GREENHOUSE GAS PROTOCOL

Scope 3 Technical Working Group Meeting

Group A
Meeting 7
Inventory quality reporting

March 13th, 2025

WORLD RESOURCES INSTITUTE

World Business Council for Sustainable Development

Agenda

- Attendance and housekeeping (5 min)
- Recap of the previous discussions (10 min)
- Option Development: disaggregated reporting based on calculation methods – continued (15 min)
- Add-ons: uncertainty assessment (60 min)
- Allocation (20 min)
- Next steps (5 min)

Housekeeping

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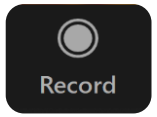
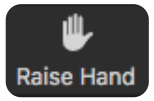
Welcome and Meeting information

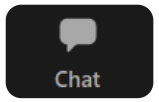


This meeting is recorded.



Please mute yourself by default and unmute when speaking

Please use the Raise Hand function to speak during the call.



You can also use the chat function in the main control.

Recording, slides, and meeting minutes will be shared after the call.

Housekeeping

- TWG members should **not disclose any confidential information** of their employers, related to products, contracts, strategy, financials, compliance, etc.

- In TWG meetings, **Chatham House Rule** applies:
  - "When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed."

- **Compliance and integrity** are key to maintaining the credibility of the GHG Protocol
  - Specifically, all participants need to follow the **conflict-of-interest policy**
  - **Anti-trust rules** have to be followed; please avoid any discussion of competitively sensitive topics*

* Such as pricing, discounts, resale, price maintenance or costs; bid strategies including bid rigging; group boycotts; allocation of customers or markets; output decisions; and future capacity additions or reductions

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Decision-Making Criteria

- Evaluating options: Describe pros and cons of each option relative to each criterion. Qualitatively assess the degree to which an option is aligned with each criterion through a green (most aligned), yellow (mixed alignment), orange (least aligned) ranking system. Some criteria may be not applicable for a given topic; if so, mark N/A.
- Comparing options: The aim is to advance approaches that ideally meet all decision criteria (i.e. maximize pros and minimize cons against all criteria). If options present tradeoffs between criteria, the hierarchy should be generally followed, such that, for example, scientific integrity is not compromised at the expense of other criteria, while aiming to find solutions that meet all criteria.

Illustrative example	**Option A: Name**	**Option B: Name**	**Option C: Name**
1A. Scientific integrity	• Pros • Cons	• Pros • Cons	• Pros • Cons
1B. GHG accounting and reporting principles	• Pros • Cons	• Pros • Cons	• Pros • Cons
2A. Support decision making that drives ambitious global climate action	• Pros • Cons	• Pros • Cons	• Pros • Cons
2B. Support programs based on GHG Protocol and uses of GHG data	• Pros • Cons	• Pros • Cons	• Pros • Cons
3. Feasibility to implement	• Pros • Cons	• Pros • Cons	• Pros • Cons

Note: This is a summary version. For further details, refer to the full decision-making criteria included in the annex to the Governance Overview, available at https://ghgprotocol.org/our-governance.

Decision-making Guidance

To aid the group's work, the decision-making criteria and key considerations marked by the group during the discussions, were summarized into a guidance. Full detailed version was distributed to the TWG members.

Decision-making criteria	Corresponding needs identified by the TWG
1A. Scientific integrity	Promote quality
1B. GHG accounting and reporting principles	Promote accuracy
2A. Support decision making that drives ambitious global climate action	Promote decarbonization
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand
3. Feasibility to implement	Easy to implement

Additional characteristics identified by the TWG
Future proof
Encourage improvement over time
Promote value chain partner engagement
Applicable to all 15 scope 3 categories
Minimize/remove subjective choices by the preparer
Applicable to scope 1 & 2 (optional)

Recap of the previous discussions

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Group A: Inventory quality – scope of work

1. Identifying what scope 3 inventories are used for
   - Clarifying the relationship between data quality and various inventory objectives
2. Define how to more effectively present / communicate the inventory's quality
   - Consider additional requirements to enhance the usability and transparency of scope 3 inventories
3. Address how to define the inventory quality based on the input data
   - Consider developing more prescriptive allocation rules
   - Consider developing a hierarchy of data and/or calculation methods
   - Consider additional guidance on the transfer of data across the value chain and integrating of product level data into scope 3 calculations
4. Consider whether and how to restrict inventory quality
   - Consider constrains or minimum requirements to inventory quality
   - Consider requirement to improve inventory data quality improvements over time
   - Consider requirement to perform hotspot analysis

For the detailed scope of work, refer to the standard revision process as detailed in section 5 of the Scope 3 SDP.

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Main outcomes of meetings #2-6

1. Regarding the revision of inventory quality reporting requirements, the TWG prefers **Option 3: Disaggregated reporting of scope 3 emissions based on quality**
   - Itemized (disaggregated) inventory by tier based on data quality
2. Two dimensions were identified as desired components of the solution: data quality (accuracy/precision) and actionability
3. The proposals that include **principal disaggregation based on calculation methods received the most support**
4. In consideration of using calculation methods as the disaggregation principle for the tiers, the group expressed mixed support, and preference toward options 2 (category-specific tiers unique for each category) and 4 (calculation methods and data inputs with differentiated classifications for downstream vs. upstream categories). A follow-up asynchronous poll was held.
5. **A verification add-on was supported**, with a preference for **marking verified data with a "+"**
6. **An uncertainty add-on was supported**, with configuration to be discussed.
7. The group calls for **more rigid terminology**

Feedback received on meeting #6

Feedback submitted through the feedback form

- placeholder

Secretariat response

- placeholder

Option Development: disaggregated reporting based on calculation methods – continued

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Options summary

Option 1. Classify results based on existing **calculation methods** **normalized** across categories

Option 2. Classify results using **category-specific** tiers **unique** for each category

Option 3. Classify results based on calculation methods **AND** data inputs

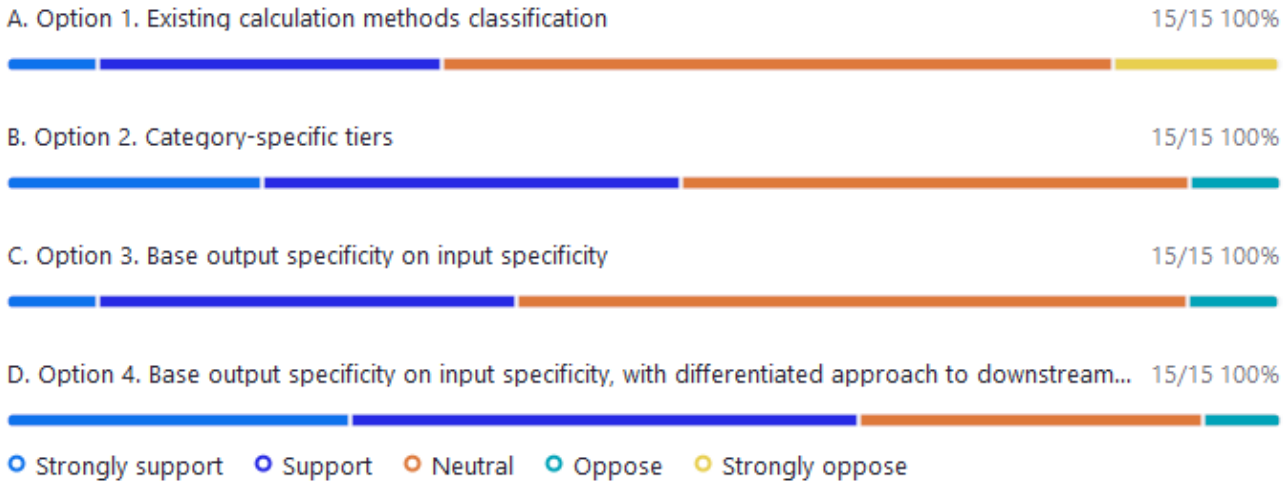
Option 4. **Option 3** with **differentiated** classifications for downstream vs. upstream categories

