


An aerial photograph of a wind farm. Two large white wind turbines are prominent in the foreground and middle ground, standing in a lush green agricultural landscape. The fields are divided into various sections, some with distinct patterns of crops. A dirt road or path runs through the center of the image, passing between the turbines. The background shows more turbines and rolling green hills under a clear sky.

# Core Laboratories Operational Footprint and Value Chain FY-2023

 Sustainable 1

September 2024



# Credits

## Sustainable1 Project Team

Kimberlee Glinka, Account Manager | Sustainability Specialist Market Intelligence

Matt Pogue, Project Manager | Sustainability Analytics Services

Stuart Kim, Ben Freeman Lead Analysts | Sustainability Analytics Services

## About S&P Global Sustainable1

Sustainable1 is part of S&P Global. A leader in carbon and environmental data and risk analysis, Sustainable1 assesses risks relating to climate change, natural resource constraints, and broader environmental, social, and governance (ESG) factors. Companies and financial institutions use Sustainable1 intelligence to understand their ESG exposure to these factors, inform resilience, and identify transformative solutions for a more sustainable global economy. S&P Global's commitment to environmental analysis and product innovation enables its team to deliver essential ESG investment-related information to the global marketplace. For more information, visit <https://www.spglobal.com/esg/Sustainable1>.

## About S&P Global

S&P Global (NYSE: SPGI) is a leading provider of transparent and independent ratings, benchmarks, analytics, and data to the capital and commodity markets worldwide. For more information, visit [www.spglobal.com](http://www.spglobal.com).

## Contact

E: [Sustainable1info@spglobal.com](mailto:Sustainable1info@spglobal.com)

E: [Sustainable1northamerica@spglobal.com](mailto:Sustainable1northamerica@spglobal.com)

E: [Sustainable1EMEA@spglobal.com](mailto:Sustainable1EMEA@spglobal.com)

E: [Sustainable1asiapacific@spglobal.com](mailto:Sustainable1asiapacific@spglobal.com)

E: [Sustainable1southamerica@spglobal.com](mailto:Sustainable1southamerica@spglobal.com)

Telephone (UK): +44 (0) 20 7160 9800

Telephone (North America): +1 800 402 8774

# Contents

Report Highlights

---

Project Overview

---

Operational Footprint GHG Emissions Results

---

Operational Footprint - Water

---

Value Chain GHG Emissions Results

---

Industry Best Practices

---

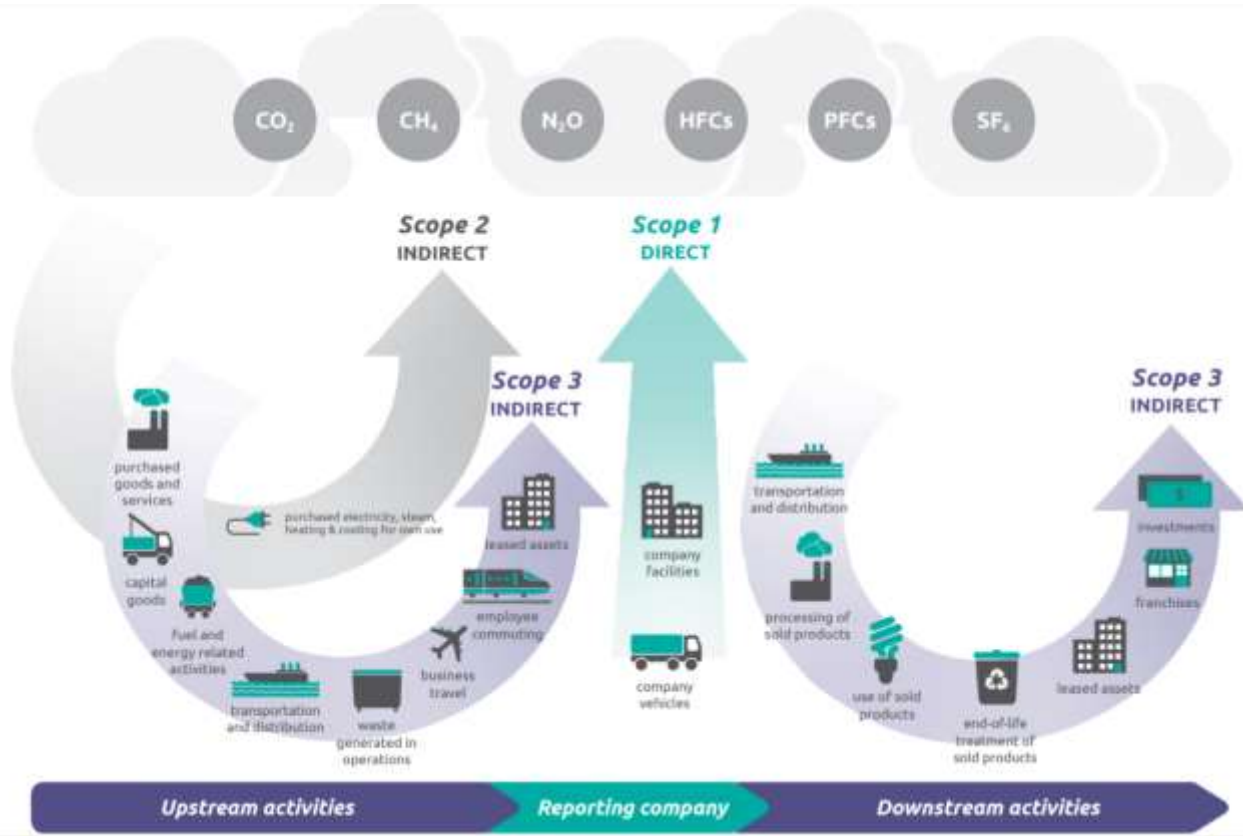
Appendices

---

# Report Highlights

- Under the location-based approach, the total GHG emissions for FY2023 were 43,702 tCO<sub>2</sub>e. Scope 2 (location-based) emissions account for 24% of the total, Scope 1 emissions for 22% and the remaining 54% is associated with Scope 3 which includes Categories 1 to 8, 11 and 12.
- The total operational footprint for Core Laboratories, including both Scope 1 and Scope 2 (location-based) emissions in FY2023, was 19,999 tCO<sub>2</sub>e. Out of this, Scope 2 emissions were 10,285 tCO<sub>2</sub>e, or 51% of the total, with Scope 1 emissions representing the remaining 49% at 9,714 tCO<sub>2</sub>e.
- The total Scope 3 emissions for Core Laboratories, including upstream and downstream emissions, were 23,703 tCO<sub>2</sub>e.
- Upstream emissions represented almost all Scope 3 emissions at 23,673 tCO<sub>2</sub>e, or 99% of the total, whereas downstream emissions were limited to 30 tCO<sub>2</sub>e.
- The total supply chain footprint for Core Laboratories, including Scope 3 Category 1 (Purchased Goods and Services) and Category 2 (Capital Goods and Services) in FY2023 was 6,102 tCO<sub>2</sub>e. Out of this, Category 1 emissions were 5,452 tCO<sub>2</sub>e and Category 2 emissions 650 tCO<sub>2</sub>e, or 23% and 3% of the total, respectively.
- The total value chain footprint for Core Laboratories, which includes all calculated Scope 3 categories except Categories 1 and 2, was 17,601 tCO<sub>2</sub>e in FY2023. These emissions include Category 3 (Fuel and Energy Related Activities), Category 4 (Upstream Transportation and Distribution), Category 5 (Waste Generated in Operations), Category 6 (Business Travel), Category 7 (Employee Commuting), Category 8 (Upstream Lease Assets), Category 11 (Use of Sold Products), and Category 12 (End of Life Treatment of Sold Products), and does not include Category 9 (Downstream Transportation and Distribution), Category 10 (Processing of Sold Products), and Category 13 (Downstream Leased Assets), Category 14 (Franchises) and Category 15 (Investment) since no data was provided for these categories.

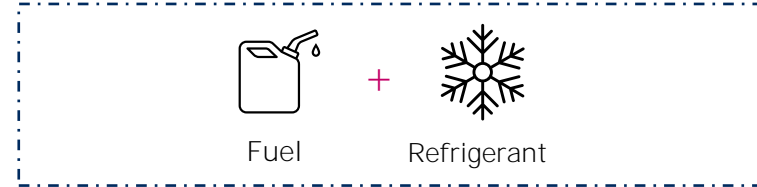
# GHG Emissions



Source: WRI (2015) GHG Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

## Scope 1

are emissions from



sources which a company owns or controls

## Scope 2

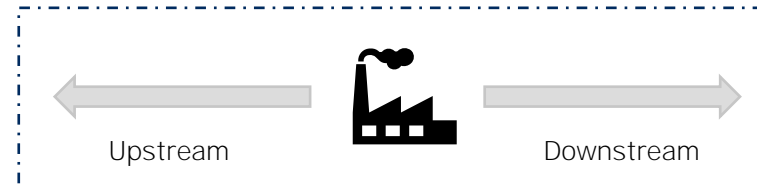
are emissions from



procured from outside Company premise

## Scope 3

are emissions from



sources not owned or directly controlled by the organization

## Introduction

- Core Laboratories' business, hereafter called Core Lab, provides reservoir description and production enhancement services and products to the oil and gas industry. It is headquartered in Houston, Texas.
- Core Lab engaged Sustainable1 to assess its Scope 1 and Scope 2 emissions, plus measurement of water usage, in accordance with Scope 1 and 2 GHG Inventory Guidance (GHG Protocol).
- Core Lab also engaged Sustainable1 to assess Scope 3 (Cat 1-8 and 11-12) greenhouse gas (GHG) emissions in line with the WRI/WBCSD Corporate Value Chain (Scope 3) Guidelines (GHG Protocol).
- The assessment allows Core Lab to report its relevant Scope 1, 2 and 3 emissions in accordance with the GHG protocol.
- Greenhouse accounting standard used: GHG protocol

## Scope

Sustainable1 assessed Core Lab's Scope 1 and Scope 2 GHG emissions consistent with the GHG Protocol

- 209 sites covered
- Boundary setting approach: Operational Control

Sustainable1 also assessed Core **Lab's** Scope 3 (Cat 1-8 and 11-12) value chain GHG emissions consistent with the GHG Protocol.

Analysis period: January 2023 - December 2023

# Scope 1 and 2 GHG Emission Approach

- Core Lab provided Sustainable1 with data for calculation of its operational footprint. Data points received from the client were:
  - Operational fuel used – Natural Gas, Diesel, Gas Oil, Petrol, Propane and Kerosene
  - Vehicle fuel used – Diesel, Petrol, LPG and kWh and mile/ km travelled
  - Electricity sourced from grid
- The Greenhouse Gas Protocol methodology for compiling GHG data is used to assess carbon footprint. This includes the following material GHGs: CO<sub>2</sub> (carbon dioxide), N<sub>2</sub>O (nitrous oxide) and CH<sub>4</sub> (methane).
- The following emission conversion factor sources are used in calculations:
  - Fossil fuel emission factors (Scope 1 - Stationary and mobile): DEFRA 2023
  - Purchased electricity: EPA eGrid Factors 2023 (for US locations), IEA Electricity Factors 2023 (for locations outside the US)



# Scope 3 GHG Emissions Approach

## Methodology

- Sustainable1 is estimating the GHG emissions of each category using the Sustainable1 Environmentally Extended Input-Output (EEI-O) model along with primary data, where available, for selected upstream and downstream impact categories. Examples of primary data included in the analysis:
  - Supplier spend
  - Energy consumption
  - Waste disposal
  - Business travel
  - Employee Headcount
  - Floor space

Please refer to Appendix II for the methodology associated with calculating GHG emissions for each Scope 3 category.

## Scope of value chain GHG emissions footprint, GHG Protocol

| <i>Upstream or downstream</i>       | <i>Scope 3 category</i>  |
|-------------------------------------|--|
| <b>Upstream scope 3 emissions</b>   | <ol style="list-style-type: none"><li>1. Purchased goods and services</li><li>2. Capital goods</li><li>3. Fuel- and energy-related activities (not included in scope 1 or scope 2)</li><li>4. Upstream transportation and distribution</li><li>5. Waste generated in operations</li><li>6. Business travel</li><li>7. Employee commuting</li><li>8. Upstream leased assets</li></ol> |
| <b>Downstream scope 3 emissions</b> | <ol style="list-style-type: none"><li>9. Downstream transportation and distribution</li><li>10. Processing of sold products</li><li>11. Use of sold products</li><li>12. End-of-life treatment of sold products</li><li>13. Downstream leased assets</li><li>14. Franchises</li><li>15. Investments</li></ol>  |

Source: GHG Protocol: Corporate Value Chain Accounting Reporting Standard (WRI / WBCSD)

# Operational Footprint

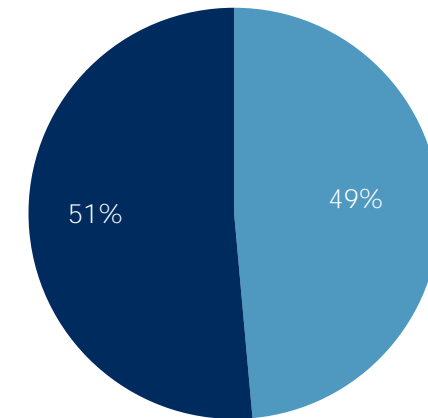
# Group level results

| Impact category                 | Impact                          | Units  | FY 2023    |
|---------------------------------|---------------------------------|--------|------------|
| Onsite Fuel Use                 | Burning Oil                     | litres | 37,801     |
|                                 | Diesel                          | litres | 2,200      |
|                                 | Natural Gas                     | m3     | 99,958     |
|                                 | Natural Gas                     | kWh    | 13,198,358 |
|                                 | Petrol                          | litres | 53,496     |
| Company Vehicle fuel Combustion | Diesel                          | litres | 1,662      |
|                                 | Diesel                          | km     | 1,370,536  |
|                                 | Petrol                          | litres | 1,181,940  |
|                                 | Petrol                          | km     | 70,350     |
|                                 | Plug-in Hybrid Electric Vehicle | km     | 78,761     |
| Refrigerants                    | HCFC-22/R22                     | kg     | 1,264      |
|                                 | HFC-134a                        | kg     | 983        |
|                                 | R406A                           | kg     | 1          |
|                                 | R407C                           | kg     | 25         |
|                                 | R410A                           | kg     | 131        |
| Electricity                     | Purchased electricity           | kWh    | 30,320,596 |
| Water                           | Water abstracted                | m3     | 3,677      |
|                                 | Water supplied                  | m3     | 131,582    |
| Waste                           | Total Non-Hazardous Waste       | tonnes | 24,069     |
|                                 | Total Hazardous Waste           | tonnes | 66         |

According to the GHG Protocol Scope 2 Guidance released in January 2015, corporates are now to report two Scope 2 emission totals – location-based and market-based, known as ‘dual reporting’. Since market-based emission factors (such as renewable energy certificates, supplier emission factors or other tracking mechanisms) are not available to any of Core Lab’s locations, Sustainable1 adopted residual emission factors where they are available. Future calculations shall be updated upon the release of residual factors for public use.

