel systems. All data is collected and submitted at the company-level; utilising guidance provided by the Group. For Scope 1, 2 and annually calculated Scope 3 categories, the guidance requires that companies use pro-rata estimates or accruals where actual energy or usage data is not available by the reporting date (for example where invoices or landlord recharges for the period covered have not yet been received). In addition, in some cases companies may need to estimate the split between mileage in company-owned and employee-owned cars where systems do not currently exist to track this data separately, or apply additional conversions for energy and other data between source units and final units utilised in applying emissions factors.

Companies are required to ensure availability of Renewable Energy Guarantees of Origin (REGO) or similar local Energy Attribute Certificates (EACs) for purchased renewable electricity and gas. Where companies are unable to obtain these certificates, other utility provider confirmation may be accepted.

Acquisitions made during the year are required to submit a full year of data (aligned with Halma's reporting period). Due to time sensitivity, data from acquisitions in Q4 of a financial year are not included until the following year.

#### (ii) Scope 3 estimated categories

We faced significant difficulties and data limitations, due to our decentralised business model, when estimating our 2020 Scope 3 emissions from the bottom up. Therefore, we believe that to re-model Scope 3 emissions on the same bottom-up basis annually would require undue cost and effort for limited useful additional information provided for our stakeholders.

As a result, during 2025 we replicated the prior year methodology to produce a high-level annual estimate of Scope 3 emissions. This methodology does not have the same degree of granularity as our bottom-up 2020 estimate, but continues to improve over time, and we expect to perform periodic fuller bottom-up modelling of emissions. Key estimates and assumptions, data sources and exclusions for all relevant categories are included in Appendix A and B.

#### d. Base year recalculations and adjustments

##### (i) Acquisitions and disposals:

Our Scope 1 & 2 (market-based) GHG emissions for the year ended 31 March 2020 form the baseline for our Scope 1 & 2, which is aligned with guidance from the Science-based target Initiative. Given the acquisitive nature of Halma, we assess the significance of the effect of current year acquisitions to our 2020 baseline Scope 1 & 2 emissions and apply a 5% threshold for restatement. This means, if the current year acquisitions result in either total Scope 1 or Scope 2 emissions moving by 5% or more, then we restate both our 2020 baseline and our prior year comparative figures to include/exclude these acquired/disposed companies. This 5% threshold constitutes a structural change trigger.

We do not recalculate annually calculated Scope 3 emissions for acquisitions and disposals. We include the impact of acquisitions and disposals for our two major Scope

3 categories, Categories 1 & 4 and Category 11 (together 96% of total emissions) in the first full year after acquisition.

(ii) Corrections and adjustments:

The measuring and reporting of carbon emissions data inevitably involves a degree of estimation. Where estimates are updated or improved to reflect new, more reliable, or more accurate information or assumptions, this may be reflected in the baseline and/or previous reporting years to ensure accuracy of comparative reporting. Baseline and/or previous reporting years may also be adjusted to include new emission sources that have been identified in the current year, in particular within Scope 3 data. In some circumstances, restatements of Scope 1 & 2 prior year reported emissions may be required, where omissions or misstatements from a failure to use (or misuse of) information that was available when the information was being compiled and that could reasonably have been expected to have been taken into account.

We apply a 5% threshold for error adjustments for Scope 1 & 2. We do not recalculate Scope 3 annually calculated emissions for errors. Other estimated categories of Scope 3 emissions may be recalculated where possible to reflect improving data, better methodologies, and errors where relevant.

e. Energy productivity (EP)

EP is revenue (at constant currency) divided by energy consumed, resulting in a “revenue per kWh of energy consumed” figure.

Due to the inclusion of this metric in remuneration, it is calculated on a different basis to Scope 1 & 2 emissions and renewable electricity percentage. Revenue is calculated at the currency exchange rate of the baseline year (2022), and both revenue and energy are adjusted to exclude all acquisitions since the beginning of the baseline year.

The components of “energy consumed” are electricity and gas used (both renewable and non-renewable) and all other fuels used in operations.

Exclusions include fuel used for business travel, any electricity used for charging electric vehicles and Scope 3 energy usage.

### 3. Water and waste data

Halma plc voluntarily discloses water and waste data to help meet the needs of various stakeholders.

Total figures are based on available source data and estimated if appropriate where source data is not available. In particular, both actual and estimated data at the company-level is limited for all types of solid and liquid waste, and therefore the figures shown are likely to be under-estimated.

a. Data collection, estimations and assumptions

All data is collected and submitted at the company-level by utilising guidance provided by the Group. Third-party sources such as water and waste management invoices are utilised where possible, but in many cases this data is not available and reasonable estimates are applied (such as landlord-provided recharges of water withdrawals per square foot of leased space, estimates of tonnage of waste based on numbers of skips/bins collected, or estimates utilising average waste production and water withdrawal per employee across the Group).

