CDP Technical Note: Relevance of Scope 3 Categories by Sector

CDP Corporate Questionnaire

Contents

Version

Version	Revision date	Revision summary
1.0	April 11, 2022	First published version.
2.0	January 25, 2023	Minor edits to align with CDP 2023 questionnaires. Clarified status of emissions from upstream transportation of fossil fuels for the Electric Utilities sector.
3.0	June 28, 2024	Updated to align with 2024 changes to the corporate questionnaire

1. Introduction

1.1 Purpose of the Technical Note

Scope 3 emissions represent the majority of emissions for many sectors, so it is crucial that companies are aware of, and are measuring, all relevant sources of Scope 3 emissions in their value chain. Identifying and reporting all relevant sources of Scope 3 emissions is, however, often difficult. As highlighted by the Science Based Targets Initiative (SBTi)'s Value Chain Report, the qualitative nature of the GHG Protocol's criteria for identifying relevant Scope 3 activities (detailed in section 1.2) leads to ambiguity in their interpretation. Companies may end up measuring and reporting emissions in categories which are easy to calculate (e.g., business travel) rather than categories where the bulk of their emissions occur but which are more difficult to calculate.

Based on a review of literature and analysis of 2021 CDP response data, this technical note identifies the relevant and most significant (by size) Scope 3 categories for each of CDP's high-impact sectors and, where relevant, specific sectoral activities. This technical note signposts the categories of Scope 3 emissions that companies should be measuring and taking action to mitigate.

1.2 Introduction to Scope 3 emissions

As per the GHG Protocol's Value Chain (Scope 3) Standard, Scope 3 emissions consist of all the indirect emissions in a company's value chain, apart from indirect emissions from the generation of purchased or acquired energy consumed by the reporting company, which are accounted under Scope 2. Scope 3 emissions are divided into 15 categories of emissions, highlighted in Figure 1. Each Scope 3 category has a minimum boundary which defines the activities that must be accounted for in that Scope 3 category. See Appendix 1 for a description of each category and its minimum boundary.

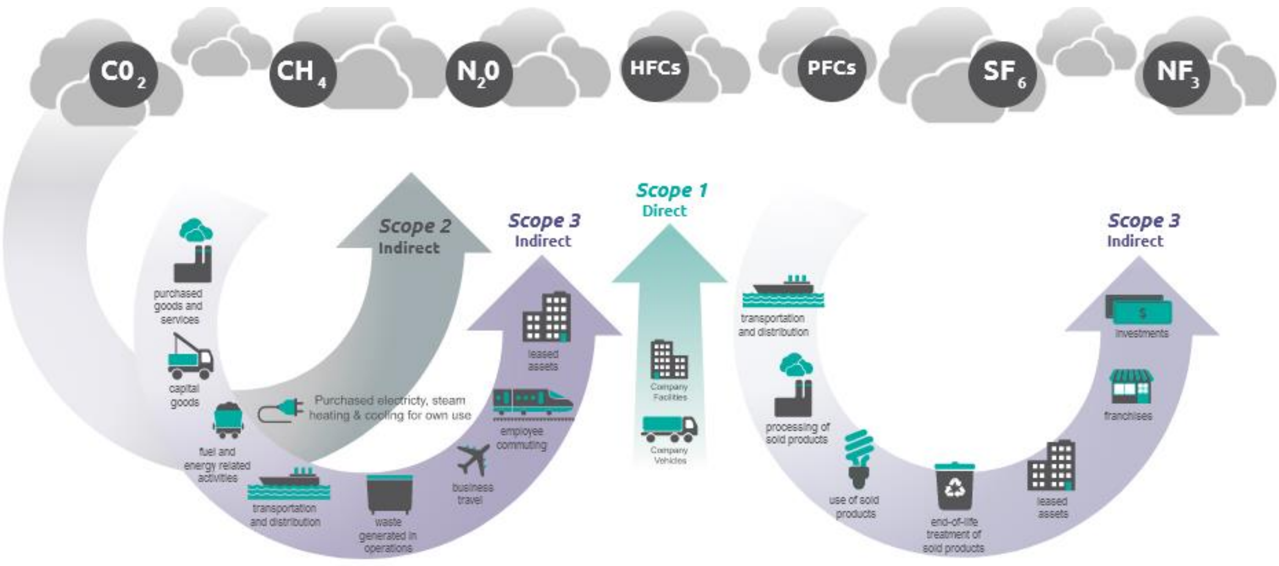


Figure 1. Overview of GHG Protocol scopes and emissions across the value chain (GHG Protocol Scope 3 Standard, p.5)

The GHG Protocol also provides seven qualitative criteria for identifying and reporting relevant Scope 3 activities, as shown in Figure 2. Companies are advised to not exclude any activity that would compromise the relevance of the reported inventory, nor exclude any activity that is expected to contribute significantly to the company's total Scope 3 emissions.

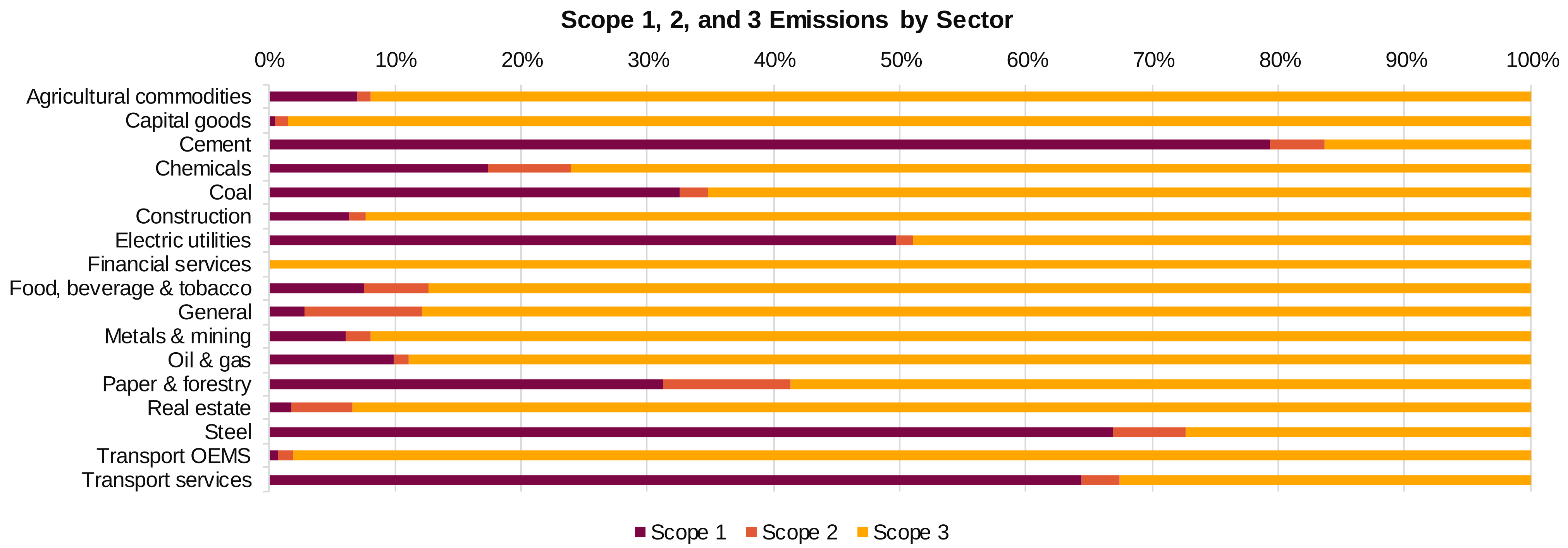
Criteria	Description
Size	They contribute significantly to the company's total anticipated scope 3 emissions (see section 7.1 for guidance on using initial estimation methods)
Influence	There are potential emissions reductions that could be undertaken or influenced by the company (see box 6.2)
Risk	They contribute to the company's risk exposure (e.g., climate change related risks such as financial, regulatory, supply chain, product and customer, litigation, and reputational risks) (see table 2.2)
Stakeholders	They are deemed critical by key stakeholders (e.g., customers, suppliers, investors, or civil society)
Outsourcing	They are outsourced activities previously performed in-house or activities outsourced by the reporting company that are typically performed in-house by other companies in the reporting company's sector
Sector guidance	They have been identified as significant by sector-specific guidance
Other	They meet any additional criteria for determining relevance developed by the company or industry sector

Figure 2. Criteria for identifying relevant scope 3 activities (GHG Protocol Scope 3 Standard, p.61)

Note that although the GHG Protocol guidance suggests that Scope 3 activities can be considered relevant if their size contributes significantly to total anticipated Scope 3 emissions, it is also useful to understand the magnitude of each Scope 3 emissions category as a proportion of total Scope 1+2+3 emissions, to understand the contribution of each category (and of Scope 3 emissions as a whole) to a company's overall emissions reduction efforts. For example, as shown in this document, although Scope 3 category 1, "Purchased goods and services" comprises the largest proportion of Scope 3 emissions reported by the Cement sector, Cement companies should primarily focus their emissions reduction efforts on Scope 1 which forms the majority of the Cement sector's total Scope 1+2+3 emissions. In contrast, around 90% of Scope 1+2+3 emissions for the Capital Goods sector are in Scope 3 category 11, "Use of sold products", so it is critical for Capital Goods companies to focus their emissions reduction efforts on minimizing product use phase emissions.

2. Relevant Scope 3 Categories by Sector

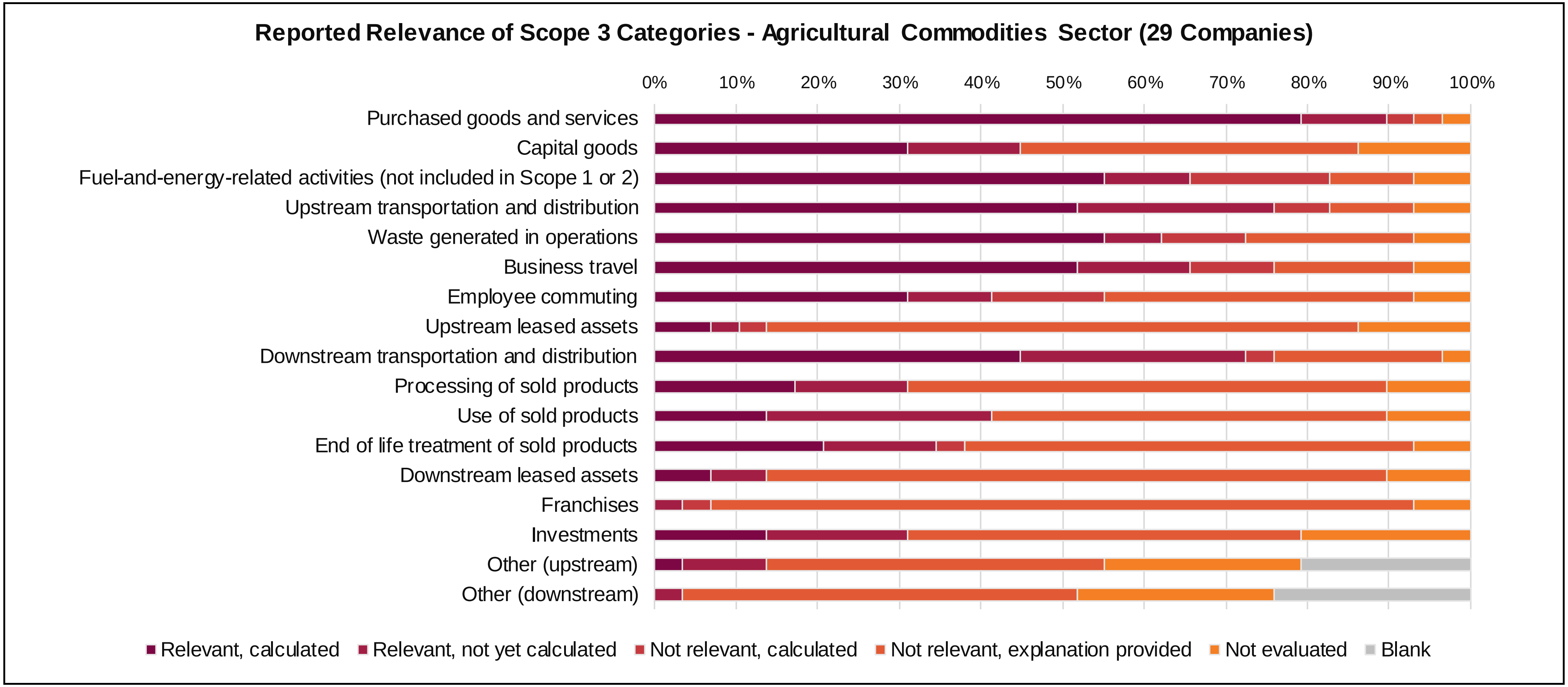
The sections below give an overview of the relevance of Scope 3 categories for each CDP high-impact sector (as defined by the CDP Activity Classification System), based on two types of analysis conducted. As a first step, the relevant categories for each sector were determined using a literature review of frameworks and resources relevant to that sector. As a second step, an analysis of 2021 CDP responses to question C6.5 (7.8 in 2024), and C-FS14.1a (12.1.1) for the Financial Services sector was conducted to identify a) the proportion of responders in a sector selecting a Scope 3 category as "Relevant, calculated", and b) the magnitude of each Scope 3 category relative to both total Scope 3 emissions and total Scope 1+2+3 emissions (as reported in C6.1 (7.6), C6.3 (7.7), C6.5 (7.8), and C-FS14.1a (12.1.1) for the Financial Services sector). Based on the data analysis results, other relevant categories were included if they comprised a large proportion of Scope 3 emissions reported by the sector. Note that overall, this analysis of CDP data highlights the importance of Scope 3 emissions - as across all sectors Scope 3 emissions account on average for 75% of total Scope 1+2+3 emissions in the sample (as shown below). Note also that due to a lack of specific literature on Transport OEM - Engine Part Manufacturers, this CDP high-impact sector was excluded from this technical note, however insights from CDP data showed consistency with the Transport OEM sector.



It is important to note that this analysis aims to identify the categories that are most likely to be relevant and represent the bulk of Scope 3 emissions for the majority of companies in the sector. Depending on the company structure, other categories such as e.g., categories 8 “Upstream leased assets”, 14 “Franchises” and 15 “Investments” may also be relevant for some companies and should be evaluated. Categories 6 “Business travel” and 7 “Employee commuting” may be relevant for some sectors but they tend to be negligible for all high-impact sectors and represent 0.10% and 0.20% of total Scope 3 emissions on average, respectively. For the purposes of clear data presentation, categories which comprised less than 1% of total Scope 1+2+3 emissions for each sector were identified as upstream or downstream and grouped into either “Other upstream categories” or “Other downstream categories” in the pie charts.

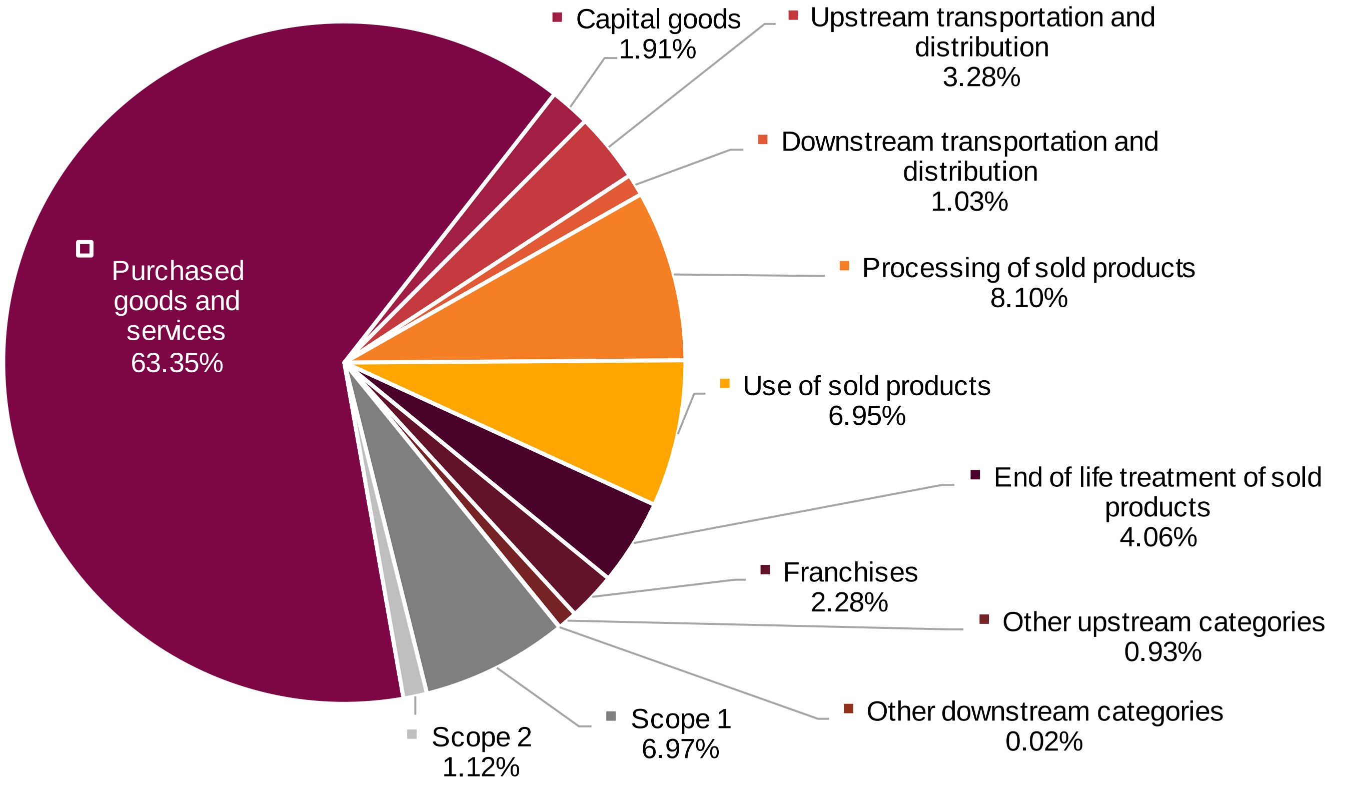
AC: Agricultural Commodities

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
- Category 1: Purchased goods and services - Category 10: Processing of sold products - Category 11: Use of sold products	For many Agricultural Commodities companies, Scope 3 emissions represent a significant component of overall GHG impacts (WRI & WBCSD:74). **Scope 3 category 1 “Purchased goods and services”** should generally be included in the inventories of the Agricultural Commodities sector to account for upstream emissions from feed production (for animals) and for fertilizer production (WRI & WBCSD:74); (SBTi, 2022:9). Consistent with the literature, category 1 was reported as “Relevant, calculated” by 79% of the 29 Agricultural Commodities companies responding to the 2021 CDP climate change questionnaire on behalf of investors, and comprised a significant proportion of the sector’s emissions – 69% of total Scope 3 emissions and 63% of total Scope 1+2+3 emissions. Food processing, packaging, storage, and cooking are key sources of postproduction emissions for the Agricultural Commodities sector, therefore **Scope 3 category 10 “Processing of sold products”** and **category 11 “Use of sold products”** should generally also be relevant (Richards, 2018:2). These Scope 3 categories were not, however, commonly reported by Agricultural Commodities companies responding to the 2021 CDP climate change questionnaire on behalf of investors, with only 17% and 14% of companies reporting categories 10 and 11 as “Relevant, calculated”, respectively.