In-meeting polling

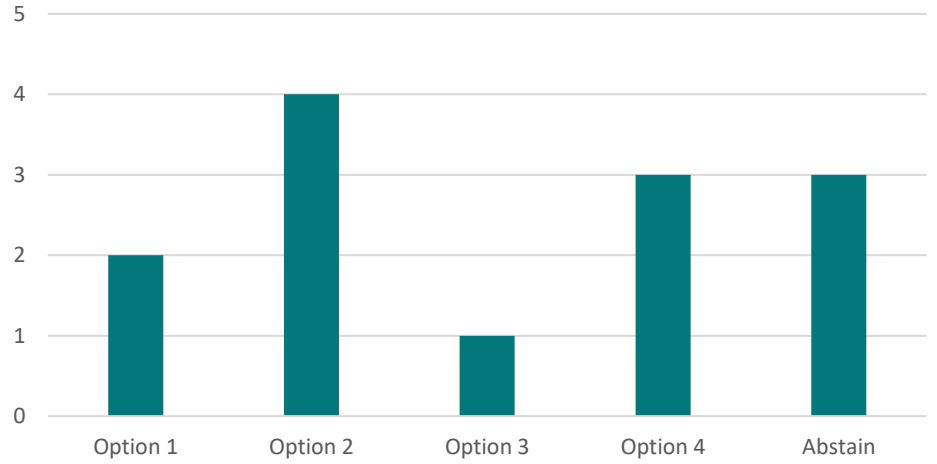
Support for options

1. Which options should be taken further? Rate your support of each of the options (Rank order)

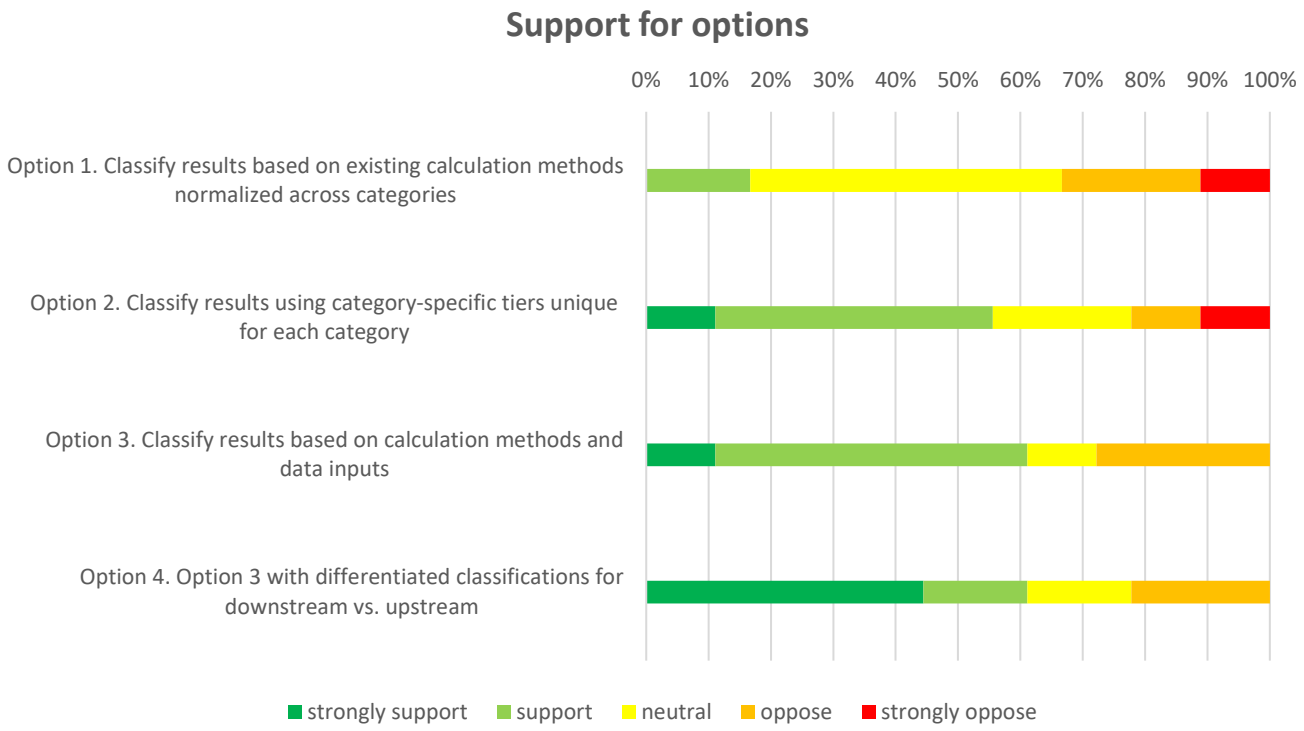
15/15 (100%) answered

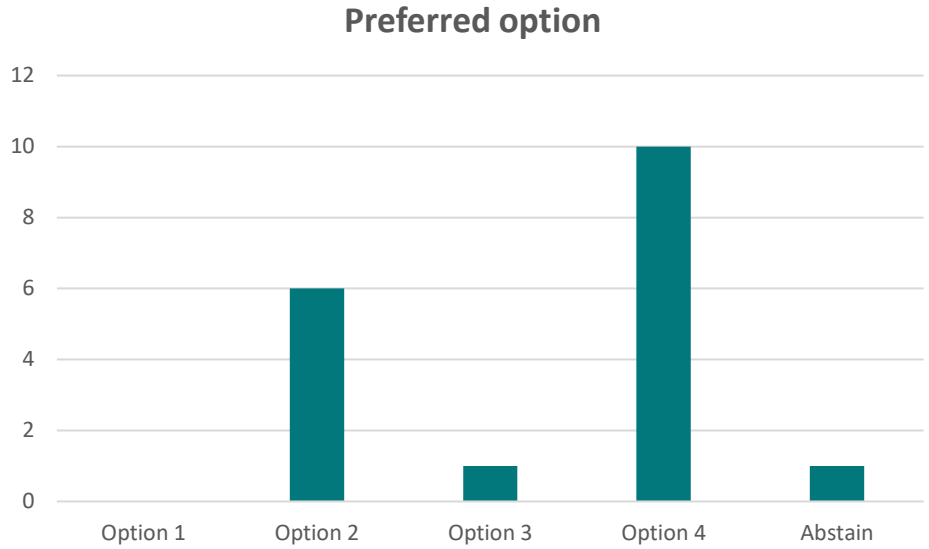


Preferred option



Follow-up asynchronous polling





Concerns about Option 4 center around the issues of complexity and market maturity

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Option 4: base output specificity on input specificity, with a differentiated approach for categories 9-12

- Focus classification on data specificity rather than calculation methods per se.
- Defining specificity of output would be done through defining specificity of input.
- Provide a separate classification for downstream categories 9, 10(?), 11, 12

Option 4 considerations

- There is some consistency in the tiers across categories
- It is possible to facilitate roll-up of specificity along the value chain promoting supplier engagement beyond tier 1
- The option gets more confusing in application and implementation is complex
- Difficult to define high vs low quality activity data for categories 9-12

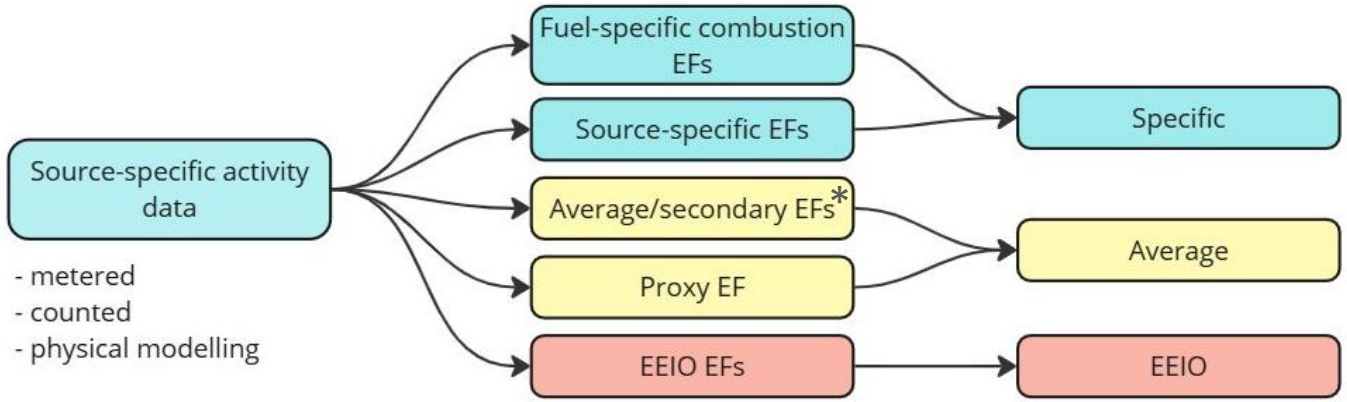
- Promotes supplier engagement and decarbonization along the value chain Applicable to all 15 categories
- Minimizes subjective choices
- Applicable to scope 1 and 2
- Promotes accuracy
- Promotes improvements

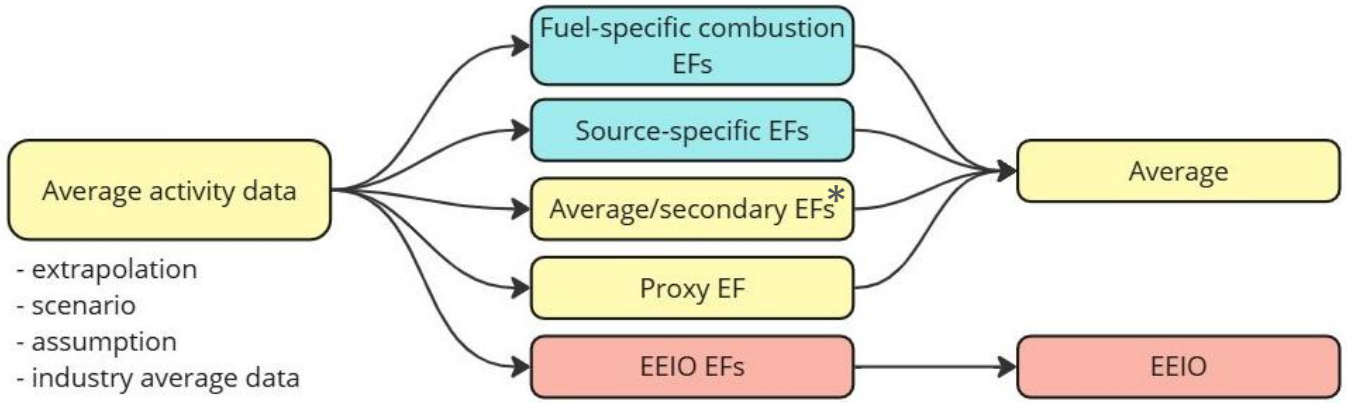
- Confusing and complex for implementation and potentially interpretation
- Potentially keeping subjective choices in decisions on high vs low quality data in downstream

- Is it future-proof?