Core Lab’s Scope 2 emissions calculated using market-based approach are 20,136 tCO<sub>2</sub>e, slightly higher than the 19,999 tCO<sub>2</sub>e derived with a location-based approach. This is due to many geographies having higher residual emission factors than the average grid mix because a lot of renewable power generation is associated with contractual obligation and removed from residual calculations.

| Scope                            | Category                    | Absolute emissions tCO <sub>2</sub> e |
|----------------------------------|-----------------------------|---------------------------------------|
| Scope 1                          | Stationary Emissions        | 2,845                                 |
|                                  | Mobile Emissions            | 3,070                                 |
|                                  | Refrigerants                | 3,799                                 |
| Scope 2                          | Electricity: Location Based | 10,285                                |
|                                  | Electricity: Market Based   | 10,422                                |
| Total Emissions (Location Based) |                             | 19,999                                |
| Total Emissions (Market Based)   |                             | 20,136                                |



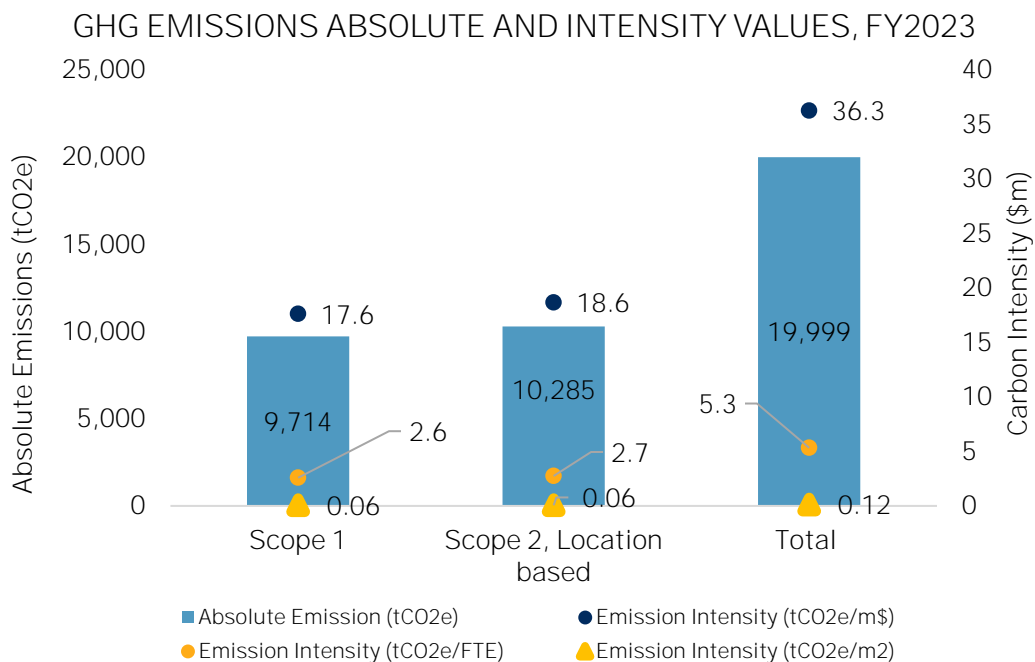
■ Scope 1 ■ Scope 2, Location based

# Environmental Impact

## Greenhouse Gas Emissions

Sustainable1 reviewed Core Lab's environmental data for FY2023 and the table below summarizes the key environmental impacts. These impacts are described in absolute terms and in intensity terms by revenue (551.52 mUSD) and by employees (3,759). The intensities of GHG emissions, normalized by revenue and total employees, were 36.3 tCO<sub>2</sub>e/mUSD and 5.3 tCO<sub>2</sub>e/employee, respectively.

| SCOPE                    | Emissions (tCO <sub>2</sub> e) | Contribution % | tCO <sub>2</sub> e per revenue (mUSD) | tCO <sub>2</sub> e per employee |
|--------------------------|--------------------------------|----------------|---------------------------------------|---------------------------------|
| Scope 1                  | 9,714                          | 49%            | 17.6                                  | 2.6                             |
| Scope 2 – Location Based | 10,285                         | 51%            | 18.6                                  | 2.7                             |
| Total (Location Based)   | 19,999                         | 100%           | 36.3                                  | 5.3                             |



### Direct (Scope 1) GHG Emissions

Direct emissions are GHG emissions from organizational operations (or Scope 1) are generally derived from natural gas and diesel for heating and backup generation, owned transportation and refrigeration processes. For Core Lab, we received data for backup generation and owned transportation. Core Lab's Scope 1 emissions during FY2023 were 9,714 tCO<sub>2</sub>e.

### Indirect (Scope 2) GHG Emissions

The second component of Core Lab's GHG emissions relates to indirect (or Scope 2) emissions from the consumption of purchased electricity. Core Lab's Scope 2 emissions (location based) during FY2023 were 10,285 tCO<sub>2</sub>e.



# Operational Footprint: Water and Waste

# Operational Water Footprint

## Water Use

Sustainable1 reviewed the data received from Core Lab on water procured for its operations. Core Lab's aggregated water consumption for FY 2023 is 135,258 m<sup>3</sup>, which is comprised of abstracted and supplied water sources.

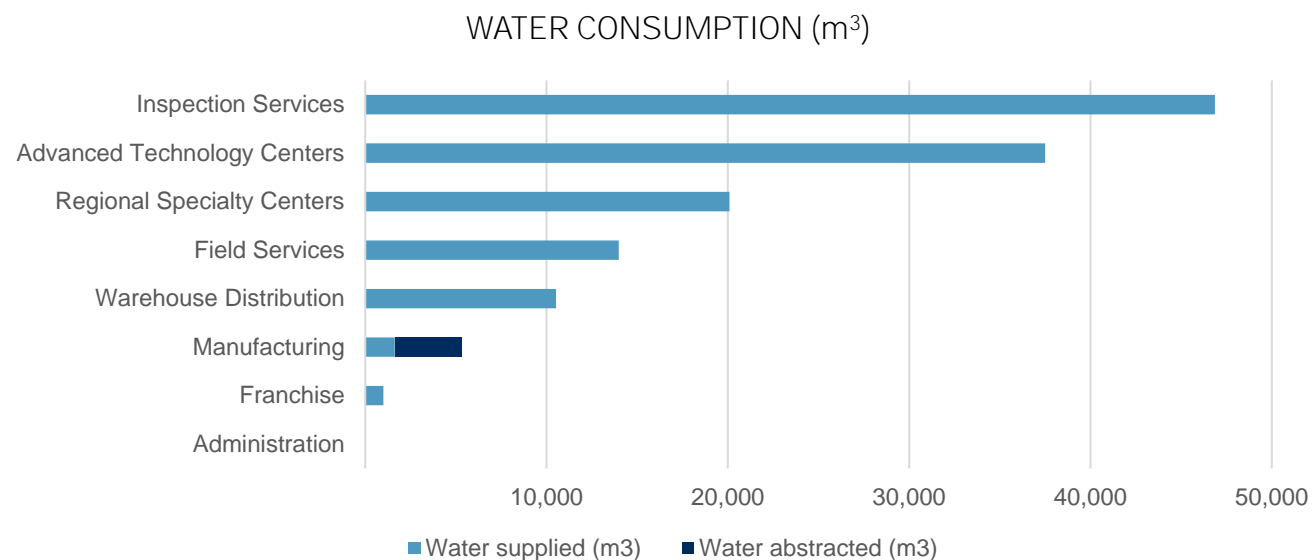
The table below highlights the absolute water use for FY 2023. The water intensity of Core Lab per mUSD of revenue generated is 245.2 m<sup>3</sup> of water. Water use per employee is 36.0 m<sup>3</sup>.

### ABSOLUTE WATER USE, FY2023

| Nature of Supply | Water Consumption (m <sup>3</sup> ) | Contribution (%) | Intensity m <sup>3</sup> /mUSD | Intensity m <sup>3</sup> /Employee |
|------------------|-------------------------------------|------------------|--------------------------------|------------------------------------|
| Water supplied   | 131,582                             | 97%              | 238.6                          | 35.0                               |
| Water abstracted | 3,677                               | 3%               | 6.7                            | 1.0                                |
| Total            | 135,258                             | 100%             | 245.2                          | 36.0                               |

### WATER CONSUMPTION BY DIVISION, FY2023

|                             | Water supplied (m <sup>3</sup> ) | Water abstracted (m <sup>3</sup> ) |
|-----------------------------|----------------------------------|------------------------------------|
| Inspection Services         | 46,865                           | 0                                  |
| Advanced Technology Centers | 37,498                           | 0                                  |
| Regional Specialty Centers  | 20,092                           | 0                                  |
| Field Services              | 13,981                           | 0                                  |
| Warehouse Distribution      | 10,520                           | 0                                  |
| Manufacturing               | 1,626                            | 3,677                              |
| Franchise                   | 1,000                            | 0                                  |
| Administration              | 0                                | 0                                  |
| Total                       | 131,582                          | 3,677                              |



# Waste Footprint

## Waste Generated and Disposal Expenditures

Absolute non-hazardous waste generated in FY2023 was 24,069 tonnes. Absolute non-hazardous waste was 66 tonnes. Almost all (99%) of this waste was disposed of through incineration at Core Lab's Estonian sites.

### TOTAL WASTE GENERATED BY TYPE OF WASTE , FY2023

| Waste                     | Tonnes of waste | Waste Intensity (tonnes/m\$) | Waste Intensity (tonnes/FTE) |
|---------------------------|-----------------|------------------------------|------------------------------|
| Total Non-Hazardous Waste | 24,069          | 43.64                        | 6.40                         |
| Total Hazardous Waste     | 66              | 0.12                         | 0.02                         |
| Total                     | 24,134          | 43.76                        | 6.42                         |

### TOTAL WASTE GENERATED BY DISPOSAL ROUTE, FY2023

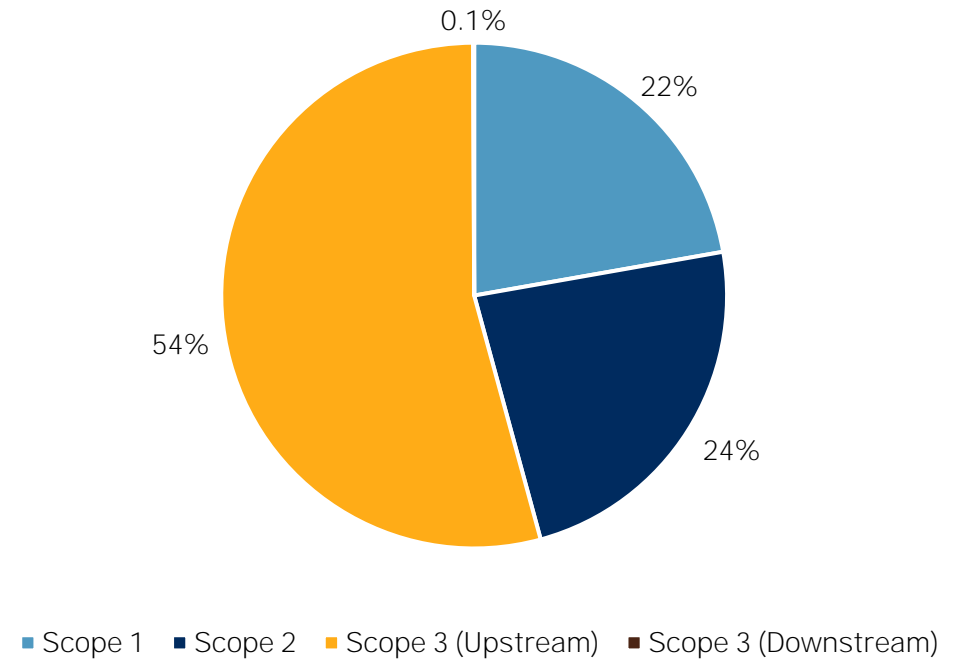
| Disposal Route                  | Total Hazardous Waste | Total Non-Hazardous Waste | Waste Intensity (tonnes/m\$) | Waste Intensity (tonnes/FTE) |
|---------------------------------|-----------------------|---------------------------|------------------------------|------------------------------|
| Landfill                        | 0                     | 29                        | 0.05                         | 0.01                         |
| Combustion with energy recovery | 23                    | 10                        | 0.06                         | 0.01                         |
| Recycled                        | 42                    | 22                        | 0.12                         | 0.02                         |
| Incinerate                      | 1                     | 24,008                    | 43.53                        | 6.39                         |
| Total                           | 66                    | 24,069                    | 43.76                        | 6.42                         |

# Total Value Chain Emissions

Core Lab's total GHG emissions were 43,702 tCO<sub>2</sub>e in FY2023. Scope 3 is the largest contributor to the GHG footprint, accounting for 58% of total emissions. The table below displays the split among Scope 1, Scope 2 (location-based approach) and Scope 3 (value chain emissions). All Scope 1, 2 and 3 emissions were calculated by Sustainable1 from the data provided by Core Lab.

| EMISSION SCOPE       | FY 2023 TOTAL GHG (tCO <sub>2</sub> e) | CONTRIBUTION (%) |
|----------------------|--|------------------|
| Scope 1              | 9,714                                  | 22%              |
| Scope 2              | 10,285                                 | 24%              |
| Scope 3 (Upstream)   | 23,673                                 | 54%              |
| Scope 3 (Downstream) | 30                                     | 0.1%             |
| <b>Total</b>         | <b>43,702</b>                          | <b>100%</b>      |

Core Lab's GHG Emissions by Scope, FY 2023



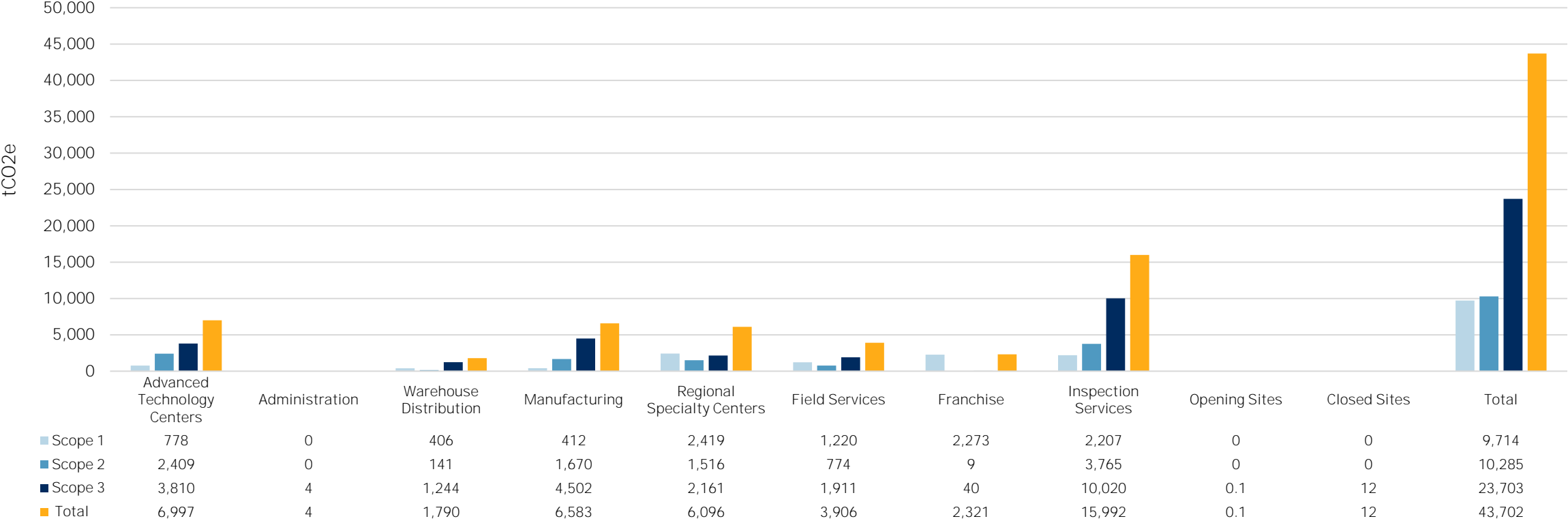


# Value Chain Footprint

# GHG Emissions by Division

The largest contribution to Core Lab's total GHG emissions in FY2023 came from Inspection Services with 37% of the company share, followed by Advanced Technology Centers with 16%, Manufacturing with 15%, and Regional Specialty Centers with 14%. The Administration division, as well as Opening and Closed sites had contributions less than 1%, whereas the contribution from Warehouse Distribution, Franchise, and Field Services remained below 10% each.