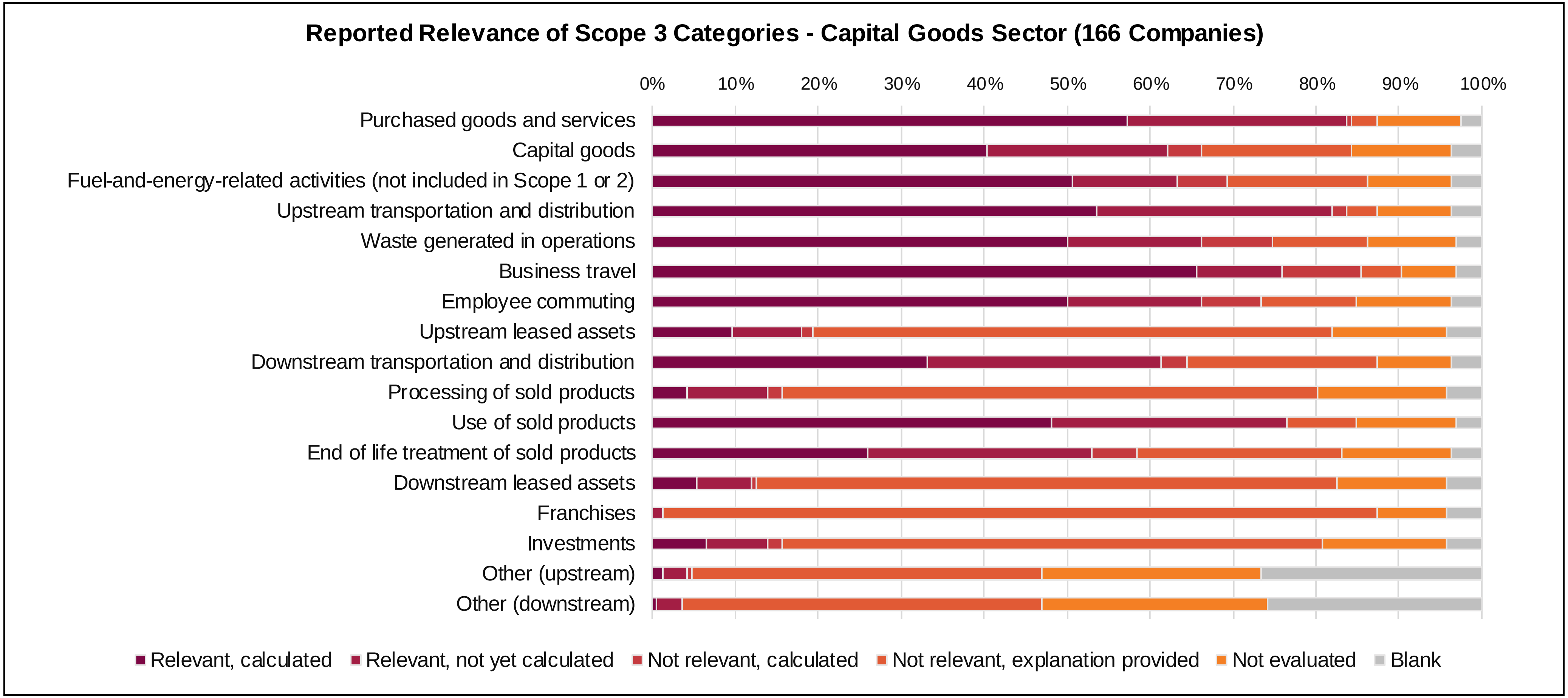
Reported Relevance of Scope 3 Categories - Agricultural Commodities Sector (29 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank

Scope 3 Categories as % Total Scope 1+2+3 Emissions - Agricultural Commodities Sector

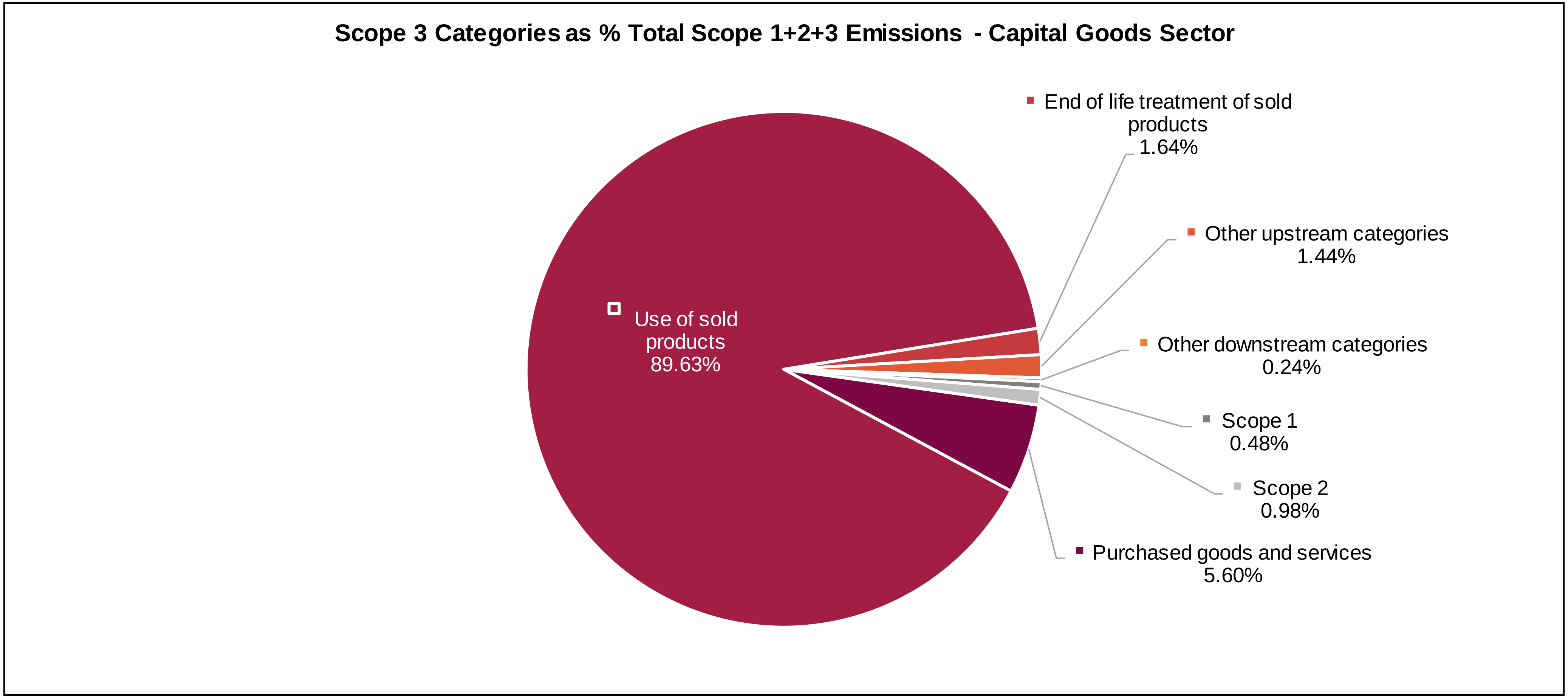


CG: Capital Goods

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
- Category 11: Use of sold products - Category 1: Purchased goods and services	Value chain emissions account for more than 90% of emissions from the Capital Goods sector (CDP, 2018:3). **Scope 3 category 11 "Use of sold products"** is the largest category of Scope 3 emissions for the Capital Goods sector and is often an order of magnitude larger than emissions in the next largest category, category 1 "Purchased Goods and Services". Targeting emissions reductions efforts on category 11 is key to the sector's position in delivering carbon savings through their products in the end markets where decarbonization needs to take place – power generation, transmission and distribution, transport, buildings, and household consumption through the use of appliances. (CDP, 2018:11); (SBTi, 2021:23). Despite only 48% the 166 Capital Goods companies responding to CDP's 2021 climate change questionnaire on behalf of investors reporting category 11 as "Relevant, calculated", it comprised 91% of total Scope 3 emissions and 90% of total Scope 1+2+3 emissions reported by the sector. **Scope 3 category 1 "Purchased goods and services"** should also be relevant to Capital Goods companies to account for upstream emissions associated with the materials used to manufacture their products (CDP, 2018:11). Category 1 was reported as "Relevant, calculated" by 57% of Capital Goods companies responding to CDP, but only accounted for 5.7% of total Scope 3 emissions and 5.6% of total Scope 1+2+3 emissions reported by the sector.

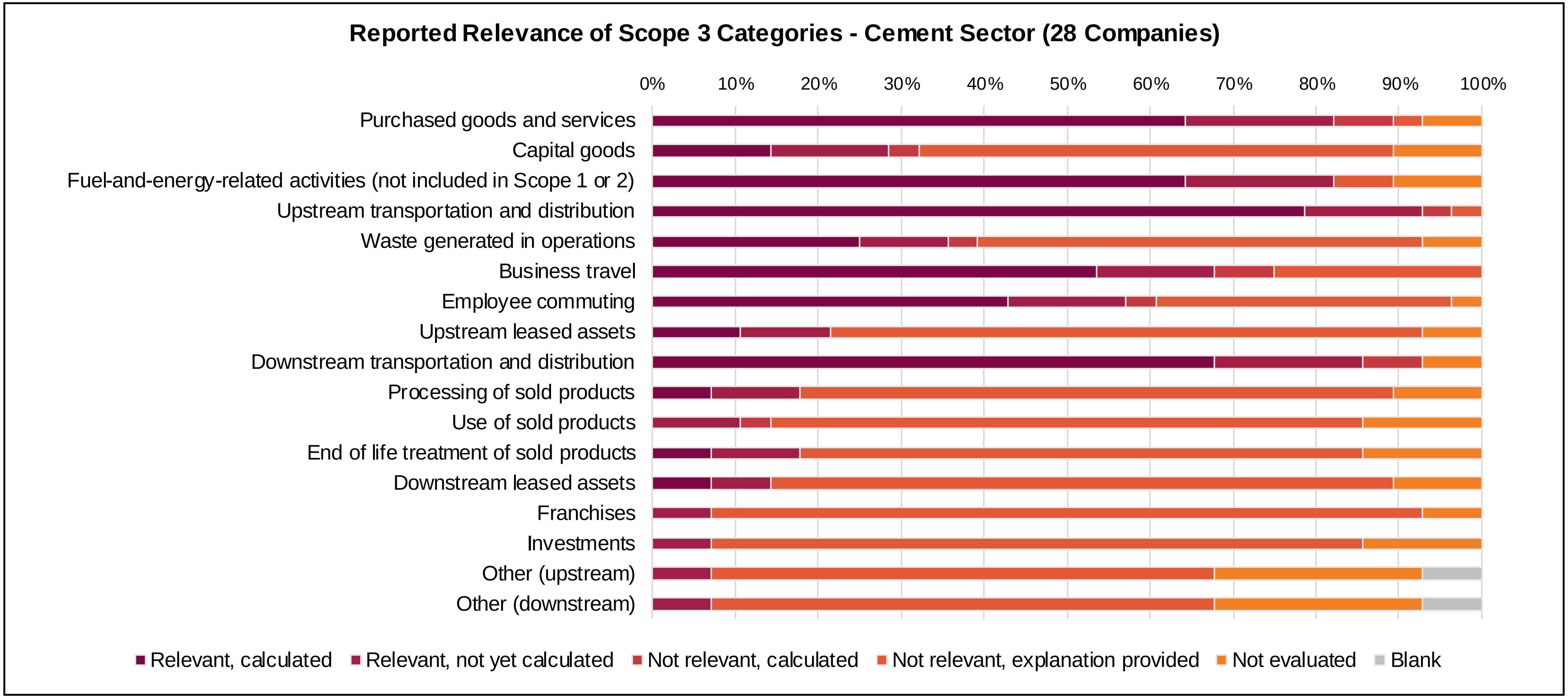


Reported Relevance of Scope 3 Categories - Capital Goods Sector (166 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank


Scope 3 Categories as % Total Scope 1+2+3 Emissions - Capital Goods Sector
End of life treatment of sold products 1.64%
Other upstream categories 1.44%
Other downstream categories 0.24%
Scope 1 0.48%
Scope 2 0.98%
Purchased goods and services 5.60%
Use of sold products 89.63%

CE: Cement

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
- Category 1: Purchased goods and services - Category 3: Fuel-and-energy-related activities - Category 4: Upstream transportation and distribution - Category 9: Downstream transportation and distribution	Due to the processes that take place within the Cement industry, the majority of the sector's emissions are in Scopes 1 and 2 (WBCSD, 2016:8). However, Scope 3 emissions are relevant to the Cement sector depending on the specific activities that occur within a cement company (i.e., blending plant operators, grinding plant operators, or vertically integrated manufacturers) (WBCSD, 2016:9). Most upstream Scope 3 emissions in the Cement industry come from **Scope 3 category 1 "Purchased goods and services", category 3 "Fuel-and-energy-related activities",** and **category 4 "Upstream transportation and distribution"**. These categories are generally relevant to all activities (WBCSD, 2016:8,9), and indeed these three categories were all reported as "Relevant, calculated" by a majority of the 28 Cement companies responding to the CDP climate change questionnaire on behalf of investors. Category 1 was the most significant category of Scope 3 emissions overall in terms of size, comprising 39% of total Scope 3 emissions and 6% of total Scope 1+2+3 emissions reported by the sector. The WBCSD guidance recommends that emissions from **Scope 3 category 9 "Downstream transportation and distribution"** should be accounted for and reported by a majority of companies in the Cement sector (WBCSD, 2016:8,9). In line with the WBCSD guidance, category 9 was reported as "Relevant, calculated" by 68% of Cement companies responding to the CDP climate change questionnaire on behalf of investors.


Reported Relevance of Scope 3 Categories - Cement Sector (28 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
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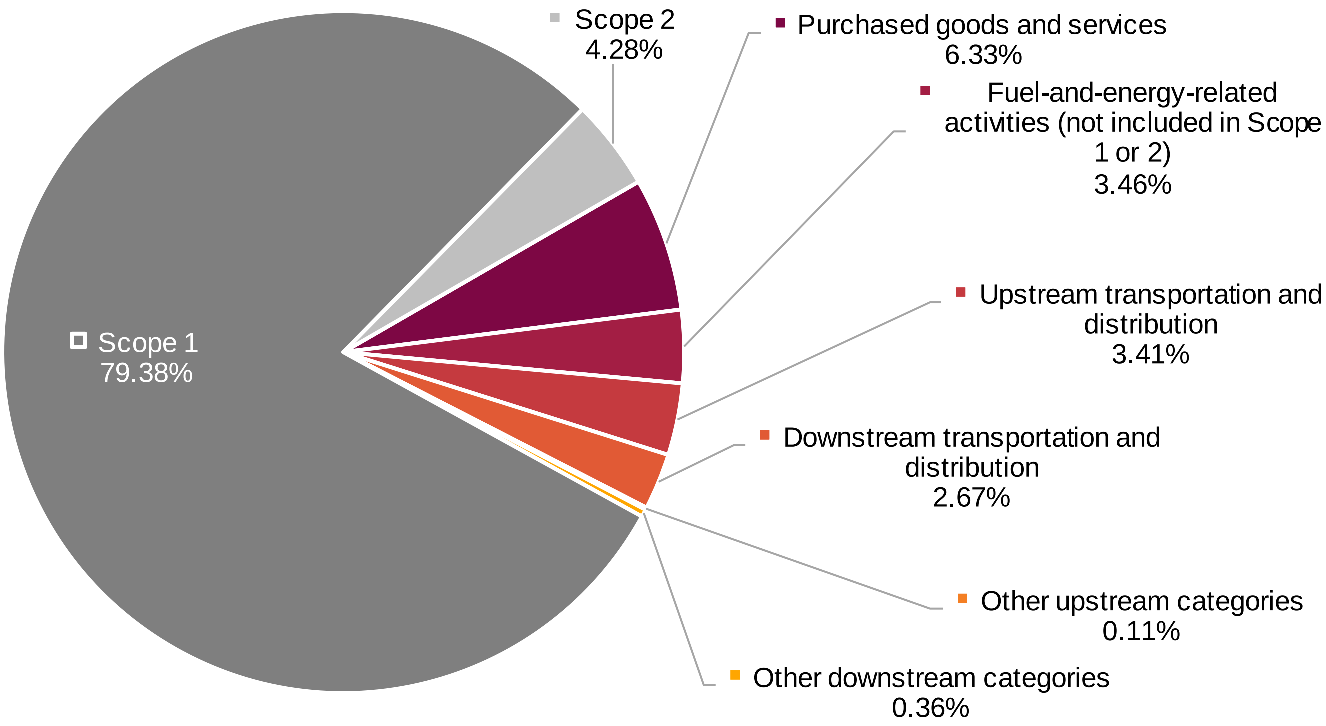
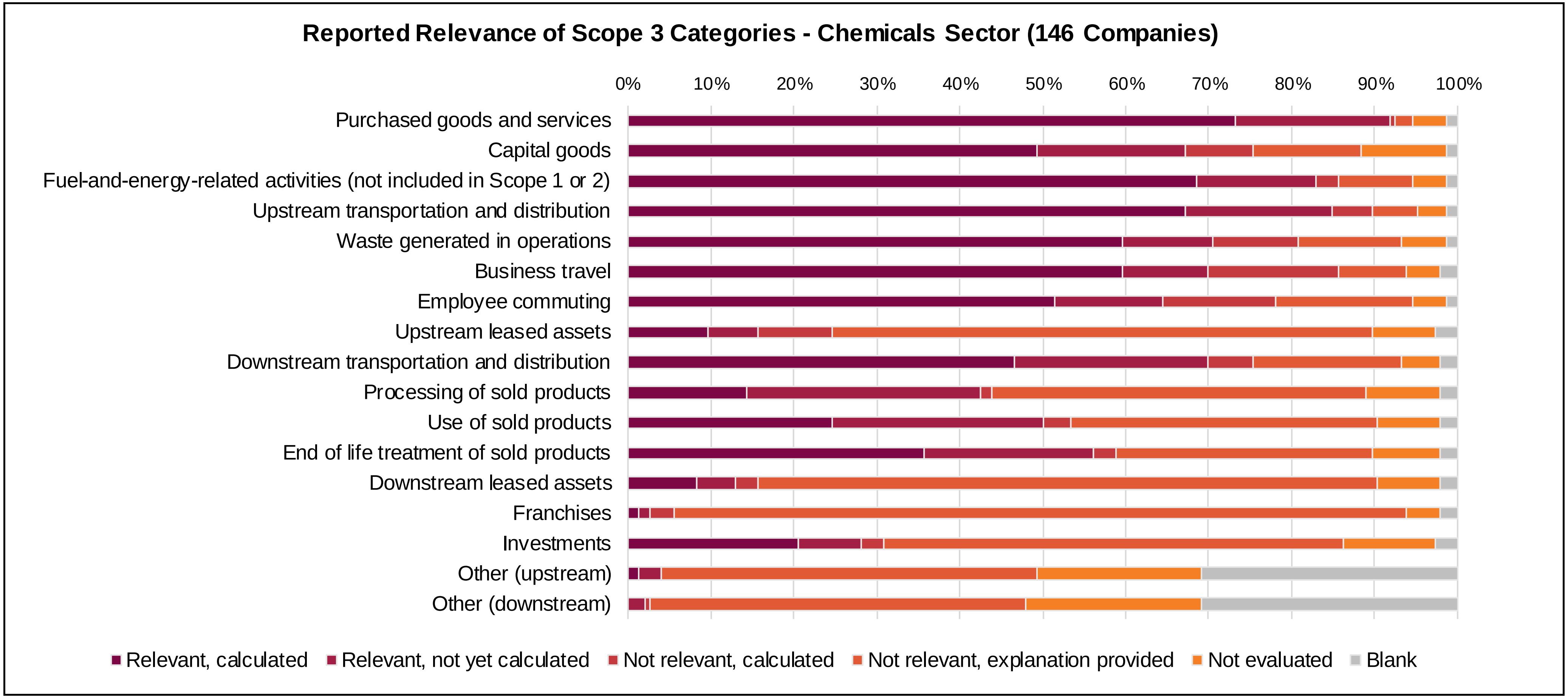
Scope 3 Categories as % Total Scope 1+2+3 Emissions - Cement Sector



