Supporting Information for Scope 3 emissions: data quality and machine learning prediction accuracy

S4 Table. The top five most relevant predictors in stepwise regression

| Predictors | Total Scope 3 | [1] Purchased Goods and Service | [2] Capital Goods | [3] Fuel and Energy Related Activities | [4] Upstream Transportation and Distribution | [5] Waste Generation | [6] Business Travel | [7] Employee Commuting | [8] Upstream Leased Assets | [9] Downstream Transportation and Distribution | [10] Process of Sold Products | [11] Use of Sold Products | [12] End of Line Treatment | [13] Downstream Leased Assets | [14] Franchise | [15] Investments | [16] Other |
|-----------------------------------|---------------|---------------------------------|-------------------|--|--|----------------------|---------------------|------------------------|----------------------------|--|-------------------------------|---------------------------|----------------------------|-------------------------------|----------------|------------------|------------|
| Revenue | 1 | 2 | | 4 | 1 | 4 | 2 | 1 | 1 | 4 | | 1 | 1 | | | | 4 |
| Number of Employees | | | 3 | | | | 1 | 2 | | | | | | | | | |
| Gross Profit | | | | | | | 5 | 4 | | | | | | | | | |
| Operational Expense | | | | | | | | 5 | | | | | | | 2 | | |
| Net Property, Plant and Equipment | | | | | | | | | | 1 | 1 | | | | | 1 | |
| Capital Expense | 3 | | 1 | 1 | | 1 | | | | | | | | | | | 1 |
| Leverage | | | | | | | | | | | | | | 1 | | | |
| Asset Age | | | 4 | | | | | | | | | | | | | | |
| Total Debt | | | | | | | | | | | | | | | | 2 | |
| Receivable | | | 2 | | | | | | | | | | | | | 5 | |

| Inventory | 1 | | 3 | 2 | | | | | | | 2 | 3 | 3 | | | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gross Intangible Asset | | | | | | 3 | 3 | | | | | | | | | |
| Current Asset | 3 | | | | | | | | | | | | | | | |
| GMAR | | | | | | | | | | | 5 | | | | | |
| Current Liability | | | | | | | | | 5 | | | | | | | |
| [GICS] Banks | | | | | | | | | | | | | | | 4 | |
| [GICS] Commercial & Professional Services | | | | | | | | | | | | | | | | |
| [GICS] Consumer Services | | | | | | | | | | | | | | 1 | | |
| [GICS] Diversified Financials | | | | | | | | | | | | | | | | 3 |
| [GICS] Energy | | 5 | | | | | | | | 3 | 3 | | 4 | | | 5 |
| [GICS] Food, Beverage & Tobacco | 5 | | | 5 | | | | | 2 | | | | | | | |
| [GICS] Household & Personal Products | | | | | | | | | | | | 4 | | | | |
| [GICS] Insurance | | | | | | | | 2 | | | | | | | | |
| [GICS] Materials | 4 | | 5 | 3 | 5 | | | 5 | 3 | 2 | | 2 | | 3 | 3 | |
| [GICS] Pharmaceuticals, Biotechnology & Life Sciences | | | | | | | | | | | | | | 5 | | |
| [GICS] Retailing | | | | | | | | 3 | | | | | | | | |
| [GICS] Software & Services | | | | | 3 | 4 | | | | | | 5 | | | | |
| [GICS] Telecommunication Services | | | | | | | | | | | | | | | | |
| [GICS] Transportation | | | | | | | | 4 | | | | | 5 | | | |
| [GICS] Utilities | | | 2 | | | | | | | | 4 | | | | | |

This table summarises the top five most relevant predictors for each emissions scope in *Forward-Backward Stepwise Regression*, which automatically includes relevant predictors (< 1% significant level) into the model and excludes irrelevant ones (>5% significant level) as described in Section 4.3.2. Rank of each predictor is determined by the order of which the predictors are included into the predictor set.