*Specific = specific to activities in the value chain

Approach for Categories 1-8 and 13-15 in Option 4

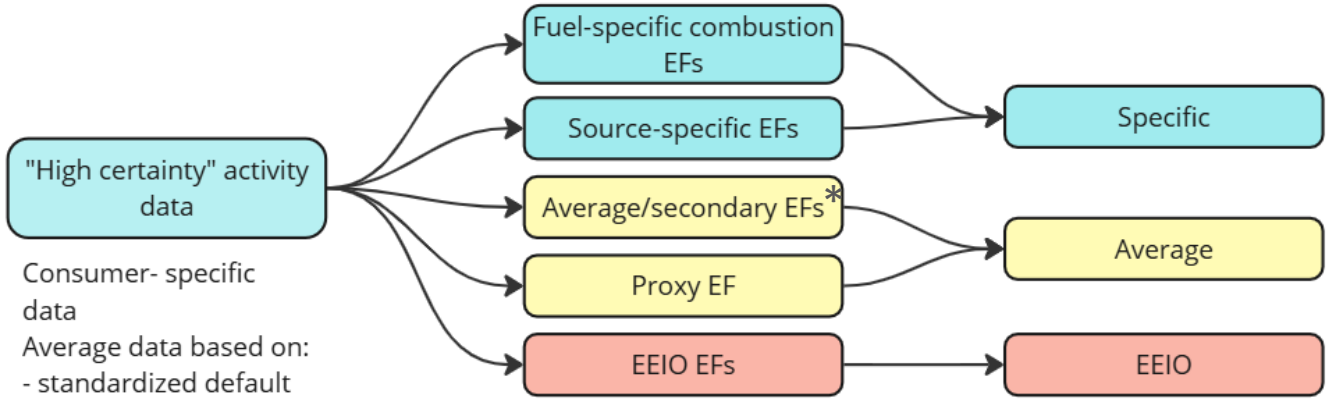


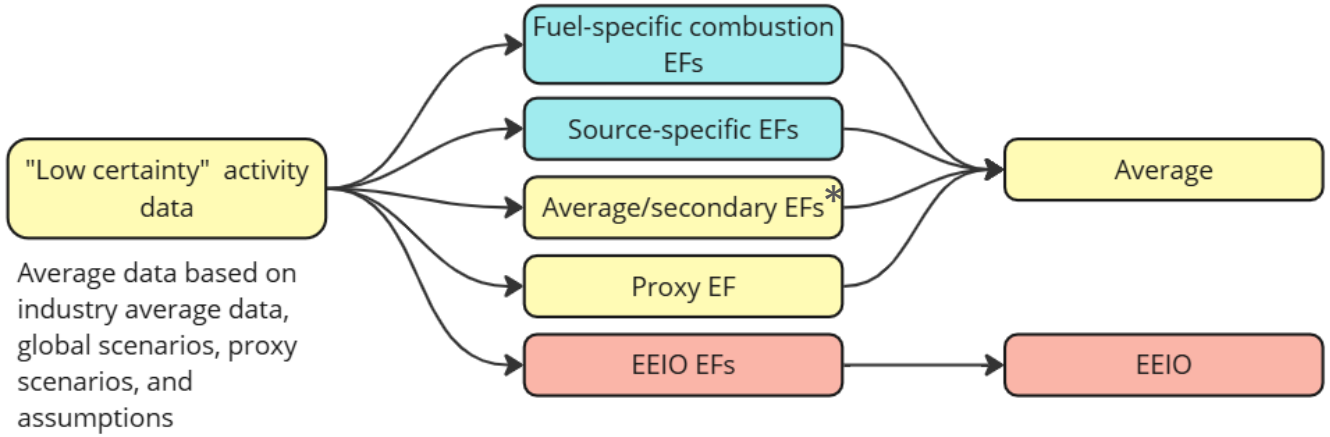


- This scheme presents a draft suggestion as an input for the TWG discussion

* Term "Average" might be replaced with other term to better reflect the nature of the EF

Approach for Categories 9-12 in Option 4





- This scheme presents a draft suggestion as an input for the TWG discussion. Names and classifications are tentative

* Term "Average" might be replaced with other term to better reflect the nature of the EF

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Potential rules to implement in Option 4

Defining output specificity based on input specificity could be streamlined by introducing rules. E.g.:

[1] If a calculation uses EEIO data, emissions data shall be classified as "EEIO" (Tier 3)

[2] If a calculation uses an activity data input (e.g., unit count product, unit weight fuel, unit weight material, etc.) that is calculated, estimated, or modeled from or based on spend data (e.g., expenses), and a non-EEIO emission factor, the emissions data shall be classified as "average" (Tier 2)

[3] Calculations of scope 1 data with the use of measured activity data and fuel-specific or substance-specific emissions factor shall be classified as specific (Tier 1).

- Applies to Tier 1, Tier 2, and Tier 3+ value chain suppliers that can document specific scope 1 in data transfers

Etc.

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Option 4
1A. Scientific integrity	Promote quality	+/-
1B. GHG accounting and reporting principles	Promote accuracy	+
2A. Support decision making that drives ambitious global climate action	Promote decarbonization	+
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand	+/-
3. Feasibility to implement	Easy to implement	+/-
Encourage improvement over time		+
Promote value chain partner engagement		+
Applicable to all 15 categories		+
Minimize/remove subjective choices by the preparer		+/-
Future proof		?
Applicable to scope 1 & 2 (optional)		+

Legend **+** Satisfied **-** Not satisfied **+/-** Mixed **?** Unclear

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Next steps

Option 4 is tentatively adopted

Next steps:

1. Forming a taskforce for:
    1. Stress-testing the approach
    2. Exploring possibility to form rules and/or streamline the approach
    3. Preparing the first draft of the text, including requirements, guidance, and examples
2. Revisiting the issue later on:
    - Upon other considerations of the group (allocations, minimum requirements, improvement requirement)
    - After the taskforce has distributed their first draft