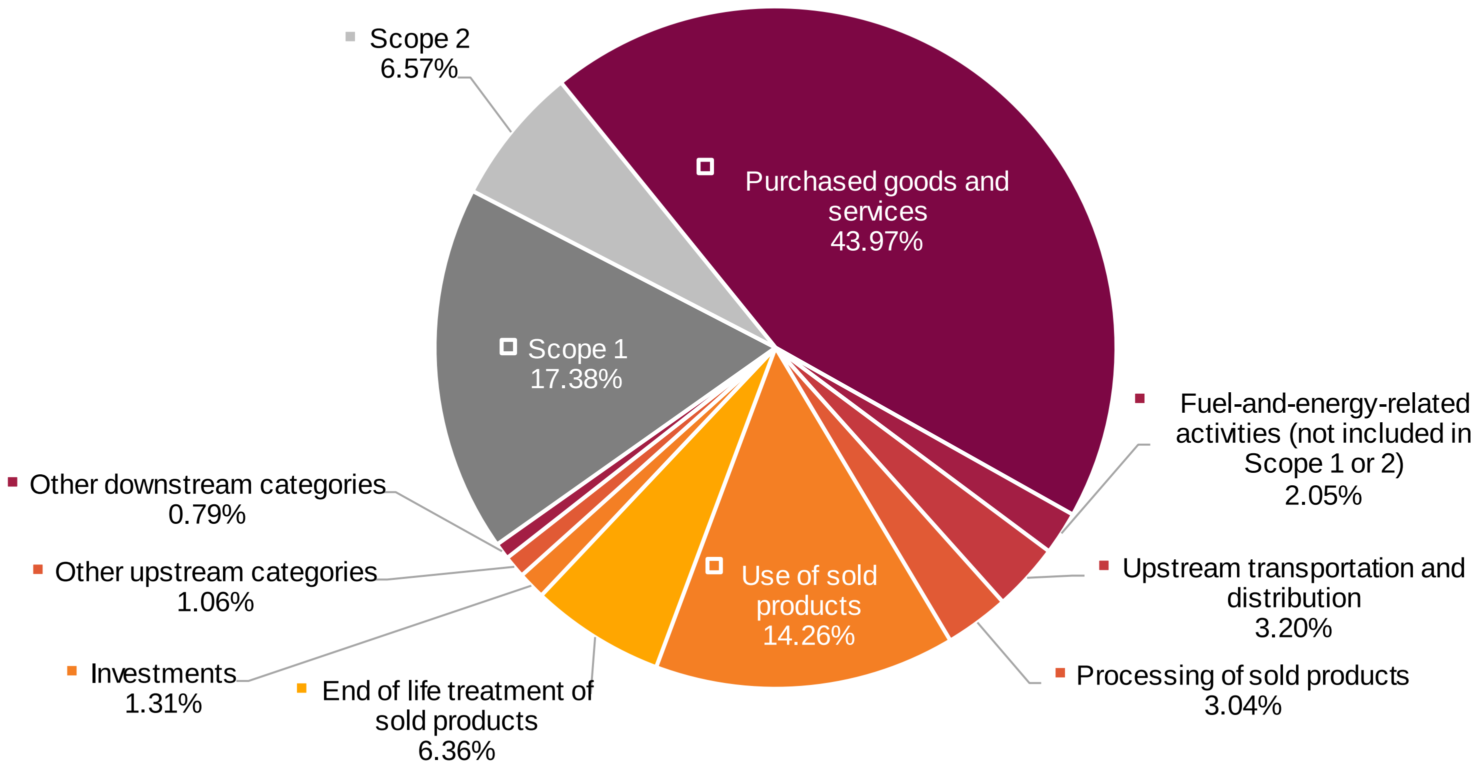
CH: Chemicals

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
- Category 1: Purchased goods and services - Category 11: Use of sold products - Category 12: End of life treatment of sold products - Category 4: Upstream transportation and distribution - Category 3: Fuel-and-energy-related activities - Category 2: Capital goods - Category 9: Downstream transportation and distribution	Chemicals sector companies typically sell intermediate products, which are products that a company produces for another company to further process, transform, or include in another product (WBCSD, 2013:21). It is therefore important for chemical companies to consider Scope 3 emissions from upstream and downstream of their value chain. Upstream emissions relevant to the Chemicals sector include emissions from **Scope 3 category 1 "Purchased goods and services"** (CA100+, 2020:5); (WBCSD, 2013:17), such as from machining and processing services, engineering services, industrial cleaning and raw materials (e.g. ethylene, sodium carbonate, methanol) (WBCSD, 2013:23). Category 1 was reported as "Relevant, calculated" by 73% of the 146 companies responding to the 2021 CDP climate change questionnaire on behalf of investors, and the size of emissions was significant - comprising 58% of total Scope 3 emissions and 44% of total Scope 1+2+3 emissions for the Chemicals sector. Downstream emissions relevant to this sector include emissions from **Scope 3 category 12 "End of life treatment of sold products"** (SBTi, 2021:23); (WBCSD, 2013:17) and from **Scope 3 category 11 "Use of sold products"** to account for combusted fuels during use phase or products that contain or form GHGs that are emitted during use, e.g. leakage/emissions of refrigeration and air-conditioning equipment, industrial gases, fire extinguishers, fertilizers and agricultural chemicals (WRI & WBCSD:10); (CA100+, 2020:5); (WBCSD, 2013:17,32). Despite only 25% of Chemicals companies responding to the 2021 CDP climate change questionnaire on behalf of investors reporting category 11 as "Relevant, calculated", it was the second most significant Scope 3 category in terms of size - comprising 19% of total Scope 3 emissions and 14% of total Scope 1+2+3 emissions. The WBCSD also recommends Chemicals companies to calculate **Scope 3 category 2 "Capital goods"**, **category 3 "Fuel-and-energy-related activities"**, **category 4 "Upstream transportation and distribution", and category 9 "Downstream transportation and distribution"**, as these categories are expected to be of a medium in size of emissions relative to total Scope 3, and companies can have a large influence on potential emissions reductions in these categories (WBCSD, 2013:17).



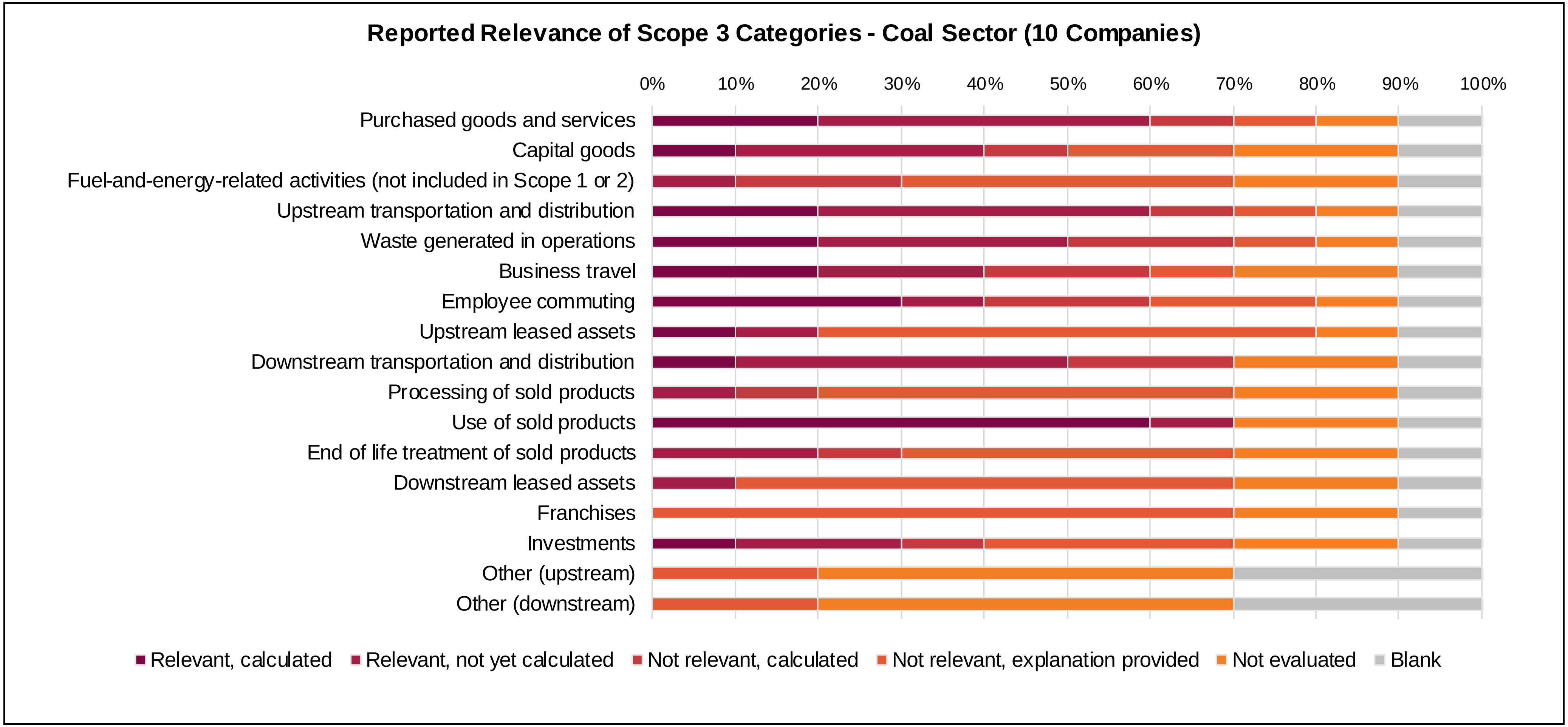
Reported Relevance of Scope 3 Categories - Chemicals Sector (146 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank

Scope 3 Categories as % Total Scope 1+2+3 Emissions - Chemicals Sector

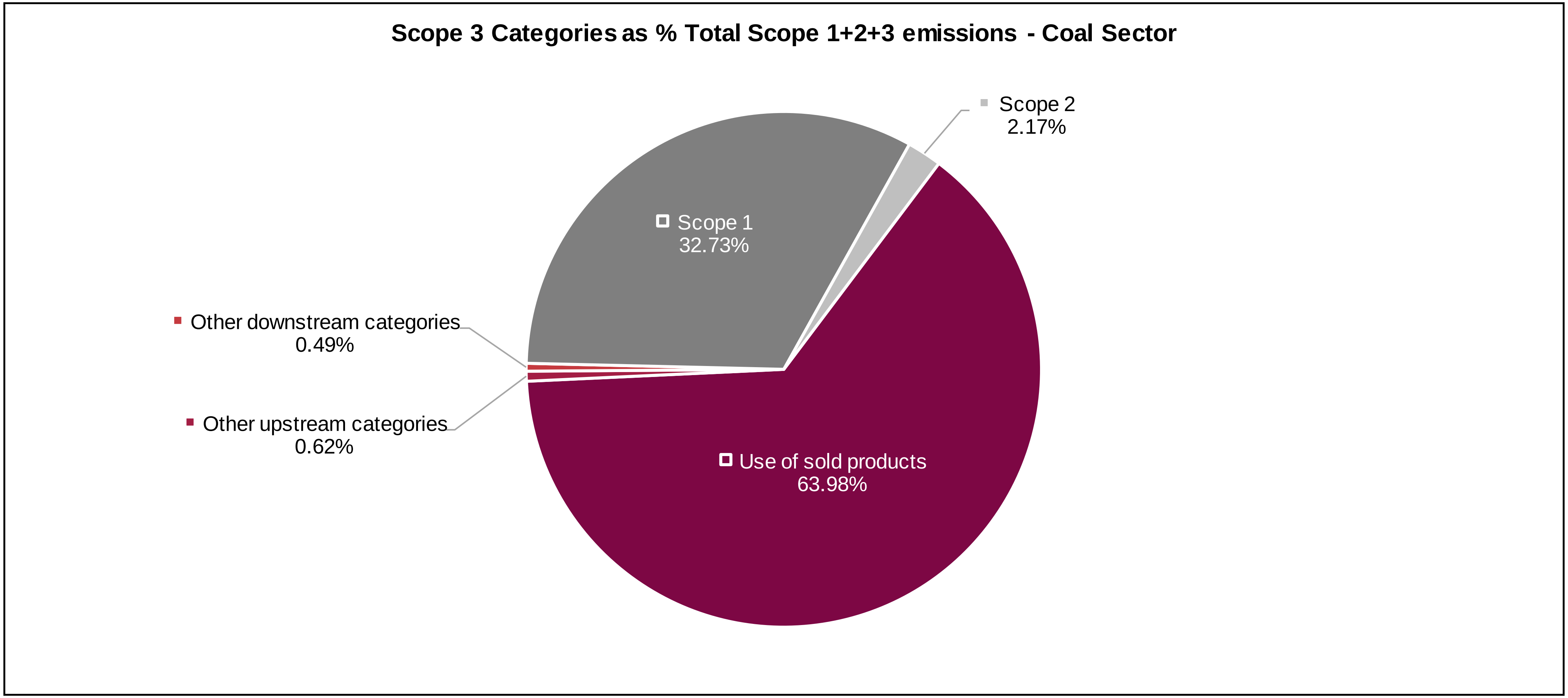


CO: Coal

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
◥ Category 11: Use of sold products	The vast majority of emissions associated with the Coal sector come from combustion by customers. In 2020, emissions from the combustion of coal in the power sector accounted for 69% of total CO_2 combustion emissions from coal, based on analysis of the IEA's World Energy Outlook 2021. The power sector accounts for 64% of coal energy demand, with industry accounting for 29% and the building sector 2.6% (IEA, 2021). Therefore, **Scope 3 category 11** "**Use of sold products"** is relevant for Coal sector companies to measure and report (CA100+, 2020:5) (Greene, 2018:6). Category 11 was the most reported Scope 3 category for the 10 Coal companies responding to the 2021 CDP climate change questionnaire on behalf of investors – 60% of companies reported it as "Relevant, calculated", and the size of emissions was significant, comprising 98% of total Scope 3 emissions and 64% of total Scope 1+2+3 emissions reported by the sector.

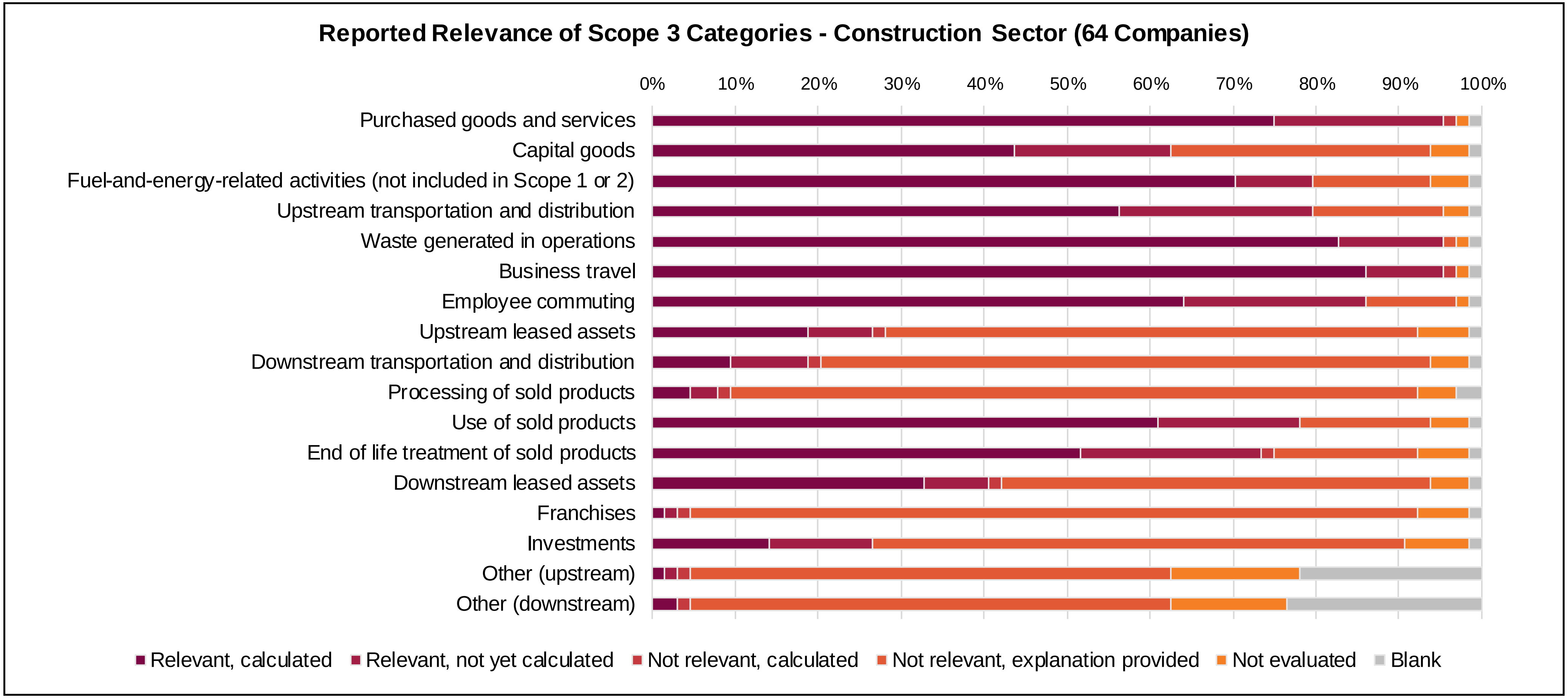


Reported Relevance of Scope 3 Categories - Coal Sector (10 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank

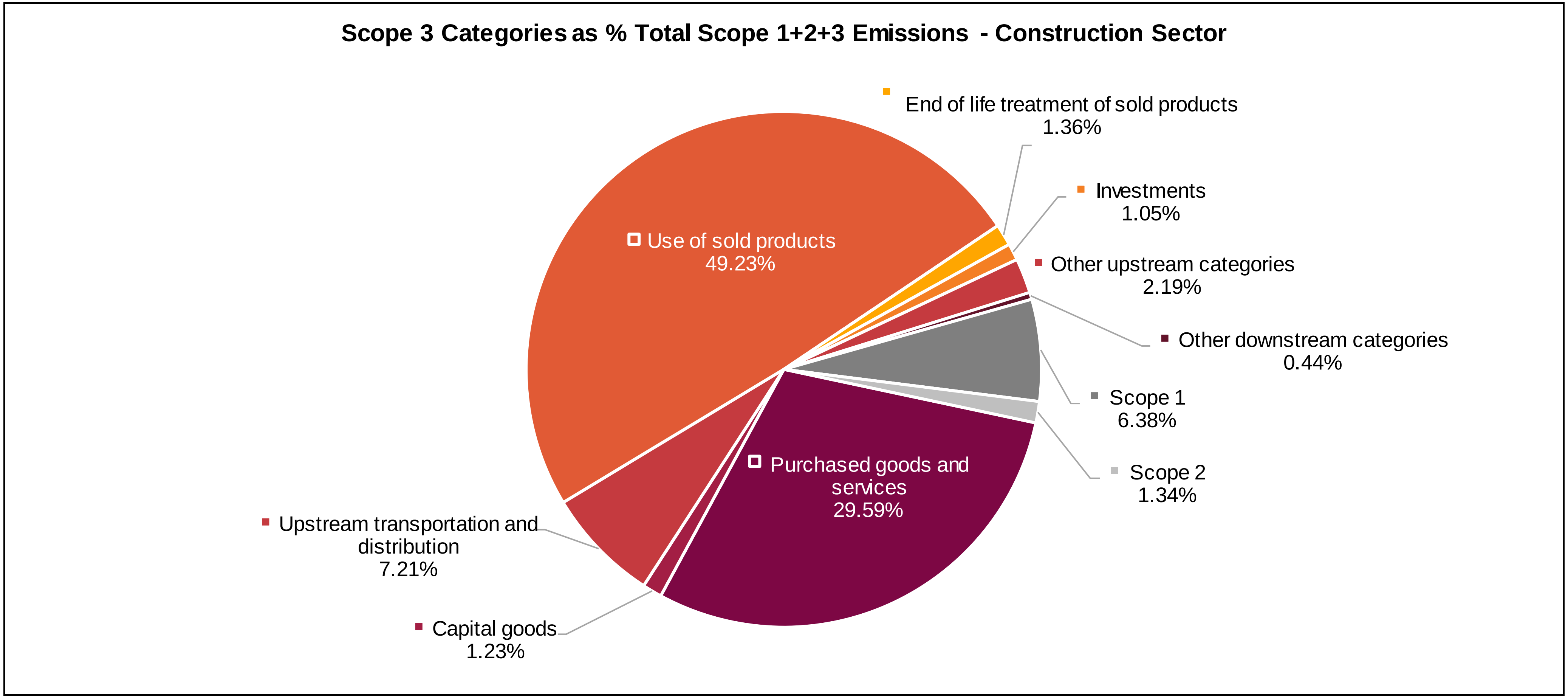

Scope 3 Categories as % Total Scope 1+2+3 emissions - Coal Sector
Scope 2
2.17%
Scope 1
32.73%
Other downstream categories
0.49%
Other upstream categories
0.62%
Use of sold products
63.98%

CN: Construction

Relevant Scope 3 categories (listed in order of % share of total Scope 3*)	Explanation of relevance & insights from CDP data
Building developers: - Category 11: Use of sold products - Category 4: Upstream transportation and distribution - Category 12: End of life treatment of sold products - Category 2: Capital Goods - Category 3: Fuel-and-energy-related activities **Construction contractors:** - Category 1: Purchased goods and services - Category 2: Capital goods **Relevant Scope 3 categories for each activity are listed in order of percentage share of total Scope 3 emissions for the Construction sector as a whole (not for the specific activity).*	The relevancy of Scope 3 categories for the Construction sector varies significantly depending on a company's sub-sector (UK GBC: 4). **Building developers** should primarily measure and report **Scope 3 category 2 "Capital Goods"** to account for the embodied emissions of new buildings (e.g. construction materials such as steel and concrete) and **Scope 3 category 11 "Use of sold products"** to account for the expected operational emissions from any buildings sold. **Scope 3 category 12 "End of life treatment of sold products"**, is also relevant for **building developers** to account for end of life emissions for any buildings sold (UK GBC, 2019:16-19). Category 11 was the most significant Scope 3 category in terms of size of emissions for the Construction sector – 61% of the 64 Construction companies responding to the 2021 CDP climate change questionnaire on behalf of investors reported category 11 as "Relevant, calculated", and it comprised 53% of total Scope 3 emissions and 49% of total Scope 1+2+3 emissions reported by the sector. Category 2 did not comprise a significant proportion of emissions for the Construction sector according to CDP 2021 data, but this could be reflective of the challenges associated with estimating embodied emissions of buildings. Other Scope 3 categories that may be relevant to **building developers** are **Scope 3 category 3 "Fuel-and-energy-related activities"** to account for well-to-tank and transmission and distribution losses from fuels and electricity purchased, and **Scope 3 category 4 "Upstream transportation and distribution"** to account for emissions from logistics for developments (UK GBC, 2019:16). These categories were reported as 'Relevant, calculated' by a majority of Construction companies responding to CDP in 2021 but did not comprise a significant proportion of total emissions reported by the sector. **Construction contractors** should aim to reduce 'upfront carbon' (i.e. emissions from the materials production and construction phases of the lifecycle before the building begins to be used). Therefore **category 1 "Purchased goods and services"** is relevant to **construction contractors** to account for upstream construction materials, and **Scope 3 category 2 "Capital goods"** may also be relevant to account for the machinery used in construction (UK GBC:5). Category 1 was reported as "Relevant, calculated" by two thirds of Construction companies responding to the 2021 CDP climate change questionnaire on behalf of investors, and it represented the second largest category of Scope 3 emissions, comprising 32% of total Scope 3 emissions and 30% of total Scope 1+2+3 emissions reported by the sector.