GHG Emissions By Division, FY 2023



# Value Chain Emissions by Category

|            | VALUE CHAIN (SCOPE 3) CATEGORY                | FY2023 TOTAL GHG (tCO <sub>2</sub> e) | FY2023 SCOPE 3 GHG SHARE (%) | EVALUATION STATUS <sup>1</sup> |
|------------|---|---------------------------------------|------------------------------|--------------------------------|
| UPSTREAM   | 1) Purchased goods and services               | 5,452                                 | 23%                          | Relevant, calculated           |
|            | 2) Capital goods                              | 650                                   | 3%                           | Relevant, calculated           |
|            | 3) Fuel- and energy-related activities        | 4,270                                 | 18%                          | Relevant, calculated           |
|            | 4) Upstream transportation and distribution   | 3,010                                 | 13%                          | Relevant, calculated           |
|            | 5) Waste generated in operations              | 791                                   | 3%                           | Relevant, calculated           |
|            | 6) Business travel                            | 1,936                                 | 8%                           | Relevant, calculated           |
|            | 7) Employee commuting                         | 6,720                                 | 28%                          | Relevant, calculated           |
|            | 8) Upstream leased assets                     | 844                                   | 4%                           | Relevant, calculated           |
| DOWNSTREAM | 9) Downstream transportation and distribution | -                                     | 0%                           | Not calculated                 |
|            | 10) Processing of sold products               | -                                     | 0%                           | Not calculated                 |
|            | 11) Use of sold products                      | 20                                    | 0.08%                        | Not relevant, calculated       |
|            | 12) End-of-life treatment of sold products    | 10                                    | 0.04%                        | Not relevant, calculated       |
|            | 13) Downstream leased assets                  | -                                     | 0%                           | Not calculated                 |
|            | 14) Franchises                                | -                                     | 0%                           | Not calculated                 |
|            | 15) Investments                               | -                                     | 0%                           | Not calculated                 |
|            | <b>Total</b>                                  | <b>23,703</b>                         | <b>100%</b>                  |                                |

<sup>1</sup> The materiality threshold is set at 1% of scope 3 emissions.

# Overall Value Chain Results

## Total GHG Emissions

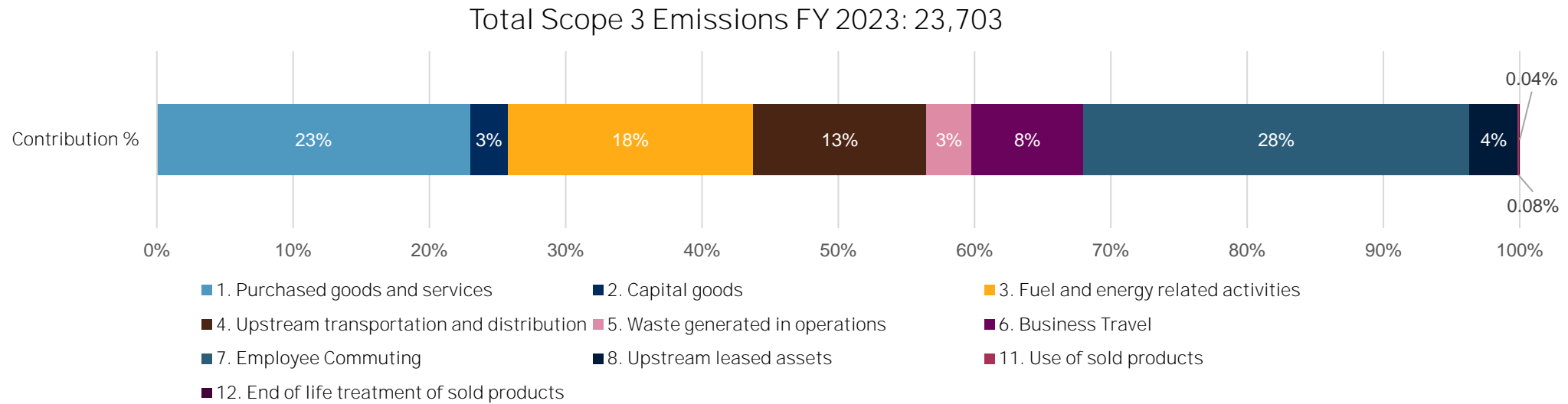
- The total Emissions from Core Lab's value chain are 23,703 tCO<sub>2</sub>e. Almost all the calculated emissions come from its upstream value chain, with the remaining coming from downstream activities.

## Upstream GHG Emissions

- Emissions from Employee Commuting (Category 7), followed by Purchased Goods and Services (Category 1) and Fuel and Energy related activities (Category 3) are the biggest contributors to Core Lab's upstream value chain, with their combined share accounting for 64% of the total Scope 3 emissions.

## Downstream GHG Emissions

- Two downstream categories were calculated in Core Lab's FY2023 GHG analysis – Use of Sold Products (Category 11) and End of life treatment of sold products (Category 12). Together these account for less than 1% of the scope 3 footprint.





# Value Chain Footprint by Category

# Upstream Value Chain Results: Categories 1 and 2

## Data sources

Sustainable1 received data from Core Lab's purchase ledger for FY2023. Key data points provided include supplier names, category of purchase and spend amount.

## Methodology

Sustainable1 used Core Lab's supplier spend data and supplier disclosed emissions data from Trucost Environmental Register where available. If supplier data was not available, sector-specific emission factors (tCO<sub>2</sub>e/mUSD) from the Trucost EEI-0 model was applied, to calculate the supply chain GHG emissions through all tiers up to and including raw material extraction.

## Final Activity Data

Sustainable1 has quantified the GHG scope 3 categories: Category 1, Purchased goods and services, and Category 2, Capital goods. This has been done by analyzing Core Lab's expenditures on 6,206 suppliers accounting for \$70 mUSD of spend, or 94% of total spend for that period (after eliminating tax spending, financial transactions, personal expenses, and items for Scope 3 categories 3-15, and negative expenditures).

## Exclusions

Sustainable1 excluded the following data in accordance with our standard practice and the Greenhouse Gas Protocol:

- All credits/negative spend lines and spend lines with zero or negative value
- Spend related to Scope 3 categories other than Purchased Goods and Services and Capital goods
- All other spend not related to Purchase goods and services and Capital goods such as taxes, fees or employee salary and benefits

| Parameter                                  | No. of suppliers | Expenditure (mUSD) |
|--|------------------|--------------------|
| Non-negative expenses provided by Core Lab | 6,467            | 74                 |
| Data analysed by Sustainable1              | 6,206            | 70                 |
| Percentage analysed                        | 96%              | 94%                |

# Scope 3 Categories 1 and 2 – Expenditure and GHG

Total Purchased Goods and Services and Capital Goods Emissions: 6,102 tCO<sub>2</sub>e

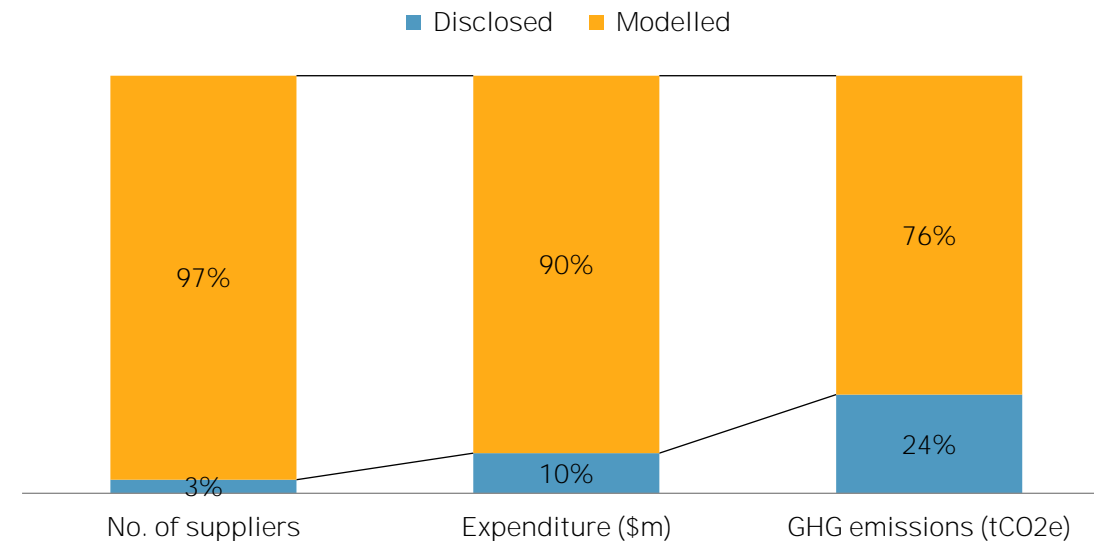
*Emissions in this category are associated with the production of products and capital goods purchased by the company.*

Total GHG emissions from Category 1, Purchased Goods and Services, and Category 2, Capital goods, are 6,102 tCO<sub>2</sub>e, accounting for 27% of total Scope 3 emissions. The average intensity of Core Lab's supply chain is 87 tCO<sub>2</sub>e/mUSD of spend.

Currently, 204 of the 6,206 suppliers analyzed disclose Scope 1 emissions. This accounts for 3% of all suppliers. However, these suppliers account for 24% of supplier Scope 1 emissions and 10% of supply chain spend.

## Scope 3 Categories 1 and 2 Summary

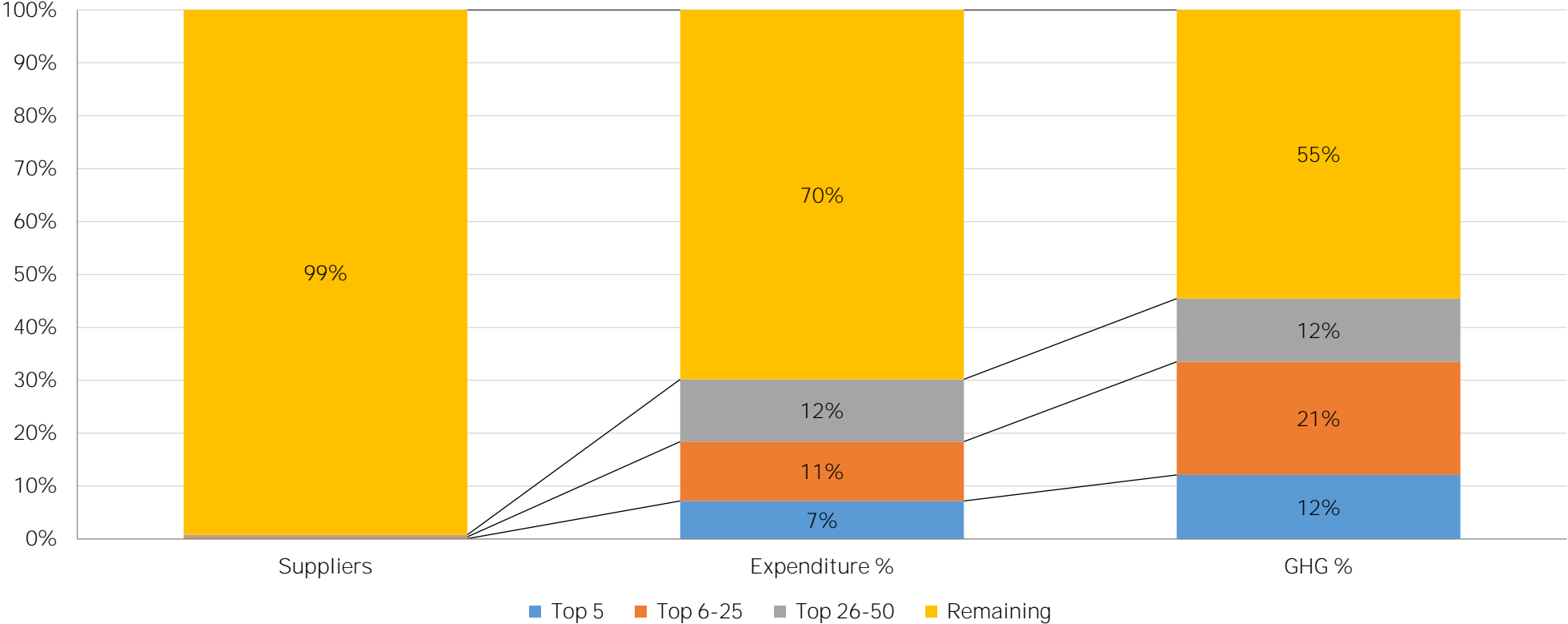
| Suppliers Analyzed        | Total GHG Footprint (tCO <sub>2</sub> e) | Average GHG Intensity (tCO <sub>2</sub> e/mUSD) |
|---------------------------|--|---|
| 6,206                     | 6,102                                    | 87  |
| Data Source               | Number of Suppliers                      | GHG Emissions (tCO <sub>2</sub> e)              |
| Supplier disclosed data   | 204                                      | 1,443   |
| Sustainable1 modeled data | 6,002                                    | 4,658   |



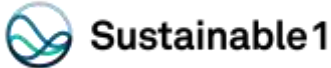
# Scope 3 Categories 1 and 2 – Expenditure and GHG

As per the graph below, the top 5 suppliers account for 7% of upstream **suppliers'** GHG emissions. The top 50 suppliers with the greatest GHG contribution represent 45% of the total upstream supplier emissions. While Core Lab has a diverse supplier set, there is potential to enact impactful management strategies by engaging with a small percentage of top suppliers.

