



ISM

University of
Management
and Economics

GHG Report of ISM 2024-2025

1,589.19 tCO₂e

* Total GHG emissions are presented including Scope 2 calculations using the location-based method.
** Calculations were performed based on data provided by ISM.

GHG inventory areas

01

Scope 1 – Direct emissions

- Transport and mobile fuel-using sources;
- Heating equipment;
- Fire suppression equipment.

02

Scope 2 – Indirect emissions

- Electricity;
- Heating.

03

Scope 3 – Indirect emissions

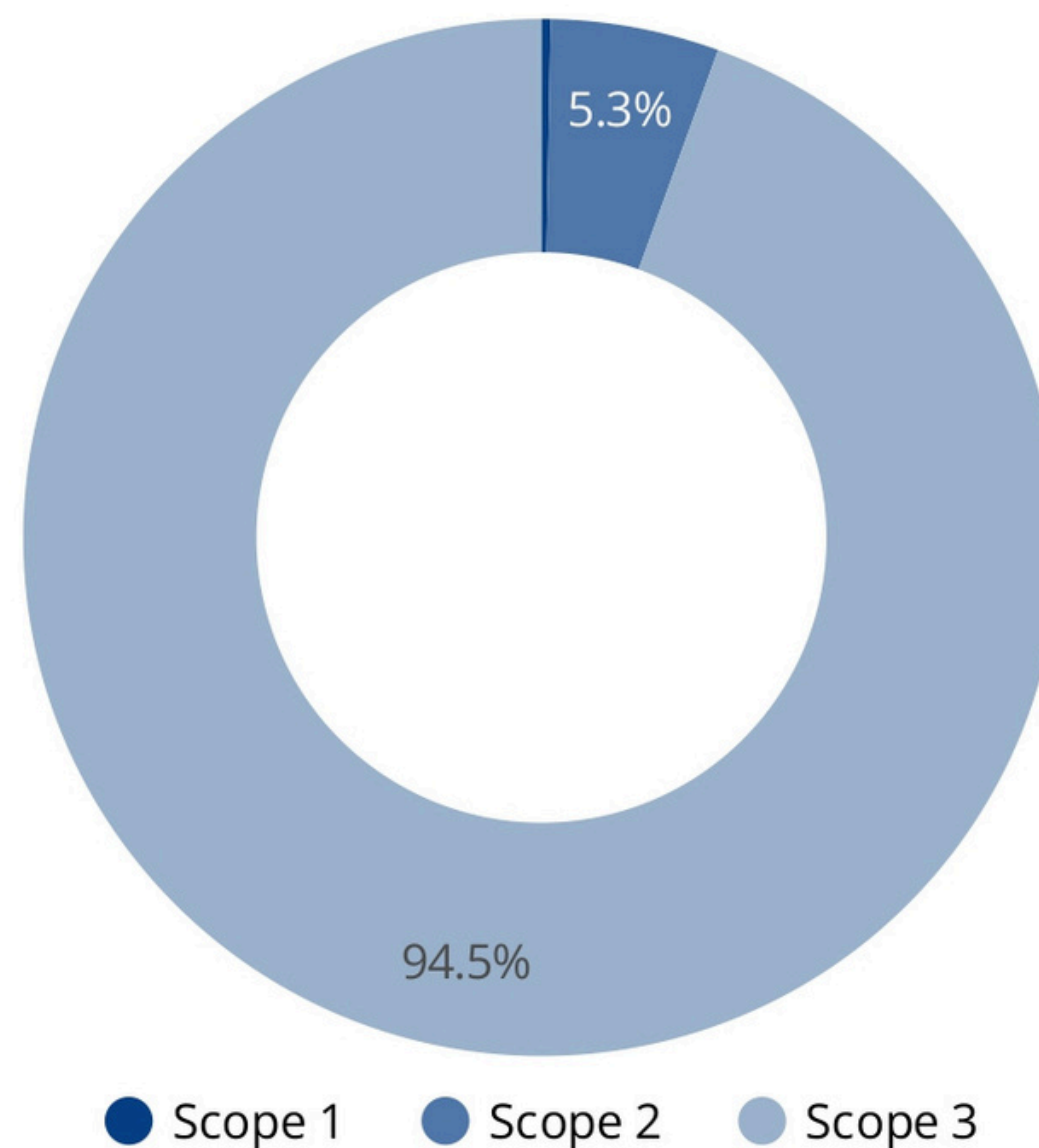
- Purchased goods and services;
- Capital goods;
- Fuel- and energy-related activities (not included in Scopes 1 and 2);
- Transportation and distribution;
- Business travel;
- Employee commuting and remote work;
- Digital footprint.