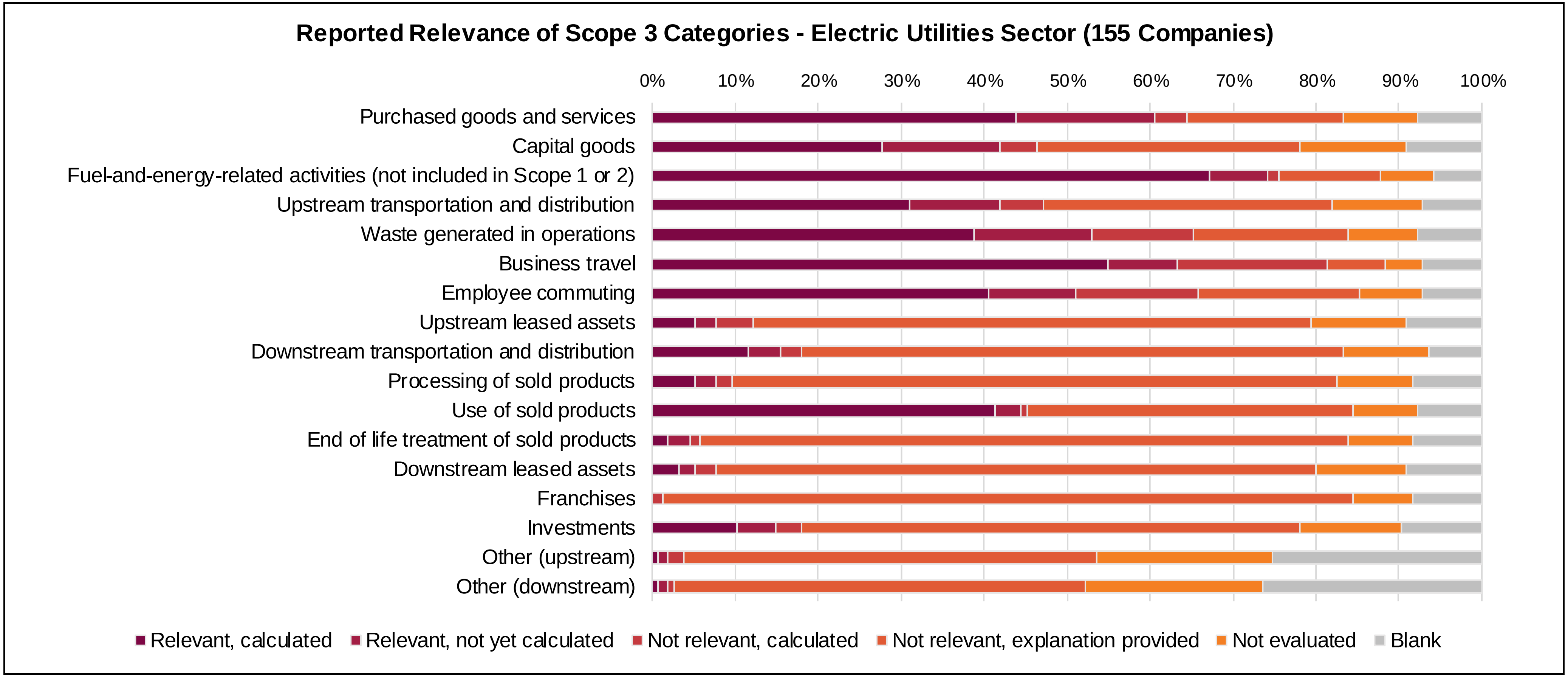


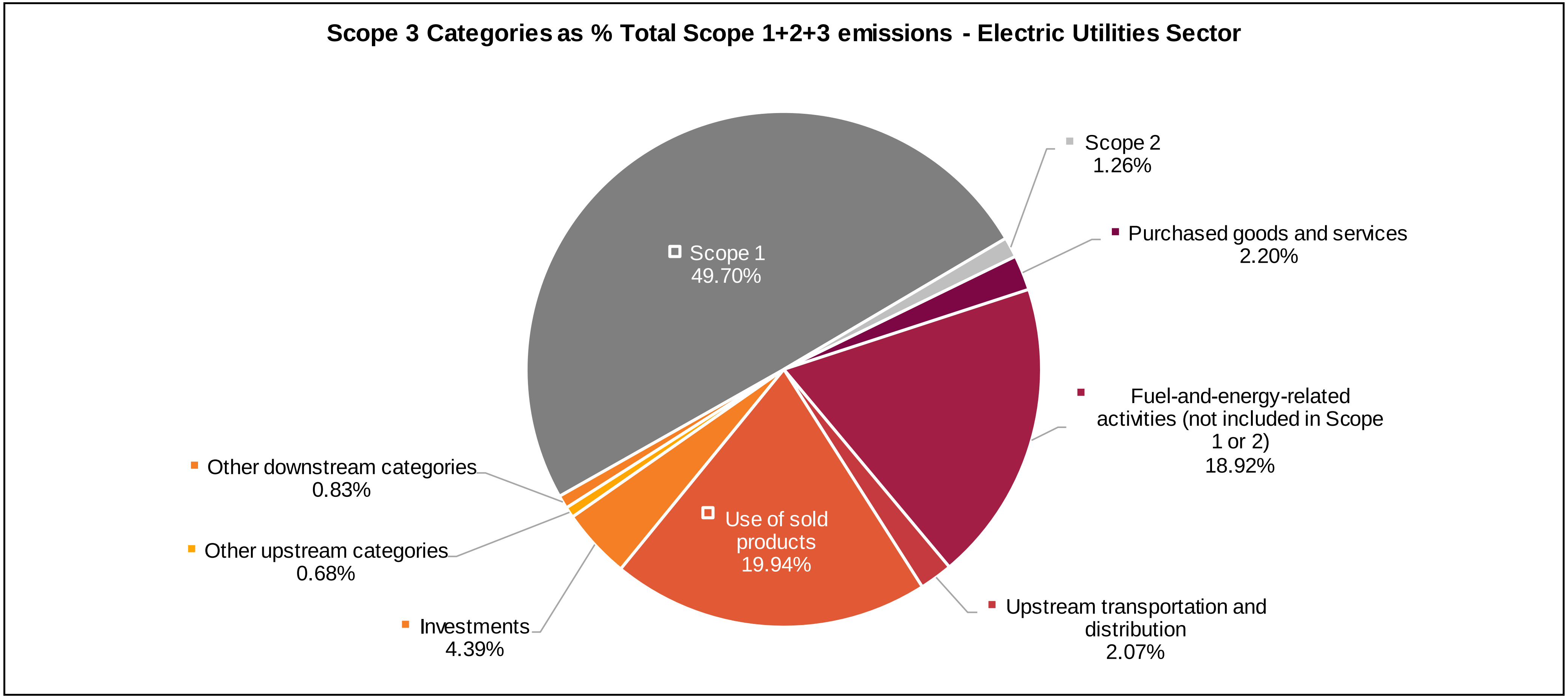
Reported Relevance of Scope 3 Categories - Construction Sector (64 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank


Scope 3 Categories as % Total Scope 1+2+3 Emissions - Construction Sector
End of life treatment of sold products 1.36%
Investments 1.05%
Other upstream categories 2.19%
Other downstream categories 0.44%
Scope 1 6.38%
Scope 2 1.34%
Purchased goods and services 29.59%
Capital goods 1.23%
Upstream transportation and distribution 7.21%
Use of sold products 49.23%

EU: Electric Utilities

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
- Category 11: Use of sold products - Category 3: Fuel-and-energy-related activities - Category 15: Investments - Category 1: Purchased goods and services - Category 4: Upstream Transportation and Distribution	Depending on the utility's activities, emissions associated with power generation may be accounted for in Scopes 1, 2, or 3 (SBTi, 2020:12). For companies in the Electric Utilities sector that have a substantial share of **fossil fuel power generation**, Scope 3 is less significant because Scope 1 emissions typically represent a large share of a company's carbon footprint (WBCSD, 2020:12). However, when utilities have a **gas retail business**, the downstream use of the sold natural gas typically accounts for a substantial share of their Scope 3 inventory. (WBCSD, 2020:13). Therefore, **Scope 3 category 11 "Use of sold products"** is relevant to account for combustion emissions of natural gas sold to customers (SBTi, 2021:23); (WBCSD, 2020:13,15). Category 11 was calculated by fewer than half of the 155 Electric Utility companies responding to the 2021 CDP climate change questionnaire on behalf of investors but comprised the largest proportion of Scope 3 emissions reported by the sector – 41% of total Scope 3 emissions and 20% of total Scope 1+2+3 emissions. **Scope 3 category 3 "Fuel-and-energy-related activities"** is also relevant for Electric Utility companies that **purchase electricity** and **vertically integrated companies** to account for the upstream generation and transmission and distribution losses of electricity that is traded or purchased and sold to customers (SBTi, 2020:13,14); (WBCSD, 2020:13); (WRI, 2011:40); (SBTi, 2018:16). Emissions from upstream transportation of fossil fuels are also material for electric utility companies (WBCSD, 2020:13). Category 3 was reported as "Relevant, calculated" by a majority of the Electric Utility companies responding to CDP in 2021 and was the second largest Scope 3 category in terms of emissions reported by the sector, comprising 39% of total Scope 3 emissions and 19% of total Scope 1+2+3 emissions. Other Scope 3 categories that may be relevant for the Electric Utilities sector are **Scope 3 category 1 "Purchased goods and services"**, to account for embodied carbon emissions associated with the acquisition or construction of new power plants (WBCSD, 2020:13), and **Scope 3 category 15 "Investments"** to account for equity investments in fossil fuel plants. (WBCSD, 2020:14). Categories 1 and 4 were commonly calculated by Electric Utilities companies responding to CDP in 2021 but did not comprise a significant proportion of total emissions. Category 15, however, was only calculated by 16% of companies but comprised 9% of total Scope 3 emissions and 4 of total Scope 1+2+3 emissions reported by the sector.

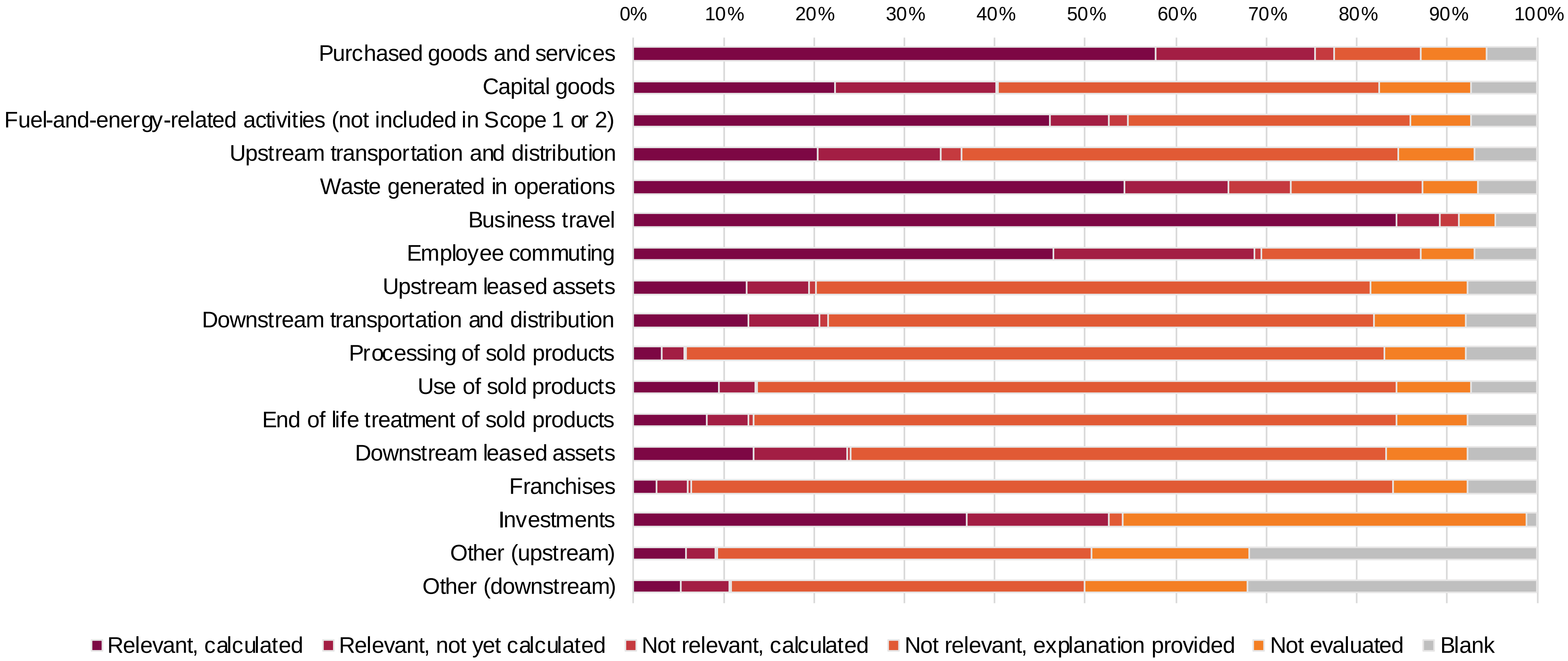

Reported Relevance of Scope 3 Categories - Electric Utilities Sector (155 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank


Scope 3 Categories as % Total Scope 1+2+3 emissions - Electric Utilities Sector
Scope 2
1.26%
Purchased goods and services
2.20%
Scope 1
49.70%
Fuel-and-energy-related activities (not included in Scope 1 or 2)
18.92%
Other downstream categories
0.83%
Use of sold products
19.94%
Other upstream categories
0.68%
Investments
4.39%
Upstream transportation and distribution
2.07%

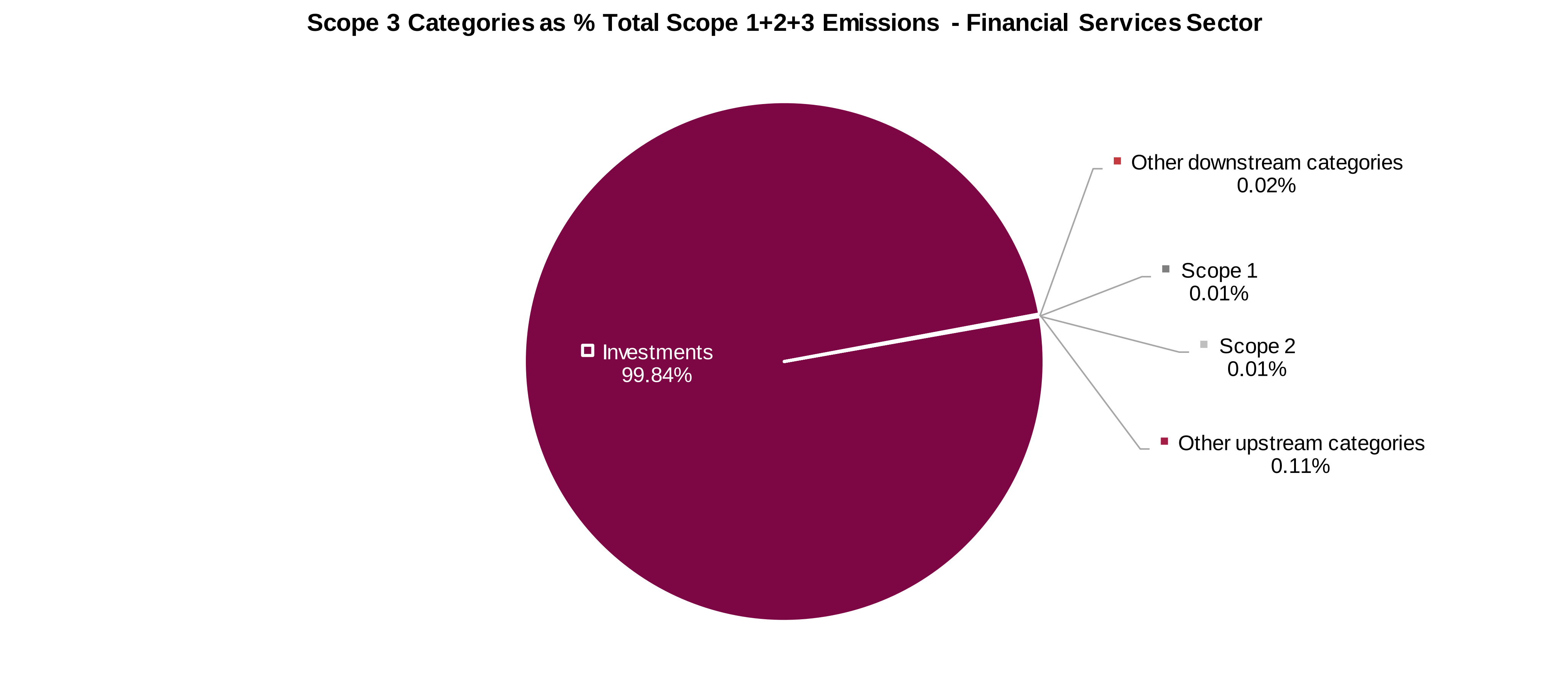
FS: Financial Services

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
◥ Category 15: Investments	The Financial Services' sector's largest source of emissions come from its lending, investment, and insurance underwriting activities, i.e., portfolio emissions, accounted under **Scope 3 category 15, "Investments"**. The portfolio emissions of global financial institutions are on average over 700 times larger than direct emissions (CDP 2020: 35). Category 15 was reported as "Relevant, calculated" by only 37% of the 377 Financial Services companies responding to the 2021 CDP climate change questionnaire on behalf of investors, but comprised over 99% of total Scope 3 emissions and over 99% of total Scope 1+2+3 emissions reported by the sector. Note that CDP requests Financial Services sector companies to report portfolio emissions in a FS-only module in the CDP Corporate questionnaire:Module 12 Environmental Performance – FS. CDP has partnered with the Partnership for Carbon Accounting Financials (PCAF) to mainstream the assessment and reporting of portfolio emissions. CDP has also produced a technical note which provides guidance on the methodologies used to calculate portfolio emissions and other portfolio impact metrics, available here.