Water discharge disclosed is estimated at 95% of water withdrawal rather than based on actual data. The 95% figure is based on actual water withdrawal data collected in 2021 and 2022.

## Appendix A: Scope 3 bottom-up estimated 2020 figures and annually calculated categories - methodology, scope, exclusions

While we no longer disclose our 2020 Scope 3 figures, the methodology is included here as 2020 figures continue to be used to scale emissions to 2024 and 2025 for certain operating companies, as set out in Appendix B.

C.	Methodology	Scope/Exclusions	Current calculation frequency
1	<p><b>Purchased goods and services (incl. Upstream transportation and distribution)</b>            In scope are all emissions generated upstream of Halma’s operations associated with the extraction, production and transportation of goods and services purchased and acquired during the reporting year. This includes both goods for resale and not for resale. Halma uses the Environmentally Extended Input Output (EEIO) modelling method to estimate the emissions associated with goods and services. Supplier spend was collated for each of the Halma operating companies, using the average foreign exchange rate for the year. Judgement was applied to allocate appropriate industries to individual suppliers. Location and industry specific emissions factors (kgCO<sub>2</sub>e per GBP) were then applied to spend using the Eora MRIO database for tier 1 and tier 2+ associated emissions. Where it was not possible to allocate a SIC (industry) code, an industry average emissions factor was applied.</p>	All spend relating to other scopes or categories of Scope 3 have been excluded e.g. electricity and utilities supply. Pure financial transactions, such as taxes and depreciation, are also excluded from the spend ledger.	Estimated for 2020 (detailed estimate), updated for 2025 (see Appendix B)
2	<p><b>Capital goods</b>            Capital goods are the physical assets used by the business to carry out its operational activities usually purchased with the intention to generate value and/or save cost. These goods sit within all of the fixed asset classes – land and buildings, leasehold improvements, fixtures and fittings, vehicles, and computer equipment.            Halma’s capital goods emissions are calculated using the EEIO modelling method, in the same way as category one but using separate Capex input data.</p>	None	Estimated for 2020 (detailed estimate), updated for 2025 (see Appendix B)
3	<p><b>Fuel and energy related activities not included in Scope 1 or 2</b>            Emissions related to the extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in Scope 1 or Scope 2. Includes manufacturing sites and offices that Halma has financial control over across its portfolio. This includes transmission and distribution (T&amp;D) of purchased electricity and well-to-tank (WTT) of purchased electricity and purchased fuels.</p>	None	Annually
4	<p><b>Upstream transportation and distribution</b>            Transportation and distribution of products purchased by the reporting company in the reporting</p>	None - incorporated into Category 1: purchased goods and services.	Estimated for 2020 (detailed

	year between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company), and any transportation of goods to end customers by third parties paid for by Halma. Due to the nature of data available it is not possible to reliably separate out emissions associated with the transportation and distribution of goods covering rail, road, and sea transport. This is incorporated into Category 1 and includes all transport that Halma pays for and any third-party warehousing and storage.		estimate), updated for 2025 (see Appendix B)
5	<p><b>Waste generated in operations</b> Disposal and treatment of waste generated in the reporting company's operations in the reporting year (in facilities not owned or controlled by the reporting company).</p> <p>Waste generated from Halma's operations are calculated based on waste data from all countries of the company's operations (tonnage), including their respective waste disposal methods used. For all countries, the waste tonnage is then multiplied by the appropriate UK Government GHG Conversion Factors for company reporting to calculate emissions.</p>	None	Annually
6	<p><b>Business travel</b> Employee travel for business-related activities during the reporting year (in vehicles not owned or operated by the reporting company). Emission factors from the UK Government GHG Conversion Factors for company reporting are applied to the distance travelled or the fuel consumption reported (by transport type), in order to calculate the total emissions. diesel average emissions factor. Air travel uses average passenger long haul emissions factor and includes radiative forcing. Electricity used in electric vehicles charged on Halma premises is not captured separately, but rather included in Scope 2 emissions.</p>	Travel outside of travel and expense management system e.g. sundry journeys by taxi, train and metro and underground systems etc. have been excluded on the basis of materiality and that at present, data collection for these transport types is impractical.	Annually
7	<p><b>Employee commute</b> Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company). Emissions from commuting of employees to and from Halma's worksites was estimated using a process-based method, based on an estimate of commuting distances per average full-time and part-time headcount for the working year and applying Defra UK Travel factors to total distance travelled in km. Transport mode split applied was 80% car, 10% walking/bike, 10% public transport.</p>	None	Estimated for 2020 (high level screening estimate), updated for 2025 (see Appendix B)
8	<p><b>Upstream leased assets</b> Operation of assets leased by the reporting company (lessee) in the reporting year and not included in Scope 1 and scope 2 –reported by lessee. This category is determined not relevant by Halma.</p>	N/A - All assets leased by Halma are already included in Scope 1 and 2 reporting	N/A
9	<p><b>Downstream transport and distribution</b> Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end</p>	N/A - Halma does not currently have any visibility over proportion of product transportation	N/A

	consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company).	that customers are responsible for.	
10	<p><b>Processing of sold products</b></p> <p>Processing of intermediate products sold in the reporting year by downstream companies (e.g., manufacturers). This category is determined not relevant by Halma.</p>	N/A - To the best of our knowledge, no Halma product undergoes further processing by a downstream customer. Halma companies sell finished products to their customers.	N/A
11	<p><b>Use of sold products</b></p> <p>End use of goods and services sold by the reporting company in the reporting year. This is relevant for many of Halma's products and involves energy consumption from specific product ranges.</p> <p>While all products within Halma's portfolio are in scope, Halma owns more than 45 companies from different sectors where each company often produces a wide range of products. Since assessment of every single product is not feasible, a dual methodology was employed.</p> <p>For a number of companies, company specific bottom-up calculations were completed for all in-scope products (those with use-phase emissions) across product portfolio. Power rating, usage assumptions and lifetime were estimated, and mapped to unit sales of products or product groupings. DEFRA emissions factors for company reporting and IEA emissions factors were used to calculate emissions, using a global average for all companies with the exception of our two largest contributors, where more specific geographic end market emissions factors were applied.</p> <p>Emissions factors include generation T&amp;D, WTT and WTT T&amp;D.</p> <p>Bespoke emissions factors (tCO<sub>2</sub>e/£ revenue) were then developed for each of the companies where a full bottom-up mapping was completed.</p> <p>For the remaining companies where no bottom-up calculations were developed, the bespoke emissions factor from a similar company was applied to their revenue.</p>	Companies which sell only products that contribute towards indirect emissions (products using disposable batteries, pure contract manufacturing) are excluded from the calculation, as are companies that sell only software (currently considered an immaterial contribution).	Estimated for 2020 (detailed estimate), updated for 2025 (see Appendix B)
12	<p><b>End of life treatment</b></p> <p>Waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life.</p> <p>Halma owns more than 45 companies from different sectors where each company often produces a wide range of products. Since assessment of all products is not feasible, top selling products from a small number</p>	None	Estimated for 2020 (high-level screening estimate), updated for 2025 (see Appendix B)

	<p>of individual companies were assessed and their end-of-life emissions estimated by applying the relevant waste disposal Defra factor (e.g. closed-loop, combustion, landfill). Total emissions were calculated by multiplying based on total volume sold. These assessments provided a weighted average proxy end-of-life emissions factor per £ revenue which was applied to total Halma revenue.</p>		
13	<p><b>Downstream leased assets</b>  Operation of franchises  Operation of investment  Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not included in Scope 1 and Scope 2 – reported by lessor.</p> <p>This category is determined not relevant by Halma, given the immateriality of any downstream leases to the Group.</p>	N/A	N/A
14	<p><b>Franchises</b>  Operation of franchises in the reporting year, not included in scope 1 and scope 2 – reported by franchisor.</p> <p>This category is determined not relevant, as Halma does not operate a franchise model. All operating companies are included within Halma Group’s Scope 1 &amp; 2 emissions reporting.</p>	N/A	N/A
15	<p><b>Investments</b>  Operation of investments (including equity and debt investments and project finance) in the reporting year, not included in scope 1 or scope 2.</p> <p>This category is determined not relevant by Halma, as Halma does not currently have any significant equity or debt investments, project finance or joint ventures.</p>	N/A	N/A

## Appendix B: Scope 3 estimated categories 2025 - methodology

This Appendix contains additional details of our 2025 methodology for those Scope 3 categories which are both relevant and not annually calculated (categories 1, 2, 4, 7, 11 & 12).

Please see Appendix A for:

- details of all categories not deemed relevant for Halma (categories 8-10, 13-15)
- details of methodologies for annually calculated categories (categories 3-6)
- The full description of our methodology for our detailed, bottom-up 2020 estimates for categories 1, 2, 4, 7, 11 & 12, including a description of emissions within all category and scope/exclusions.