2024 - 2025 GHG scope detailed

Scope 3 emissions account for the largest share of total GHG emissions

Scope ▲		tCO2e
1.	Scope 1	4.5
2.	Scope 2	83.5
3.	Scope 3	1,501.2
Grand total		1,589.2

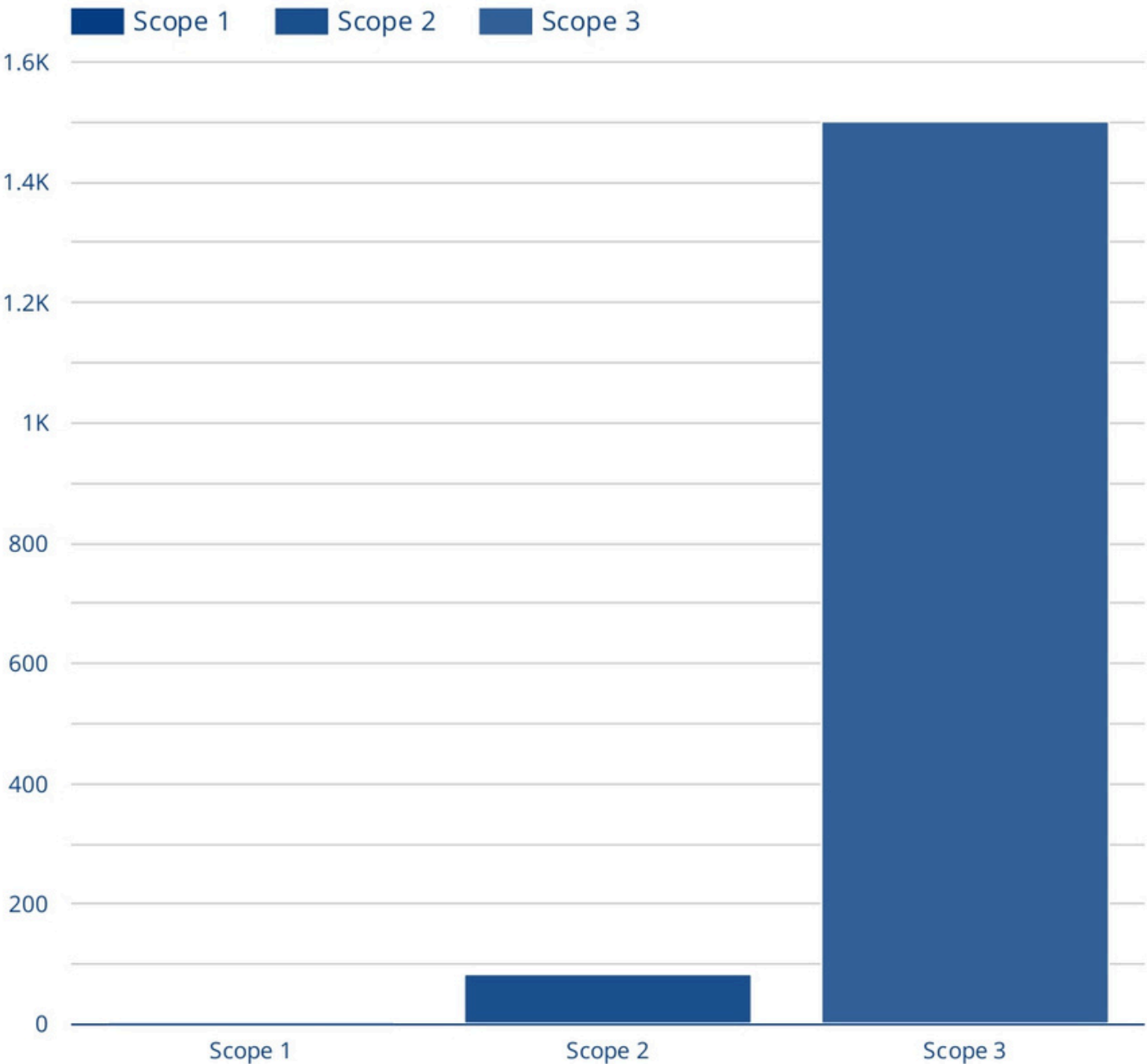
The high share of Scope 3 emissions is mainly driven by purchased goods and services occurring across the value chain.



