CDP Technical Note: Relevance of Scope 3 Categories by Sector

CDP Corporate Questionnaire



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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

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About this 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 <u>Science</u> <u>Based Targets Initiative (SBTi)'s Value Chain Report</u>, 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. Introduction to Scope 3 emissions

As per the <u>GHG Protocol's Value Chain (Scope 3) Standard</u>, 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 <u>CDP Activity Classification System</u>), 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 7.8 and 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 7.6, 7.7, 7.8, and 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.



Scope 1, 2 and 3 Emissions by 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.

2.1. AC: Agricultural Commodities

Relevant Scope 3 categories (listed in	Explanation of relevance & insights from CDP data
order of % share of total Scope 3)	
Category 1: Purchased goods and	For many Agricultural Commodities companies, Scope 3 emissions represent a significant component of overall GHG
services	impacts (<u>WRI & WBCSD:74</u>).
Category 10: Processing of sold	
products	Scope 3 category 1 "Purchased goods and services" should generally be included in the inventories of the Agricultural
• Category 11: Use of sold products	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)

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



2.2. 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 productsCategory 1: Purchased goods and	Value chain emissions account for more than 90% of emissions from the Capital Goods sector (Ferguson, 2018:3).
services	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. (Ferguson, 2018:11); (SBTi, 2024:23). 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 (Ferguson, 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.

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0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Purchased goods & 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)

Reported Relevance of Scope 3 Categories - Capital Goods Sector (166 Companies)

Relevant, calculated

Relevant, not yet calculated

Not relevant, calculated

Not relevant, explanation provided

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



2.3. CE: Cement

F	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	Due to the processes that take place within the Cement industry, the majority of the sector's emissions are in Scopes 1 and 2 (<u>WBCSD, 2016:8</u>). 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) (<u>WBCSD, 2016:9</u>).
•	Category 4: Upstream transportation and distribution Category 9: Downstream transportation and distribution	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 (<u>WBCSD, 2016:8,9</u>). 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.

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Reported Relevance of Scope 3 Categories - Cement Sector (28 Companies)



Relevant, calculated

Relevant, not yet calculated

Not relevant, calculated

Not relevant, explanation provided

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



2.4. CH: Chemicals

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
Category 1: Purchased goods and	Chemicals sector companies typically sell intermediate products, which are products that a company produces for
services	another company to further process, transform, or include in another product (<u>WBCSD, 2013:21</u>). It is therefore
Category 11: Use of sold products	important for chemical companies to consider Scope 3 emissions from upstream and downstream of their value
Category 12: End of life treatment of	chain.
sold products	
Category 4: Upstream transportation	Upstream emissions relevant to the Chemicals sector include emissions from Scope 3 category 1 "Purchased
and distribution	goods and services" (CA100+, 2020:5); (WBCSD, 2013:17), such as from machining and processing services,
Category 3: Fuel-and-energy-related	engineering services, industrial cleaning and raw materials (e.g. ethylene, sodium carbonate, methanol) (<u>WBCSD,</u>
activities	<u>2013:23</u>). Category 1 was reported as "Relevant, calculated" by 73% of the 146 companies responding to the 2021
Category 2: Capital goods	CDP climate change questionnaire on behalf of investors, and the size of emissions was significant - comprising
Category 9: Downstream transportation	58% of total Scope 3 emissions and 44% of total Scope 1+2+3 emissions for the Chemicals sector.
and distribution	
	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 (<u>WRI & WBCSD:10</u>); (<u>CA100+, 2020:5</u>); (<u>WBCSD, 2013:17,32</u>). 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 (<u>WBCSD, 2013:17</u>).

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Reported Relevance of Scope 3 Categories - Chemicals Sector (146 Companies)



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



2.5. CO: Coal

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
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 <u>IEA's World Energy Outlook 2021</u> . 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.