Distribution of GHG Emissions (Scope 3 categories 1, 2)

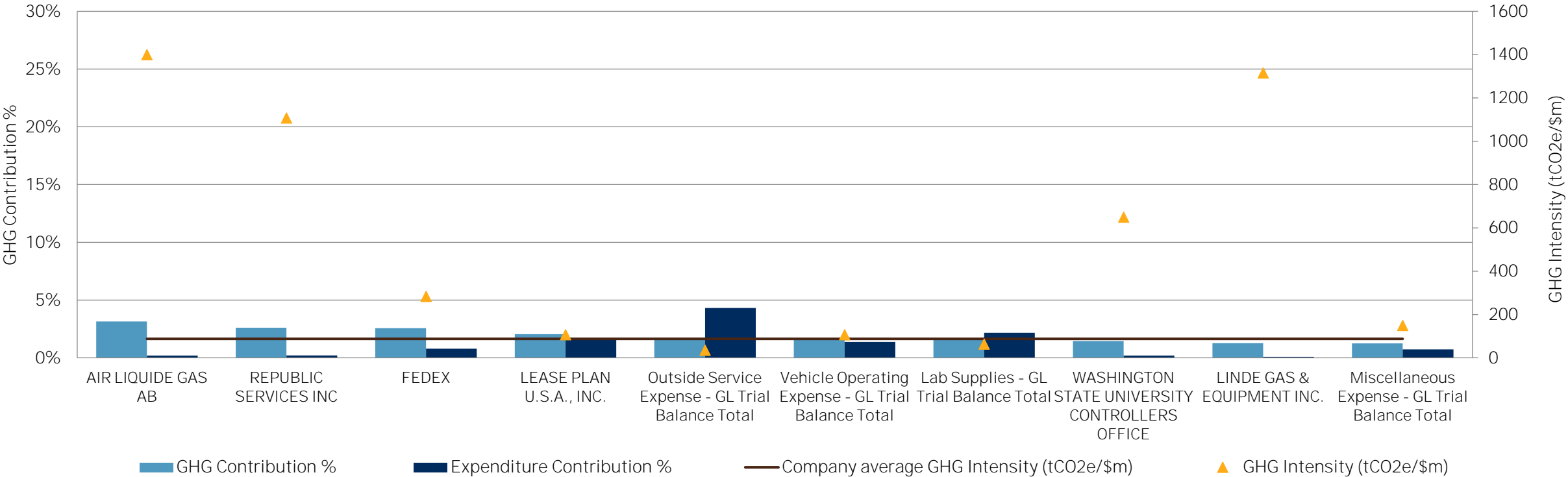


# Scope 3 Categories 1 and 2 – Emissions by Key Suppliers

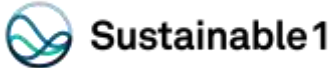


- The top 10 suppliers which contribute the highest emissions account for 19% of Core Lab's total supply chain emissions and 12% of Core Lab's supply chain spend. The suppliers with the highest contribution are AIR LIQUIDE GAS AB, REPUBLIX SERVICES INC, AND FEDEX.
- Seven of the top 10 suppliers have intensities above the overall supply chain average of 85 tCO<sub>2</sub>e/mUSD of spend. AIR LIQUIDE GAS AB, has the highest intensity of the top 10 at 1,399 tCO<sub>2</sub>e/mUSD of spend.

Top ten suppliers, by contribution to the GHG footprint (Scope 3 Categories 1 and 2)

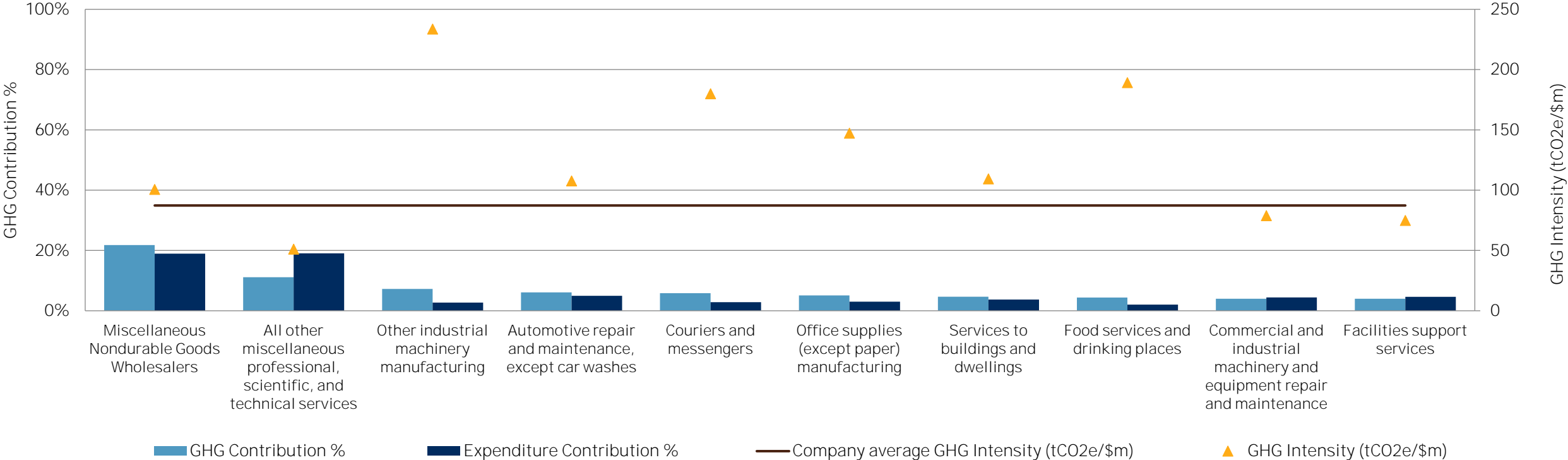


# Scope 3 Categories 1 and 2 – Emissions by Key Sectors



- Sustainable1 found that suppliers from the top 10 sectors contribute to approximately 74% of supply chain emissions.
- The sector Miscellaneous Nondurable Goods Wholesalers is the largest contributor in terms of GHG footprint. This sector contributes to 22% of upstream suppliers GHG emissions.
- Seven of the top 10 sectors have intensities above the overall supply chain average of 85 tCO<sub>2</sub>e/mUSD of spend.

Top ten sectors, by contribution to the GHG footprint (Scope 3 Categories 1 and 2)



# Scope 3 Category 3 – Fuel and Energy Related Activities

Total fuel and energy related activities emissions: 4,270 tCO<sub>2</sub>e

## Data sources

Sustainable1 received data from Core Lab including actual fuel and electricity consumption by location.

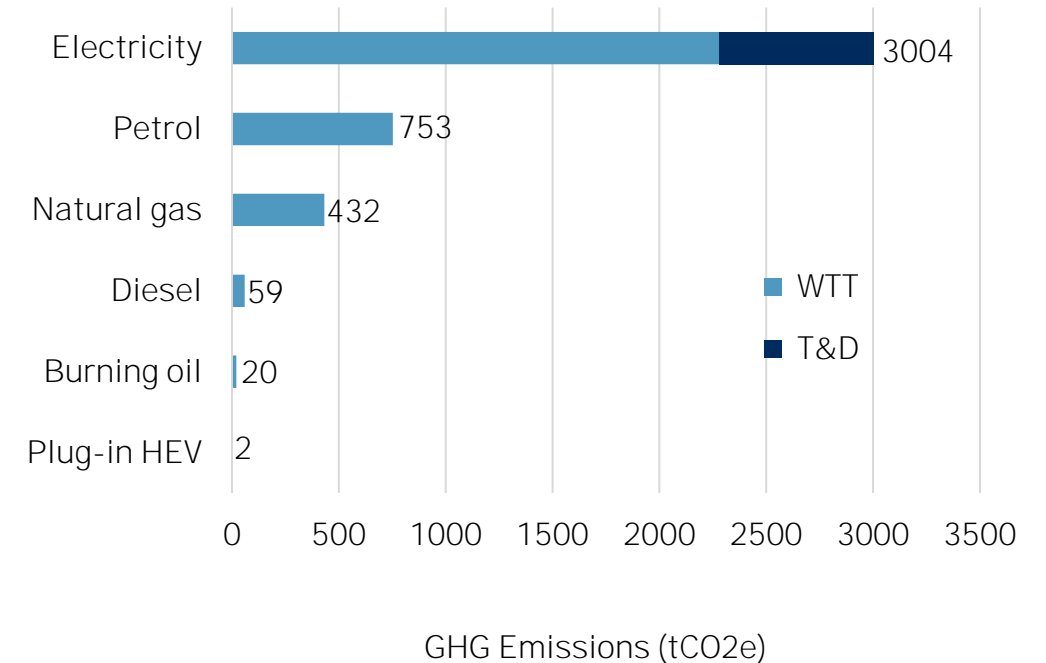
## Methodology

Sustainable1 used Core Lab energy consumption and applied location specific Defra emission factors to calculate transmission & distribution (T&D)<sup>1</sup> and well-to-tank (WTT)<sup>2</sup> emissions.

## Final Activity Data

Sustainable1 has quantified the GHG emissions of Scope 3 Category 3, Fuel and Energy Related Activities. The chart to the right displays the emissions for each energy type. Energy sources included electricity, petrol, natural gas, diesel, diesel, burning oil, and plug-in hybrid electric vehicles. Electricity consumption accounts for 60% of total emissions, followed by petrol at 24%, natural gas at 14% and diesel at 4%. The remaining sources contribute to less than 5% combined.

Emissions for fuel and energy related activities, by type of fuel



<sup>1</sup> Transmission and distribution (T&D) factors are used to account for emissions associated with grid losses (the energy loss that occurs in getting the electricity from the power plant to the organizations that purchase it).

<sup>2</sup> Well-to-tank (WTT) fuels conversion factors are used to account for emissions associated with extraction, refining and transportation of the raw fuel sources prior to combustion or electricity generation.

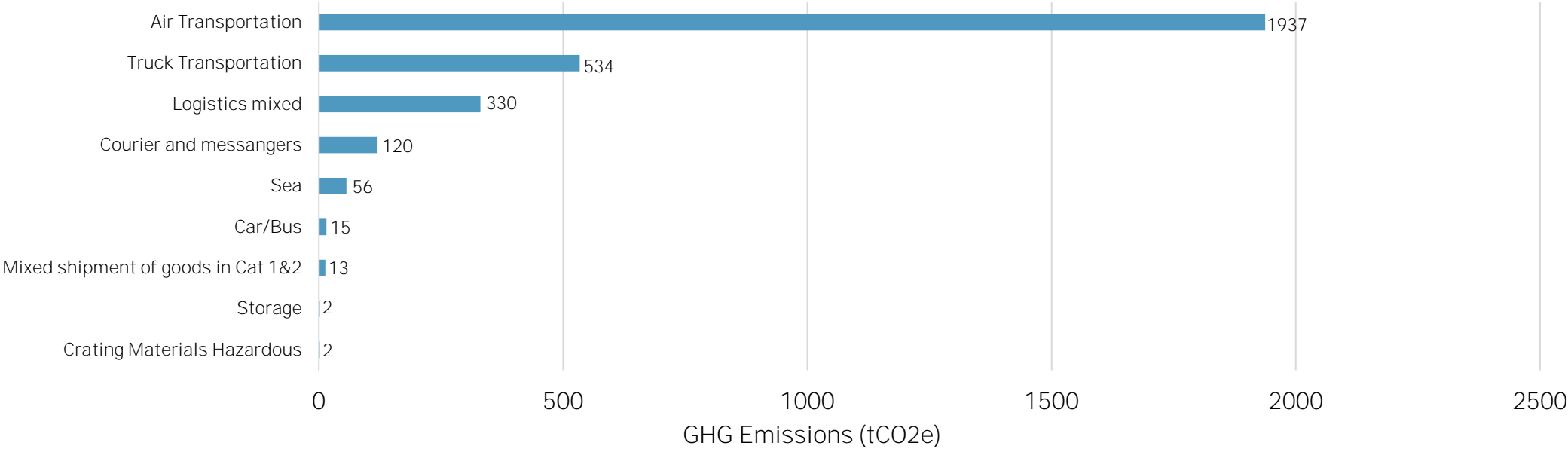


# Scope 3 Category 4 - Upstream Transportation and Distribution

Total upstream transportation and distribution emissions: 3,010 tCO<sub>2</sub>e

- Total expenditure were provided by . Sustainable1 estimated the associated emissions using expenditure data and the EEI-0 transportation model, largest of which is Mixed Transportation.

Upstream transportation emissions by transportation source



# Scope 3 Category 5 – Waste Generated in Operations

Total Waste related emissions: 791 tCO<sub>2</sub>e

## Data sources

Sustainable1 received waste quantities by disposal route and waste type from Core Lab.

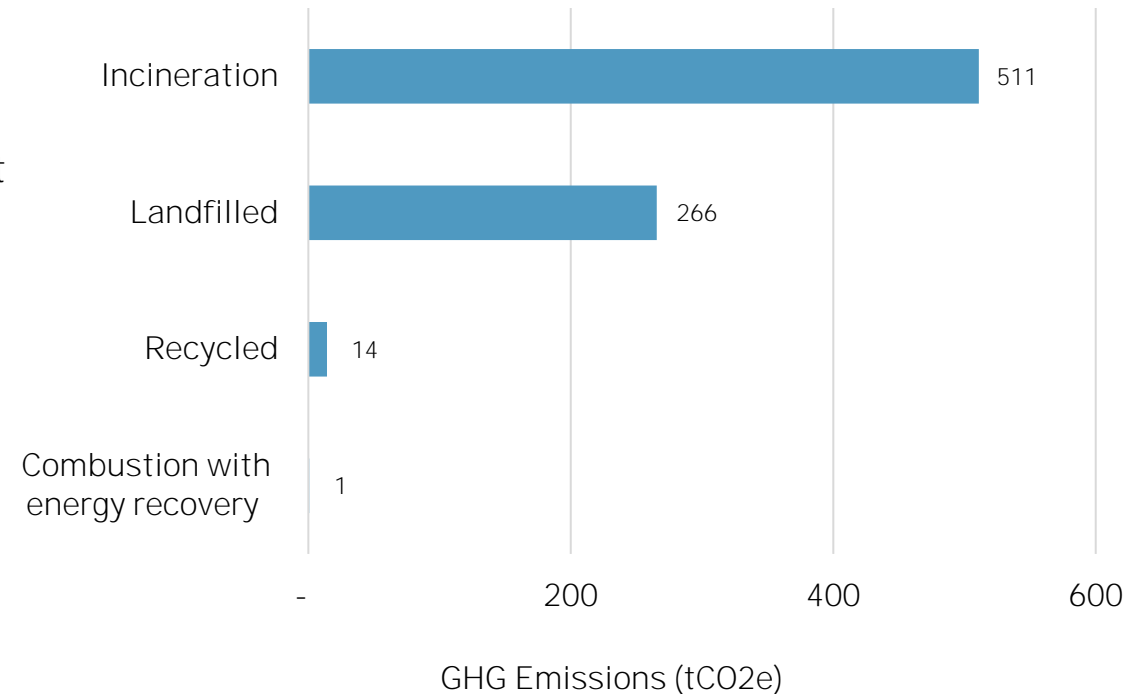
## Methodology

Sustainable1 used Core Lab waste data and applied the appropriate or best match among the Defra emission factor based on waste type and disposal route.