* Calculations were performed based on data provided by ISM.

2024 - 2025 GHG by scopes

Overall, the results highlight that indirect emissions, particularly those in Scope 3, represent the most significant contributor to the organization's carbon footprint.



Scope 3 emission categories account for the largest share of total emissions (94.5%). Scope 3 emissions dominate the overall footprint at 1,501.15 tCO₂e, while Scope 2 emissions amount to 83.53 tCO₂e and Scope 1 emissions remain minimal at 4.51 tCO₂e.

* Calculations were performed based on data provided by ISM.

Scope 1

Scope 1

Category	tCO2e	tCO2	tCH4	tN2O
Refrigeration	0	0	0	0
Fire-fighting equipment	0	0	0	0
Transport and mobile sources	4.51	4.45	0	0.06
Stationary combustion	0	0	0	0
Grand total	4.51	4.45	0	0.06

Scope 1 emissions are entirely driven by fuel use in company vehicles, with no contribution from stationary combustion or refrigerants, indicating a highly transport-dependent emission profile.

These emissions have been calculated using the fuel-based (litres) method in accordance with DEFRA emission factors, meaning that fuel consumption data (e.g., litres of petrol or diesel) was converted into emissions using standardized conversion factors.

Scope 2

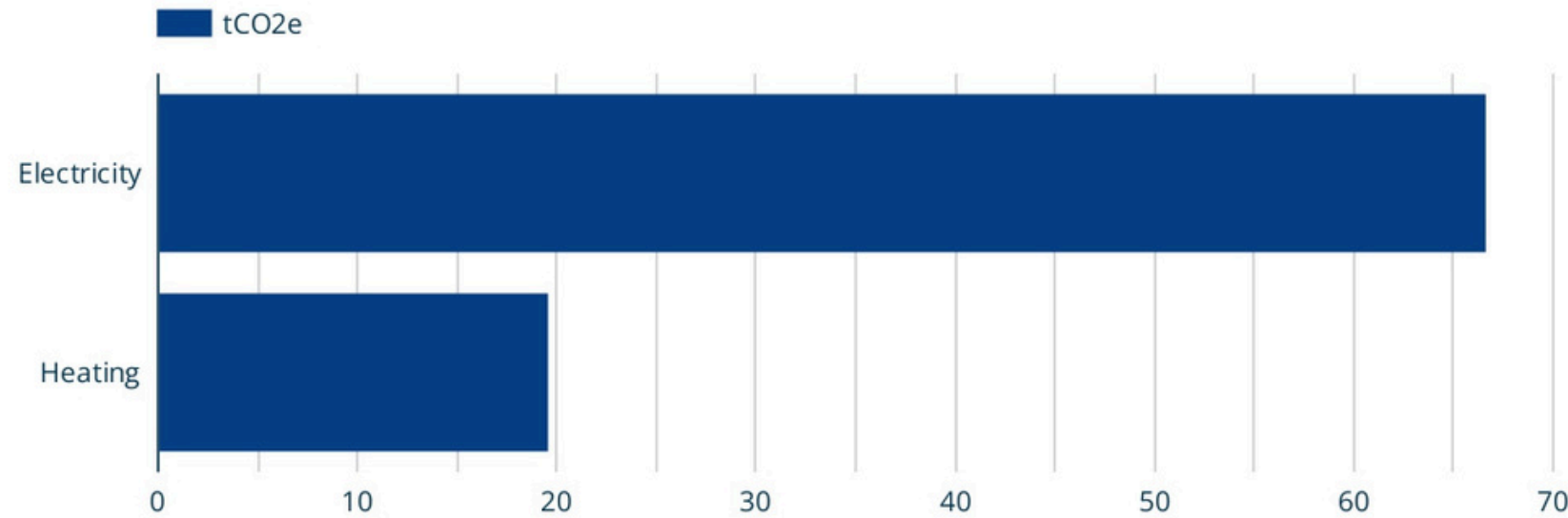
Scope 2

Source	Method	Source	tCO ₂ e
Heating	Location based	Heating	16.88
Heating	Market based	Heating	2.69
Electricity	Market based	Electricity	0
Electricity	Location based	Electricity	66.65

Scope 2 emissions are calculated using two separate methods: location-based and market-based. The location-based method, which reflects the average emissions intensity of the electricity grid, results in 83.53 tCO₂e, mainly driven by electricity consumption (66.65 tCO₂e) and heating (16.88 tCO₂e).