Reported Relevance of Scope 3 Categories - Financial Services Sector (377 Companies)*



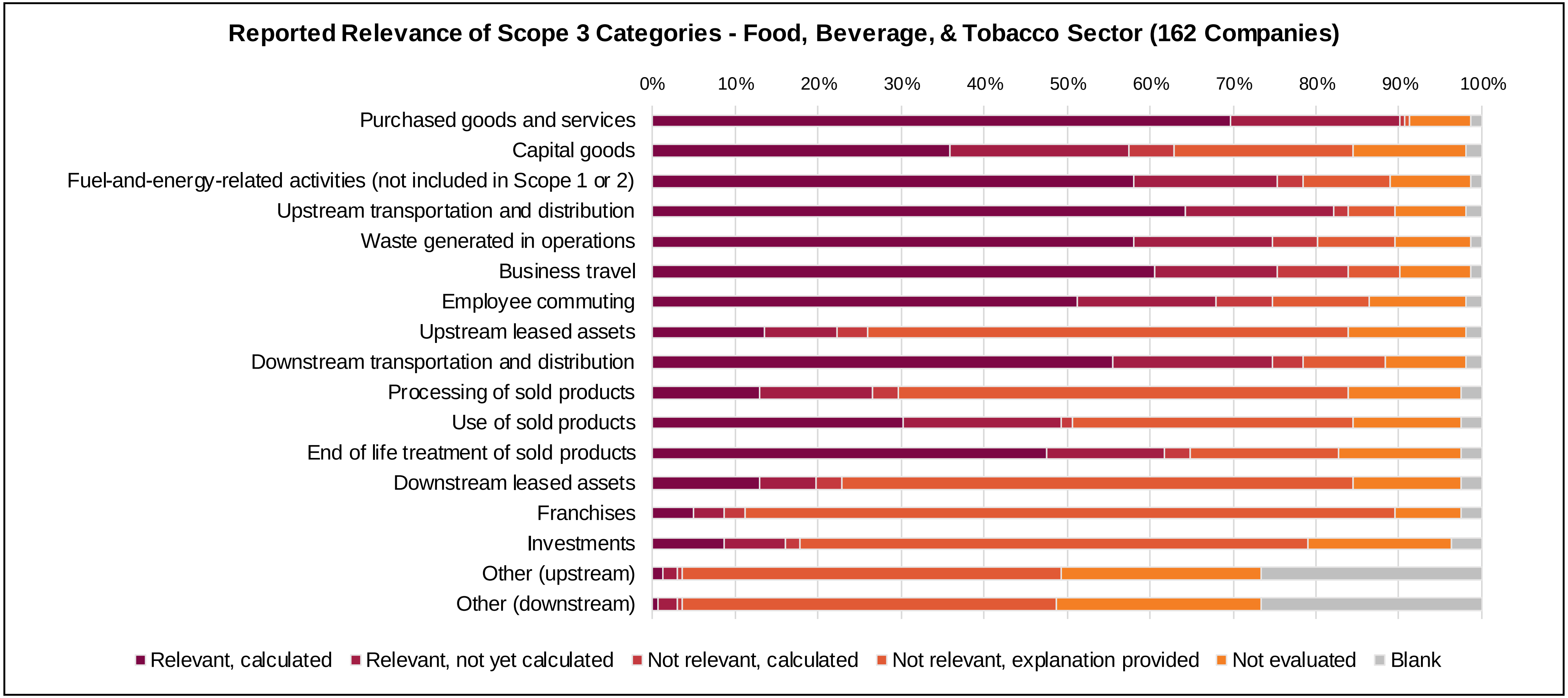
*For the Financial Services sector, relevancy data for Scope 3 category 15 was obtained from a separate question (C-FS14.1a / 12.1.1 in 2024) in a sector-specific module.

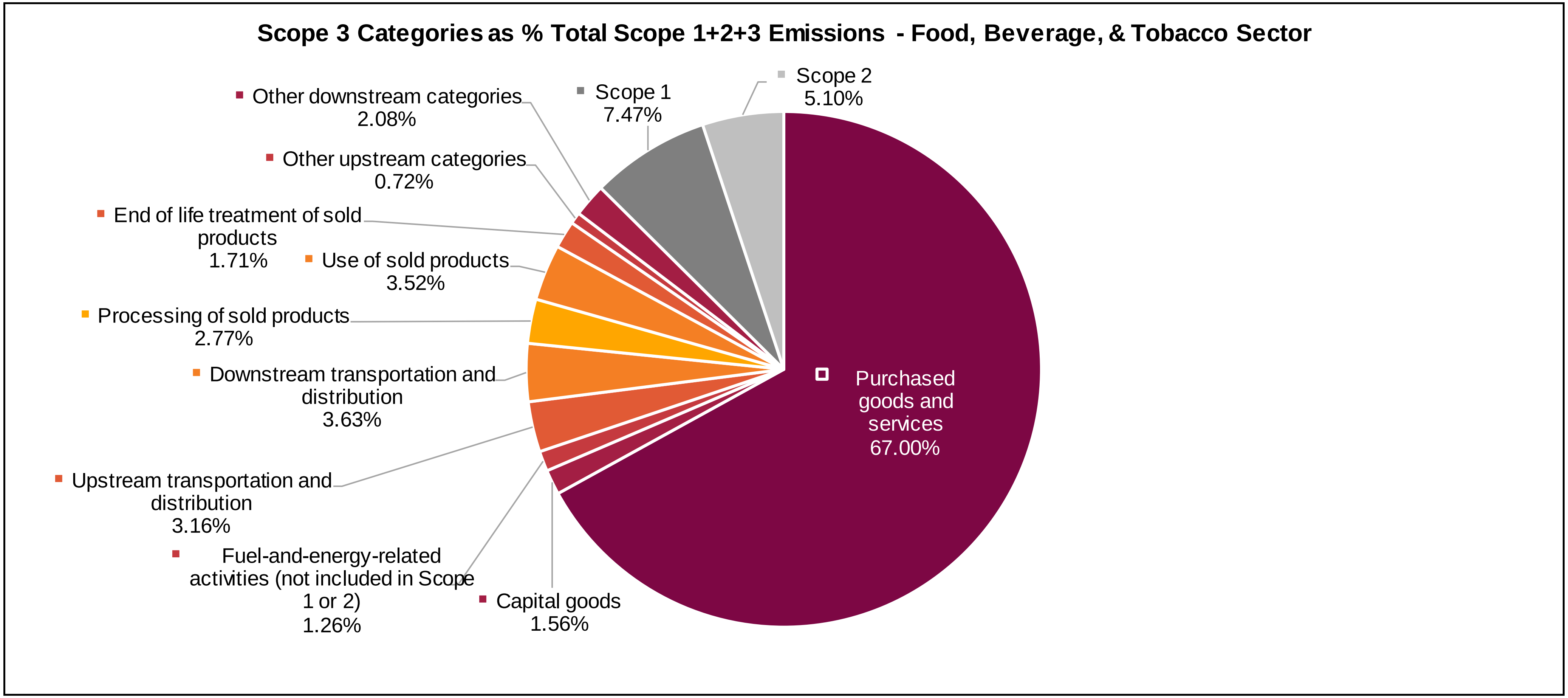


For the Financial Services sector, emissions data for Scope 3 category 15 was obtained from a separate question (C-FS14.1a / 12.1.1 in 2024) in a sector-specific module.

FB: Food, Beverage, & Tobacco

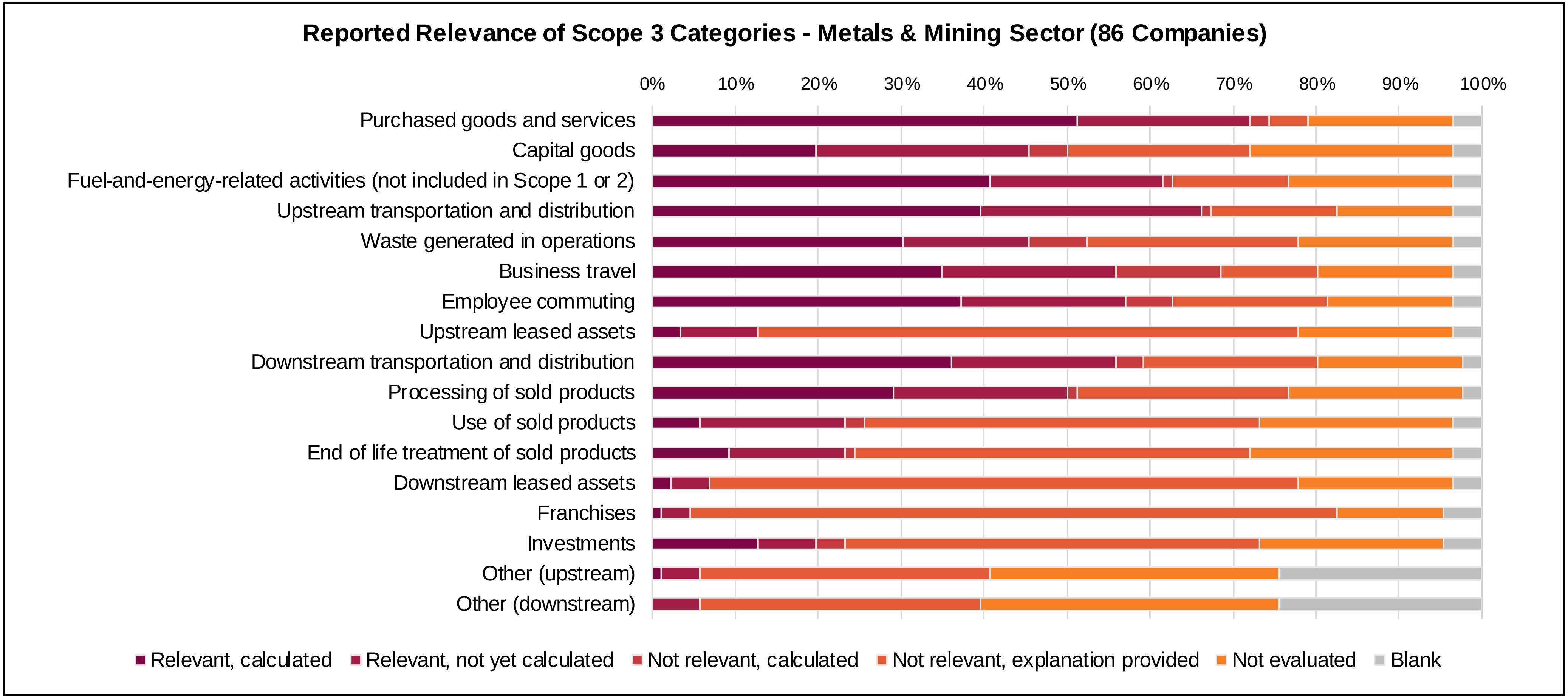
Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
◥ Category 1: Purchased goods and services ◥ Category 9: Downstream Transportation and Distribution ◥ Category 4: Upstream Transportation and Distribution	Food, Beverage, and Tobacco sector companies (i.e., processors) tend to have fewer emissions in Scope 1, but more indirect Scope 3 emissions arising from their supply and distribution chains (TCFD, 2017:62). Companies operating in the Food, Beverage, and Tobacco sector should primarily measure and report **Scope 3 category 1 "Purchased goods and services"** (TCFD, 2017:62); (CA100+, 2020:5); (WRI & WBCSD:10); (SBTi, 2018:16), (SBTi, 2021:23) to account for upstream land use change emissions from agricultural production. Category 1 was reported as "Relevant, calculated" by 70% of the 162 Food, Beverage, and Tobacco companies responding to the 2021 CDP climate change questionnaire on behalf of investors, and comprised a significant proportion of the sector's emissions – 77% of total Scope 3 emissions and 67% of total Scope 1+2+3 emissions reported by the sector. Food, Beverage, and Tobacco companies could also consider **Scope 3 category 4 "Upstream Transportation and Distribution",** and **category 9 "Downstream Transportation and Distribution"** relevant to account for transport-related emissions within their supply and distribution chains. A majority of the Food, Beverage and Tobacco companies responding to CDP in 2021 reported these categories as "Relevant, calculated", but neither comprised significant proportion of total emissions for the sector.


Reported Relevance of Scope 3 Categories - Food, Beverage, & Tobacco Sector (162 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank

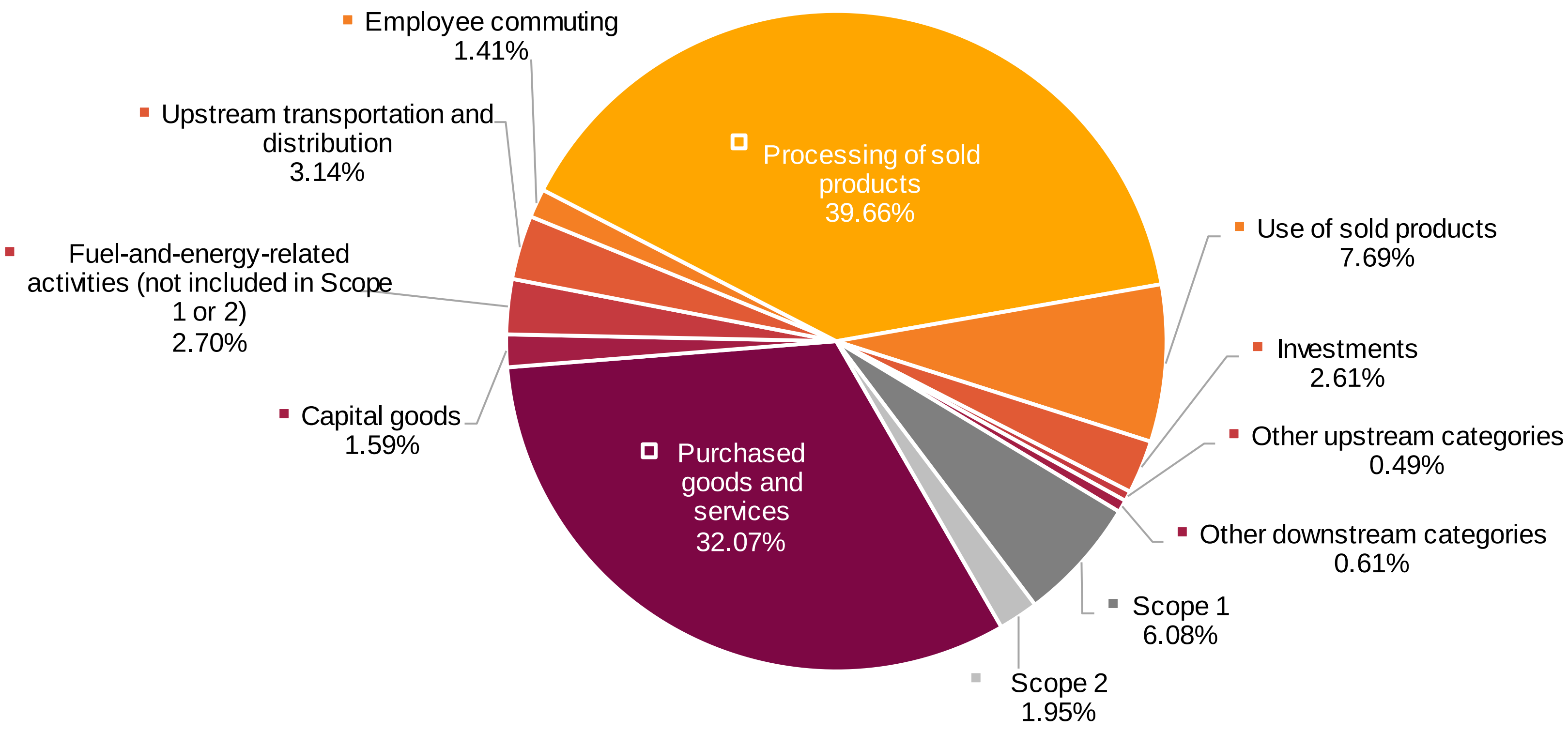

Scope 3 Categories as % Total Scope 1+2+3 Emissions - Food, Beverage, & Tobacco Sector
Other downstream categories 2.08%
Scope 1 7.47%
Scope 2 5.10%
Other upstream categories 0.72%
End of life treatment of sold products 1.71%
Use of sold products 3.52%
Processing of sold products 2.77%
Downstream transportation and distribution 3.63%
Upstream transportation and distribution 3.16%
Fuel-and-energy-related activities (not included in Scope 1 or 2) 1.26%
Capital goods 1.56%
Purchased goods and services 67.00%

MM: Metals & Mining

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
Mining: - Category 10: Processing of sold products **Processing Metals:** - Category 1: Purchased goods and services	Scope 3 emissions represent the largest source of GHG emissions from the mining sector, representing over two thirds of total emissions (McKinsey, 2020). The most relevant Scope 3 categories for Metals and Mining sector organizations depend upon the commodity produced and the specific activities the organization is involved in. For eight minerals needed for clean energy transitions, the emissions intensity per ton of metal content varies considerably, for both processing and mining (IEA, 2021:195). Note that the CDP Activity Classification System does not include coal mining, iron & steel making and oil & gas extraction within the Metals and Mining sector activities. Most **mining companies'** Scope 3 emissions are downstream, for example from the processing of metals such as aluminum (Mining technology, 2021), and so **Scope 3 category 10 "Processing of sold products"** is the most relevant Scope 3 category for mining companies (CA100+, 2020); (TPI, 2021). Although category 10 was reported as "Relevant, calculated" by only 29% of the 86 Metals & Mining companies responding to the 2021 CDP climate change questionnaire on behalf of investors, it comprised the largest proportion of emissions reported by the sector – 43% of total Scope 3 emissions and 40% of total Scope 1+2+3 emissions. Emissions from **Scope 3 category 1 "Purchased goods and services"** are also very relevant to this sector, representing over 50% of value chain emissions for some companies (Greene, 2017:5). Category 1 is most relevant for **metal processing** companies, to account for the extraction of raw materials, manufacturing, electricity generation consumed by upstream activities, land use change, and transportation of goods between suppliers. Category 1 was reported as "Relevant, calculated" by 51% of Metals & Mining companies responding to CDP on behalf of investors in 2021 and comprised a significant proportion of emissions – 35% of total Scope 3 emissions and 32% of total Scope 1+2+3 emissions reported by the sector.