## Final Activity Data

The chart to the right displays the emissions for each disposal route. More than 70% all of the emissions came from the incineration of waste, with most of the remaining share coming landfill, and recycling.

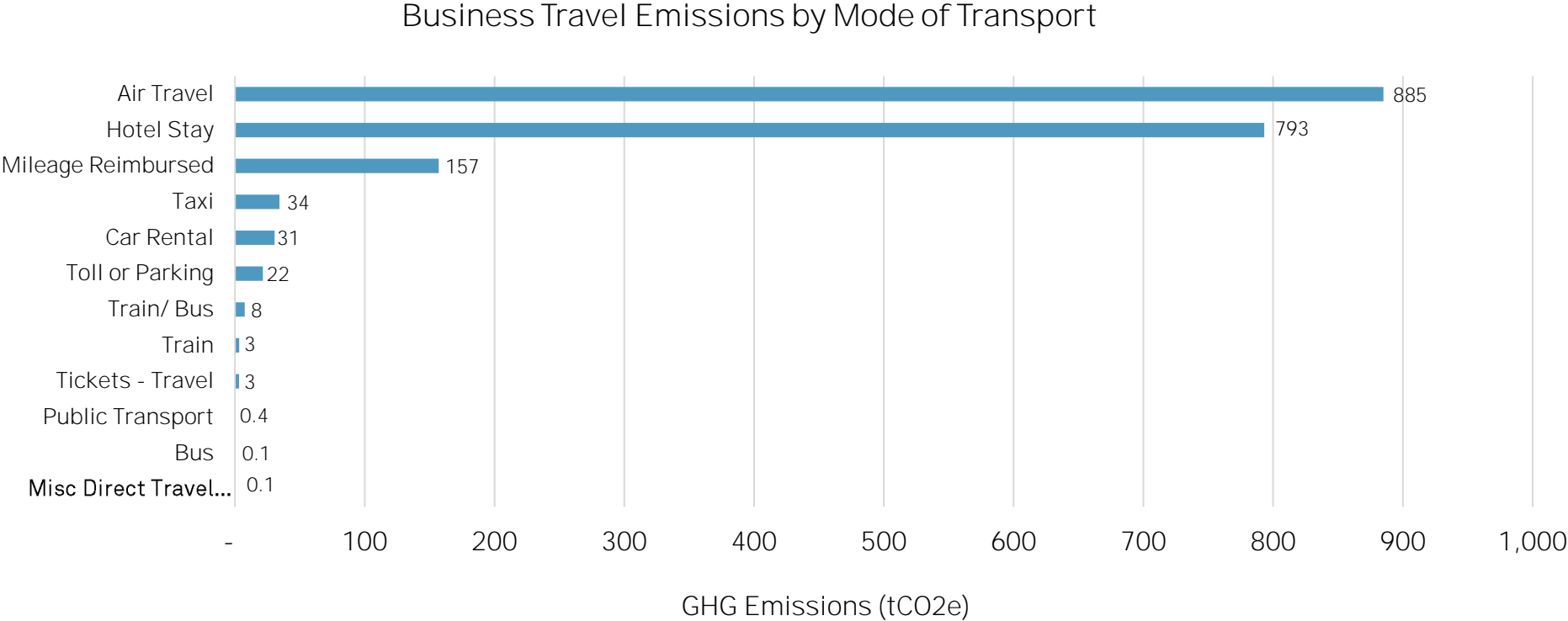
Waste emissions by Disposal Type



# Scope 3 Category 6 – Business Travel

Total Business Travel emissions: 1,936 tCO<sub>2</sub>e

- Emissions from business travel were calculated based on business travel data from Core Lab. The majority of emissions came from air travel during FY2023, contributing to 69% of the total.
- Emissions from hotels and rental vehicles, including mileage reimbursed, represent another 28% combined, with the remaining amount associated to taxi, train/bus and other public transport.



# Scope 3 Category 7 – Employee Commuting and WFH

Total Employee Commuting and WFH-Related Emissions: 6,720 tCO<sub>2</sub>e

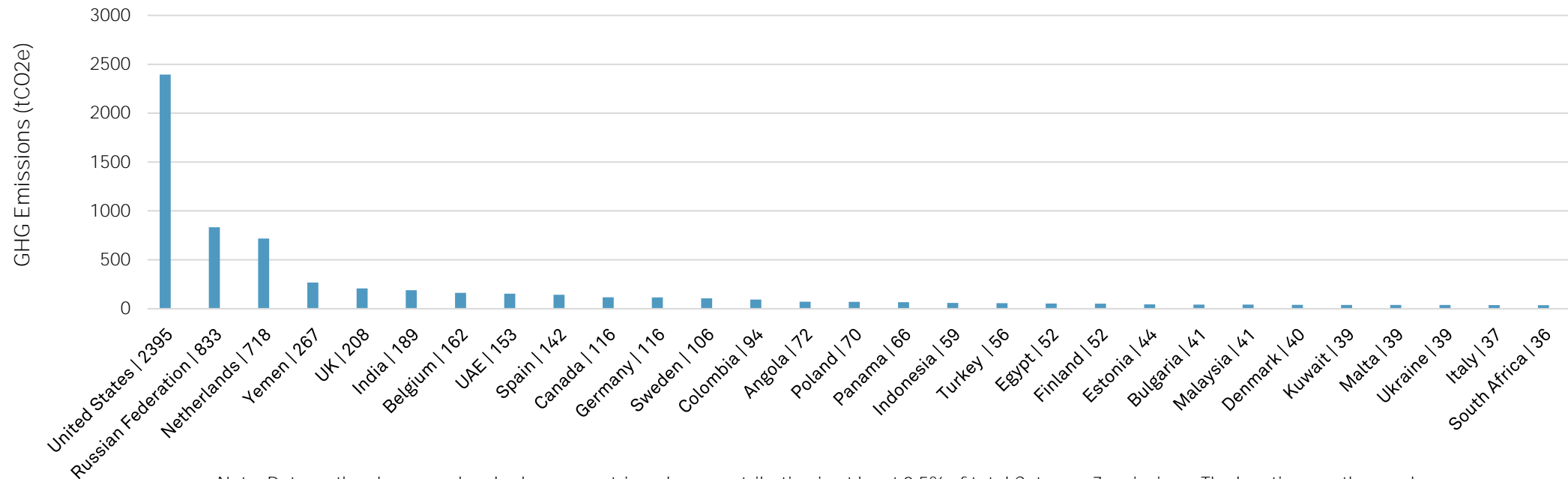
Data sources

Sustainable1 received total headcount (regular and contract employees) from sites in 55 countries.

Methodology

Sustainable1 used Core Lab headcount data, combined with OECD working hours, country level average commuting time, country level transportation mode split survey data, and DEFRA factors by mode of transportation. Core Lab has no employees working from home in FY 2023.

Employee Commuting Emissions



Note: Data on the above graph only shows countries whose contribution is at least 0.5% of total Category 7 emissions. The locations on the graph account for 93% of total Category 7 emissions, the remaining locations included in the analysis account for 7% of category 7 emissions. The horizontal axis shows emissions by country in the format [country name | emissions in tCO<sub>2</sub>e]

# Scope 3 Category 8 – Upstream Leased Assets

Total Upstream Leased Assets emissions: 844 tCO<sub>2</sub>e

## Data sources

Sustainable1 received building type data and square footage or annual expenditure from Core Lab for all upstream leased buildings not included in Scope 1 and 2. In addition, Core Lab provided annual expenditure for their equipment contract maintenance and expenditure or fuel consumption for leased vehicles.

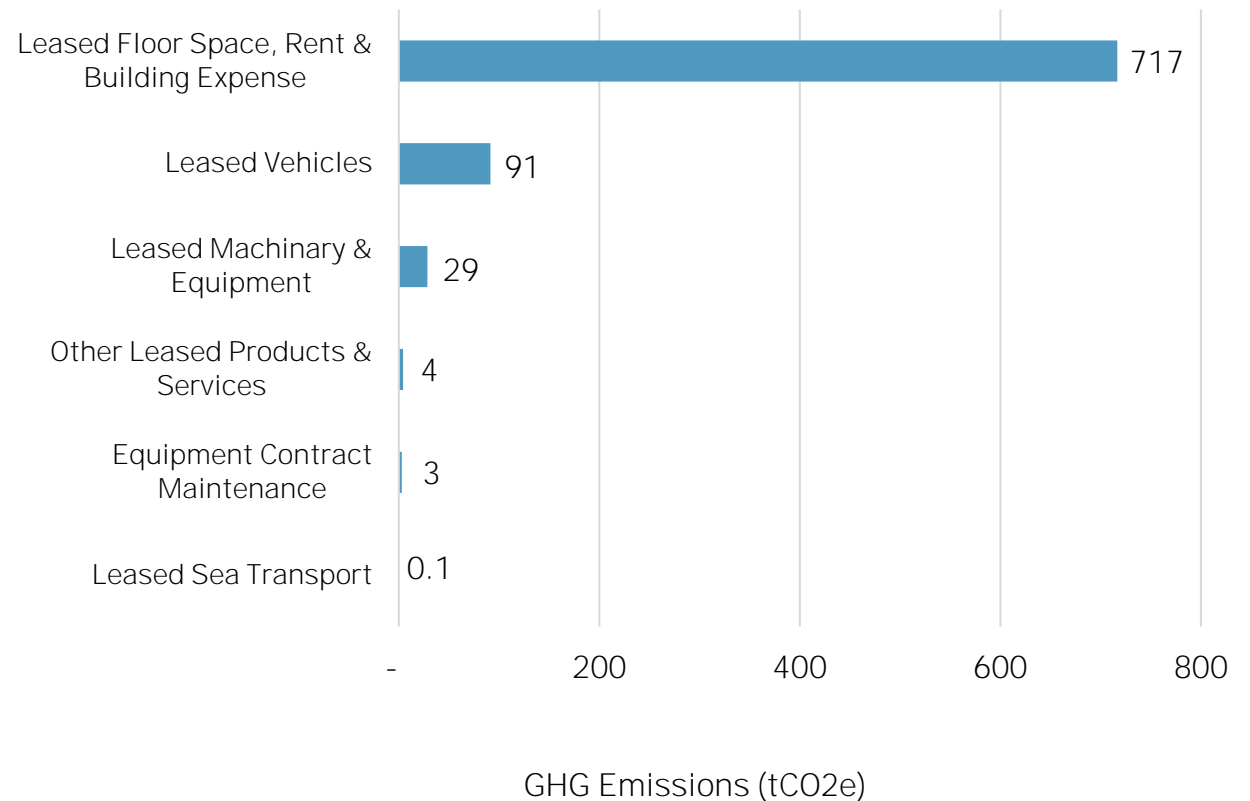
## Methodology

Sustainable1 applied average Scope 1 intensity (tCO<sub>2</sub>e/sq ft) and Scope 2 intensity (kWh/sq ft) by building type. The scope 2 intensity was combined with IEA emission factors to determine the final Scope 2 emissions of upstream leased assets.

For assets where only expenditure data was provided, emissions were estimated from the EEI-O model.

Defra emission factors by fuel type was applied to fuel consumption for leased vehicles.

Upstream Leased Assets Emissions



# Scope 3 Category 11 – Use of Sold Products

Total Use of Sold Products Emissions: 20 tCO<sub>2</sub>e

### Data sources

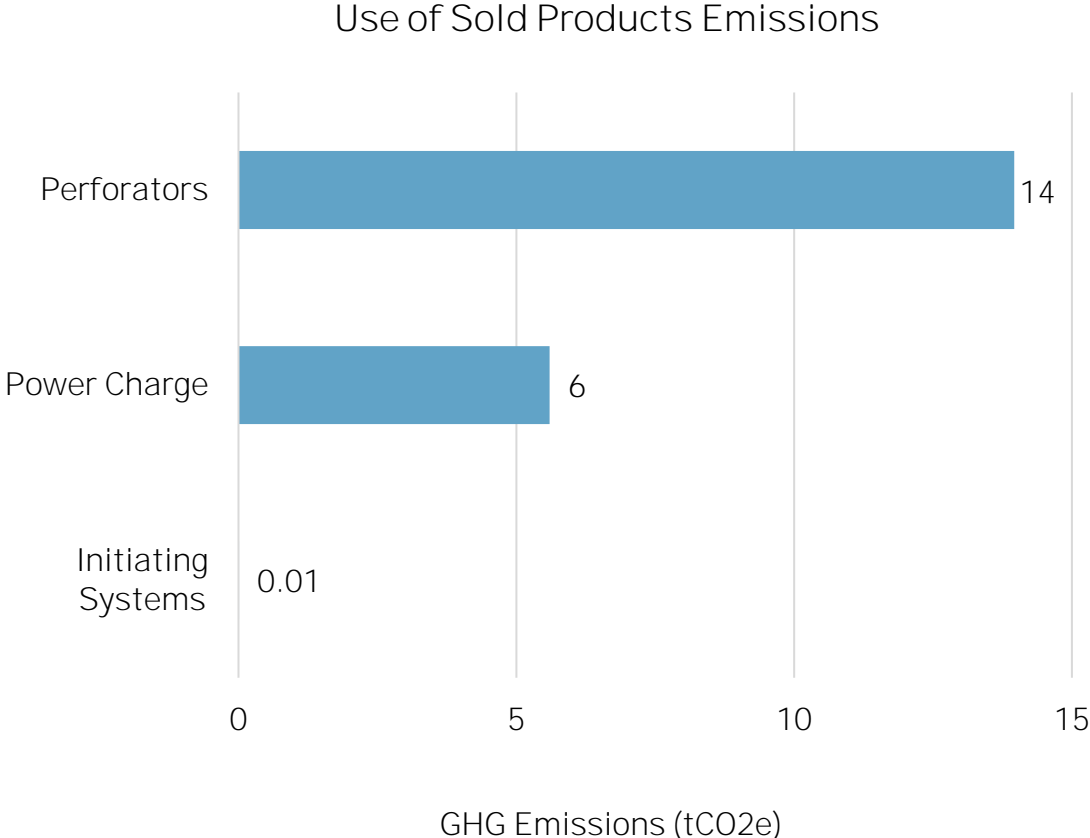
Core Lab provided product specification, quantity and total expenditure for all products.

### Methodology

Sustainable1 calculated emissions based on estimated use and type of explosive.

### Final Activity Data

Overall emissions from all products is minimal, with perforators accounting for about 70% of total emissions.



# Scope 3 Category 12 – End of Life Treatment of Sold Products

Total Product Disposal emissions: 10 tCO<sub>2</sub>e

### Data sources

Core Lab provided product specification, quantity and total expenditure for Metal Gun Systems and Bridge Plugs. For all other products Core Lab provided weight of materials and disposal route.