In contrast, the market-based method, which accounts for contractual energy purchases such as renewable electricity certificates, results in significantly lower emissions of 2.69 tCO₂e, as electricity emissions are reported as zero. This difference highlights the impact of renewable electricity procurement on reducing reported Scope 2 emissions.

Scope 2 (location and market based methods), tCO₂e



As ISM uses certified green electricity, a zero emission factor was applied to electricity consumption when using the market-based method.

* Calculations were performed based on data provided by ISM.

Scope 3

Categories ^	tCO2e
Capital goods	37.25
Commuting/homeworking	124.29
Digital footprint	92.49
Downstream leased assets	0
Downstream transportation and distribution	0
End-of-life treatment of sold goods	0
Flights	52.19
Franchises	0
Fuel and energy-related activities (not included in areas 1 and 2)	37.28
Hotel stay	28.21
Investments	0
Land transport	1.64
Processing of sold goods	0
Purchased goods	351.24
Purchased services	776.56
Grand total	1,501.15

Within Scope 3, the largest contributors are purchased goods, and purchased services, which together account for the majority of total emissions. Additional notable contributions come from commuting & homeworking, digital footprint and business travel (flights and hotel stays).

Purchased services account for approximately 51.73%, and purchased goods for around 23.39 % of total Scope 3 emissions (1,501.2 tCO₂e). Other categories, such as commuting & homeworking (8.28%), the digital footprint (6.16%), flights (3.47%) and capital goods (2.48%) contribute smaller but still relevant shares.

* Calculations were performed based on data provided by ISM.

Emissions Intensity Metrics

tCO₂e per person (employee, student and professor)

0.64

In 2024-2025, GHG emissions per person amounted to 0.636 tCO₂e.

tCO₂e/m²

0.27

Emissions intensity per square meter was 0.27 tCO₂e, with the relatively low value likely reflecting the large total building area.

tCO₂e per day

4.35

Emissions intensity per day was 4.35 tCO₂e. Which in other words is equivalent to approximately 26,000 km driven by a passenger car.

Commuting and remote work

Commuting accounts for the majority of GHG emissions, representing approximately 69% of total emissions, while homeworking contributes around 31%

Category	Commuting tCO2e	Homeworking tCO2e
Employee	52.15	26.58
Professor/Lecturer	33.71	11.86

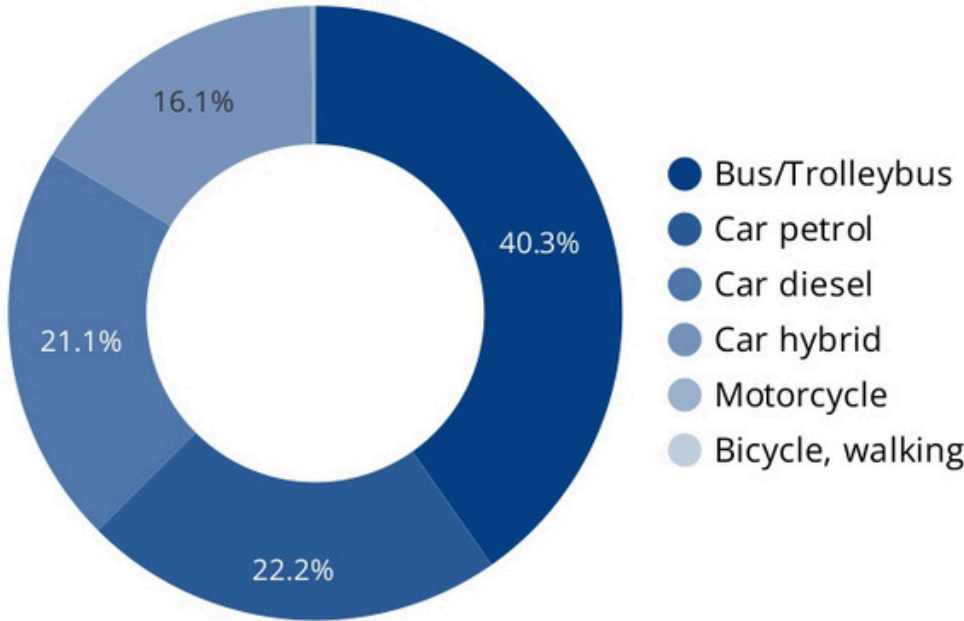
Total emissions from commuting and homeworking amount to 124.29 tCO₂e (7.8% of total emissions), with emissions heavily dominated by commuting activities.