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Reported Relevance of Scope 3 Categories - Coal Sector (10 Companies)





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

Use of sold products: 63.98%

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2.6. CN: Construction

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3*)	
Building developers:	The relevancy of Scope 3 categories for the Construction sector varies significantly depending on a company's sub-
Category 11: Use of sold products	sector (<u>UK GBC, 2019: 4)</u> .
Category 4: Upstream transportation	
and distribution	Building developers should primarily measure and report Scope 3 category 2 "Capital Goods" to account for the
Category 12: End of life treatment of	embodied emissions of new buildings (e.g. construction materials such as steel and concrete) and Scope 3 category
sold products	11 "Use of sold products" to account for the expected operational emissions from any buildings sold. Scope 3
Category 2: Capital Goods	category 12 "End of life treatment of sold products", is also relevant for building developers to account for end of life
Category 3: Fuel-and-energy-related	emissions for any buildings sold (<u>UK GBC, 2019:16-19</u>). Category 11 was the most significant Scope 3 category in
activities	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
Construction contractors:	comprised 53% of total Scope 3 emissions and 49% of total Scope 1+2+3 emissions reported by the sector. Category
Category 1: Purchased goods and	2 did not comprise a significant proportion of emissions for the Construction sector according to CDP 2021 data, but
services	this could be reflective of the challenges associated with estimating embodied emissions of buildings.
Category 2: Capital goods	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,
*Relevant Scope 3 categories for each activity	and Scope 3 category 4 "Upstream transportation and distribution" to account for emissions from logistics for
are listed in order of percentage share of total	developments (UK GBC, 2019:16). These categories were reported as 'Relevant, calculated' by a majority of
Scope 3 emissions for the Construction sector	Construction companies responding to CDP in 2021 but did not comprise a significant proportion of total emissions
as a whole (not for the specific activity).	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.

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Reported Relevance of Scope 3 Categories - Construction Sector (64 Companies)



Not relevant, calculated

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



2.7. EU: Electric Utilities

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
Category 11: Use of sold products	Depending on the utility's activities, emissions associated with power generation may be accounted for in Scopes 1,
Category 3: Fuel-and-energy-related	2, or 3 (<u>SBTi, 2020:12</u>).
activities	
Category 15: Investments	For companies in the Electric Utilities sector that have a substantial share of fossil fuel power generation , Scope 3 is
Category 1: Purchased goods and	less significant because Scope 1 emissions typically represent a large share of a company's carbon footprint
services	(<u>WBCSD, 2020:12</u>).
Category 4: Upstream Transportation	However, when utilities have a gas retail business , the downstream use of the sold natural gas typically accounts for
and Distribution	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 (<u>SBTi, 2021:23</u>); (<u>WBCSD</u> .
	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 (<u>SBTi, 2020:13,14</u>); (<u>WBCSD</u> ,
	2020:13);. Emissions from upstream transportation of fossil fuels are also material for electric utility companies
	(<u>WBCSD, 2020:13</u>). 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)



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



2.8. 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 as published by <u>CDP</u> . 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: Module12 Environmental Performance – FS. CDP has partnered with the <u>Partnership</u> <u>for Carbon Accounting Financials (PCAF)</u> 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 <u>here</u> .

0% 50% 10% 20% 30% 40% 60% 70% 80% 90% 100% Purchased goods & 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, not yet calculated Not relevant, explanation provided Not relevant, calculated Relevant, calculated Not evaluated Blank

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.

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



*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.

2.9. FB: Food, Beverage, & Tobacco

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
 Category 1: Purchased goods and services Category 9: Downstream Transportation 	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 (<u>TCFD, 2017:62</u>).
 Category 9: Downstream Transportation and Distribution Category 4: Upstream Transportation and Distribution 	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 scope for the sector.