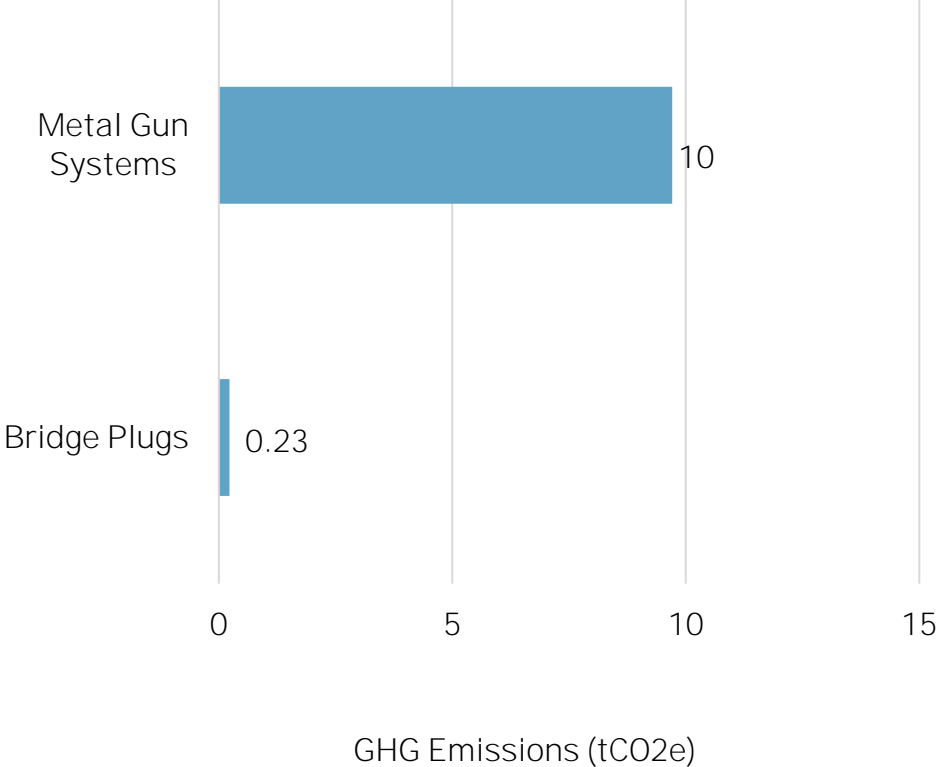
### Methodology

Sustainable1 calculated emissions based on disposal route and waste type.

### Final Activity Data

The majority of emissions, or 90%, came from the disposal of cardboard boxes, followed by the disposal of wood at 9% and minimal quantities from the disposal of steel tubes and bridge plugs.

End of life treatment of sold products emissions





# Industry Best Practices

## Best practice considerations for setting base for environmental reporting



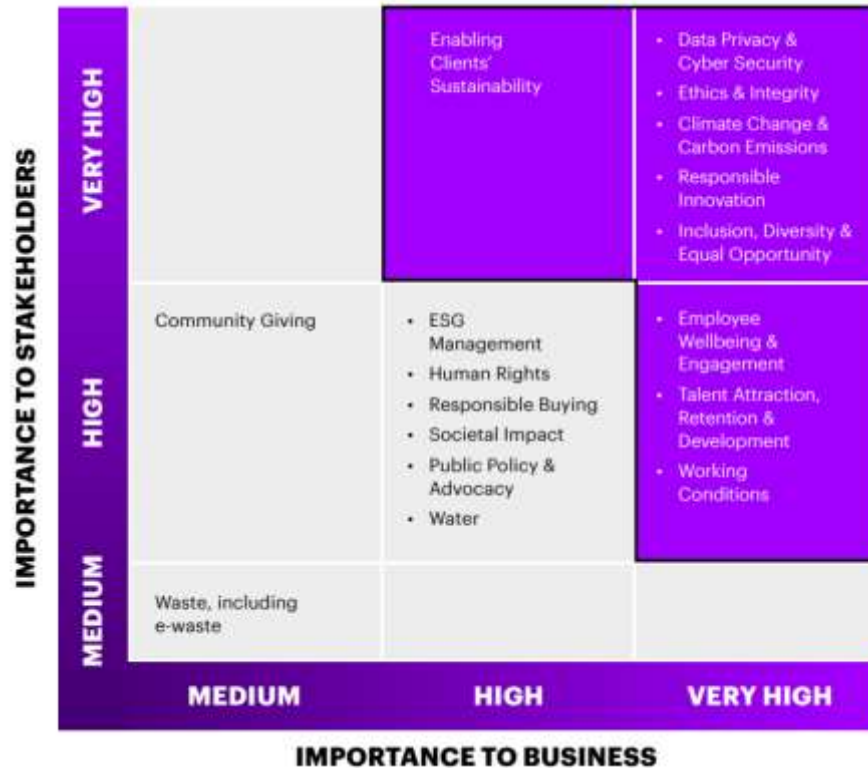
### ESG Report

Reporting ESG performance data in the public domain helps a reporting entity convey its alignment with climate change adaptation and mitigation. It also enables reporting entities to connect with like-minded organizations for collaborative partnerships and foster synergy.



### 1. Identify Material Aspects

Material aspects are topics that are critical for an organization and its stakeholders (employees, community, government, media). Identifying and reporting on material aspects **strengthens an organization's social license to operate.**



### 2. Create Vision & Policy

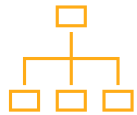
After determining material aspects, a reporting entity creates a vision for the future and develops policies on the material aspects that clarifies its position and approach towards creating value under each material aspect.

## Best practice considerations for data backed reporting and decision making



### Data

A number of quantification approaches are used to assess GHG inventory for an organization. Approaches leveraging on primary data (e.g. fuel and energy consumption, waste disposal tonnage by category and disposal route) are considered to generate emissions data of higher quality compared to methodologies that use secondary data (e.g. spend on upstream transportation or headcount per country to estimate emissions from commuting). To improve the data quality of the inventory, a reporting entity should focus on collecting primary data from all its business sites, suppliers, and other partners.



#### Data Owners

Assigning data owners at a site level enables easy collection of data at periodic intervals. Consistent data owners are well-versed with the methodology/SOPs and help address any anomaly in data collection right at the source.



#### Itemized bill

The reporting entity should request its supply chain partners such as lessors of sites, recycling partners, and building management to provide itemized bill instead of an aggregate bill.



#### Data Assurance

Assurance/internal audit of ESG data builds credibility and accuracy of the reported environmental indicators.



#### Supplier Engagement

The reporting entity may engage with its suppliers to encourage them to disclose their emissions and implement programs to reduce GHG emissions.



#### Environmental Indicators

The reporting entity may extend the scope of its reporting to other environmental indicators such as water, waste and biodiversity.

## Best practice considerations for managing scope 1 and 2 emissions



### Managing Scope 1,2 Emissions

Scope 1 and Scope 2 emissions are in direct control of the reporting entity as the emissions are generated within the its own offices/sites. Some of the best practices adopted by organizations around the world are detailed below:



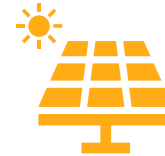
#### Fuel Use

- ✓ Implementing an Energy Management System
- ✓ Electricity based heating system instead of Natural Gas based system
- ✓ Periodic maintenance of the HVAC System
- ✓ Comprehensive Insulation (glass wool, double/triple glazed windows)
- ✓ Review use of refrigerant



#### Electricity Use

- ✓ LED lighting
- ✓ Occupancy sensor-based lighting
- ✓ Centrally controlled heating/cooling
- ✓ Ventilation management
- ✓ ENERGY STAR-certified equipment
- ✓ Programmable thermostats
- ✓ Lease office space in a Green certified building



#### Renewable Energy

- ✓ Procurement of solar/wind-based energy
- ✓ Procurement of power from low emission suppliers
- ✓ Installation of solar panels on rooftop



#### Behavioral Change

- ✓ Employee sensitization on responsible use of resources and energy

## Best practice considerations for managing Scope 3 emissions



### Managing Scope 3 Emissions

An organization has relatively lower control over Scope 3 emissions. Some of the best practices adopted by organizations around the world are detailed below:

| Scope 3 Category                               | Contribution (%) | Best Practices   |
|--|------------------|--|
| Employee Commuting                             | 28%              | <ul style="list-style-type: none"> <li>✓ Regular employee survey to collect data on mode of transport and distance travelled to office</li> <li>✓ Generate employee travel reports in accordance with the overall working days</li> <li>✓ Utilization of Public transport</li> </ul>                               |
| Purchased Goods and Services and Capital Goods | 23%              | <ul style="list-style-type: none"> <li>✓ Procurement from suppliers with lower emission profile</li> <li>✓ Encourage suppliers to disclose environmental performance</li> </ul>  |
| Fuel and Energy related Services               | 18%              | <ul style="list-style-type: none"> <li>✓ Source Renewable Energy</li> <li>✓ Procurement of electricity from suppliers with lower emission factor</li> </ul>  |
| Upstream Transportation                        | 13%              | <ul style="list-style-type: none"> <li>✓ Use of electric vehicles</li> <li>✓ Request suppliers and customers to share distance travelled and mode of transport, and track weight of shipment</li> </ul>  |
| Business Travel                                | 8%               | <ul style="list-style-type: none"> <li>✓ Choose the most carbon efficient route when possible (avoid stopovers, fly economy, buy into sustainable aviation services when possible)</li> <li>✓ Look for environmentally certified travel organizations or services</li> <li>✓ Avoid travel when possible</li> </ul> |

# Appendices

Appendix I – Primary information provided by Core Lab for emission calculations by company division

Appendix II – Scope 1 & 2 Glossary

Appendix III – Scope 3 Methodology

# Appendix I

Primary information provided by Core Lab for emission calculations by company division



# Scope 1

|                             | Operational Fuel |                 |                  |                      |                  |
|-----------------------------|------------------|-----------------|------------------|----------------------|------------------|
|                             | Burning Oil      | Diesel          | Natural gas      |                      | Petrol           |
| Facility Type               | litres           | litres          | m3               | kWh                  | litres           |
| Advanced Technology Centers | 0.00             | 0.00            | 0.00             | 2,067,077.79         | 0.00             |
| Administration              | 0.00             | 0.00            | 0.00             | 0.00                 | 0.00             |
| Warehouse Distribution      | 4,290.00         | 0.00            | 11,737.33        | 934,578.77           | 0.00             |
| Manufacturing               | 0.00             | 0.00            | 0.00             | 1,415,417.24         | 0.00             |
| Regional Specialty Centers  | 0.00             | 0.00            | 0.00             | 5,376,364.01         | 39,440.00        |
| Field Services              | 2,800.00         | 0.00            | 71,572.59        | 3,071,325.12         | 0.00             |
| Franchise                   | 0.00             | 0.00            | 0.00             | 0.00                 | 14,056.00        |
| Inspection Services         | 30,711.00        | 2,200.00        | 16,648.08        | 333,595.22           | 0.00             |
| Opening Sites               | 0.00             | 0.00            | 0.00             | 0.00                 | 0.00             |
| Closed Sites                | 0.00             | 0.00            | 0.00             | 0.00                 | 0.00             |
| <b>Total</b>                | <b>37,801.00</b> | <b>2,200.00</b> | <b>99,958.00</b> | <b>13,198,358.15</b> | <b>53,496.00</b> |

|                             | Vehicle Fuel        |                 |                  |                     |                  |
|-----------------------------|---------------------|-----------------|------------------|---------------------|------------------|
|                             | Diesel              |                 | Petrol           |                     | Plug-in HEV      |
| Facility Type               | km                  | litres          | km               | litres              | km               |
| Advanced Technology Centers | 0.00                | 0.00            | 0.00             | 5,312.99            | 0.00             |
| Administration              | 0.00                | 0.00            | 0.00             | 0.00                | 0.00             |
| Warehouse Distribution      | 0.00                | 0.00            | 0.00             | 85,026.02           | 0.00             |
| Manufacturing               | 0.00                | 0.00            | 0.00             | 64,836.56           | 0.00             |
| Regional Specialty Centers  | 0.00                | 1,662.00        | 0.00             | 87,179.90           | 0.00             |
| Field Services              | 0.00                | 0.00            | 0.00             | 215,628.97          | 0.00             |
| Franchise                   | 0.00                | 0.00            | 0.00             | 46,956.00           | 0.00             |
| Inspection Services         | 1,370,536.00        | 0.00            | 70,350.00        | 676,999.10          | 78,761.00        |
| Opening Sites               | 0.00                | 0.00            | 0.00             | 0.00                | 0.00             |
| Closed Sites                | 0.00                | 0.00            | 0.00             | 0.00                | 0.00             |
| <b>Total</b>                | <b>1,370,536.00</b> | <b>1,662.00</b> | <b>70,350.00</b> | <b>1,181,939.53</b> | <b>78,761.00</b> |

# Scope 1 – continued, Scope 2

|                             | Refrigerants    |               |             |              |               |
|-----------------------------|-----------------|---------------|-------------|--------------|---------------|
|                             | HCFC-22/R22     | HFC-134a      | R406A       | R407C        | R410A         |
| Facility Type               | kg              | kg            | kg          | kg           | kg            |
| Advanced Technology Centers | 54.40           | 136.08        | 0.00        | 0.00         | 59.51         |
| Administration              | 0.00            | 0.00          | 0.00        | 0.00         | 0.00          |
| Warehouse Distribution      | 0.00            | 0.00          | 0.00        | 0.00         | 0.00          |
| Manufacturing               | 0.00            | 0.00          | 0.00        | 0.00         | 0.00          |
| Regional Specialty Centers  | 0.00            | 847.00        | 0.00        | 0.00         | 17.24         |
| Field Services              | 0.00            | 0.00          | 0.00        | 0.00         | 0.00          |
| Franchise                   | 1,210.00        | 0.00          | 0.00        | 0.00         | 0.00          |
| Inspection Services         | 0.00            | 0.00          | 1.21        | 25.40        | 54.40         |
| Opening Sites               | 0.00            | 0.00          | 0.00        | 0.00         | 0.00          |
| Closed Sites                | 0.00            | 0.00          | 0.00        | 0.00         | 0.00          |
| <b>Total</b>                | <b>1,264.40</b> | <b>983.08</b> | <b>1.21</b> | <b>25.40</b> | <b>131.15</b> |

|                             | Electricity          | Scope 2          |                  |
|-----------------------------|----------------------|------------------|------------------|
|                             | Grid                 | Location Based   | Market Based     |
| Facility Type               | kWh                  | tc02e            | tc02e            |
| Advanced Technology Centers | 6,243,644.99         | 2,409.28         | 2,408.47         |
| Administration              | 0.00                 | 0.00             | 0.00             |
| Warehouse Distribution      | 419,788.11           | 140.84           | 151.33           |
| Manufacturing               | 5,475,738.74         | 1,670.07         | 1,678.57         |
| Regional Specialty Centers  | 4,848,961.98         | 1,516.31         | 1,537.72         |
| Field Services              | 2,294,342.66         | 774.32           | 878.62           |
| Franchise                   | 14,400.00            | 8.82             | 8.82             |
| Inspection Services         | 11,023,719.56        | 3,765.28         | 3,758.22         |
| Opening Sites               | 0.00                 | 0.00             | 0.00             |
| Closed Sites                | 0.00                 | 0.00             | 0.00             |
| <b>Total</b>                | <b>30,320,596.04</b> | <b>10,284.92</b> | <b>10,421.76</b> |

