

This document includes PwC's responses submitted to the Greenhouse Gas Protocol Scope 3 Standard and Scope 3 Calculation Guidance survey (the Scope 3 survey). It should be read in conjunction with our [summary letter](#), responses to the [Corporate Accounting and Reporting survey](#) and [Scope 2 Guidance survey](#), and supplemental proposals on (1) [governance matters](#); (2) [consistency with financial reporting](#); and (3) [tracking emissions over time](#).

Also, note that the Scope 3 survey contains a combination of required and optional questions. This document includes only those questions to which we provided responses. Please refer to the Greenhouse Gas Protocol website for the complete [Scope 3 survey](#).

Scope 3 Standard and Scope 3 Calculation Guidance survey

DATA AND PRIVACY ACKNOWLEDGEMENT

1. *In order to proceed to the survey, please click yes below to acknowledge that you have reviewed the information in the Process Memo and Scope 3 Survey Memo and that you consent to the data disclosure agreements outlined in the Process Memo.*

- Yes**
 No

RESPONDENT INFORMATION

2. *Name*

Henry Daubeney

3. *Organization*

PricewaterhouseCoopers

4. *Country*

"PricewaterhouseCoopers" refers to the network of member firms of PricewaterhouseCoopers International Limited (PwCIL), each of which is a separate and independent legal entity. With offices in 152 countries and almost 328,000 people, PwCIL is among the leading professional services networks in the world. Following consultation with members of the PricewaterhouseCoopers network of firms, our survey response summarizes the views of those member firms that commented on the survey.

5. *Email address*

henry.daubeney@pwc.com

6. *Would you like to receive email updates from GHG Protocol?*

- Yes**
 No

7. *Does your company/organization have a greenhouse gas inventory?*

- Yes
 No
 Other (please specify)

PwC's corporate sustainability group prepares a greenhouse gas inventory in accordance with the Greenhouse Gas Protocol and issues a climate report on behalf of the global firm. In addition, many of our firms issue climate reports in line with their jurisdictional requirements. Our responses to the survey, however, are primarily informed by our interactions with clients and investors as well as our history of engagement and proactive thought leadership on ESG matters.

We have also prepared a [summary letter](#) to highlight our most significant recommendations.

8. *Are you involved in developing your company's/organization's greenhouse gas inventory?*

- Yes
- No
- Not applicable
- Other (please specify)**

Please refer to our response to question 7.

9. *What is your organization type?*

- Academia/research
- Company
- Consultant supporting organizations with GHG inventories/strategies
- GHG reporting program or initiative
- Government institution
- International agency
- Industry group
- Non-profit organization/NGO/civil society
- Provider of data or product related to GHG inventories
- Other (please specify)**

Please refer to our response to question 7.

10. *What is your company's sector?*

- Agriculture
- Apparel
- Biotech, health care and pharmaceutical
- Chemicals
- Construction
- Consumer goods
- Education
- Energy
- Finance
- Food and beverage
- Forest products
- Forestry
- Fossil fuels
- Hospitality
- Information and communication technology
- Infrastructure
- Insurance

- Manufacturing
- Materials
- Mining
- Power generation
- Professional, scientific, and technical services**
- Real estate
- Retail
- Services
- Transportation
- Utilities (water, gas, electricity)
- Waste management
- Other (please specify)

CORPORATE VALUE CHAIN (SCOPE 3) STANDARD

11. *Does your company/organization use the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Standard to develop its greenhouse gas inventory?*

- Yes
- No
- Not sure
- Not applicable (my company/organization does not have a greenhouse gas inventory)
- Other (please specify)**

Please refer to our response to question 7.

12. *How satisfied are you with the current GHG Protocol Corporate Value Chain (Scope 3) Standard?*

- 1 - Very satisfied
- 2 - Somewhat satisfied
- 3 - Neither satisfied nor dissatisfied**
- 4 - Somewhat dissatisfied
- 5 - Very dissatisfied
- Not applicable (I don't use it)

13. *Do you think there is a need to update the GHG Protocol Corporate Value Chain (Scope 3) Standard?*

- No (no update needed)
- Minor update (limited updates, clarifications, additional guidance, or refresh needed)
- Major update (major changes or revisions needed)**
- No opinion/Not sure

14. *Please explain your selection. You may enter brief comments here or submit a more detailed proposal using the proposal template.*

As noted in our response to question 7, we prepared a [summary letter](#) which highlights our most significant recommendations in response to the surveys issued by the Greenhouse Gas Protocol. These recommendations include comments related to the GHG Protocol's purpose, governance, organization of the reporting standards, interoperability, and enhanced data quality. These recommendations are applicable broadly to all of the GHG Protocol's standards, including its

guidance related to scope 3. Please also see question 14 in our response to the gwhere we have also included these recommendations.

Our comments and recommendations specific to scope 3 are discussed in our responses to this survey.

Scope 3

To achieve the accounting and reporting principles of accuracy, completeness, consistency, relevance, and transparency, as defined by the Corporate Standard, we believe GHG Protocol should revisit whether its Corporate Value Chain (Scope 3) Standard, including the fifteen categories, still aligns with its purpose and application.