Uncertainty add-on

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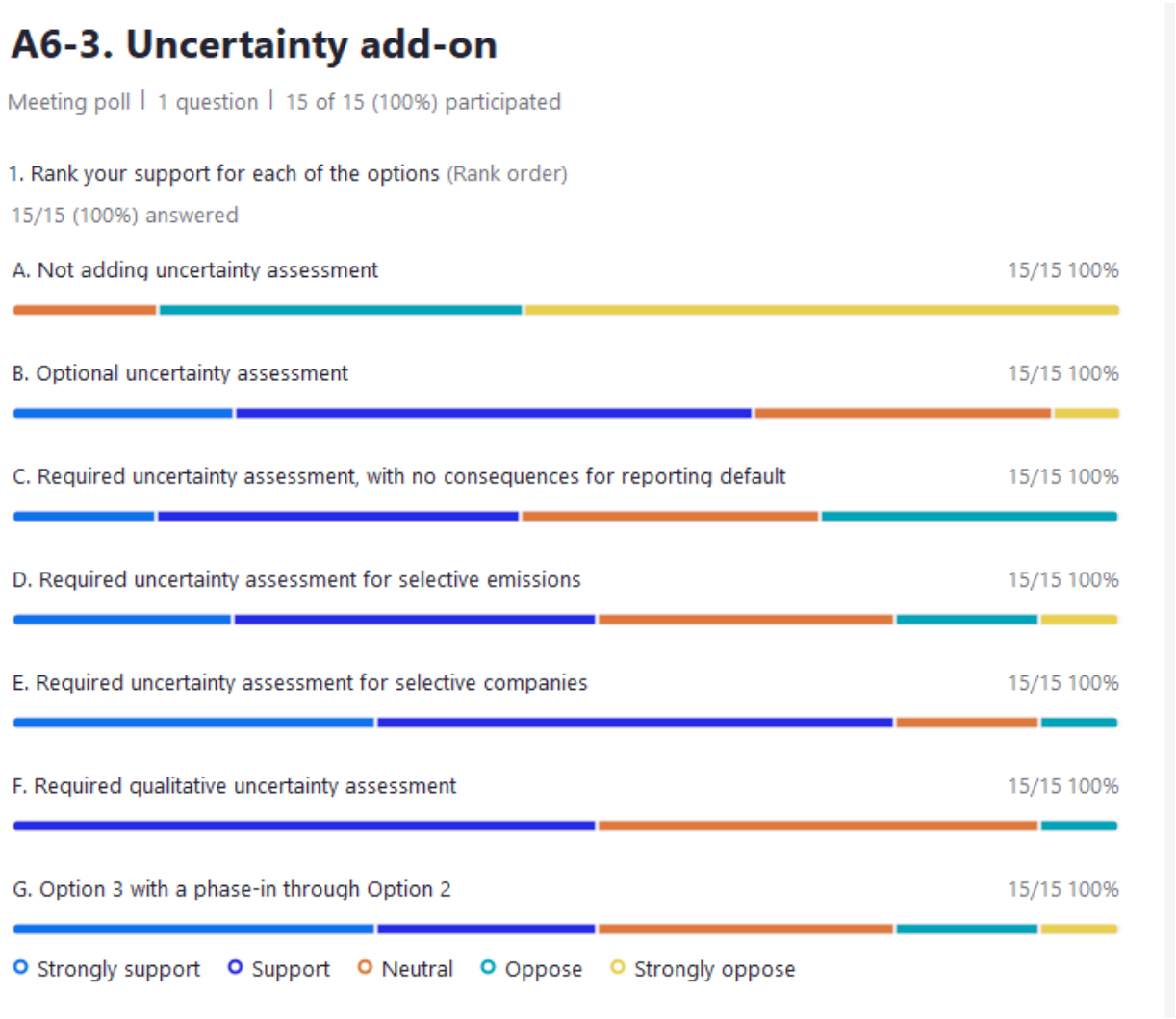
Adding uncertainty assessment

- **Option 0**: Not adding uncertainty assessment
- **Option 1**: Optional uncertainty assessment
- **Option 2**: Required uncertainty assessment, with a default option
- **Option 3**: Required uncertainty assessment for selective emissions sources:
  - **3a** Top x% of emissions
  - **3b** Largest emissions contributor
  - **3c** Selective scope 3 categories
  - **3d** Selective tiers
- **Option 4**: Required uncertainty assessment for selective companies:
  - **4a** By sector
  - **4b** By size
  - **4c** By objective of the inventory
- **Option 5**: Required qualitative uncertainty assessment

Pulse-check poll in meeting#5

- Live polling resulted in clear support for adding a form of uncertainty assessment
- All other options showed potential



Option 1. Optional uncertainty assessment

In this option, companies **are recommended** but not required to conduct quantitative uncertainty assessment of their inventories

Optional reporting information (p. 120)
"Information on inventory uncertainty (e.g., information on the causes and magnitude of uncertainties in emission estimates) and an outline of policies in place to improve inventory quality"

→

Optional information: "Quantitative uncertainty assessment of inventory, along with information on inventory uncertainty (e.g., information on the causes ~~and magnitude~~ of uncertainties in emission estimates) and an outline of policies in place to improve inventory quality"

p. 122 "Companies **should** describe the level of uncertainty of reported data, qualitatively or quantitatively, to ensure transparency and avoid misinterpretation of data"

→

p. 122 "Companies **should** describe the level of uncertainty of reported data~~, qualitatively or~~ quantitatively, to ensure transparency and avoid misinterpretation of data"

Appendix B provides an overview of concepts and procedures for evaluating sources of uncertainty in a scope 3 inventory.

→

~~*Appendix B*~~ *Chapter X* provides an overview of concepts and procedures for evaluating sources of uncertainty in a scope 3 inventory.

Legend Suggested changes

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		
1B. GHG accounting and reporting principles	Promote accuracy	For those implementing	Presumably most preparers would not implement
2A. Support decision making that drives ambitious global climate action	Promote decarbonization		
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand		
3. Feasibility to implement	Easy to implement	Accessible for those with limited resources and early stages	
Encourage improvement over time		Presumably, there is a market for voluntary action	
Promote value chain partner engagement			Difficulties if not all partners implement
Applicable to all 15 categories		Yes	
Minimize/remove subjective choices by the preparer			
Future proof		Starting point for uncertainty	
Applicable to scope 1 & 2 (optional)		Yes	

Option 2. Required uncertainty assessment with a default option

- In this option, preparers are required to report quantitative uncertainty of their inventory, but a default option is provided.
- No minimum requirements, nor requirements for improvement are imposed on the uncertainty analysis
- Reporting example:

Category	Emissions, tCO2eq	Uncertainty, 95% CI
Category 1	1550	(665; 3612)
Specific	200	(85; 466)
Average	1000	(429; 2330)
EEIO	350	(150; 815)

- At a minimum, preparers would have to calculate the uncertainty bound with default values for each category per process type and total, using provided default GSD

Basic Uncertainty Factors by Process Type

Combustion Process	1.05
Thermal Energy	1.05
Electricity	1.05
Industrial Products	1.05
Agricultural Products	2
Transport Services	2
Infrastructure	3
Direct emissions, CO2	1.05
Direct emissions, Other GHGs	1.5

Pedigree Matrix

Indicator score	Poor
Reliability	1.5
Completeness	1.2
Temporal representativeness	1.5
Geographical representativeness	1.1
Technological representativeness	2

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		Potentially conflicting with different uncertainty assessment guidelines
1B. GHG accounting and reporting principles	Promote accuracy	Yes, in case if improvements from default do realize	Not in case of holding to default
2A. Support decision making that drives ambitious global climate action	Promote decarbonization		
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand		Not if default is chosen for the lack of resources
3. Feasibility to implement	Easy to implement	Somewhat easy on default	Significant added effort
Encourage improvement over time		Has a potential	Not a requirement
Promote value chain partner engagement			
Applicable to all 15 categories		yes	
Minimize/remove subjective choices by the preparer			
Future proof			
Applicable to scope 1 & 2 (optional)		yes	

Option 3a: Required uncertainty assessment for top X% of emissions

- In this option, preparers are required to report quantitative uncertainty of the top X% of emissions in their inventory. E.g. for 20%:
  - Step 1: Calculate the inventory
  - Step 2: Rank the categories from highest contribution to the lowest contribution
  - Step 3: Identify categories that constitute at least 20% of the inventory
  - Step 4: Calculate uncertainty for those categories

- Reporting Example:

Category	Emissions, tCO2eq	Uncertainty, 95% CI
Category 1	1550	(665; 3612)
Specific	200	
Average	1000	
EEIO	350	
Category 2	250	Not in top 20%
Specific	0	
Average	200	
EEIO	50	

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		
1B. GHG accounting and reporting principles	Promote accuracy	For the emissions included in the assessment	Not for those not included
2A. Support decision making that drives ambitious global climate action	Promote decarbonization	Provides information for the top priority emissions	Not for the omitted categories
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand	Provides information for the top priority emissions	Confusing if year-to-year selection changes
3. Feasibility to implement	Easy to implement	Somewhat reducing effort compared to the full inventory analysis	Significant added effort (especially for complex categories)
Encourage improvement over time			
Promote value chain partner engagement			
Applicable to all 15 categories		Yes	
Minimize/remove subjective choices by the preparer			
Future proof		Over time, the top X% categories are likely to change, shifting the focus onto a new priority	Over time, subset of categories in the top X% are likely to change, impeding transparency
Applicable to scope 1 & 2 (optional)			No

Option 3b: Required uncertainty assessment for largest contributor

- In this option, preparers are required to report quantitative uncertainty of the top contributing category(ies) their inventory.
  - Step 1: Calculate the inventory
  - Step 2: Identify the top contributing category(ies) of the inventory
  - Step 3: Calculate uncertainty for those categories

- Reporting example:

Category	Emissions, tCO2eq
Category 1	1550
Specific	200
Average	1000
EEIO	350
Category 2	250
Specific	0
Average	200
EEIO	50
[…]	
Category 1 is the top contributing category, 95% CI is (665 tCO2eq; 3612tCO2eq)	

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		
1B. GHG accounting and reporting principles	Promote accuracy	For the emissions included in the assessment	Not for those not included
2A. Support decision making that drives ambitious global climate action	Promote decarbonization	Provides information for the top priority emissions	Not for the omitted categories
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand	Provides information for the top priority emissions	Confusing if year-to-year selection changes
3. Feasibility to implement	Easy to implement	Reducing effort to the top contributor only, comparing to the full inventory	Added effort (especially for complex categories)
Encourage improvement over time			
Promote value chain partner engagement			
Applicable to all 15 categories		Yes	
Minimize/remove subjective choices by the preparer			
Future proof		Over time, the top contributing categories potentially change, shifting the focus onto a new priority	Over time, the top contributing categories potentially change, impeding transparency
Applicable to scope 1 & 2 (optional)			No

Option 3c: Required uncertainty assessment for certain categories

- In this option, preparers are required to report quantitative uncertainty of the selective subset of categories in their inventory, (to be) set by the Scope 3 Standard.