# Scope 3

|                             | Categories 1 and 2 |                   |              |
|-----------------------------|--------------------|-------------------|--------------|
|                             | Cat 1 Expenditure  | Cat 2 Expenditure | Total        |
| Facility Type               | mUSD               | mUSD              | mUSD         |
| Advanced Technology Centers | 17.27              | 0.48              | 17.76        |
| Administration              | 0.00               | 0.00              | 0.00         |
| Warehouse Distribution      | 1.44               | 0.38              | 1.82         |
| Manufacturing               | 7.43               | 1.09              | 8.52         |
| Regional Specialty Centers  | 6.13               | 0.22              | 6.35         |
| Field Services              | 5.08               | 0.61              | 5.69         |
| Franchise                   | 0.00               | 0.00              | 0.00         |
| Inspection Services         | 28.63              | 0.98              | 29.62        |
| Opening Sites               | 0.00               | 0.00              | 0.00         |
| Closed Sites                | 0.11               | 0.00              | 0.11         |
| <b>Total</b>                | <b>66.10</b>       | <b>3.76</b>       | <b>69.86</b> |

|                             | Category 3           |                      |                  |                  |                     |                  |                 |                     |                  |
|-----------------------------|----------------------|----------------------|------------------|------------------|---------------------|------------------|-----------------|---------------------|------------------|
|                             | Electricity          | Natural gas          |                  | Burning oil      | Petrol              |                  | Diesel          |                     | Plug-in HEV      |
| Facility Type               | kWh                  | kWh                  | cubic metres     | litres           | litres              | km               | litres          | km                  | km               |
| Advanced Technology Centers | 6,243,644.99         | 2,067,077.79         | 0.00             | 0.00             | 5,312.99            | 0.00             | 0.00            | 0.00                | 0.00             |
| Administration              | 0.00                 | 0.00                 | 0.00             | 0.00             | 0.00                | 0.00             | 0.00            | 0.00                | 0.00             |
| Warehouse Distribution      | 419,788.11           | 934,578.77           | 11,737.33        | 4,290.00         | 85,026.02           | 0.00             | 0.00            | 0.00                | 0.00             |
| Manufacturing               | 5,475,738.74         | 1,415,417.24         | 0.00             | 0.00             | 64,836.56           | 0.00             | 0.00            | 0.00                | 0.00             |
| Regional Specialty Centers  | 4,848,961.98         | 5,376,364.01         | 0.00             | 0.00             | 126,619.90          | 0.00             | 1,662.00        | 0.00                | 0.00             |
| Field Services              | 2,294,342.66         | 3,071,325.12         | 71,572.59        | 2,800.00         | 215,628.97          | 0.00             | 0.00            | 0.00                | 0.00             |
| Franchise                   | 14,400.00            | 0.00                 | 0.00             | 0.00             | 61,012.00           | 0.00             | 0.00            | 0.00                | 0.00             |
| Inspection Services         | 11,023,719.56        | 333,595.22           | 16,648.08        | 30,711.00        | 676,999.10          | 70,350.00        | 2,200.00        | 1,370,536.00        | 78,761.00        |
| Opening Sites               | 0.00                 | 0.00                 | 0.00             | 0.00             | 0.00                | 0.00             | 0.00            | 0.00                | 0.00             |
| Closed Sites                | 0.00                 | 0.00                 | 0.00             | 0.00             | 0.00                | 0.00             | 0.00            | 0.00                | 0.00             |
| <b>Total</b>                | <b>30,320,596.04</b> | <b>13,198,358.15</b> | <b>99,958.00</b> | <b>37,801.00</b> | <b>1,235,435.53</b> | <b>70,350.00</b> | <b>3,862.00</b> | <b>1,370,536.00</b> | <b>78,761.00</b> |

# Scope 3 - continued

|                             | Category 4         |         |                        |                             |                 |                                    |        |         |                      |
|-----------------------------|--------------------|---------|------------------------|-----------------------------|-----------------|------------------------------------|--------|---------|----------------------|
|                             | Air Transportation | Car/Bus | Courier and messengers | Crating Materials Hazardous | Logistics mixed | Mixed shipment of goods in Cat 1&2 | Sea    | Storage | Truck Transportation |
| Facility Type               | mUSD               | mUSD    | mUSD                   | mUSD                        | mUSD            | mUSD                               | mUSD   | mUSD    | mUSD                 |
| Advanced Technology Centers | 0.0506             | 0.0000  | 0.0057                 | 0.0003                      | 0.4572          | 0.0000                             | 0.0000 | 0.0025  | 0.1031               |
| Administration              | 0.0000             | 0.0000  | 0.0000                 | 0.0000                      | 0.0000          | 0.0000                             | 0.0000 | 0.0000  | 0.0000               |
| Warehouse Distribution      | 0.2691             | 0.0037  | 0.0139                 | 0.0000                      | 0.4778          | 0.0002                             | 0.0000 | 0.0001  | 1.1951               |
| Manufacturing               | 1.1912             | 0.0000  | 0.0944                 | 0.0132                      | 0.1909          | 0.0817                             | 0.0545 | 0.0002  | 1.0161               |
| Regional Specialty Centers  | 0.1166             | 0.0550  | 0.1248                 | 0.0000                      | 0.1326          | 0.0002                             | 0.0000 | 0.0075  | 0.2236               |
| Field Services              | 0.0411             | 0.0037  | 0.0127                 | 0.0000                      | 0.3841          | 0.0000                             | 0.0000 | 0.0000  | 0.1109               |
| Franchise                   | 0.0000             | 0.0000  | 0.0000                 | 0.0000                      | 0.0000          | 0.0000                             | 0.0000 | 0.0000  | 0.0000               |
| Inspection Services         | 0.1232             | 0.0097  | 0.5045                 | 0.0073                      | 0.0038          | 0.0002                             | 0.0036 | 0.0000  | 0.0116               |
| Opening Sites               | 0.0000             | 0.0000  | 0.0000                 | 0.0000                      | 0.0000          | 0.0000                             | 0.0000 | 0.0000  | 0.0000               |
| Closed Sites                | 0.0000             | 0.0000  | 0.0000                 | 0.0000                      | 0.0000          | 0.0000                             | 0.0000 | 0.0000  | 0.0000               |
| Total                       | 1.79               | 0.07    | 0.76                   | 0.02                        | 1.65            | 0.08                               | 0.06   | 0.01    | 2.66                 |

|                             | Category 5                      |              |            |      |          |      |
|-----------------------------|---------------------------------|--------------|------------|------|----------|------|
|                             | Combustion with energy recovery | Incineration | Landfilled |      | Recycled |      |
| Facility Type               | tonnes                          | tonnes       | tonnes     | mUSD | tonnes   | mUSD |
| Advanced Technology Centers | 18.19                           | 0.00         | 28.17      | 0.11 | 1.86     | 0.00 |
| Administration              | 0.00                            | 0.00         | 0.00       | 0.00 | 0.00     | 0.00 |
| Warehouse Distribution      | 0.00                            | 0.00         | 0.00       | 0.00 | 0.00     | 0.00 |
| Manufacturing               | 0.00                            | 0.00         | 0.00       | 0.57 | 19.52    | 0.00 |
| Regional Specialty Centers  | 0.00                            | 0.00         | 0.00       | 0.02 | 1.90     | 0.00 |
| Field Services              | 0.00                            | 0.00         | 0.00       | 0.07 | 0.00     | 0.00 |
| Franchise                   | 0.00                            | 0.00         | 0.00       | 0.00 | 0.00     | 0.00 |
| Inspection Services         | 14.85                           | 24,008.52    | 0.80       | 0.94 | 40.59    | 0.09 |
| Opening Sites               | 0.00                            | 0.00         | 0.00       | 0.00 | 0.00     | 0.00 |
| Closed Sites                | 0.00                            | 0.00         | 0.00       | 0.03 | 0.00     | 0.00 |
| Total                       | 33.04                           | 24,008.52    | 28.97      | 1.74 | 63.87    | 0.09 |

# Scope 3 - continued

| Category 6                  |             |                     |             |             |             |                  |                    |                          |                  |             |                  |                 |             |             |
|-----------------------------|-------------|---------------------|-------------|-------------|-------------|------------------|--------------------|--------------------------|------------------|-------------|------------------|-----------------|-------------|-------------|
|                             | Air Travel  |                     | Bus         | Car Rental  | Hotel Stay  |                  | Mileage Reimbursed | Misc Direct Travel Costs | Public Transport | Taxi        | Tickets - Travel | Toll or Parking | Train       | Train/ Bus  |
| Facility Type               | mUSD        | passenger miles     | mUSD        | mUSD        | mUSD        | room per night   | vehicle miles      | mUSD                     | mUSD             | mUSD        | mUSD             | mUSD            | mUSD        | mUSD        |
| Advanced Technology Centers | 0.18        | 977,672.89          | 0.00        | 0.06        | 0.46        | 2,852.00         | 116,996.90         | 0.00                     | 0.00             | 0.05        | 0.00             | 0.03            | 0.00        | 0.00        |
| Administration              | 0.00        | 0.00                | 0.00        | 0.00        | 0.00        | 0.00             | 0.00               | 0.00                     | 0.00             | 0.00        | 0.00             | 0.00            | 0.00        | 0.00        |
| Warehouse Distribution      | 0.02        | 106,100.37          | 0.00        | 0.01        | 0.10        | 292.00           | 45,819.40          | 0.00                     | 0.00             | 0.00        | 0.00             | 0.00            | 0.00        | 0.00        |
| Manufacturing               | 0.04        | 355,107.42          | 0.00        | 0.01        | 0.14        | 1,399.00         | 122,865.18         | 0.00                     | 0.00             | 0.01        | 0.00             | 0.01            | 0.00        | 0.00        |
| Regional Specialty Centers  | 0.07        | 180,822.02          | 0.00        | 0.01        | 0.14        | 1,497.00         | 102,331.31         | 0.00                     | 0.00             | 0.03        | 0.00             | 0.01            | 0.00        | 0.00        |
| Field Services              | 0.00        | 449,037.00          | 0.00        | 0.01        | 0.14        | 1,336.00         | 55,795.10          | 0.00                     | 0.00             | 0.01        | 0.00             | 0.02            | 0.00        | 0.00        |
| Franchise                   | 0.00        | 0.00                | 0.00        | 0.00        | 0.00        | 1.00             | 0.00               | 0.00                     | 0.00             | 0.00        | 0.00             | 0.00            | 0.00        | 0.00        |
| Inspection Services         | 0.14        | 401,235.53          | 0.00        | 0.04        | 0.49        | 10,521.00        | 110,972.80         | 0.00                     | 0.00             | 0.07        | 0.06             | 0.04            | 0.00        | 0.01        |
| Opening Sites               | 0.00        | 0.00                | 0.00        | 0.00        | 0.00        | 0.00             | 0.00               | 0.00                     | 0.00             | 0.00        | 0.00             | 0.00            | 0.00        | 0.00        |
| Closed Sites                | 0.00        | 0.00                | 0.00        | 0.00        | 0.00        | 0.00             | 2,870.00           | 0.00                     | 0.00             | 0.00        | 0.00             | 0.00            | 0.00        | 0.00        |
| <b>Total</b>                | <b>0.45</b> | <b>2,469,975.24</b> | <b>0.00</b> | <b>0.14</b> | <b>1.48</b> | <b>17,898.00</b> | <b>557,650.69</b>  | <b>0.00</b>              | <b>0.00</b>      | <b>0.16</b> | <b>0.06</b>      | <b>0.10</b>     | <b>0.01</b> | <b>0.02</b> |

| Category 7                  |                     |                 |
|-----------------------------|---------------------|-----------------|
|                             | Number of Employees | Toll or Parking |
| Facility Type               | #                   | mUSD            |
| Advanced Technology Centers | 519.00              | 1,128.68        |
| Administration              | 2.00                | 3.65            |
| Warehouse Distribution      | 66.00               | 105.82          |
| Manufacturing               | 359.00              | 736.05          |
| Regional Specialty Centers  | 410.00              | 476.69          |
| Field Services              | 231.00              | 468.22          |
| Franchise                   | 0.00                | 0.00            |
| Inspection Services         | 2,334.00            | 3,801.08        |
| Opening Sites               | 0.00                | 0.00            |
| Closed Sites                | 0.00                | 0.00            |
| <b>Total</b>                | <b>3,921.00</b>     | <b>6,720.19</b> |

| Category 8                  |                                |   |                   |             |                              |                      |                   |                 |             |                                  |
|-----------------------------|--------------------------------|---|-------------------|-------------|------------------------------|----------------------|-------------------|-----------------|-------------|----------------------------------|
|                             | Equipment Contract Maintenance | Leased Floor Space, Rent & Building Expense |                   |             | Leased Machinery & Equipment | Leased Sea Transport | Leased Vehicles   |                 |             | Other Leased Products & Services |
| Facility Type               | mUSD                           | sq ft                                       | kWh               | mUSD        | mUSD                         | mUSD                 | km                | Litre - Petrol  | mUSD        | mUSD                             |
| Advanced Technology Centers | 0.02                           | 160.49                                      | 0.00              | 0.46        | 0.46                         | 0.000                | 0.00              | 0.00            | 0.06        | 0.00                             |
| Administration              | 0.00                           | 0.00  | 0.00              | 0.00        | 0.00                         | 0.000                | 0.00              | 0.00            | 0.00        | 0.00                             |
| Warehouse Distribution      | 0.00                           | 26,160.00                                   | 0.00              | 0.00        | 0.06                         | 0.000                | 0.00              | 0.00            | 0.00        | 0.01                             |
| Manufacturing               | 0.07                           | 40,350.00                                   | 0.00              | 0.00        | 0.29                         | 0.000                | 0.00              | 0.00            | 0.00        | 0.00                             |
| Regional Specialty Centers  | 0.00                           | 0.00  | 0.00              | 0.00        | 0.19                         | 0.002                | 0.00              | 0.00            | 0.02        | 0.00                             |
| Field Services              | 0.03                           | 6,471.23                                    | 0.00              | 0.00        | 0.18                         | 0.000                | 0.00              | 0.00            | 0.02        | 0.00                             |
| Franchise                   | 0.00                           | 0.00  | 0.00              | 0.00        | 0.00                         | 0.000                | 0.00              | 0.00            | 0.00        | 0.00                             |
| Inspection Services         | 0.07                           | 30,331.22                                   | 309,747.00        | 0.00        | 0.61                         | 0.000                | 315,000.00        | 9,311.16        | 0.99        | 0.08                             |
| Opening Sites               | 0.00                           | 0.00  | 0.00              | 0.00        | 0.00                         | 0.000                | 0.00              | 0.00            | 0.00        | 0.00                             |
| Closed Sites                | 0.00                           | 0.00  | 0.00              | 0.00        | 0.00                         | 0.000                | 0.00              | 0.00            | 0.00        | 0.00                             |
| <b>Total</b>                | <b>0.20</b>                    | <b>103,472.94</b>                           | <b>309,747.00</b> | <b>0.46</b> | <b>1.80</b>                  | <b>0.00</b>          | <b>315,000.00</b> | <b>9,311.16</b> | <b>1.08</b> | <b>0.09</b>                      |