By definition, scope 3 emissions are indirect and encompass emissions outside the direct control of the reporting entity. Scope 3 emissions disclosures are typically the most challenging to prepare and understand, given the often broad scope of a company's value chain and its varying degrees of influence over emissions. We acknowledge, however, that scope 3 emissions represent an important element of a company's overall carbon footprint.

To balance the importance of these disclosures with providing more decision-useful information, we recommend revising the scope 3 standard to better differentiate emissions over which a company has a degree of influence, with differentiated disclosures depending on the degree. For example, a large company may have visibility into the emissions of its suppliers and may be able to exert pressure to reduce those emissions in the future, whereas a small company may have limited visibility or influence, providing less useful information. Further, depending on a company's location in the value chain, it may have limited or no influence over the use and disposal of its products and disclosures based solely on conjecture do not serve the interest of the company or its stakeholders.

Thus, we recommend that GHG Protocol rethink the depth and breadth of scope 3 disclosures and consider requiring a company to disclose its relative degree of influence over the entities generating such emissions. The current guidance assumes that both influence and visibility are balanced throughout the value chain, which creates unnecessary hurdles for many entities, including smaller companies and entities serving intermediary roles, such as agents, wholesalers, or retailers. In addition, lack of influence and visibility may impact the quality of the information reported.

Therefore, we recommend incorporation of flexibility in reporting of scope 3 emissions, such that disclosures are commensurate with the reporting entity's influence over those emissions. Specifically, we believe that GHG Protocol should consider developing factors to be considered by preparers in their assessment of influence, and further, establish minimum reporting requirements based on the varying degrees of influence. We support the disclosure of ranges of most likely or possible outcomes when a reporting entity has limited influence and there are multiple alternate scenarios factored in estimating emissions associated with its value chain.

Lastly, we recommend that GHG Protocol require enhanced disclosures about key methodologies, assumptions, and estimates used in developing a greenhouse gas inventory. We believe a disclosure framework, similar to the fair value measurement hierarchy, based on factors and techniques of relevance in emissions measurement, would promote transparency. Refer to our detailed recommendations within our [governance matters template](#).

15. *Does your company/organization or industry face any specific challenges in complying with the GHG Protocol Corporate Value Chain (Scope 3) Standard requirements and guidance? If yes, please describe each challenge and the solutions you would propose for addressing the challenge. You may enter brief comments here or submit a more detailed proposal using the proposal template.*

Please refer to our response to question 7.

16. Does your company/organization or industry require additional industry-specific guidance for developing a scope 3 GHG inventory? If yes, please describe what is needed.

We believe that GHG Protocol should prioritize industry-agnostic standards that have sufficient flexibility to address matters arising across a multitude of use cases. We recognize, however, that there are certain industry-specific situations where additional clarity would aid consistency and transparency of reporting. To address these concerns, we recommend that the standards and guidance incorporate more practical application examples, spanning a range of industries. For example, it would be helpful to illustrate the scope determination for common and recurring situations such as commercial real estate, oil rigs, power plants, principal-agent transactions, and other multi-party arrangements.

17. Do you propose revisiting or making any changes or clarifications to the current requirements and guidance in the Corporate Value Chain (Scope 3) Standard?

- Yes**
 No
 No opinion/Not sure

18. If yes, please explain the proposed change(s). You may enter brief comments here or submit a more detailed proposal using the proposal template, including which scope 3 category or categories the comment or proposal pertains to.

As referenced above, we believe GHG Protocol should revisit whether its scope 3 guidance, including the fifteen categories, still aligns with the purpose and use of the standard. Please refer to our detailed recommendations in our responses to the [Corporate Accounting and Reporting Standard survey](#) and question 14 above.

SCOPE 3 CALCULATION GUIDANCE

19. Does your company/organization use the Greenhouse Gas Protocol Scope 3 Calculation Guidance to develop its greenhouse gas inventory?

- Yes
 No
 Not sure
 Not applicable (my company/organization does not have a greenhouse gas inventory)
 Other (please specify)

Please refer to our response to question 7.

20. How satisfied are you with the current GHG Protocol Scope 3 Calculation Guidance?

- 1 - Very satisfied
 2 - Somewhat satisfied
 3 - Neither satisfied nor dissatisfied
 4 - Somewhat dissatisfied
 5 - Very dissatisfied
 Not applicable (I don't use it)

21. Do you think there is a need to update the GHG Protocol Scope 3 Calculation Guidance?

- No (no update needed)
- Minor update (limited updates, clarifications, additional guidance, or refresh needed)
- Major update (major changes or revisions needed)**
- No opinion/Not sure

22. Please explain your selection. You may enter brief comments here or submit a more detailed proposal using the proposal template.

Given the pervasive scope of the activities impacting emissions throughout an organization's value chain, practitioners encounter nuances in practice that are not explicitly addressed within the standards. Additional implementation guidance and practical examples would enable more consistent application of the scope 3 standard, improving comparability across companies. In addition, we include specific recommendations with respect to certain categories below.