  E.g., based on overall contribution: Cat. 1, cat. 4, cat. 11, OR

- Reporting example:

Category	Emissions, tCO2eq
Category 1	1550
Specific	200
Average	1000
EEIO	350
Category 2	250
Specific	0
Average	200
EEIO	50
[…]	

Categories in uncertainty assessment	Uncertainty, 95% CI
Category 1	(665; 3612)
Category 4	(150; 320)
Category 11	(250; 720)

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		
1B. GHG accounting and reporting principles	Promote accuracy	For the emissions included in the assessment	Reducing relevance for those who's top priority emissions are different
2A. Support decision making that drives ambitious global climate action	Promote decarbonization		Not for the omitted categories
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand	Provides information for comparable categories	
3. Feasibility to implement	Easy to implement	Somewhat reducing effort compared to the full inventory analysis	Added effort (especially for complex categories)
Encourage improvement over time			
Promote value chain partner engagement			
Applicable to all 15 categories			No
Minimize/remove subjective choices by the preparer			
Future proof			Shift of categories in assessment expected
Applicable to scope 1 & 2 (optional)			No

Option 3d: Required uncertainty assessment for certain tiers

- In this option, preparers are required to report quantitative uncertainty of the selective tiers in the inventory.
- Below, application to specific data is considered. For specific data there might be two sourcing options: preparer calculation AND receiving information from the value chain partner.

- Reporting example:

Category	Emissions, tCO2eq	Uncertainty, 95% CI
Category 1	1550	
Specific	200	(100; 400)
Average	1000	
EEIO	350	
Category 2	250	
Specific	10	(8.3; 12)
Average	200	
EEIO	50	

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality	Promotes higher quality specific data	
1B. GHG accounting and reporting principles	Promote accuracy	For the emissions included in the assessment	Reducing relevance for those who's top priority emissions are different
2A. Support decision making that drives ambitious global climate action	Promote decarbonization		
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand		
3. Feasibility to implement	Easy to implement	Reducing effort to one tier only	If disaggregation option 4 is taken forward, separation of uncertainty for specific data might be complex and make Option 4 even more complicated
Encourage improvement over time			
Promote value chain partner engagement			May discourage engagement if it requires additional work
Applicable to all 15 categories		Yes	
Minimize/remove subjective choices by the preparer			
Future proof		Potential for gradual growth of emissions in scope of assessment	
Applicable to scope 1 & 2 (optional)		Yes	

Option 4a: Required uncertainty assessment for selective sectors

- In this option, preparers operating in selective sectors are required to report quantitative uncertainty of their inventory.
  - E.g. specifying high emitting sectors, or the energy sector, in the *Scope 3 Standard*
- A strict definition of affected sectors is necessary.

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		
1B. GHG accounting and reporting principles	Promote accuracy		
2A. Support decision making that drives ambitious global climate action	Promote decarbonization	Focus on high emitting sectors	
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand		Difficult to interpret if a company operates in several sectors, or in several geographies – no consistent inventory can be made
3. Feasibility to implement	Easy to implement	Large range of companies are exempted	Difficult to implement if a company operates in several sectors, "sector-border" business, or has different sectoral classification in different regions. No consistent inventory. Difficult for limited resources companies (e.g. SMEs) in focus sectors
Encourage improvement over time			
Promote value chain partner engagement			
Applicable to all 15 categories		Yes	
Minimize/remove subjective choices by the preparer			
Future proof			
Applicable to scope 1 & 2 (optional)		Yes	

Option 4b: Required uncertainty assessment for large companies

- In this option, large organizations are required to report quantitative uncertainty of their inventory.
  - E.g. criteria indicated in CSRD*
- A strict definition of organizations in scope is needed

* Suggestion is an example; a global approach would need to be discussed

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Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		
1B. GHG accounting and reporting principles	Promote accuracy	For those implementing	Not all implement
2A. Support decision making that drives ambitious global climate action	Promote decarbonization	Potentially focus on large emitters	Potentially reducing information for decision making when companies out of scope are considered
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand		
3. Feasibility to implement	Easy to implement	Large companies presumably have resources for additional effort	Large companies have larger inventories with more datapoints that would requires higher effort
Encourage improvement over time			
Promote value chain partner engagement			
Applicable to all 15 categories		Yes	
Minimize/remove subjective choices by the preparer			
Future proof			
Applicable to scope 1 & 2 (optional)		Yes	

Option 4c: Required uncertainty assessment in pursuit of a certain objective

- In this option, organizations are required to report quantitative uncertainty of their inventory if certain objectives are targeted.
  - E.g. those that commit to SBT
- A strict definition of objectives in scope is needed

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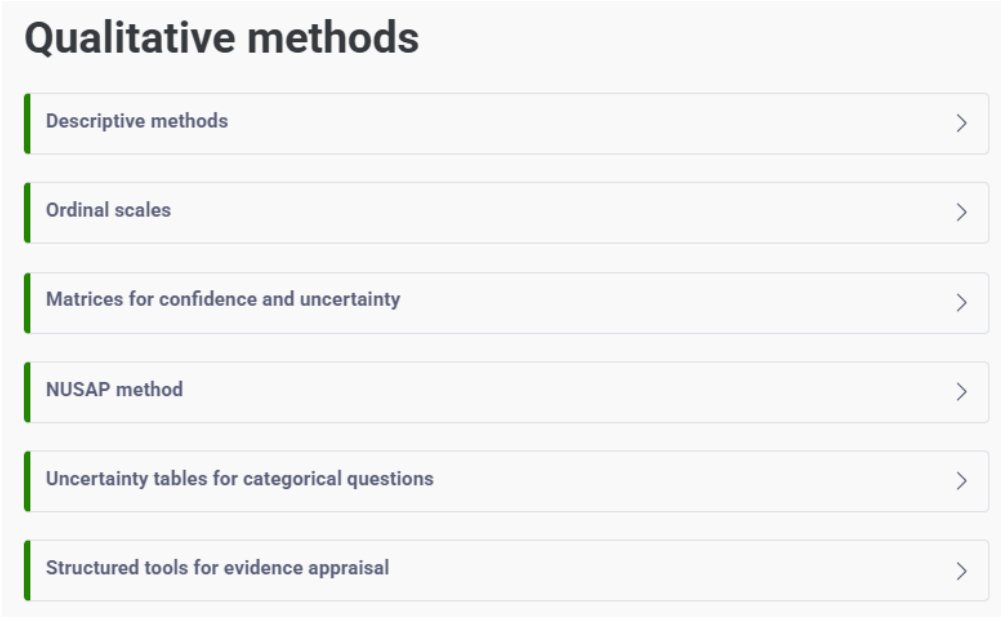
Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		
1B. GHG accounting and reporting principles	Promote accuracy	For those implementing	Not all implement
2A. Support decision making that drives ambitious global climate action	Promote decarbonization		Potentially disincentivizing SBT commitment (or other action-related objectives)
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand	Useful for frameworks (e.g. SBT)	Confusing to interpret data
3. Feasibility to implement	Easy to implement	Potentially exempting a wide range of companies	High effort for those who is in scope;
Encourage improvement over time			
Promote value chain partner engagement			
Applicable to all 15 categories		Yes	
Minimize/remove subjective choices by the preparer			Objective might classify as a subjective choice. Inventories may be externally used for a range of different (not planned) objectives
Future proof			
Applicable to scope 1 & 2 (optional)		Yes	

Option 5: Required qualitative uncertainty assessment

- In this option, preparers are required to report **qualitative** uncertainty of their inventory
- A guidance would need to be developed
  - EFSA Tutorial on Uncertainty - Qualitative methods
    suggest several options



- E.g. in case Ordinal Scales are used, as a minimum, preparers would have to:
  - Calculate the inventory
  - For each category identify the sources of uncertainty
  - Assess uncertainty per source and total