Homeworking and Commuting total emissions

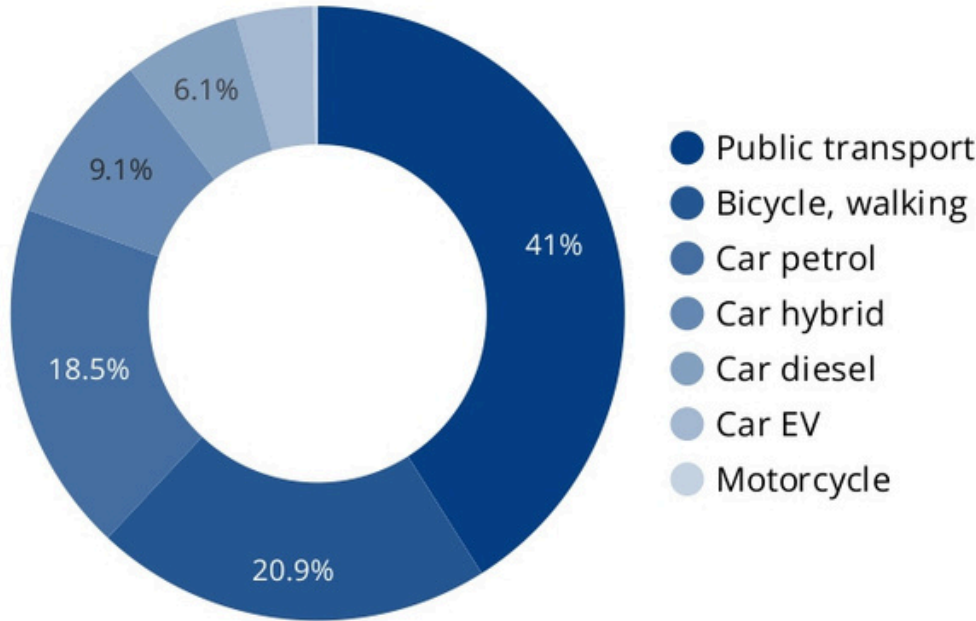
tCO₂e
124.29

Sustainable transport (walking and cycling) accounts for 41% of commuting patterns, representing the largest share. However, public transport contributes the highest share of emissions, accounting for 40.3% of total commuting-related emissions.

Total emissions by category



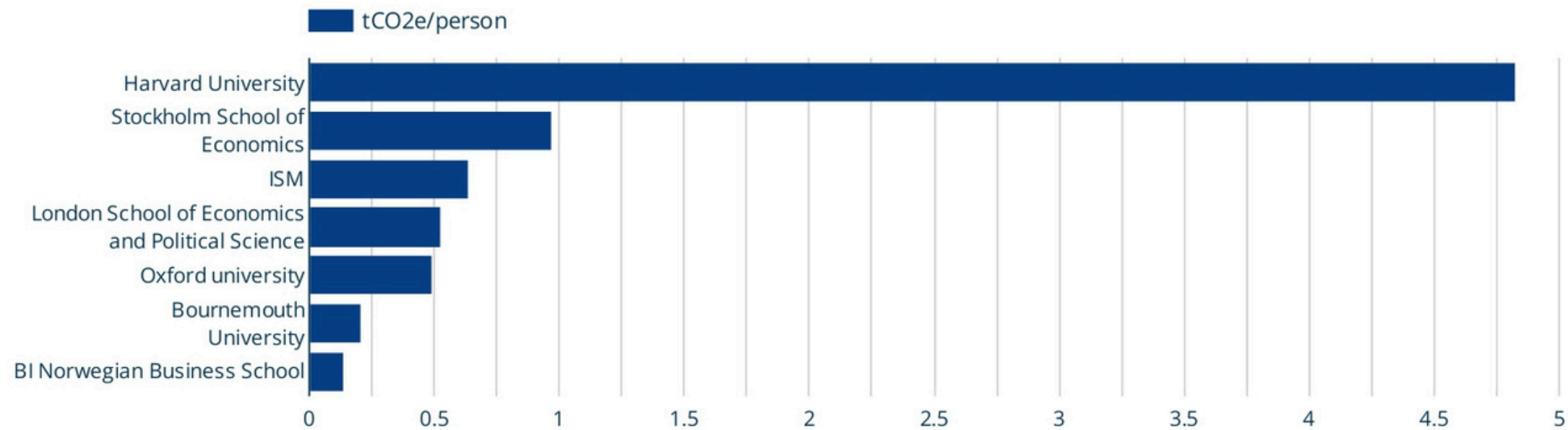
Which types of transport were the most popular?