# Scope 3 - continued

|                             | Category 11         |                  |                    |
|-----------------------------|---------------------|------------------|--------------------|
|                             | Perforators         | Power Charge     | Initiating Systems |
| Facility Type               | # of Units          | # of Units       | # of Units         |
| Advanced Technology Centers | 0.00                | 0.00             | 0.00               |
| Administration              | 0.00                | 0.00             | 0.00               |
| Warehouse Distribution      | 3,978,771.00        | 9,976.00         | 64,869.00          |
| Manufacturing               | 2,804,334.00        | 3,167.00         | 94,280.00          |
| Regional Specialty Centers  | 0.00                | 0.00             | 0.00               |
| Field Services              | 0.00                | 0.00             | 0.00               |
| Franchise                   | 0.00                | 0.00             | 0.00               |
| Inspection Services         | 0.00                | 0.00             | 0.00               |
| Opening Sites               | 0.00                | 0.00             | 0.00               |
| Closed Sites                | 0.00                | 0.00             | 0.00               |
| <b>Total</b>                | <b>6,783,105.00</b> | <b>13,143.00</b> | <b>159,149.00</b>  |

|                             | Category 12     |                   |
|-----------------------------|-----------------|-------------------|
|                             | Bridge Plugs    | Metal Gun Systems |
| Facility Type               | # of Units      | # of Units        |
| Advanced Technology Centers | 0.00            | 0.00              |
| Administration              | 0.00            | 0.00              |
| Warehouse Distribution      | 823.00          | 21,834.00         |
| Manufacturing               | 1,447.00        | 22,211.00         |
| Regional Specialty Centers  | 0.00            | 0.00              |
| Field Services              | 0.00            | 0.00              |
| Franchise                   | 0.00            | 0.00              |
| Inspection Services         | 0.00            | 0.00              |
| Opening Sites               | 0.00            | 0.00              |
| Closed Sites                | 0.00            | 0.00              |
| <b>Total</b>                | <b>2,270.00</b> | <b>44,045.00</b>  |

# Water & Waste

|                             | Water          |                  |
|-----------------------------|----------------|------------------|
|                             | Water supplied | Water abstracted |
| Facility Type               | m3             | m3               |
| Advanced Technology Centers | 37,497.87      | 0.00             |
| Administration              | 0.00           | 0.00             |
| Warehouse Distribution      | 10,519.68      | 0.00             |
| Manufacturing               | 1,625.54       | 3,676.77         |
| Regional Specialty Centers  | 20,092.44      | 0.00             |
| Field Services              | 13,981.32      | 0.00             |
| Franchise                   | 1,000.00       | 0.00             |
| Inspection Services         | 46,864.82      | 0.00             |
| Opening Sites               | 0.00           | 0.00             |
| Closed Sites                | 0.00           | 0.00             |
| Total                       | 131,581.66     | 3,676.77         |

|                             | Waste                 |                           |
|-----------------------------|-----------------------|---------------------------|
|                             | Total Hazardous Waste | Total Non-Hazardous Waste |
| Facility Type               | Tonnes                | Tonnes                    |
| Advanced Technology Centers | 18.19                 | 30.03                     |
| Administration              | 0.00                  | 0.00                      |
| Warehouse Distribution      | 0.00                  | 0.00                      |
| Manufacturing               | 0.00                  | 19.52                     |
| Regional Specialty Centers  | 1.90                  | 0.00                      |
| Field Services              | 0.00                  | 0.00                      |
| Franchise                   | 0.00                  | 0.00                      |
| Inspection Services         | 45.49                 | 24,019.26                 |
| Opening Sites               | 0.00                  | 0.00                      |
| Closed Sites                | 0.00                  | 0.00                      |
| Total                       | 65.58                 | 24,068.80                 |



# Appendix II

## Scope 1 & 2 Glossary

| Term                           | Description   |
|--------------------------------|---|
| Carbon footprint               | The total amount of greenhouse gases produced by direct or indirect human activities, usually expressed in equivalent tons of carbon dioxide.   |
| Dual reporting                 | According to the GHG Protocol Scope 2 Guidance released in January 2015, companies are required to report two Scope 2 emission totals – location-based and market-based, known as <b>'dual reporting'</b>   |
| Emission intensity             | Emission intensity is the level of GHG emissions per unit of economic activity.   |
| Global warming potential (GWP) | GWP is the ratio of the warming of the atmosphere caused by one substance to that caused by a similar mass of carbon dioxide, which is assigned a reference value of 1.   |
| Greenhouse gases               | Gases that trap heat in the atmosphere are called greenhouse gases.   |
| Location based                 | A location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data).  |
| Market based                   | A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice). It derives emission factors from contractual instruments, which include any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims. Markets differ as to what contractual instruments are commonly available or used by companies to purchase energy or claim specific attributes about it, but they can include energy attribute certificates (RECs, GOs, etc.), direct contracts (for both low-carbon, renewable, or fossil fuel generation), supplier-specific emission rates, and other default emission factors representing the untracked or unclaimed energy and emissions (termed the residual mix) |

| Term   | Description  |
|--|--|
| <b>Residual Emission Factor</b>                  | A residual mix emission factor represents the emissions and generation that remain after certificates, contracts, and supplier-specific factors have been claimed and removed from the calculation. A residual mix emission factor can be a regional or national factor.                                     |
| <b>Scope 1</b>                                   | Scope 1 includes direct emissions from sources, which a company owns, or controls. This includes direct emissions from fuel combustion and industrial processes.   |
| <b>Scope 2</b>                                   | Scope 2 covers indirect emissions relating solely to the consumption of electricity that is purchased by the owned or controlled equipment or operations of the company. Scope 2 emissions are reported in both location-based and market-based approach in alignment with the latest GHG Protocol guidance. |
| <b>Scope 3</b>                                   | Scope 3 covers other indirect emissions including third-party provided business travel and purchased goods and services.   |
| <b>Scope 1 - Stationary Combustion Emissions</b> | These emissions result from combustion of fuels in stationary sources, e.g., boilers, furnaces, turbines   |
| <b>Scope 1 Fugitive Emissions</b>                | Emissions not caught by a capture system which are often due to equipment leaks, evaporative processes and windblown disturbances. For example, emission from refrigerants   |
| <b>Scope 1 Mobile Emissions</b>                  | These emissions result from the combustion of fuels in company owned/controlled mobile combustion sources (e.g., trucks, trains, ships, airplanes, buses, and cars). These vehicles can be used for transportation of materials, products, waste, and employees.   |

# Appendix III

## Scope 3 Methodology

| SOURCE OF SCOPE 3 EMISSIONS                   | EMISSIONS CALCULATION METHODOLOGY   |
|---|---|
| 1) Purchased goods and services               | Sustainable1 used Core Lab's FY2023 supplier spend data, combined with supplier disclosed emissions data from Sustainable1 Environmental Register and the Sustainable1 EEI-O model, to calculate the supply chain GHG emissions through all tiers up to and including raw material extraction.                                      |
| 2) Capital goods                              |   |
| 3) Fuel- and energy-related activities        | For fuel- and energy related activities, emissions were calculated based on Core Lab's actual electricity and fuel usage data. Energy consumption data was combined with Transmission & Distribution and Well To Tank Defra emission factors.   |
| 5) Waste generated in operations              | Sustainable1 calculated emissions using Core Lab's waste data and emission factors from Defra (2023) – UK Government GHG Conversion Factors for Company Reporting.  |
| 6) Business travel                            | Sustainable1 used Core Lab's spend data by mode of transport and distance travelled combined with Sustainable1 EEI-O model, to calculate GHG emissions related to business travel. Sustainable1 also used number of room nights for hotel stay and combined it with DEFRA hotel stay factors to estimate emissions from hotel stay. |
| 7) Employee commuting                         | <b>Sustainable1 used Core Lab's global employee head count by country, combined with OECD's published country averages for commuting time, transportation mode and distance, to calculate GHG emissions from employee commuting.</b>  |
| 8) Upstream leased assets                     | Core Lab provided Sustainable1 with fuel data or expenditure for its leased vehicles and occupied floor space or expenditure for rented facilities and equipment contract maintenance and DEFRA conversion factors were used to estimate emissions  |
| 9) Downstream transportation and distribution | N/A   |

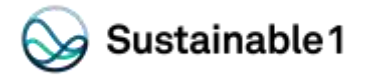
| SOURCE OF SCOPE 3 EMISSIONS                | EMISSIONS CALCULATION METHODOLOGY  |
|--|--|
| 10) Processing of sold products            | N/A  |
| 11) Use of sold products                   | Sustainable1 used Core Lab's product specification, quantity and spend data for perforators, power charges and initiating systems. |
| 12) End-of-life treatment of sold products | Sustainable1 used Core Lab's product specification, quantity and spend data for Metal Gun Systems and Bridge Plugs.                |
| 13) Downstream leased assets               | N/A  |
| 14) Franchises                             | N/A  |
| 15) Investments                            | N/A  |

# Methodology – Category 8

- The table to the right outlines the taxonomy used to group Core Lab's spend/ data categories within value chain Category 8 – Upstream Leased Assets.
- S1 grouped each category for data visualization purposes only. Each spend categorization outlined by Core Lab was analyzed independently.

| CORE LAB CATEGORY                    | S1 GROUPINGS                                |
|--------------------------------------|---|
| Leased Floor Space                   | Leased Floor Space, Rent & Building Expense |
| Leased vehicles                      | Leased Vehicles                             |
| Leased cars                          | Leased Vehicles                             |
| Leased truck                         | Leased Vehicles                             |
| Leased Machinery                     | Leased Machinery & Equipment                |
| Equipment Lease Expense - Short Term | Leased Machinery & Equipment                |
| Leased laboratory equipment          | Leased Machinery & Equipment                |
| Vehicle Lease Expense                | Leased Vehicles                             |
| Equipment Lease Expense Below \$100  | Leased Machinery & Equipment                |
| Equipment Lease Expense              | Leased Machinery & Equipment                |
| Leased laboratory gas/liquid         | Leased Machinery & Equipment                |
| Leased water systems                 | Leased Machinery & Equipment                |
| Leased Safety Equipment              | Leased Machinery & Equipment                |
| Vehicle Lease Expense - Short Term   | Leased Vehicles                             |
| Leased uniforms                      | Other Leased Products & Services            |
| Leased storage containers            | Leased Machinery & Equipment                |
| Leased maintenance equipment         | Leased Machinery & Equipment                |
| Office Rent - G&A                    | Leased Floor Space, Rent & Building Expense |
| Leased office electronics            | Other Leased Products & Services            |
| Leased forklifts                     | Leased Machinery & Equipment                |
| Leased office equipment              | Leased Machinery & Equipment                |
| Leased refrigerations unit           | Leased Machinery & Equipment                |
| Leased sea transport                 | Leased Sea Transport                        |
| Building Lease Expense - Short Term  | Leased Floor Space, Rent & Building Expense |
| Leased parts cleaner                 | Other Leased Products & Services            |
| Leased portable toilets              | Other Leased Products & Services            |
| Leased bicycles                      | Other Leased Products & Services            |
| Building Lease Expense               | Leased Floor Space, Rent & Building Expense |
| Equipment Contract Maintenance       | Equipment Contract Maintenance              |

# The Sustainable1 EEI-0 Model



Since its founding in 2000, Sustainable1 developed an environmental economic input output (EEI-0) life cycle based model for quantifying environmental impacts. The EEI-0 model uses an economic modelling technique based on extensive government census data to analyze the products used and produced by over 464 business activities or sectors. The model also describes the economic interactions between each sector. Sustainable1 is able to assess the environmental impacts of companies across their own operations and their entire supply chains, including primary resource extraction secondary processing and final product assembly.

Sustainable1 has improved upon standard EEI-0 models in several ways, resulting in what we believe is a best in class model for analyzing environmental performance. These improvements include the following:

- Sustainable1 has integrated the use and emissions of over 700 environmental resources. By applying a price to each environmental resource, based on the environmental value of that resource, the model is able to analyze, in financial terms, the economic and environmental performance of each sector. This environmental performance measure incorporates the indirect, supply chain impacts by using the information on the interactions between sectors.
- Sustainable1 maintains and updates its model annually to reflect market commodity flows. We annually update our sector revenue for all sectors, producer prices and annual production quantities for all primary sectors in our model.
- **Sustainable1 reviews the environmental intensities for all sectors annually against companies' public disclosures from our annual engagement programs. Sustainable1 engages with more than 15,000 companies directly to obtain environmental performance metrics and considers them against the specific sector's environmental intensity. As a result, we are able to test this model against many years of data on quantitative environmental disclosures from thousands of companies.**

The EEI-0 methodology extends the analysis of corporate environmental performance by using the segmental revenue data contained in company accounts to map each company to a set of sectors. Sustainable1 has modeled the environmental impacts of over 464 different **sectors and proportionally allocated these impacts to the company by calculating the company's market share of that sector.** This provides a baseline of environmental resource use that Sustainable1 can improve by adding company-specific environmental information, either from **public disclosure in the company's annual or environmental reports, or from direct communication with the company itself.**



## Copyright © 2024 by S&P Global Inc. All rights reserved.

These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable. No content (including index data, ratings, credit-related analyses and data, research, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global. The Content shall not be used for any unlawful or unauthorized purposes. S&P Global and any third-party providers, (collectively S&P Global Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Global Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. **THE CONTENT IS PROVIDED ON “AS IS” BASIS. S&P GLOBAL PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT’S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION.** In no event shall S&P Global Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

**S&P Global’s opinions, quotes and credit-related** and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global may provide index data. Direct investment in an index is not possible. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Global assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global does not endorse companies, technologies, products, services, or solutions.

S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the **right to disseminate its opinions and analyses. S&P Global’s public ratings and analyses are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge) and [www.ratingsdirect.com](http://www.ratingsdirect.com) (subscription), and may be distributed through other means, including via S&P Global publications and third-party redistributors.** Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees)

## ABOUT S&P GLOBAL SUSTAINABLE1

S&P Global Sustainable1 is the central source for sustainability intelligence from S&P Global. Sustainable1 matches customers with the ESG products, insights and solutions from across S&P **Global's divisions to help meet their unique needs. Our comprehensive coverage across global** markets combined with in-depth ESG intelligence provides financial institutions, corporations and governments an unmatched level of clarity and confidence to successfully navigate the transition to a sustainable future. Our data and well-informed point of view on critical topics like energy transition, climate resilience, positive impact and sustainable finance allow us to go deep on the details that define the big picture so customers can make decisions with conviction. To learn more about Sustainable1, visit [www.spglobal.com/sustainable1](http://www.spglobal.com/sustainable1).

## ABOUT S&P GLOBAL

**S&P Global (NYSE: SPGI) is the world's foremost provider of credit ratings, benchmarks and analytics** in the global capital and commodity markets, offering ESG solutions, deep data and **insights on critical economic, market and business factors. We've been providing essential** intelligence that unlocks opportunity, fosters growth and accelerates progress for more than 160 years. Our divisions include S&P Global Ratings, S&P Global Market Intelligence, S&P Dow Jones Indices and S&P Global Platts. For more information, visit [www.spglobal.com](http://www.spglobal.com).