Decision-making criteria and considerations

Decision-making criteria	Corresponding needs identified by the TWG	Pros	Cons
1A. Scientific integrity	Promote quality		
1B. GHG accounting and reporting principles	Promote accuracy		Assessments may change if practitioner changes
2A. Support decision making that drives ambitious global climate action	Promote decarbonization		
2B. Support programs based on GHG Protocol & uses of GHG data	Easy to understand	Provides easy to understand information about uncertainty	Potentially misleading and confusing if inconsistent cross- and intra-company
3. Feasibility to implement	Easy to implement	Arguably simpler than quantitative uncertainty	Added effort for assessment, potentially requires significant knowledge of the methodology
Encourage improvement over time			
Promote value chain partner engagement			
Applicable to all 15 categories		Yes	
Minimize/remove subjective choices by the preparer			Wide use of subjective judgement
Future proof			
Applicable to scope 1 & 2 (optional)		Yes	

Discussion

- Are there additional pros and cons not captured in the decision-making criteria analysis?
- Are there options that are not compatible with the tiered approach?
- Do any options touch on questions that are out of purview of the GHG Protocol ?
- Which option is optimal regarding the tradeoffs in the decision-making criteria analysis?
- What is the desired configuration of the option you prefer? E.g.
  - Which quantitative assessment method to use (if you prefer Options 1-4)
  - Which categories to include? (if you prefer Option 3c)
  - Which sectors to include? (if you prefer Option 4a)
  - What is a large company? (if you prefer Option 4b)
  - What should be the objectives in focus? (if you prefer Option 4c)
  - Which qualitative method to use? (if you prefer Option 5)

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Polling

- **Option 1**: Optional uncertainty assessment
- **Option 2**: Required uncertainty assessment, with a default option
- **Option 3**: Required uncertainty assessment for selective emissions sources:
  - **3a** Top x% of emissions
  - **3b** Largest emissions contributor
  - **3c** Selective scope 3 categories
  - **3d** Selective tiers
- **Option 4**: Required uncertainty assessment for selective companies:
  - **4a** By sector
  - **4b** By size
  - **4c** By objective of the inventory
- **Option 5**: Required qualitative uncertainty assessment

Allocation

Current guidance in the Scope 3 Standard (i)

- Chapter 7 provides requirements and guidance for data collection, including data types, emissions quantification, data quality, and data collection prioritization.
- While considering supplier data, Chapter 7 of the Standard defines 5 levels of specificity:

Table [7.7] Levels of data (ranked in order of specificity)

Data type	*Description*
Product-level data	Cradle-to-gate[9] GHG emissions for the product of interest
Activity-, process- or production line-level data	GHG emissions and/or activity data for the activities, processes, or production lines that produce the product of interest
Facility-level data	GHG emissions and/or activity data for the facilities or operations that produce the product of interest
Business unit-level data	GHG emissions and/or activity data for the business units that produce the product of interest
Corporate-level data	GHG emissions and/or activity data for the entire corporation

- Practically, levels 2 to 5 (all but the product-level data) demonstrate the level of aggregation at which data is being collected, and later allocated to attribute emissions to a unit of production
- If product-level data is not available, suppliers should try to provide data at the activity-, process-, or production line-level. If activity-level data is not available, suppliers should try to provide data at the facility level, and so on.

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Approaches for collecting and allocating GHG emissions from suppliers

- Chapter 8 provides guidance on allocation procedures
- Box 8.2 in chapter 8 specifies that companies may use two basic approaches for collecting and allocating GHG emissions from suppliers

Box [8.2] Two approaches to allocating GHG emissions from suppliers

Companies may use two basic approaches for collecting and allocating GHG emissions from suppliers:

- **Supplier allocation:** Individual suppliers report pre-allocated emissions data to the reporting company and disclose the allocation metric used
- **Reporting company allocation:** The reporting company allocates supplier emissions by obtaining two types of data from individual suppliers: 1) total supplier GHG emissions data (e.g., at the facility or business unit level), and 2) the reporting company's share of the supplier's total production, based on either physical factors (e.g., units of production, mass, volume, or other metrics) or economic factors (e.g., revenue, spend)

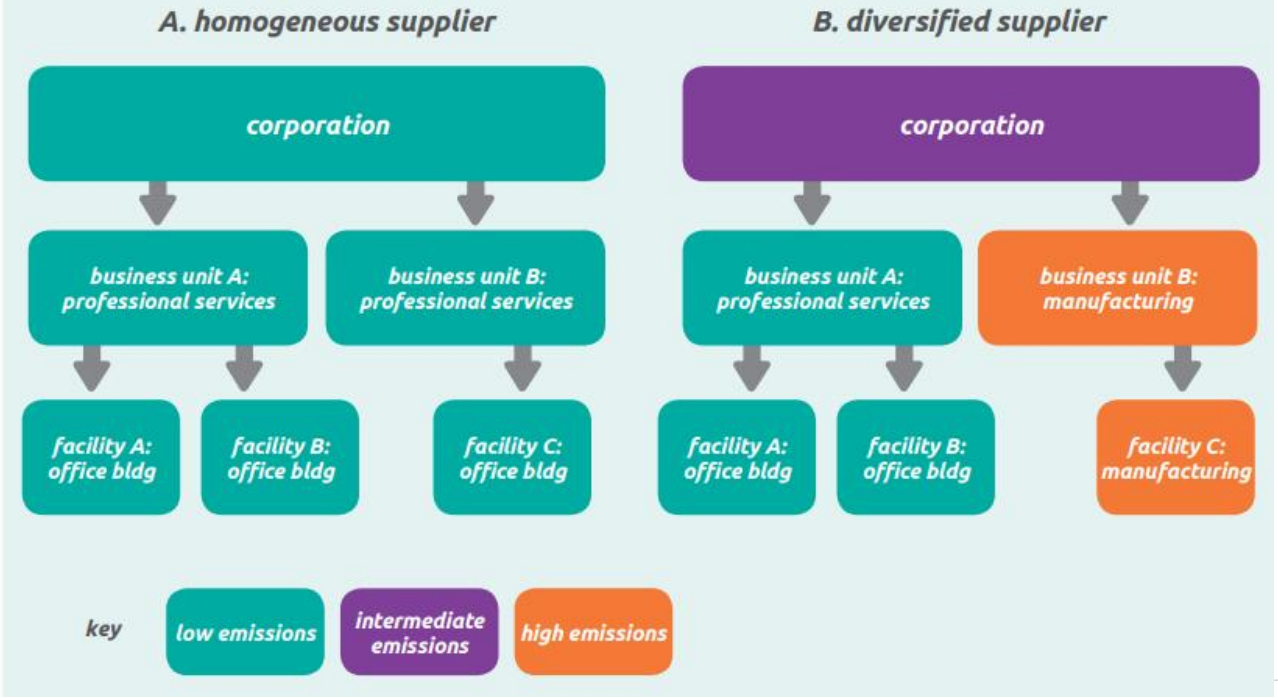
Reporting company allocation is likely to ensure more consistency in methodologies for the reporting company, while the supplier allocation approach may be more practical by avoiding the need for suppliers to report confidential business information.

Applicability of data levels

- Box 7.4 demonstrates importance of considerations of the type of activities for allocation of the data collected at the activity, production line, facility, business unit, or corporate level.
  - E.g. corporate level data might be sufficient for allocation when the activities of the company are homogenous
  - If the activities are diversified, allocation of data collected on corporate level might be misleading

Box [7.4] Level of data and supplier type

The need to collect granular data from a supplier depends in part on the variety and diversity of products the supplier produces. Collecting data at the product, production line, or facility level is more important for diversified companies than for relatively homogeneous companies, for which business unit- or corporate-level data may yield representative GHG estimates. Below are two examples: A) a homogeneous supplier with relatively uniform emissions throughout its operations and B) a diversified supplier where GHG intensity varies widely between business units and facilities.