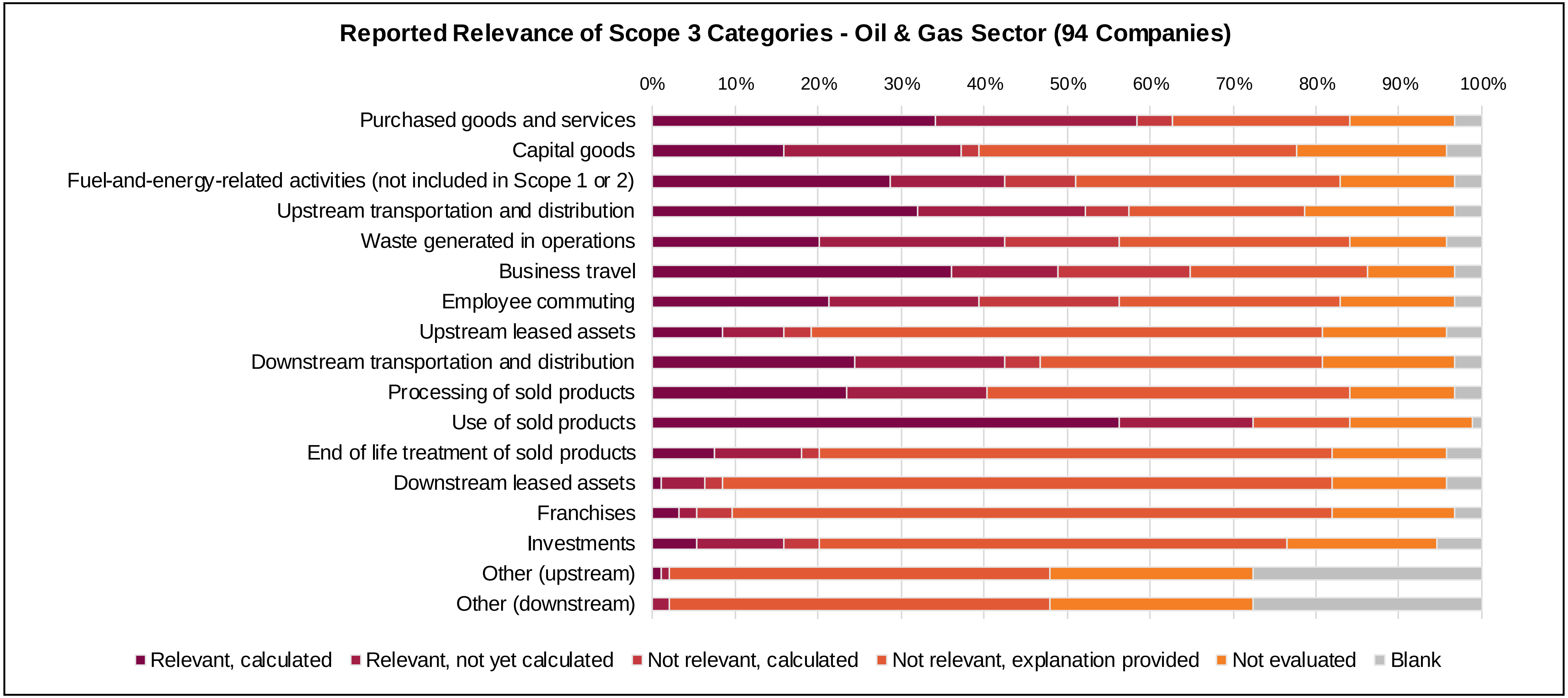

Reported Relevance of Scope 3 Categories - Metals & Mining Sector (86 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank

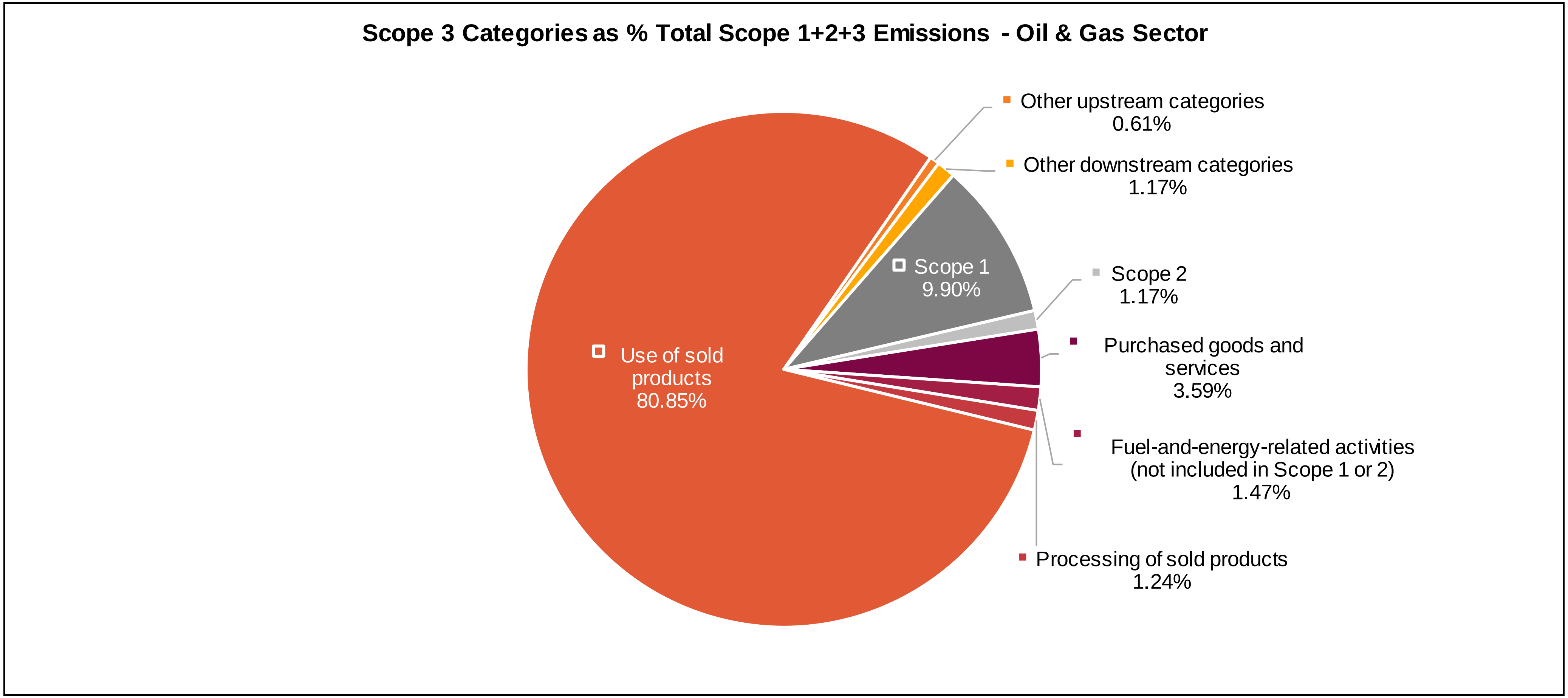
Scope 3 Categories as % Total Scope 1+2+3 emissions - Metals & Mining Sector



OG: Oil & Gas

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
- Category 11: Use of sold products - Category 1: Purchased goods and services	Companies in the Oil and Gas sector may operate at different stages of the value chain, such as in oil and gas extraction, refining, petrochemical manufacturing, or in oil and gas pipelines and storage. Wherever they operate in the value chain, a large proportion of an Oil and Gas company's emissions are in **Scope 3 category 11 "Use of sold products"**, which often represents more emissions than Scope 1 and 2 combined (CA100+, 2020); (Greene, 2017:6); (SBTi, 2020:11) (IPIECA & API, 2016:20). Indeed, although only just over half of the 94 Oil & Gas companies responding to the 2021 CDP climate change questionnaire on behalf of investors calculated emissions for category 11, it comprised a significant majority of the sector's emissions – 91% of total Scope 3 emissions and 81% of total Scope 1+2+3 emissions. Companies that do not operate in all stages of the value chain may need to purchase oil, gas, hydrogen and/or petroleum products used as feedstocks, or need to outsource activities such as drilling. Scope 3 emissions from these purchases will be accounted for under **Scope 3 category 1 "Purchased goods and services"** (IPIECA & API, 2016:22); (SBTi, 2020:11). This category may be significant for some companies, though it is a small proportion of Scope 3 across the sector as a whole, comprising 4% of total Scope 3 emissions and 4% of total Scope 1+2+3 emissions reported by Oil & Gas companies responding to CDP on behalf of investors in 2021.

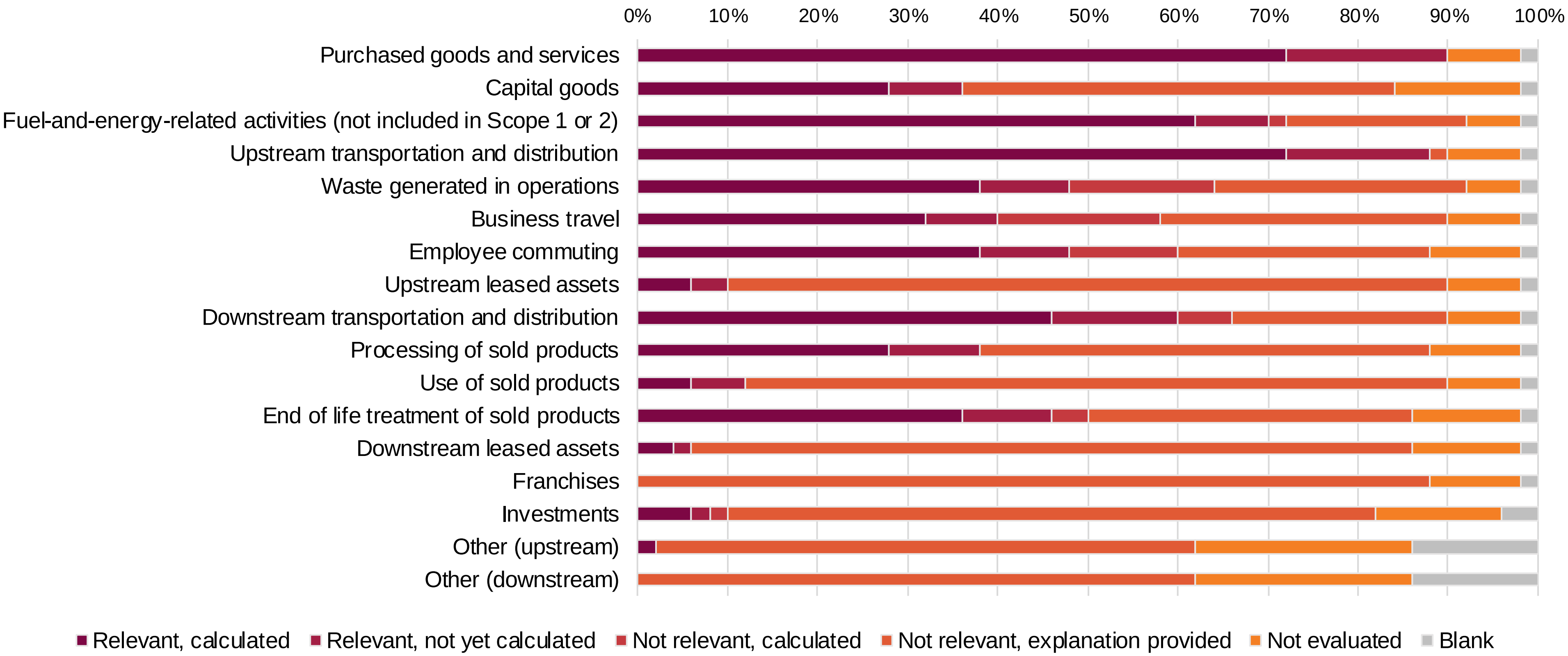

Reported Relevance of Scope 3 Categories - Oil & Gas Sector (94 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank

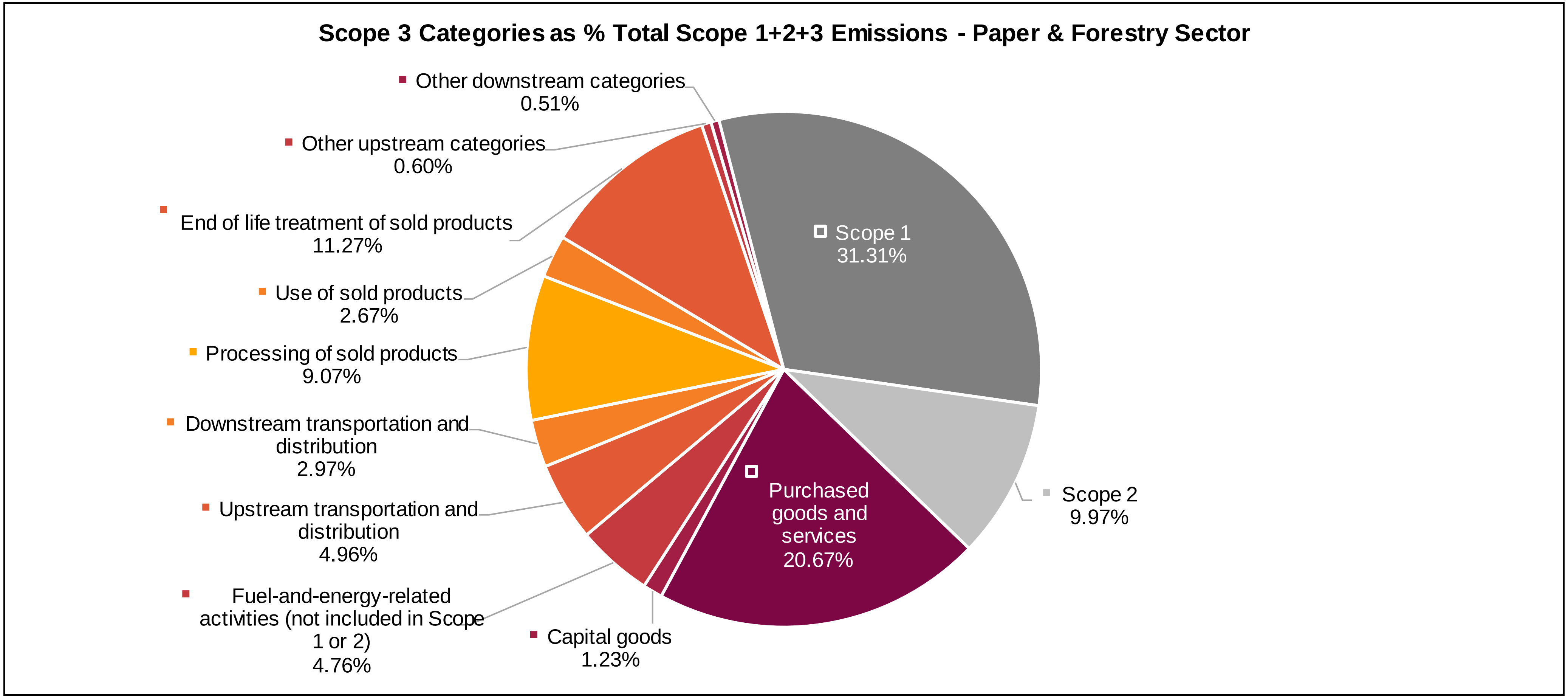

Scope 3 Categories as % Total Scope 1+2+3 Emissions - Oil & Gas Sector
Other upstream categories
0.61%
Other downstream categories
1.17%
Scope 1
9.90%
Scope 2
1.17%
Purchased goods and services
3.59%
Fuel-and-energy-related activities (not included in Scope 1 or 2)
1.47%
Processing of sold products
1.24%
Use of sold products
80.85%

Relevant Scope 3 categories (listed in order of % share of total Scope 3*)	Explanation of relevance & insights from CDP data
Forestry: - Category 1: Purchased goods and services - Category 10: Processing of sold products - Category 12: End of life treatment of sold products - Category 9: Downstream Transportation and Distribution **Processors:** - Category 1: Purchased goods and services - Category 9: Downstream Transportation and Distribution - Category 4: Upstream Transportation and Distribution **Relevant Scope 3 categories for each activity are listed in order of percentage share of total Scope 3 emissions for the Paper & Forestry sector as a whole (not for the specific activity).*	The Paper and Forestry sector covers a diverse range of activities including logging, rubber farming, paper and wood product manufacturing, and wholesale of wood and paper products. Upstream **forestry** companies involved in logging and rubber farming (from seedling production to harvesting of timber) are likely to have predominantly Scope 1 emissions arising from site preparation, harvesting, and fertilization (where fertilizers are used) (Sonne, 2006:1445). Depending on the land management regime, Scope 1 emissions may be over 80% of overall emissions (Sonne, 2006:1439). Where fertilizer is used by **forestry** companies, **Scope 3 category 1 "Purchased goods and services"** should be evaluated as its energy- and emission-intensive production makes it a key source of Scope 3 emissions for the sector (Sonne, 2006:1445). Consistent with the literature, category 1 was reported as "Relevant, calculated" by 72% of the 50 Paper & Forestry companies responding to the 2021 CDP climate change questionnaire on behalf of investors, and it was the most significant Scope 3 category for the sector – comprising 35% of total Scope 3 emissions and 21% of total Scope 1+2+3 emissions. The transport of forest products after harvesting can also be a significant source of Scope 3 emissions for **forestry** companies (Timmermann and Dibdiakova, 2014:1606), therefore **Scope 3 category 9 "Downstream transportation and distribution"** may be relevant to measure and report. Category 9 was calculated by around half of Paper & Forestry companies responding to CDP in 2021, but it did not comprise a significant proportion of emissions for the sector. **Forestry** companies may also wish to account for downstream processing and disposal in **Scope 3 category 10 "Processing of sold products",** and **category 12 "End of life treatment of sold products"**. Despite both being reported as "Relevant, calculated" by fewer than 40% responding to CDP in 2021, categories 10 and 12 were the second largest Scope 3 categories for Paper & Forestry companies responding to CDP in terms of size. Category 10 comprised 15% of total Scope 3 emissions and 9% of total Scope 1+2+3 emissions, and category 12 comprised 19% of total Scope 3 emissions and 11% of total Scope 1+2+3 emissions reported by the sector. **Processors**, such as fiber processors (i.e., paper manufacturing companies) tend to be impacted relatively less by Scope 1 emissions, but more by indirect Scope 3 emissions arising from their supply and distribution chains. These companies should therefore measure and report **Scope 3 category 1 "Purchased goods and services"** (TCFD,

	2017:62) to account for upstream emissions from land use change of forestry companies. Processors should also consider **Scope 3 category 4 "Upstream Transportation** and **Distribution", and category 9 "Downstream Transportation and Distribution"** relevant to account for transport-related emissions within their supply and distribution chains (TCFD, 2017:62). Category 4 "Upstream transportation and distribution" was reported as 'Relevant, calculated' by almost three quarters of Paper & Forestry companies responding to CDP in 2021 and comprised 8% of total Scope 3 emissions and 5% of total Scope 1+2+3 emissions reported by the sector

Reported Relevance of Scope 3 Categories - Paper & Forestry Sector (50 Companies)



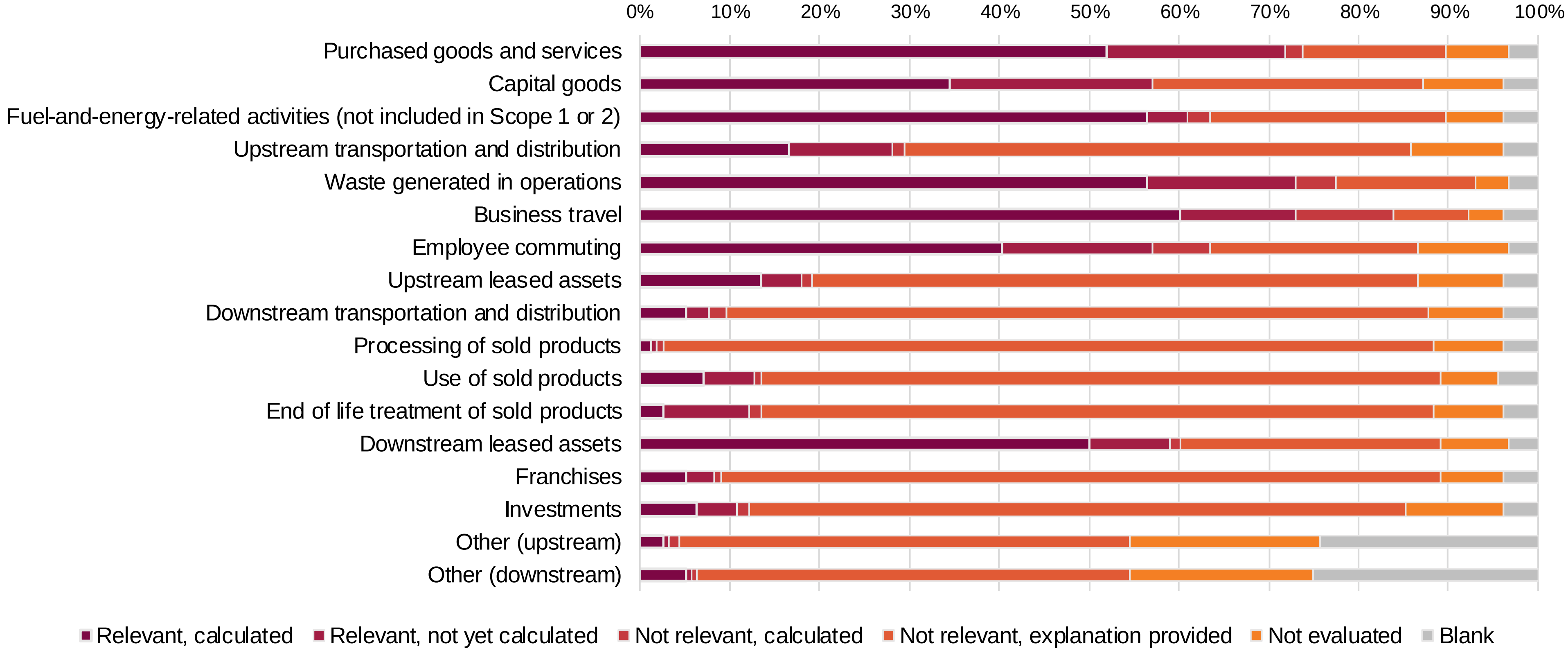

Scope 3 Categories as % Total Scope 1+2+3 Emissions - Paper & Forestry Sector
Other downstream categories 0.51%
Other upstream categories 0.60%
End of life treatment of sold products 11.27%
Use of sold products 2.67%
Processing of sold products 9.07%
Downstream transportation and distribution 2.97%
Upstream transportation and distribution 4.96%
Fuel-and-energy-related activities (not included in Scope 1 or 2) 4.76%
Capital goods 1.23%
Purchased goods and services 20.67%
Scope 1 31.31%
Scope 2 9.97%