* Calculations were performed based on data provided by ISM.

Comparing with other universities

tCO₂e per person (employee, student and professor)



The comparison shows that ISM's emissions per person (0.64 tCO₂e) are moderate relative to peer institutions. ISM performs significantly better than Harvard University (4.83 tCO₂e per person), which has substantially higher emissions due to its large campus and associated energy use, indicating a much lower emissions intensity. However, ISM's emissions are higher than those of more efficient institutions such as BI Norwegian Business School (0.14 tCO₂e), Bournemouth University (0.21 tCO₂e), the University of Oxford (0.49 tCO₂e), and the London School of Economics (0.53 tCO₂e). The Stockholm School of Economics (0.97 tCO₂e) reports slightly higher emissions than ISM, largely driven by elevated business travel emissions.

Overall, ISM sits in the middle of the range, performing closer to lower-emission institutions than to the highest-emitting ones.

2024 – 2025 Greenhouse Gas (GHG) Emissions Summary

Scope ^	Value chain phase	Categories	tCO ₂ e
Scope 1	Upstream	Transport and mobile sources	4.51
Scope 2	Upstream	Electricity	66.65
Scope 2	Upstream	Heating	16.88
Scope 3	Upstream	Waste generated in operations	0
Scope 3	Upstream	Fuel and energy-related activities (not included in areas 1 and 2)	37.28
Scope 3	Upstream	Capital goods	37.25
Scope 3	Upstream	Hotel stay	28.21
Scope 3	Upstream	Employee commuting & homeworking	124.29
Scope 3	Downstream	Digital footprint	92.49
Scope 3	Upstream	Land transport	1.64
Scope 3	Upstream	Flights	52.19
Scope 3	Upstream	Purchased goods	351.24
Scope 3	Upstream	Purchased services	776.56
Grand total			1,589.19

The largest source is **purchased services** (776.56 tCO₂e), followed by **purchased goods** (351.24 tCO₂e) and **commuting & homeworking** (124.29 tCO₂e).

Scope 3 emissions account for **94.5%** of total GHG emissions.

Data Limitations and Improvement Opportunities

During the GHG calculations, several data limitations were identified that may affect the accuracy of the results. In some areas, data was based on assumptions or average values, particularly where detailed activity data was not available. For example, emissions related to employee commuting and homeworking were calculated using aggregated data, which may not fully reflect individual behavioral differences. In addition, in some cases a spend-based method was applied, which, due to its high level of aggregation, may not fully capture actual emissions.

Data related to business travel was also limited, as it was not always available in a sufficiently detailed format. In many cases, travel data lacked specific activity metrics such as flight distances and destinations, number of hotel nights, or distance travelled by taxis and buses, which reduces the precision of emission calculations.

Furthermore, data on refrigerants and waste was not available, meaning that emissions related to refrigerant leakage, disposal, and detailed waste treatment streams may not have been captured.

To further improve the accuracy and completeness of the GHG inventory, several actions are recommended. First, additional emission categories should be included in future calculations to ensure a more comprehensive coverage of Scope 1 and 3 activities. This will help better capture the full impact of the organization's value chain.

Secondly, the collection of more activity-specific data should be strengthened. This includes tracking detailed information such as transport distances, flight destinations, number of hotel nights, refrigerant usage, and waste types and treatment methods. Improving data quality will allow for more precise emission calculations and reduce reliance on assumptions.

Finally, it is important to establish a consistent approach to monitoring emissions over time. Comparing annual changes in emissions will enable the organization to track progress, identify trends, and evaluate the effectiveness of emission reduction measures. This will support more informed decision-making and continuous improvement in sustainability performance.