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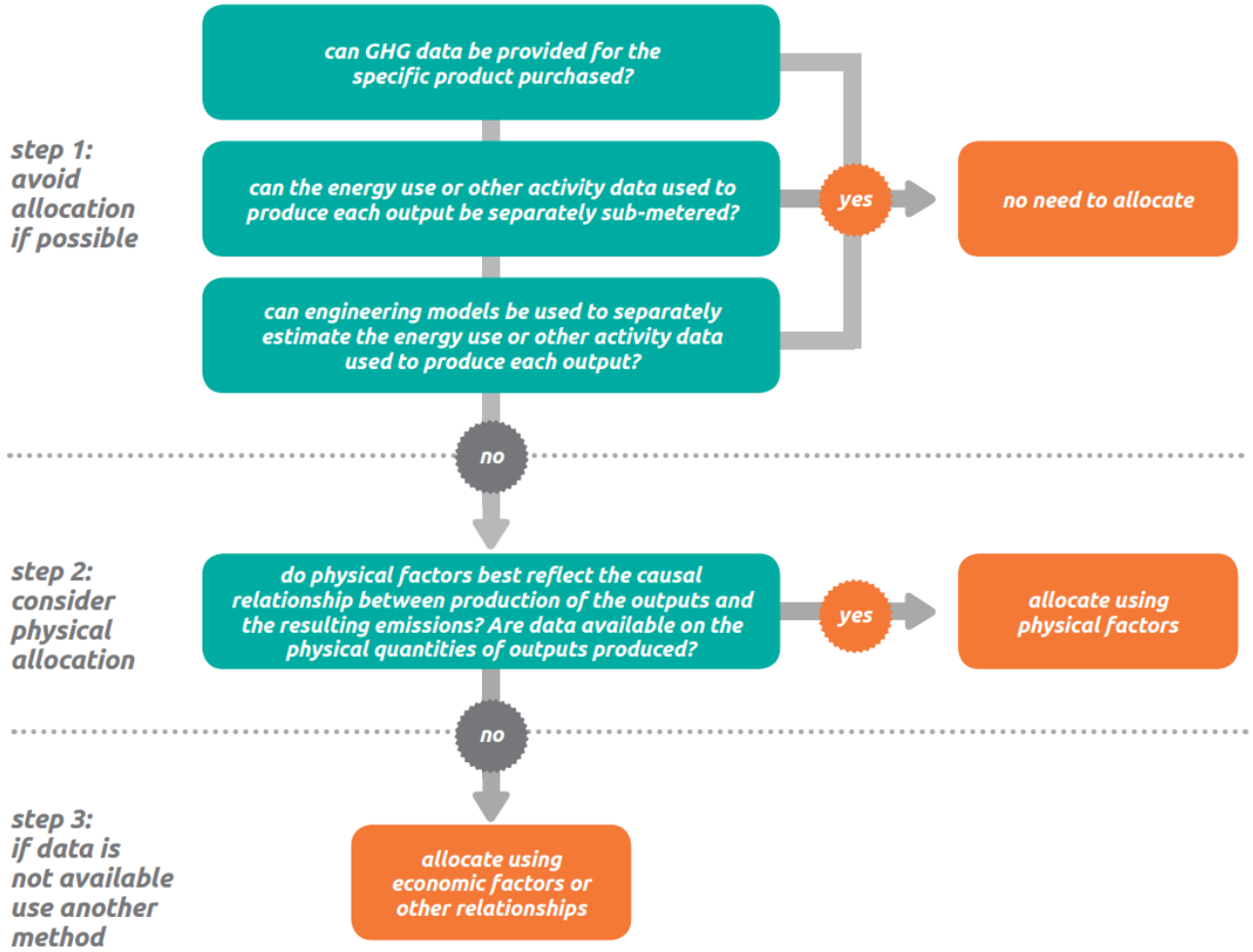
Current guidance in the Scope 3 Standard (ii)

- No single mandatory allocation methodology is prescribed by the Scope 3 Standard

- "companies **should** avoid or minimize allocation if possible." (section 8.2)
- "If avoiding allocation is not possible, companies **should** first determine total facility or system emissions, then determine the most appropriate method and factor for allocating emissions" (section 8.3)
- "Companies should select the allocation approach that:
  - best reflects the causal relationship between the production of the outputs and the resulting emissions;
  - results in the most accurate and credible emissions estimates;
  - best supports effective decision-making and GHG reduction activities;
  - otherwise adheres to the principles of relevance, accuracy, completeness, consistency and transparency" (section 8.3)
- "Companies that have a choice between multiple methods for a given activity **should** evaluate each method to determine the range of possible results before selecting a single method" (section 8.3)
- "Companies **may** use a combination of different allocation methods and factors to estimate emissions from the various activities in the scope 3 inventory. However, for each individual facility or system, a single, consistent allocation factor **should** be used to allocate emissions throughout the facility or system" (section 8.3)

Decision tree

"As a general rule, companies should follow the decision tree when deciding if allocation is needed and selecting an allocation method. However, the most appropriate allocation method for a given activity depends on individual circumstances" (section 8.3)



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Physical vs Economic allocation

Physical allocation is expected to yield more representative emissions estimates in several situations:

- Manufacturing facilities may produce multiple products, each of which requires similar energy and material inputs to produce, but which differ significantly in market value
- Allocating emissions from the transportation of cargo (or freight) with one vehicle to one or more of the products shipped
- Allocating total facility emissions to one or more products located at the facility

Economic allocation is expected to yield more representative emissions estimates in several situations:

- When a physical relationship cannot be established
- When a co-product would not be produced without the market demand for the primary product and/or other valuable coproducts (e.g., by-catch from lobster harvesting);
- When a co-product was previously a waste output that acquires value in the marketplace as a replacement for another product (e.g., fly ash in cement production)
- Investments, where emissions should be allocated to the reporting company based on the reporting company's proportional share of equity or debt in the investee

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Additional guidance

- Table 8.1 provides formulae for allocations

Physical allocation: ***Allocating the emissions of an activity based on an underlying physical relationship between the multiple inputs/outputs and the quantity of emissions generated***

Allocation factors	*Examples of allocation factors and formulas*
Mass	Mass of co-products $\textit{Allocated Facility Emissions} = \frac{\textit{Mass of Products Purchased}}{\textit{Total Mass of Products Produced}} \times \textit{Total Emissions}$
Volume	Volume of cargo transported $\textit{Allocated Facility Emissions} = \frac{\textit{Volume of Products Purchased}}{\textit{Total Volume of Products Produced}} \times \textit{Total Emissions}$

- Table 8.2 provides guidance on choosing allocation method for each category

Table [8.2] Allocation guidance by scope 3 category

Upstream scope 3 emissions

Category	*Examples of primary data requiring allocation*	*Allocation guidance*
1. Purchased goods and services	• Site-specific energy use or emissions data from suppliers	• Physical or economic allocation
2. Capital goods	• Site-specific energy use or emissions data from capital goods suppliers	• Physical or economic allocation
3. Fuel- and energy-related activities	• Company-specific data on upstream emissions (e.g. extraction of fuels)	• Physical allocation (energy)

- Multiple examples are given across the Scope 3 Standard and the Technical Guidance

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Stakeholder feedback

- Several respondents highlighted the **need for value chain emissions allocation** due to the growing need for supplier-specific emissions accounting and demand for the emissions information from customers.
- Stakeholder feedback indicates **practice of use of corporate inventories of suppliers** to allocate a share of suppliers' emissions to the products or services sourced from them
- The feedback shows **confusion** regarding allocation procedures and methods applied in this context. Stakeholders asked for more guidance and examples, more consistency, and detailed rules and easy to implement algorithms
- A few respondents noted the need for **harmonization of allocation** rules with the GHG Protocol Product Standard
- Several respondents requested **more guidance** on choosing between allocation methods, and navigating accounting in situations when different allocation methods are blended in the value chain

Questions in the scope of work

Corporate level data allocation

Q1. Should the corporate level data allocation be maintained as is or revised?

Q2. If it stays allowed, should any restrictions be introduced on allocation?

Multifunctional process allocation

Q3. Shall the GHG Protocol allocation hierarchy be made prescriptive?

Q4. Shall system expansion with substitution be added to the allocation choices?

Options for consideration (i)

Q1. Should the corporate level data allocation be maintained as is or revised?

- Option 1A. Maintain current guidance
- Option 1B. Prohibit and phase out
- Option 1C. Maintain but restrict

Q2. If it stays allowed, should any restrictions be introduced on allocation?

- Option 2A. Categorize allocated emissions as of lower quality (lower tier)
- Option 2B. Restrict methods (e.g. only physical allocation can be used)
- Option 2C. Requiring adding a disclaimer
- Option 2D. Restrict uses (e.g. can only be used in certain categories, or for certain activities)

Options for consideration (ii)

Q3. Shall the GHG Protocol allocation hierarchy be made prescriptive?

- Option 3A. Maintain current guidance
- Option 3B. Assign prescriptive choices
- Option 3C. Outsource (leave) to sectoral standards

Q4. Shall system expansion with substitution be added to the allocation choices?

- Option 4A. Maintain current guidance
- Option 4B. Allow
- Option 4C. Explicitly prohibit
- Option 4D. Explicitly prohibit, including in the sourced emission factors

Next steps

Next steps

Forming Task Force groups:

Team 1: Glossary text
Team 2: Tiered approach: Standard text update
Team 3: Uncertainty assessment

Please express your interest in joining a team via email before March 17th

Meeting follow-up:

- GHG Protocol Secretariat to distribute the recording and feedback form (by Mar 14)
- GHG Protocol Secretariat to prepare and distribute minutes of the meeting (by Mar 20)

Next meeting on April 3rd 6AM PT/ 9AM ET / 3PM CET / 9PM CHN/ 0AM AEDT(+1)
Allocation discussion

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Thank you!