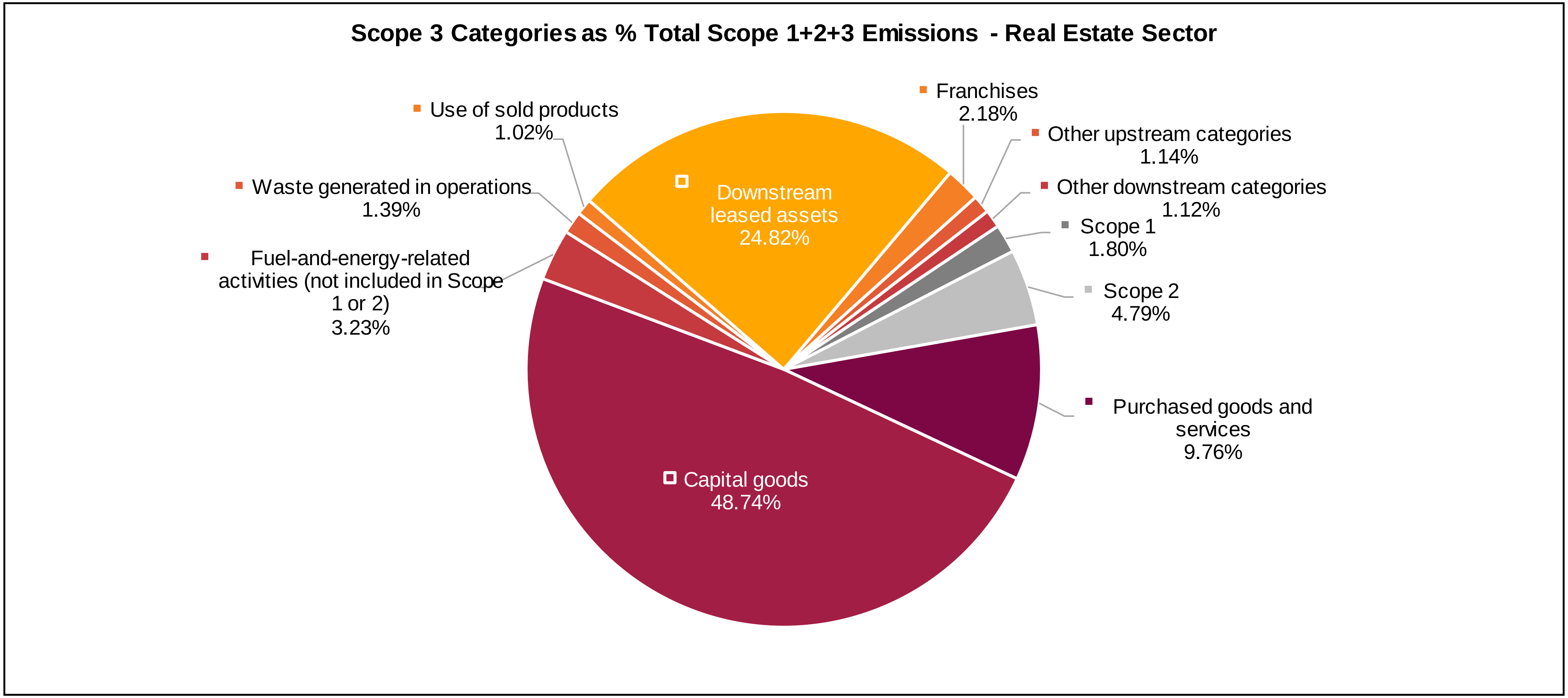
RE: Real Estate

Relevant Scope 3 categories (listed in order of % share of total Scope 3*)	Explanation of relevance & insights from CDP data
Building developers: - Category 2: Capital Goods - Category 3: Fuel and energy-related activities - Category 11: Use of sold products - Category 4: Upstream transportation and distribution - Category 12: End of life treatment of sold products **Building owners:** - Category 2: Capital Goods - Category 13: Downstream leased assets - Category 1: Purchased goods and services - Category 3: Fuel and energy-related activities **REITs (that do not own real estate):** - Category 15: Investments **Relevant Scope 3 categories for each activity are listed in order of percentage share of total Scope 3 emissions for the Real Estate sector as a whole (not for the specific activity).*	Scope 3 emissions on average contribute over 85% of a commercial Real Estate company's entire footprint (UK GBC, 2019:8). **Building developers** should primarily measure and report **Scope 3 category 2 "Capital Goods"** to account for the embodied emissions of new buildings (e.g., construction materials such as steel and concrete) and **Scope 3 category 11 "Use of sold products2** to account for the expected operational emissions from any buildings sold. **Scope 3 category 12, "End of life treatment of sold products"**, is also relevant for **building developers** to account for end of life emissions for any buildings sold (UK GBC, 2019:16-19). Category 2 was the most significant Scope 3 category reported by the 156 Real Estate companies responding to the 2021 CDP climate change questionnaire on behalf of investors. Despite only being reported as "Relevant, calculated" by 35% of companies, category 2 comprised 52% of total Scope 3 emissions and 49% of total Scope 1+2+3 emissions reported by the sector. Categories 11 and 12, however, were rarely found relevant or calculated by the sector and therefore comprised a small proportion of total emissions reported. Other Scope 3 categories that may be relevant to **building developers** are **Scope 3 category 3 "Fuel and energy-related activities"** to account for well-to-tank and transmission and distribution losses from fuels and electricity purchased, and **Scope 3 category 4 "Upstream transportation and distribution"** to account for emissions from logistics for developments (UK GBC, 2019:16). Category 3 was reported as relevant by over half of Real Estate companies responding to CDP in 2021, but neither category 3 nor 4 comprised a significant proportion of emissions for the sector. **Building owners** should consider **Scope 3 category 13, "Downstream leased assets"** relevant to account for the emissions from the assets leased to other organizations (e.g. energy use in leased spaces) (UK GBC, 2019:19). **Scope 3 category 1 "Purchased goods and services"**, may also be relevant to account for facilities management and contractors. **Category 2 "Capital Goods"** and **category 3 "Fuel-and-energy-related activities"** may also be relevant to **building owners** (UK GBC, 2019:16). Category 13 was reported as "Relevant, calculated" by half of the Real Estate companies responding to CDP on behalf of investors and was the second most significant category in terms of size – comprising 27% of total Scope 3 emissions and 25% of total Scope 1+2+3 emissions reported by the sector. Category 1 was reported as "Relevant, calculated" by 52% of companies and accounted for 10.5% of total Scope 3 emissions and 9.8% of total Scope 1+2+3 emissions reported by the sector.

	Real Estate Investment Trusts (REITs) should generally consider the same Scope 3 categories as building owners relevant. However, REITs that do not own real estate directly, but only finance it, should consider Scope 3 category 15 "Investments" relevant. Category 15 was reported as "Relevant, calculated" by just 6% of Real Estate companies responding to CDP on behalf of investors in 2021, and comprised less than 1% of both total Scope 3 emissions and total Scope 1+2+3 emissions reported by the sector.

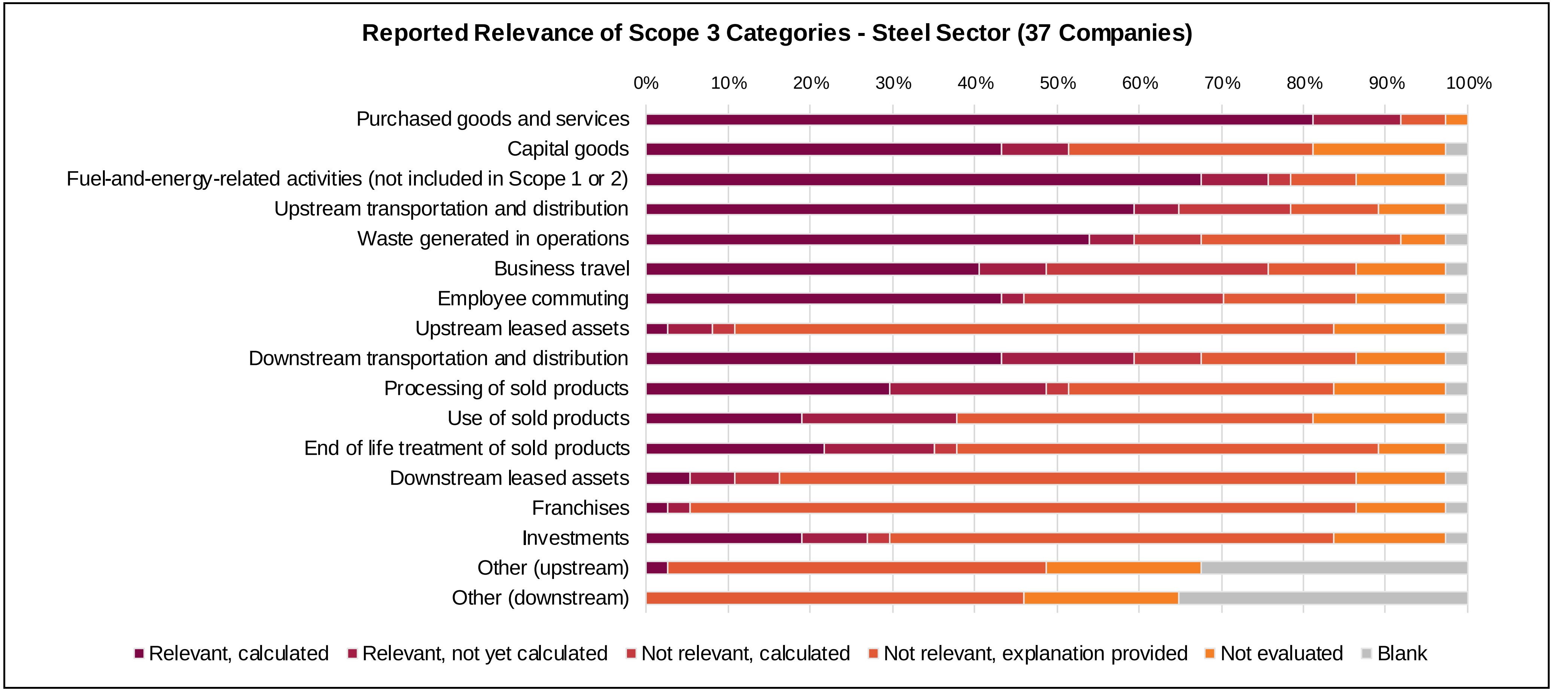
Reported Relevance of Scope 3 Categories - Real Estate Sector (156 Companies)

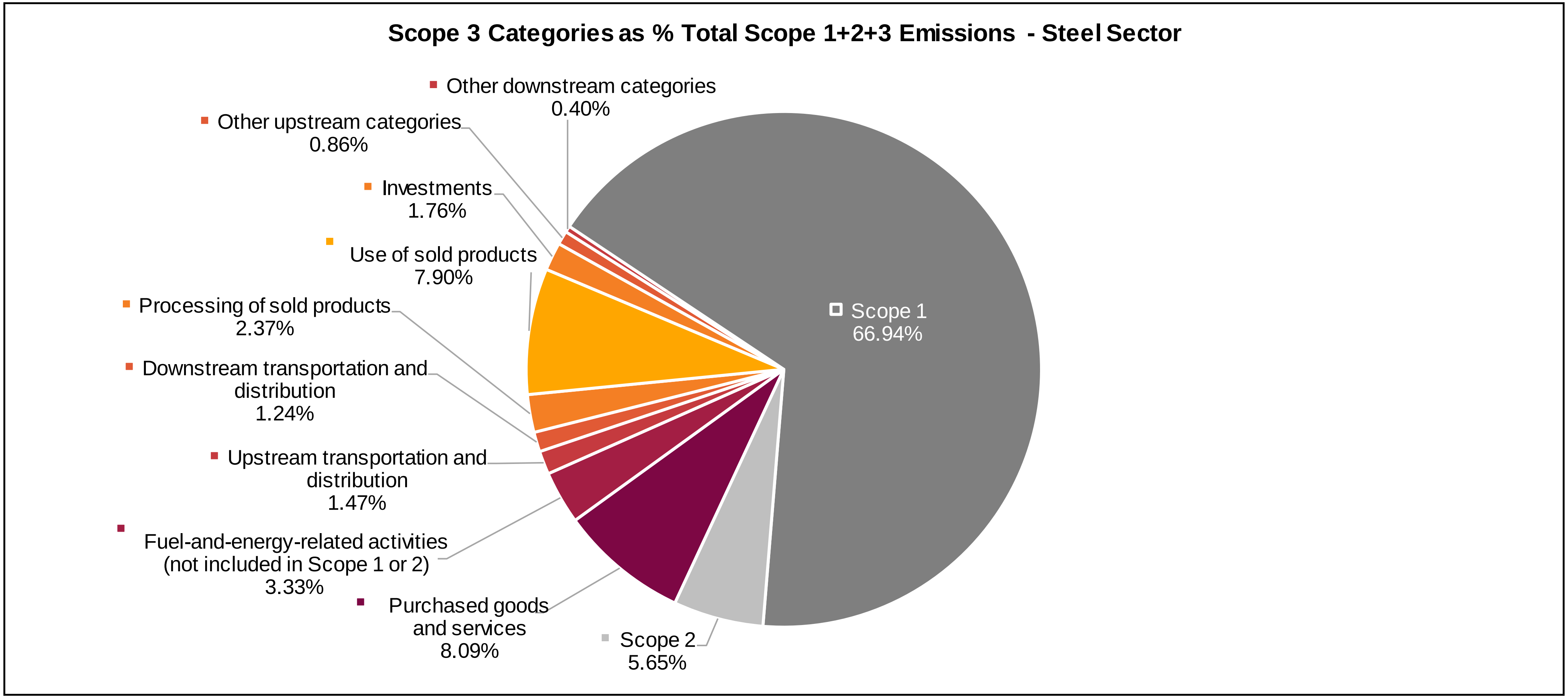



Scope 3 Categories as % Total Scope 1+2+3 Emissions - Real Estate Sector
Franchises 2.18%
Use of sold products 1.02%
Other upstream categories 1.14%
Waste generated in operations 1.39%
Other downstream categories 1.12%
Downstream leased assets 24.82%
Scope 1 1.80%
Fuel-and-energy-related activities (not included in Scope 1 or 2) 3.23%
Scope 2 4.79%
Purchased goods and services 9.76%
Capital goods 48.74%

ST: Steel

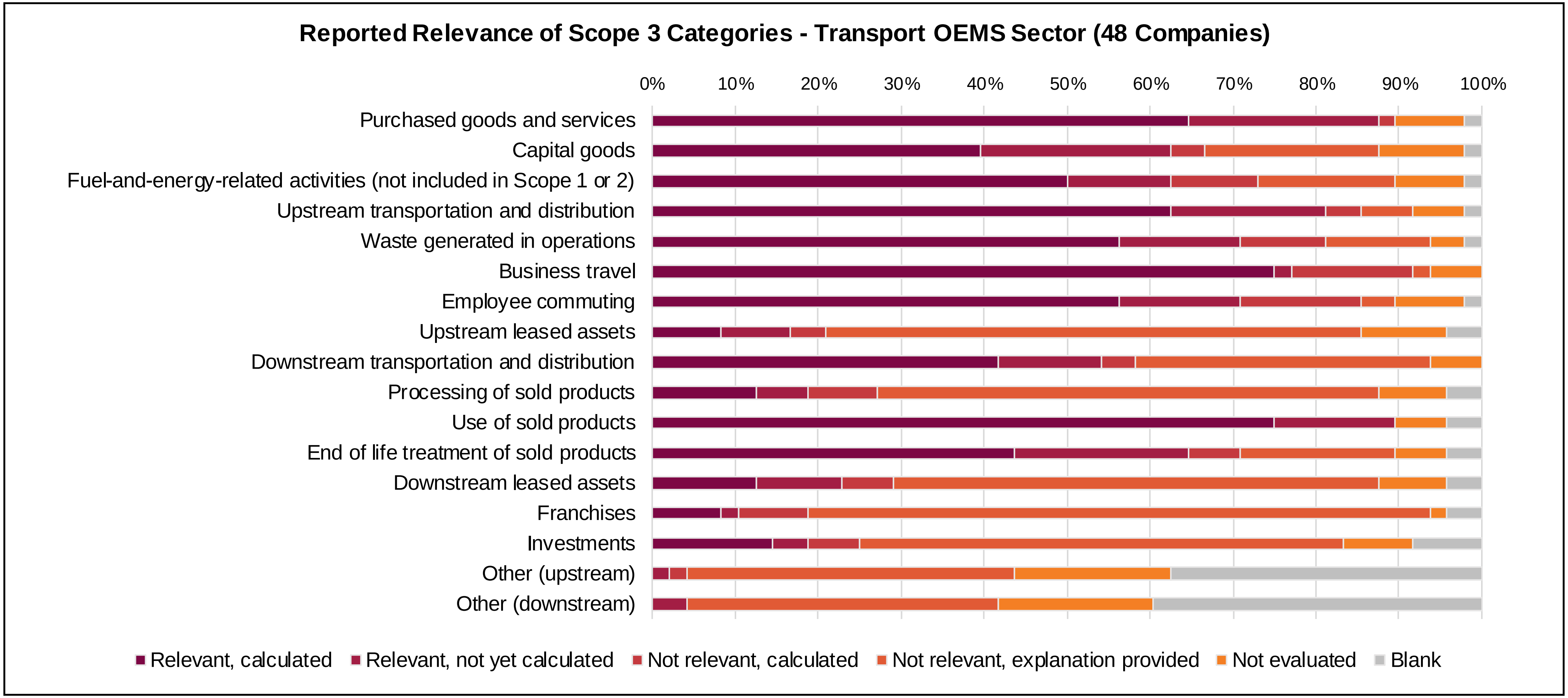
Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
- Category 1: Purchased goods and services - Category 11: Use of sold products - Category 10: Processing of sold products - Category 12: End of life treatment of sold products	The basic processes of steelmaking are very energy and material-intensive, making up almost 90% of final energy and material consumption (Carmona et al., 2019:894). For this reason, Scope 1 and 2 emissions are typically larger than Scope 3 emissions in the Steel sector (ResponsibleSteel, 2020:44). However, some Scope 3 categories are relevant to the Steel sector. **Scope 3 category 1 "Purchased good and services"** represents the majority of the Steel sector's Scope 3 emissions (Mission Possible Partnership, 2021:13). Steel companies should measure and report this category in their inventory to account for the upstream emissions from the iron ore value chain and fossil fuel inputs to the steelmaking process (Mission Possible Partnership, 2021:13). Consistent with the literature, 81% of the 156 Steel companies responding to the 2021 CDP climate change questionnaire on behalf of investors reported category 1 as "Relevant, calculated" and it comprised the largest proportion of Scope 3 emissions for the sector – comprising 30% of total Scope 3 emissions and 8.1% of total Scope 1+2+3 emissions reported by the sector. **Scope 3 category 10 "Processing of sold products"**, **category 11 "Use of sold products"** and **category 12 "End of life treatment of sold products"** may also be relevant to Steel companies, to account for the downstream manufacturing, use, and end of life treatment of steel (Mission Possible Partnership, 2021:13). In particular, Steel companies may have a large influence on potential emissions reductions in category 12 through material recirculation strategies to increase steel reuse and scrap recovery (Mission Possible Partnership, 2021:14). Fewer than a third of Steel companies responding to CDP in 2021 reported categories 10, 11 and 12 as "Relevant, calculated". Despite this, category 11 comprised a significant proportion of Scope 3 emissions reported by the sector – 29% Scope 3 emissions and 7.9% of total Scope 1+2+3 emissions.