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Reported Relevance of Scope 3 Categories - Food, Beverage & Tobacco Sector (162 Companies)

Relevant, calculated

Relevant, not yet calculated

Not relevant, calculated

Not relevant, explanation provided

Blank Not evaluated

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Scope 3 Categories as % Total Scope 1+2+3 Emissions - Food, Beverage & Tobacco Sector



2.10. MM: Metals & Mining

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
Mining:	Scope 3 emissions represent the largest source of GHG emissions from the mining sector, representing over two
 Category 10: Processing of sold products 	thirds of total emissions (<u>Delevingne, 2020</u>).
	The most relevant Scope 3 categories for Metals and Mining sector organizations_depend upon the commodity
Processing Metals:	produced and the specific activities the organization is involved in. For eight minerals needed for clean energy
Category 1: Purchased goods and	transitions, the emissions intensity per ton of metal content varies considerably, for both processing and mining (IEA,
services	2021:195). Note that the <u>CDP Activity Classification System</u> 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 (Skidmore, 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.

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Reported Relevance of Scope 3 Categories - Metals & Mining Sector (86 Companies)

Relevant, calculated

Relevant, not yet calculated

Not relevant, calculated Not relevant, explanation provided

Not evaluated

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Reported Relevance of Scope 3 Categories - Oil & Gas Sector (94 Companies)



2.11. OG: Oil & Gas

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
Category 11: Use of sold products	Companies in the Oil and Gas sector may operate at different stages of the value chain, such as in oil and gas
Category 1: Purchased goods and	extraction, refining, petrochemical manufacturing, or in oil and gas pipelines and storage.
services	
	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 (<u>CA100+</u> , 2020); (Greene, 2017:6); (<u>SBTi, 2020:11</u>) (<u>IPIECA & API, 2016:20</u>). 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.

0% 10% 20% 30% 40% 60% 70% 80% 90% 100% 50% Purchased goods & 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, not yet calculated Not relevant, explanation provided Relevant, calculated Not relevant, calculated Not evaluated Blank

Reported Relevance of Scope 3 Categories - Oil & Gas Sector (94 Companies)

Scope 3 Categories as % Total Scope 1+2+3 Emissions - Oil & Gas Sector



2.12. PF: Paper & Forestry

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3*)	
Forestry:	The Paper and Forestry sector covers a diverse range of activities including logging, rubber farming, paper and wood
Category 1: Purchased goods and	product manufacturing, and wholesale of wood and paper products.
services	
Category 10: Processing of sold	Upstream forestry companies involved in logging and rubber farming (from seedling production to harvesting of
products	timber) are likely to have predominantly Scope 1 emissions arising from site preparation, harvesting, and fertilization
Category 12: End of life treatment of	(where fertilizers are used) (<u>Sonne, 2006:1445</u>). Depending on the land management regime, Scope 1 emissions may
sold products	be over 80% of overall emissions <u>(Sonne, 2006:1439)</u> .
Category 9: Downstream Transportation	
and Distribution	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
Processors:	(Sonne, 2006:1445). Consistent with the literature, category 1 was reported as "Relevant, calculated" by 72% of the
Category 1: Purchased goods and	50 Paper & Forestry companies responding to the 2021 CDP climate change questionnaire on behalf of investors,
services	and it was the most significant Scope 3 category for the sector – comprising 35% of total Scope 3 emissions and
Category 9: Downstream Transportation and Distribution	21% of total Scope 1+2+3 emissions.
Category 4: Upstream Transportation	The transport of forest products after harvesting can also be a significant source of Scope 3 emissions for forestry
and Distribution	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
*Relevant Scope 3 categories for each activity	companies responding to CDP in 2021, but it did not comprise a significant proportion of emissions for the sector.
are listed in order of percentage share of total	
Scope 3 emissions for the Paper & Forestry	Forestry companies may also wish to account for downstream processing and disposal in Scope 3 category 10
sector as a whole (not for the specific activity).	"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"** (<u>TCFD, 2017:62</u>) 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 (<u>TCFD</u>, 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

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0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Purchased goods & 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)

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

Relevant, calculated

Relevant, not yet calculated

Not relevant, calculated

Not relevant, explanation provided

Blank Not evaluated

Scope 3 Categories as % Total Scope 1+2+3 Emissions - Paper & Forestry Sector



2.13 RE: Real Estate

Explanation of relevance & insights from CDP data
Scope 3 emissions on average contribute over 85% of a commercial Real Estate company's entire footprint (UK GBC,
<u>2019:8</u>).
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 2 estagony 12 "Downetroom logged aposts" relevant to account for the
amissions from the assots loased to other organizations (a.g. onergy use in loased spaces) (UK CPC 2010-10) 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

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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.