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Back-up

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Current reporting requirements

1. **Required information**
   a. A list of scope 3 categories and activities included in the inventory
   b. A list of scope 3 categories or activities excluded from the inventory with justification(s) for their exclusion
   c. For each scope 3 category, a description of the types and sources of data, including activity data, emission factors and GWP values, used to calculate emissions, and a description of the data quality of reported emissions data
   d. For each scope 3 category, a description of the methodologies, allocation methods, and assumptions used to calculate scope 3 emissions
   e. For each scope 3 category, the percentage of emissions calculated using data obtained from suppliers or other value chain partners
2. **Optional information**
   a. Relevant disaggregation of the emissions data
   b. Emissions from scope 3 activities not included in the list of scope 3 categories, reported separately
   c. Qualitative information about emission sources not quantified
   d. Quantitative assessments of data quality
   e. Information on inventory uncertainty (e.g., information on the causes and magnitude of uncertainties in emission estimates) and an outline of policies in place to improve inventory quality

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Industry-specific CDP reported emissions 2021, by category

	Agricultural commodities	Capital goods	Cement sector	Chemicals	Coal	Construction	Electric utilities	Financial	Food & tobacco	Metals & mining	Oil & gas	Paper & forestry	Real estate	Steel	Transport OEMS	Transport services
scope 1	7%	0%	79%	17%	33%	6%	50%	0%	7%	6%	10%	31%	2%	67%	1%	64%
scope 2	1%	1%	4%	7%	2%	1%	1%	0%	5%	2%	1%	10%	5%	6%	1%	3%
Category 1	63%	6%	6%	44%	0%	30%	2%	0%	67%	32%	4%	21%	10%	8%	11%	6%
Category 2	2%	0%	0%	0%	0%	1%	0%	0%	2%	2%	1%	1%	49%	0%	0%	3%
Category 3	0%	0%	3%	2%	0%	0%	19%	0%	1%	3%	0%	5%	3%	3%	0%	8%
Category 4	3%	0%	3%	3%	0%	7%	2%	0%	3%	3%	0%	5%	0%	1%	0%	10%
Category 5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Category 6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Category 7	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Category 8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Category 9	1%	0%	3%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%	1%	0%	0%
Category 10	8%	0%	0%	3%	0%	0%	0%	0%	3%	40%	1%	9%	0%	2%	0%	0%
Category 11	7%	90%	0%	14%	64%	49%	20%	0%	4%	8%	81%	3%	1%	8%	84%	3%
Category 12	4%	2%	0%	6%	0%	1%	0%	0%	2%	0%	0%	11%	0%	0%	0%	0%
Category 13	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	25%	0%	0%	0%
Category 14	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	2%	0%	0%	0%
Category 15	0%	0%	0%	1%	0%	1%	4%	100%	1%	3%	0%	0%	0%	2%	0%	0%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Framed cells show categories per sector reported being relevant but not calculated by more than 25% of the respondents

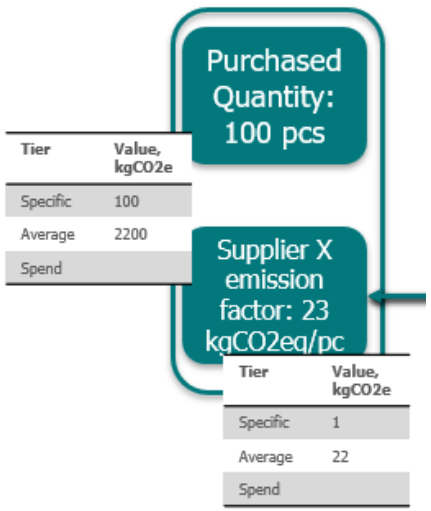
- *CDP Technical Note: Relevance of Scope 3, Categories by Sector, 2024

Engaging suppliers along the value chain (1)

Company Z purchases 100 pcs of products from their supplier, company X. Company X provides them with an emission factor. In order to report by tiers, company Z requires company X to provide the emission factor in the breakdown by tiers of specificity as well

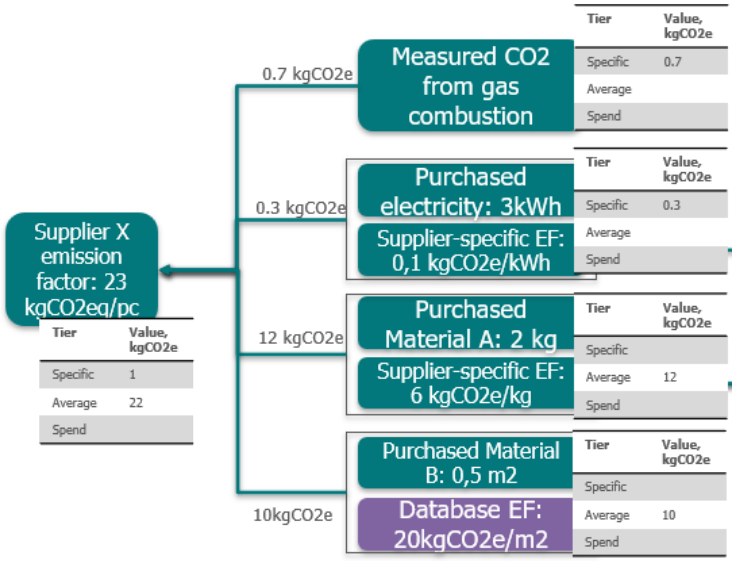
1

Reporting data



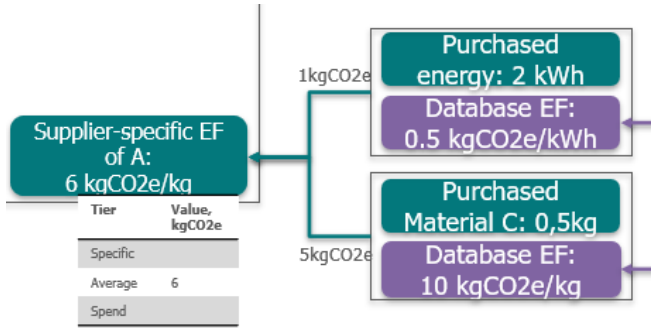
2

Company X analyses their emission factor and sees that supplier of their material A provides only an average. X engages with A for action



3

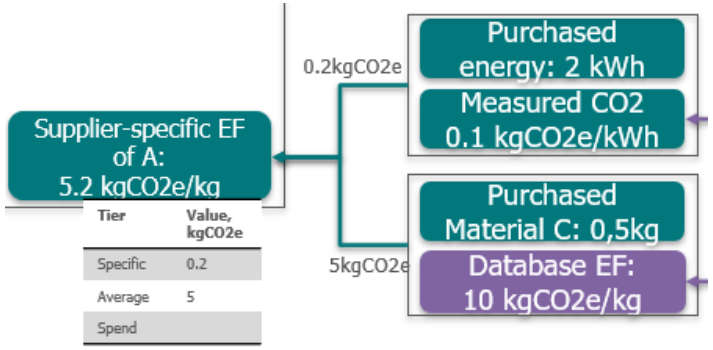
Supplier of A analyses their emission, seeing average EF for energy



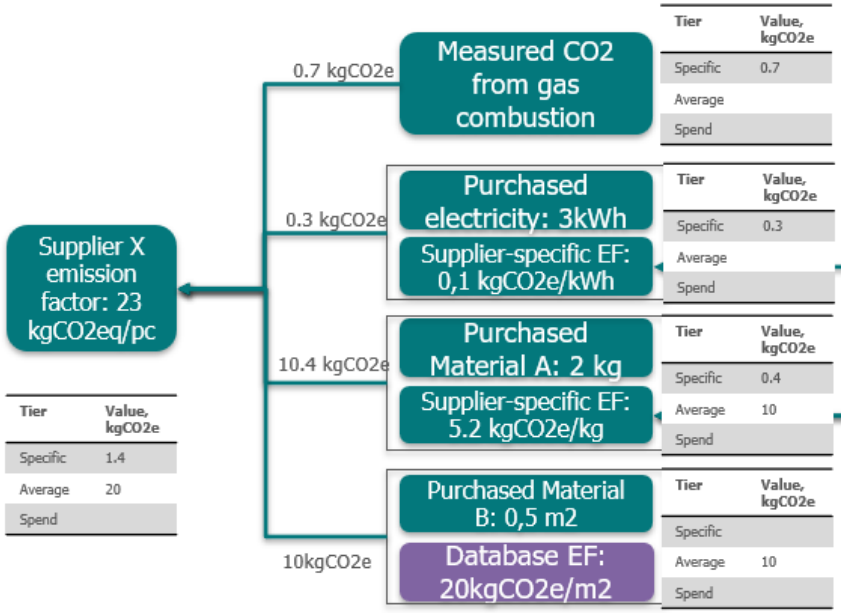
Engaging suppliers along the value chain (2)

Company Z purchases 100 pcs of products from their supplier, company X. Company X provides them with an emission factor. In order to report by tiers, company Z requires company X to provide the emission factor in the breakdown by tiers of specificity as well

4 Supplier of A requests and receives specific emissions from their energy provider



5 Company X incorporates the new measure into their EF, and passes it to the company Z



6 Company Z incorporates the new measure into their reporting