Reported Relevance of Scope 3 Categories - Steel Sector (37 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank


Scope 3 Categories as % Total Scope 1+2+3 Emissions - Steel Sector
Other downstream categories 0.40%
Other upstream categories 0.86%
Investments 1.76%
Use of sold products 7.90%
Processing of sold products 2.37%
Downstream transportation and distribution 1.24%
Upstream transportation and distribution 1.47%
Fuel-and-energy-related activities (not included in Scope 1 or 2) 3.33%
Purchased goods and services 8.09%
Scope 2 5.65%
Scope 1 66.94%

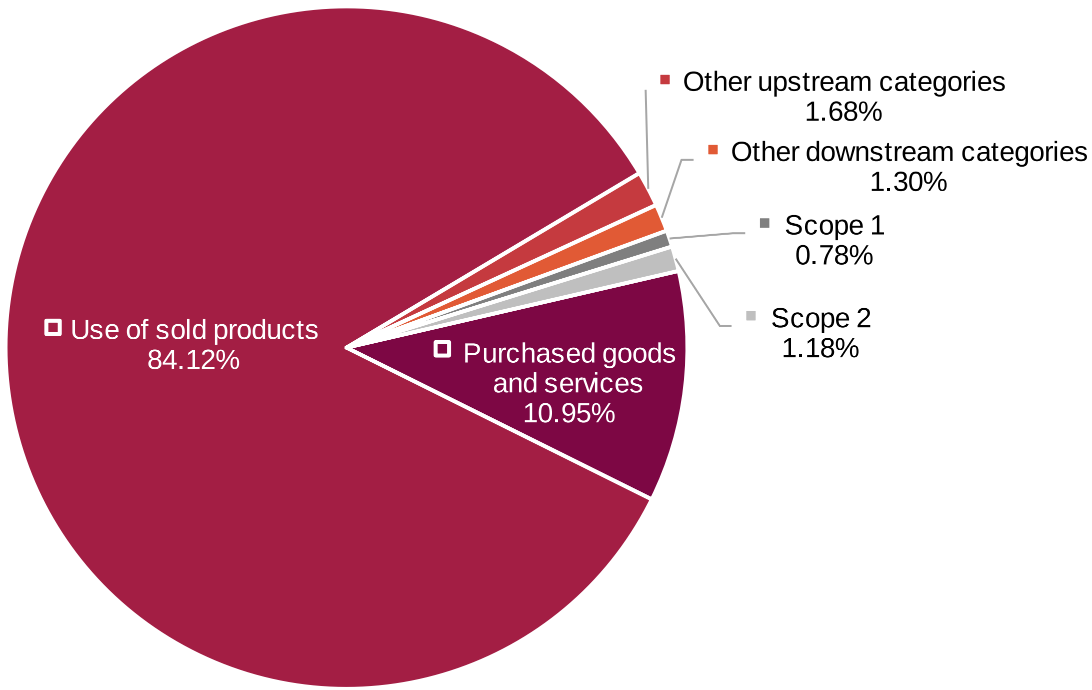
TO: Transport OEMS

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
- Category 11: Use of sold products - Category 1: Purchased goods and services	Transport is responsible for 24% of global CO_2 emissions and most of the global fleet of road vehicles, ships and planes are fossil fuel powered (IEA Data browser). Companies that manufacture transport equipment (i.e., companies that work in vehicle manufacturing, shipbuilding, aerospace etc.) should consider **Scope 3 category 11 "Use of sold products"** relevant to account for the emissions of the products they sell to the end customers (SBTi, 2021:23); (CA100+, 2020:5); (SBTi, 2018:16). Indeed, three quarters of the 48 Transport OEM companies responding to the 2021 CDP climate change questionnaire on behalf of investors reported category 11 as "Relevant, calculated", and it comprised the majority of the sector's emissions – 86% of total Scope 3 emissions and 84% of total Scope 1+2+3 emissions. **Scope 3 category 1 "Purchased goods and services"** is also likely to be relevant to Transport OEMs to account for upstream material extraction, although it is likely to be far less significant in terms of size than category 11 (SBTi, 2018:16). Category 1 was the second largest Scope 3 category for Transport OEM companies responding to CDP in 2021 in terms of size – 65% of companies reported it as "Relevant and calculated" and it comprised 11.2% of total Scope 3 emissions and 11.0% of total Scope 1+2+3 emissions reported by the sector.



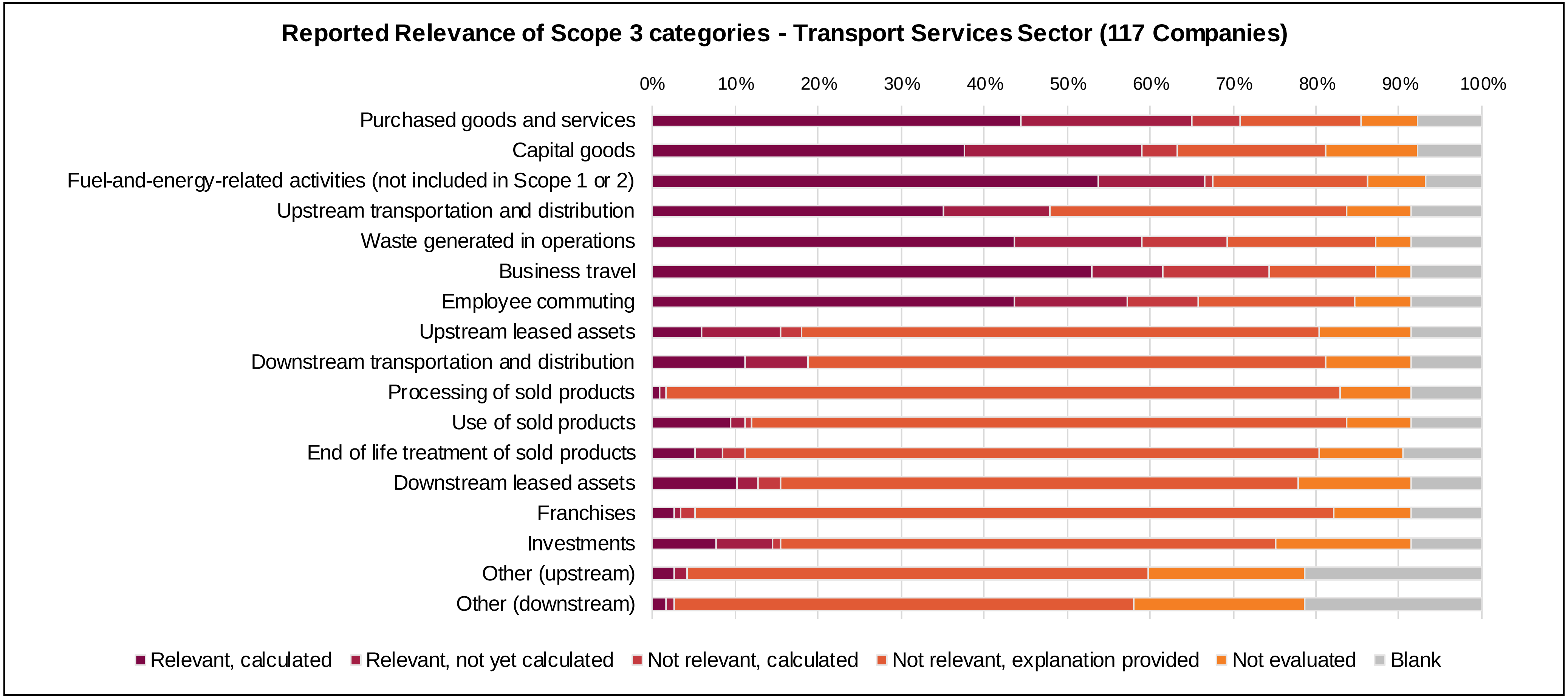
Reported Relevance of Scope 3 Categories - Transport OEMS Sector (48 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank

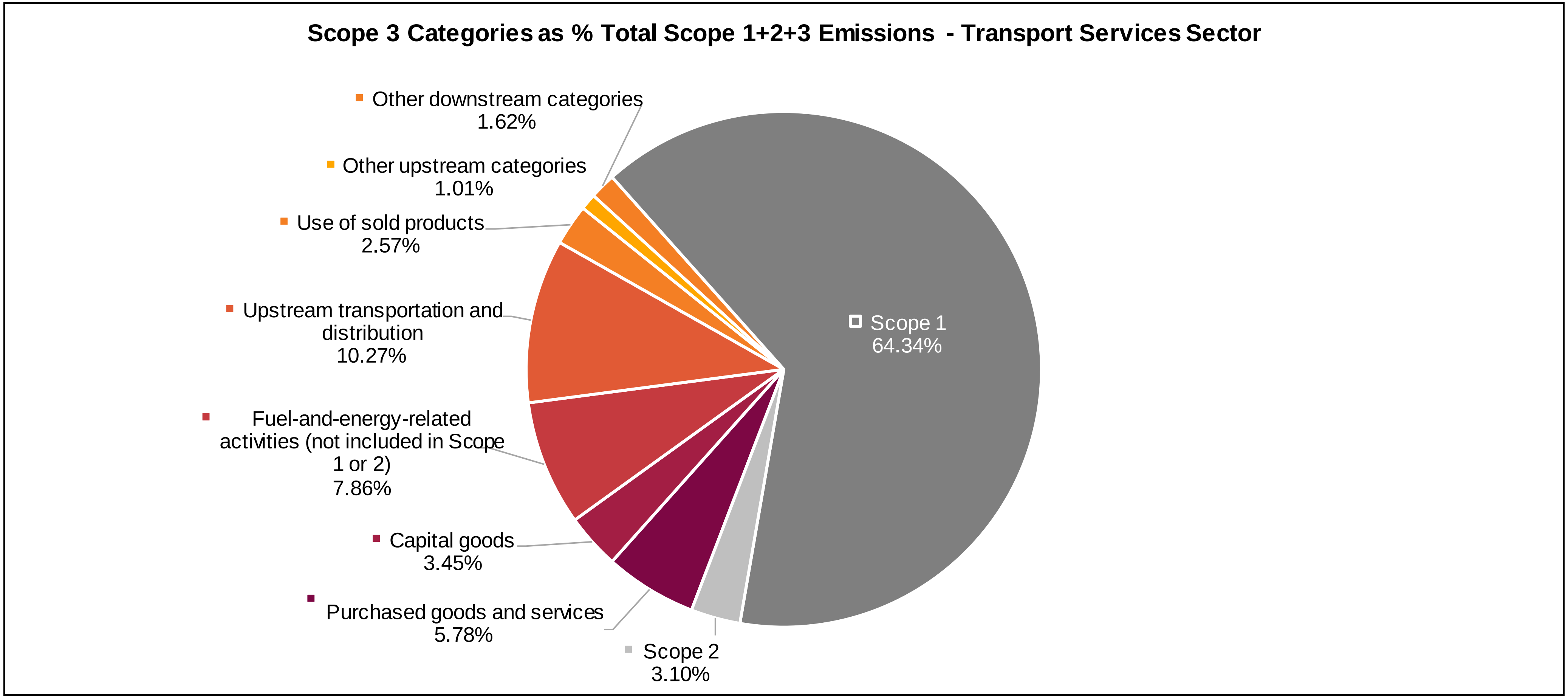
Scope 3 Categories as % Total Scope 1+2+3 Emissions - Transport OEMS Sector



TS: Transport Services

Relevant Scope 3 categories (listed in order of % share of total Scope 3)	Explanation of relevance & insights from CDP data
• Category 4: Fuel and energy-related activities • Category 3: Upstream transportation and distribution • Category 1: Purchased goods and services	The Transport Services sector has a strong reliance on oil-based fuels (ACT, 2021:7), and over 53% of primary oil consumption in 2010 was used to meet total transport energy demand (IPCC, 2014:608). The majority of emissions therefore lie in Scope 1 when these fuels are combusted in stationary or mobile equipment (e.g. vehicles, vessels, aircraft, locomotives, generators) and/or buildings associated with logistics sites (e.g. warehouses) (Smart Freight Centre, 2021:16 ;IPCC, 2014:608; Hill et al., 2020:106). However, Scope 3 is also of relevance to this sector, particularly to account for upstream fuel extraction, the inputs to vehicle production, and transportation. Companies in the Transport Services (i.e., logistics) sector should measure and report **Scope 3 category 1, "Purchased goods and services"** to account for the emissions from the production of vehicles. This is especially important for electrified forms of transport, as the proportion of lifetime emissions from manufacturing tends to be larger (Hill et al., 2020:106-107). Fewer than half of the 117 Transport Services companies responding to the 2021 CDP climate change questionnaire on behalf of investors reported category 1 as "Relevant, calculated", and it comprised 18% of total Scope 3 emissions and 6% of total Scope 1+2+3 emissions reported by the sector. **Scope 3 category 3, "Fuel-and-energy-related activities"** will also be relevant to Transport Services companies, forming the second-largest category of impact for road vehicles (Hill et al. 2020:106). Measuring this category will account for the emissions from the extraction, production and transportation of the fuels used combusted in Scope 1 (i.e., petrol, diesel, and biofuel) (Smart Freight Centre, 2021:16). Just over half of Transport Services companies responding to CDP in 2021 reported category 3 as "Relevant, calculated", and it comprised the second largest category of Scope 3 emissions in terms of size - 24% of total Scope 3 emissions and 8% of total Scope 1+2+3 emissions reported by the sector. Finally, **Scope 3 category 4 "Upstream transportation and distribution"** should be measured and reported (SBTi, 2021:23) to account transportation emissions required to move goods from suppliers to the reporting company (Smart Freight Centre, 2021:16). Despite only 35% Transport Services companies responding to CDP in 2021 reporting category 3 as "Relevant, calculated", it comprised the largest proportion of Scope 3 emissions for the sector – 32% of total Scope 3 emissions and 10% of total Scope 1+2+3 emissions.


Reported Relevance of Scope 3 categories - Transport Services Sector (117 Companies)
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Purchased goods and services
Capital goods
Fuel-and-energy-related activities (not included in Scope 1 or 2)
Upstream transportation and distribution
Waste generated in operations
Business travel
Employee commuting
Upstream leased assets
Downstream transportation and distribution
Processing of sold products
Use of sold products
End of life treatment of sold products
Downstream leased assets
Franchises
Investments
Other (upstream)
Other (downstream)
Relevant, calculated
Relevant, not yet calculated
Not relevant, calculated
Not relevant, explanation provided
Not evaluated
Blank


Scope 3 Categories as % Total Scope 1+2+3 Emissions - Transport Services Sector
Other downstream categories
1.62%
Other upstream categories
1.01%
Use of sold products
2.57%
Upstream transportation and distribution
10.27%
Fuel-and-energy-related activities (not included in Scope 1 or 2)
7.86%
Capital goods
3.45%
Purchased goods and services
5.78%
Scope 2
3.10%
Scope 1
64.34%

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Appendix 1: Scope 3 Category Descriptions

Table from [GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard](#) (WRI & WBCSD, 2011: 34-37). Categories 1-8 are upstream Scope 3 categories, whilst categories 9-15 are downstream Scope 3 categories.

Category	Category description	Minimum boundary
1. Purchased goods and services	Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in categories 2-8.	All upstream (cradle-to-gate) emissions of purchased goods and services.
2. Capital goods	Extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year.	All upstream (cradle-to-gate) emissions of purchased capital goods.
3. Fuel-and-energy-related activities (not included in Scope 1 or Scope 2)	Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in Scope 1 or Scope 2, including: a. Upstream emissions of purchased fuels (extraction, production, and transportation of fuels consumed by the reporting company). b. Upstream emissions of purchased electricity (extraction, production, and transportation of fuels consumed in the generation of electricity, steam, heating, and cooling consumed by the reporting company). c. Transmission and distribution (T&D) losses (generation of electricity, steam, heating and cooling that is consumed (i.e., lost) in a T&D system) – reported by end user. d. Generation of purchased electricity that is sold to end users (generation of electricity, steam, heating, and cooling that is purchased by the reporting company and sold to end users) – reported by utility company or energy retailer only.	a. For upstream emissions of purchased fuels: All upstream (cradle-to-gate) emissions of purchased fuels (from raw material extraction up to the point of, but excluding combustion). b. For upstream emissions of purchased electricity: All upstream (cradle-to-gate) emissions of purchased fuels (from raw material extraction up to the point of, but excluding, combustion by a power generator). c. For T&D losses: All upstream (cradle-to-gate) emissions of energy consumed in a T&D system, including emissions from combustion d. For generation of purchased electricity that is sold to end users: Emissions from the generation of purchased energy.
4. Upstream transportation and distribution	Transportation and distribution of products purchased by the reporting company in the reporting year between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company).	The Scope 1 and Scope 2 emissions of transportation and distribution providers that occur during use of vehicles and facilities (e.g., from energy use).

Category	Category description	Minimum boundary
	Transportation and distribution services purchased by the reporting company in the reporting year, including inbound logistics, outbound logistics (e.g., of sold products), and transportation and distribution between a company's own facilities (in vehicles and facilities not owned or controlled by the reporting company).	Optional: The life cycle emissions associated with manufacturing vehicles, facilities, or infrastructure.
5. Waste generated in operations	Disposal and treatment of waste generated in the reporting company's operations in the reporting year (in facilities not owned or controlled by the reporting company).	The Scope 1 and Scope 2 emissions of waste management suppliers that occur during disposal or treatment *Optional:* Emissions from transportation of waste.
6. Business travel	Transportation of employees for business-related activities during the reporting year (in vehicles not owned or operated by the reporting company).	The Scope 1 and Scope 2 emissions of transportation carriers that occur during use of vehicles (e.g., from energy use). *Optional:* The life cycle emissions associated with manufacturing vehicles or infrastructure.
7. Employee commuting	Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company).	The Scope 1 and Scope 2 emissions of employees and transportation providers that occur during use of vehicles (e.g., from energy use) *Optional:* Emissions from employee teleworking.
8. Upstream leased assets	Operation of assets leased by the reporting company (lessee) in the reporting year and not included in Scope 1 and Scope 2 – reported by lessee.	The Scope 1 and Scope 2 emissions of lessors that occur during the reporting company's operation of leased assets (e.g., from energy use) *Optional:* The life cycle emissions associated with manufacturing or constructing leased assets
9. Downstream transportation and distribution	Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company).	The Scope 1 and Scope 2 emissions of transportation providers, distributors, and retailers that occur during use of vehicles and facilities (e.g., from energy use). *Optional:* The life cycle emissions associated with manufacturing vehicles, facilities, or infrastructure.
10. Processing of sold products	Processing of intermediate products sold in the reporting year by downstream companies (e.g., manufacturers).	The Scope 1 and Scope 2 emissions of downstream companies that occur.

Category	Category description	Minimum boundary
		during processing (e.g., from energy use).
11. Use of sold products	End use of goods and services sold by the reporting company in the reporting year.	The direct use-phase emissions of sold products over their expected lifetime (i.e., the scope 1 and scope 2 emissions of end users that occur from the use of: products that directly consume energy (fuels or electricity) during use; fuels and feedstocks; and GHGs and products that contain or form GHGs that are emitted during use). *Optional:* The indirect use-phase emissions of sold products over their expected lifetime (i.e., emissions from the use of products that indirectly consume energy (fuels or electricity) during use).
12. End-of-life treatment of sold products	Waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life.	The Scope 1 and Scope 2 emissions of waste management companies that occur during disposal or treatment of sold products.
13. Downstream leased assets	Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not included in Scope 1 and Scope 2 – reported by lessor.	The Scope 1 and Scope 2 emissions of lessees that occur during operation of leased assets (e.g., from energy use). *Optional:* The life cycle emissions associated with manufacturing or constructing leased assets.
14. Franchises	Operation of franchises in the reporting year, not included in Scope 1 and Scope 2 – reported by franchisor.	The Scope 1 and Scope 2 emissions of franchisees that occur during operation of franchises (e.g., from energy use). *Optional:* The life cycle emissions associated with manufacturing or constructing franchises.
15. Investments	Operation of investments (including equity and debt investments and project finance) in the reporting year, not included in Scope 1 or Scope 2.	See the description of category 15 (Investments) in section 5.5 for the required and optional boundaries.