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0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Purchased goods & 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)

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

Relevant, calculated

Relevant, not yet calculated

Not relevant, calculated

Not relevant, explanation provided

Blank Not evaluated

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



2.14 ST: Steel

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
Category 1: Purchased goods and	The basic processes of steelmaking are very energy and material-intensive, making up almost 90% of final energy
services	and material consumption (Carmona et al., 2019:894). For this reason, Scope 1 and 2 emissions are typically larger
Category 11: Use of sold products	than Scope 3 emissions in the Steel sector (ResponsibleSteel, 2020:44). However, some Scope 3 categories are
 Category 10: Processing of sold products 	relevant to the Steel sector.
• Category 12: End of life treatment of	Scope 3 category 1 "Purchased good and services" represents the majority of the Steel sector's Scope 3 emissions
sold products	(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)



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



2.15 TO: Transport OEMS

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
Category 11: Use of sold products	Transport is responsible for 24% of global CO2 emissions and most of the global fleet of road vehicles, ships and
Category 1: Purchased goods and	planes are fossil fuel powered (<u>IEA Data browser</u>).
services	
	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). 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. 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)



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



2.16. TS: Transport Services

Relevant Scope 3 categories (listed in order	Explanation of relevance & insights from CDP data
of % share of total Scope 3)	
Category 4: Fuel and energy-related	The Transport Services sector has a strong reliance on oil-based fuels (ACT, 2021:7), and over 53% of primary oil
activities	consumption in 2010 was used to meet total transport energy demand (<u>IPCC, 2014:608</u>). The majority of emissions
Category 3: Upstream transportation	therefore lie in Scope 1 when these fuels are combusted in stationary or mobile equipment (e.g. vehicles, vessels,
and distribution	aircraft, locomotives, generators) and/or buildings associated with logistics sites (e.g. warehouses) (Lewis, 2019
Category 1: Purchased goods and	;IPCC, 2014:608; Hill et al., 2020:106). However, Scope 3 is also of relevance to this sector, particularly to account
services	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 (<u>Hill et al. 2020:106</u>). 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) (<u>Lewis, 2021:16</u>). 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
	(Lewis, 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)



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



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Appendix 1: Scope 3 Category Descriptions

Table from <u>GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard</u> (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	Extraction, production, and transportation of	All upstream (cradle-to-gate)
and services	goods and services purchased or acquired by	emissions of purchased
	the reporting company in the reporting year, not	goods and services.
	otherwise included in categories 2-8.	
2. Capital goods	Extraction, production, and transportation of	All upstream (cradle-to-gate)
	capital goods purchased or acquired by the	emissions of purchased
	reporting company in the reporting year.	capital goods.
3. Fuel-and-energy-	Extraction, production, and transportation of	a. For upstream emissions of
related activities (not	fuels and energy purchased or acquired by the	purchased fuels: All upstream
included in Scope 1 or	reporting company in the reporting year, not	(cradle-to-gate) emissions of
Scope 2)	already accounted for in Scope 1 or Scope 2,	purchased fuels (from raw
	including:	material extraction up to the
		point of, but excluding
	a. Upstream emissions of purchased fuels	combustion).
	(extraction, production, and transportation of	
	fuels consumed by the reporting company).	b. For upstream emissions of purchased electricity: All
	b. Upstream emissions of purchased electricity	upstream (cradle-to-gate)
	(extraction production and transportation of	emissions of purchased fuels
	fuels consumed in the generation of electricity	(from raw material extraction
	steam heating and cooling consumed by the	up to the point of but
	reporting company)	excluding combustion by a
		power generator)
	c. Transmission and distribution (T&D) losses	
	(generation of electricity steam heating and	c. For T&D losses: All
	cooling that is consumed (i.e. lost) in a T&D	unstream (cradle-to-gate)
	system) – reported by end user	emissions of energy
		consumed in a $T&D$ system
	d Generation of nurchased electricity that is	including emissions from
	sold to end users (generation of electricity	compustion d. For generation
	steam beating and cooling that is purchased by	of purchased electricity that is
	the reporting company and cold to and users) =	sold to and usors: Emissions
	reported by utility company or operay retailer	from the generation of
	only	numbered energy
	onny.	purchased energy.
4. Upstream	Transportation and distribution of products	The Scope 1 and Scope 2
transportation and	purchased by the reporting company in the	emissions of transportation
distribution	reporting year between a company's tier 1	and distribution providers that