Methodology

To quantify greenhouse gas (GHG) emissions, ISM's activity data is multiplied by the relevant GHG emission factors. The carbon footprint, expressed in carbon dioxide equivalent (kg CO₂e), is calculated by multiplying activity data by verified GHG emission factors.

The final GHG emissions for each category are reported in tonnes of CO₂ equivalent (t CO₂e). The calculation of CO₂e is based on Global Warming Potential (GWP) values derived from the IPCC Fourth Assessment Report (AR4).

GHG Emissions Calculation Formula $\text{GHG emissions} = \text{AD} \times \text{EF}$ Where: **GHG emissions = kg CO₂e** **AD (Activity Data) = quantity of activity expressed in relevant units** **EF (Emission Factor) = kg CO₂e per unit.**

The information is based on best practice principles and prepared in accordance with:

The Corporate Accounting and Reporting Standard (GHG Protocol), developed in 2004 by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI);

The UK Department for Environment, Food & Rural Affairs (DEFRA) Government Greenhouse Gas Conversion Factors for Company Reporting (2022);

The Intergovernmental Panel on Climate Change (IPCC) 2006 Guidelines for National Greenhouse Gas Inventories.

Calculations carried out by Planet Positive are based on standardized guidelines and methodologies described in the GHG Protocol and the IPCC (2006) Guidelines for National Greenhouse Gas Inventories. The Global Warming Potential (GWP) factors used are taken from the latest IPCC Assessment Report (AR6, 2025). Category-specific GHG calculations are based on emission factors obtained from official databases, including: – DEFRA (2025) and ClimaTiq.io.

Scope 3 calculation methods:

Purchased goods and services – spend-based method;

Capital goods – spend-based method;

Waste generated in operations – waste-type-specific method;

Business travel – distance- and fuel-based method (for land travel);

Flight and hotels emissions calculated based spend-based method;

Employee&professors commuting and homeworking – average data method.

Commuting and remote work methodology

Methodology of commuting Greenhouse gas (GHG) emissions related to commuting and homeworking were estimated using data collected through a questionnaire distributed among members of the organization. The survey gathered information about commuting habits and homeworking practices, which represent relevant sources of indirect emissions under Scope 3 reporting.

Respondents were grouped into 2 categories: employees and professors/lecturers. In total, 76 valid responses were collected, including 44 employees and 32 professors or lecturers. This grouping allowed the analysis to reflect differences in commuting behavior and work patterns between the categories.

Emissions were estimated separately for each group based on the average values reported within that category, rather than calculating a single average across all respondents. This approach was used because commuting frequency, travel patterns, and homeworking practices vary significantly between employees and academic staff. Calculating category-specific averages therefore provides a more accurate representation of typical emission patterns for each group.

The results therefore reflect the estimated emissions associated with commuting and homeworking for each category individually, based on the reported survey data and standardized emission factors.

Organizational Boundaries and GHG Accounting Principles

ISM, in accordance with the GHG Protocol, has defined clear organizational boundaries to calculate greenhouse gas (GHG) emissions and prepare its GHG inventory report. The operational control approach is applied to define these boundaries, ensuring that GHG emissions are accounted for from all operations over which the organization has control, regardless of whether it holds financial interest in them.

This report has been prepared in line with the fundamental principles of GHG accounting and reporting:

Relevance: ISM has systematically identified GHG emission sources related to its activities and stakeholders and reports them in this document. This ensures that the GHG inventory reflects the scale of operations and addresses key stakeholder concerns.

Completeness: All GHG emission sources within the defined operational boundaries of ISM are included in the report. If certain sources are excluded, clear and justified reasons for their exclusion are provided.

Consistency: To enable meaningful year-on-year comparisons and allow stakeholders to track progress, a consistent methodology and data sources are applied. Any deviations or changes in methodology are clearly explained and justified.

Transparency: ISM is committed to providing clear and comprehensive information on GHG accounting methodologies, assumptions, and data sources. This ensures that stakeholders can understand the reporting process and assess the integrity of the disclosed data.

Accuracy: ISM applies robust data collection processes, uses up-to-date emission factors, and applies appropriate measurement methodologies. While achieving absolute accuracy is challenging, every effort is made to minimize uncertainties and errors.



Planet Positive

The carbon footprint was calculated and the report was compiled by "Planet Positive," a carbon management agency. Should you have any questions, feel free to reach out to us.

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