C.	<b>Methodology for updating 2025 estimate</b>
1 & 4	<p data-bbox="264 719 1390 754"><b>Purchased goods and services (including upstream transportation and distribution)</b></p> <p data-bbox="264 786 1390 981">We created an updated estimate of this category for 2025 by combining:</p> <ul data-bbox="312 819 1390 981" style="list-style-type: none"> <li>• a more granular modelling approach to a limited data set from several of our operating companies who have engaged with creating Scope 3 decarbonisation plans during 2024 and 2025</li> <li>• a high-level scaling of our 2024 emissions (based on a high-level scaling of 2020 emissions in the prior year) for the remaining operating companies</li> </ul> <p data-bbox="264 1012 1390 1077">The more granular approach continues to be largely aligned with the GHG protocol as per the 2020 estimates, whereas the high-level scaling is not GHG protocol aligned.</p> <p data-bbox="264 1108 1390 1368">The granular approach included applying updated spend-based emissions factors to the top 20 suppliers of these companies (location and industry specific emissions factors (kgCO<sub>2e</sub> per GBP) from the Eora MRIO database for tier 1 and tier 2+ associated emissions). The implied updated average emissions factor for the top 20 suppliers was then scaled to the remaining spend for each of these companies. Two of our operating companies also transitioned to using more accurate weight-based estimation methods. The emissions from companies with more granular modelling methods comprised approximately 36% of our estimated 2025 footprint for category 1 &amp; 4.</p> <p data-bbox="264 1400 1390 1594">The approach for the remaining companies involved scaling 2024 emissions by the growth in currency and inflation-adjusted operating costs (excluding people and other non-category 1 &amp; 4 related spend) over the period. We believe that scaling from 2024 provides us with more accurate estimations for the remaining companies than extrapolating from the limited number of companies with more granular data described above, given the significant diversity within our operating companies.</p> <p data-bbox="264 1626 1390 1821">Stand-alone acquisitions in 2023 and, 2024 (not previously included in 2020 or 2024 reported figures) were included in the 2025 estimation and the 2024 comparatives. This was done by applying high level 2024 estimates (using average emissions from a similar company in the existing portfolio) to these acquisitions and then scaling to 2025. For practical reasons, acquisitions are included in our figures in the first full year after acquisition.</p> <p data-bbox="264 1852 1390 1946">As a result of the data improvements and expansion of more granular estimation methods described above, as well as the impact of acquisitions and disposals, 2024 comparatives have been re-presented.</p>

	Key judgements and estimation uncertainty include: inflation rates used (high-level scaling); allocation of appropriate industries to individual suppliers & scaling based on average of top 20 suppliers (granular modelling).
2	<b>Capital goods</b> Given the relatively small size (both absolute and compared to our most significant categories 1 & 4, and 12), a simple methodology was applied to scale the 2024 estimate by inflation-adjusted capex, as in the prior year (scaled from 2020).
7	<b>Employee commute</b> Given the relatively small size (both absolute and compared to our most significant categories 1 & 4, and 12), a simple methodology was applied to scale the 2024 estimate based on increase in global staff numbers, with an adjustment made to reflect the change in Defra emissions factors for transport methods, as in the prior year (scaled from 2020).
11	<p><b>Use of sold products</b></p> <p>We created an updated estimate of this category for 2025 by combining:</p> <ul style="list-style-type: none"> <li>• a more granular modelling approach to a limited data set from several of our operating companies who have engaged with creating Scope 3 decarbonisation plans during 2024 and 2025</li> <li>• a high-level scaling of our 2024 emissions (based on a high-level scaling of 2020 emissions in the prior year) for the remaining operating companies</li> </ul> <p>The granular approach included applying updated electricity grid emissions factors (sourced from IEA, including generation T&amp;D, WTT and WTT T&amp;D), on a regional basis where available, to energy used by key product categories. Assumptions around power draw, utilisation and lifetime were held constant from 2020, however improved data based on regional product volumes or more granular/increased product data was used where available. Emissions were scaled from available product categories to total electromechanical products for each company (where granular data for all product categories was not available). The granular modelling comprised approximately 82% of our estimated 2025 footprint for category 12.</p> <p>The approach for the remaining companies involved scaling 2024 estimated emissions by constant currency growth in revenue, adjusted for internal estimates of price increases, over the period. Stand-alone acquisitions in 2023 and 2024 (not previously included in 2020 or 2024 reported figures) were included in the 2025 estimation and the 2024 comparatives. This was done by applying high level 2024 estimates (using average emissions from a similar company in the existing portfolio) to these acquisitions and then scaling to 2025. For practical reasons, acquisitions are included in our figures in the first full year after acquisition.</p> <p>As a result of the data improvements and expansion of more granular estimation methods described above, as well as the impact of acquisitions and disposals, 2024 comparatives have been re-presented.</p> <p>Key judgements and estimation uncertainty include: price increase rates used (high-level scaling); power rating, usage assumptions, lifetime &amp; regional sales splits (granular modelling).</p>
12	<b>End of life treatment</b> Given the relatively small size (both absolute and compared to our most significant categories 1 & 4, and 12), a simple methodology was applied to scale the 2024 estimate by currency and inflation adjusted revenue, as in the prior year (scaled from 2020).