Category	Category description	Minimum boundary
	suppliers and its own operations (in vehicles and	occur during use of vehicles
	facilities not owned or controlled by the	and facilities (e.g., from
	reporting company).	energy use).
	Transportation and distribution services	
	purchased by the reporting company in the	Optional: The life cycle
	reporting year, including inbound logistics,	emissions associated with
	outbound logistics (e.g., of sold products), and	manufacturing vehicles,
	transportation and distribution between a	facilities, or infrastructure.
	company's own facilities (in vehicles and	
	facilities not owned or controlled by the	
	reporting company).	
5. Waste generated in	Disposal and treatment of waste generated in	The Scope 1 and Scope 2
operations	the reporting company's operations in the	emissions of waste
	reporting year (in facilities not owned or	management suppliers that
	controlled by the reporting company).	occur during disposal or
		treatment
		Optional: Emissions from
		transportation of waste.
6. Business travel	Transportation of employees for business-	The Scope 1 and Scope 2
	related activities during the reporting year (in	emissions of transportation
	vehicles not owned or operated by the reporting	carriers that occur during use
	company).	of vehicles (e.g., from energy
		use).
		<i>Optional:</i> The life cycle
		emissions associated with
		manufacturing vehicles or
		Infrastructure.
7. Employee	I ransportation of employees between their	The Scope T and Scope 2
commuting	homes and their worksites during the reporting	emissions of employees and
	year (in vehicles not owned or operated by the	transportation providers that
	reporting company).	occur during use of vehicles
		(e.g., from energy use)
		Ontional: Emissions from
		employee teleworking
8 Unstroom loosed	Operation of assets loased by the reporting	The Scope 1 and Scope 2
assets	company (lessee) in the reporting year and not	emissions of lessors that
433513	included in Scope 1 and Scope 2 - reported by	occur during the reporting
		company's operation of
		leased assets (e.g. from
		energy use
		cheryy use

Category	Category description	Minimum boundary
		<i>Optional:</i> 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).
		<i>Optional:</i> 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. 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). <i>Optional:</i> 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).

Category	Category description	Minimum boundary
12. End-of-life	Waste disposal and treatment of products sold	The Scope 1 and Scope 2
treatment of sold	by the reporting company (in the reporting year)	emissions of waste
products	at the end of their life.	management companies that
		occur during disposal or
		treatment of sold products.
13. Downstream	Operation of assets owned by the reporting	The Scope 1 and Scope 2
leased assets	company (lessor) and leased to other entities in	emissions of lessees that
	the reporting year, not included in Scope 1 and	occur during operation of
	Scope 2 – reported by lessor.	leased assets (e.g., from
		energy use).
		<i>Optional:</i> The life cycle
		emissions associated with
		manufacturing or
		constructing leased assets.
14. Franchises	Operation of franchises in the reporting year, not	The Scope 1 and Scope 2
	included in Scope 1 and Scope 2 – reported by	emissions of franchisees that
	franchisor.	occur during operation of
		franchises (e.g., from energy
		use).
		emissions associated with
		manufacturing or
		constructing franchises.
15. Investments	Operation of investments (including equity and	See the description of
	dept investments and project finance) in the	category 15 (investments) in
	reporting year, not included in Scope 1 or Scope	section 5.5 for the required
	2.	and optional boundaries.