Category 1 — We recommend that GHG Protocol expand this guidance to include specific considerations related to emissions associated with purchased licenses and patents. In certain industries, material amounts of capital are deployed to purchase licenses and patents for goods or services. Reporting entities would benefit from clarity and practical application examples related to the recognition and measurement of scope 3 emissions associated with the development of associated products and services. Specifically, we believe GHG Protocol should address the disconnect between emissions determined based on the cost of patents and licenses incurred during a reporting period relative to the actual emissions generated during the development of those patents and licenses when scope 3 emissions are calculated using the spend-based method.

Category 11 — Reporting entities also frequently encounter hurdles in the estimation of emissions from the use of sold products. This estimation may be relatively straightforward when an entity creates a product for a specific purpose. In contrast, this estimation is exponentially difficult in segments of the value chain, such as raw materials suppliers (e.g., corn, natural gas, steel, lumber), where there are numerous potential uses for a particular product and the suppliers often have no visibility as to how their product is utilized after sale, making it impractical to project emissions associated with the downstream use of the product. We recommend that GHG Protocol permit ranges to be used in reporting or disclosure based on one or two likely or representative uses. Further, the inclusion of implementation examples would provide additional clarity on how to evaluate and calculate emissions in multifaceted scenarios.

Category 12 — Anecdotally, one of the most frequent areas of difficulty for preparers is determining how to calculate end-of-life emissions for products that are often recycled, such as steel, or products for which they have limited visibility into their final disposition. Thus, as discussed in question 14, we recommend allowing alternative reporting when the reporting entity has limited or no influence or visibility. Notwithstanding this recommendation, if category 12 is retained as currently written, we recommend GHG Protocol provide additional clarity on how to evaluate and calculate emissions in these scenarios.

Category 15 — As noted in our response to question 27, we believe it is important for GHG Protocol to control the development of its standards, in lieu of relying on supplemental guidance developed by individual sectors. Direct responsibility for standards development and application of the GHG Protocol's own due process will ensure that its suite of standards are robust, independent, and fit for purpose across a broad spectrum of users. In addition, with respect to financed emissions, we suggest the enhancement of guidance on accounting for emissions related to investments for companies other than financial institutions. Incorporation of guidance with respect to financed emissions, through an industry-agnostic lens, within the GHG Protocol's core standards will benefit all users.

Questions 23 - 26 omitted

27. Are there existing resources, tools, or databases developed by other organizations (which are in conformance with the Scope 3 Standard) that you would suggest that GHG Protocol references to support companies in applying the Scope 3 Standard?

We do not recommend that GHG Protocol make reference to any resources, tools, or databases developed by other organizations. We believe it is critical that the GHG Protocol's standards stand alone to provide a complete source of guidance on greenhouse gas emissions reporting.

We have observed that certain sectors are developing supplemental guidance outside the auspices of GHG Protocol. Leveraging the work of other organizations may have been an effective strategy for GHG Protocol as it sought to expand its available guidance. Ultimately, however, to be the premier standard setter for greenhouse gas emissions reporting, we believe it is important for GHG Protocol to control the development of its standards, thus avoiding potential bias that may be inherent in standards developed by industry groups or others interested in promulgating a specific viewpoint. Ensuring all standards governing emissions reported in accordance with the GHG Protocol's standards and guidance are subject to its own due process would ensure that its suite of standards are robust, independent, and fit for purpose across a broad spectrum of users.

28. Are there new resources, tools, or databases that you think need to be developed to support companies in applying the Scope 3 Standard?

One of the challenges we observe in applying the GHG Protocol is difficulty in determining the applicable requirements and understanding how the various standards and guidance interact with each other. We believe that restructuring the full suite of standards and guidance to enhance their usefulness and effectiveness should be one of the GHG Protocol's highest priorities. Please refer to the "Organization of the reporting standards" section of our response to question 4 in the related [governance matters template](#).

29. Do you have any other feedback or suggestions to improve and/or refine the Scope 3 Calculation Guidance?

New technologies and techniques that advance decarbonization (e.g., sustainable aviation fuel, hydrogen, agricultural commodities, recycling innovations) may impact how emissions are calculated and reported. Ensuring that calculation and reporting methodologies reflect the current stages of market developments require a collaborative effort with various stakeholders. We believe this is critical to ensuring that GHG Protocol guidance progresses in line with the state of the emission landscape. Therefore, we recommend that GHG Protocol establish formal processes to monitor developing technologies and evolutions in access to information. Further, GHG Protocol should formally evaluate the impact of these technological advances on scope 1, scope 2, and scope 3 GHG reporting, incorporating additional interpretive guidance in its standards as applicable.

QUESTIONS FOR PROGRAMS/POLICYMAKERS

This section is intended for programs, initiatives, policymakers, or regulators using GHG Protocol standards

30. Are you applying the Corporate Value Chain (Scope 3) Standard in the context of your program? If so, please explain.

Not applicable.

31. What is your experience applying the standard? Does your program implement all the requirements of the standard? If not, why not? Are there any gaps or problems you have faced in implementing the standard? Are changes to the standard and/or support on the use of the standard needed from a programmatic perspective?

Not applicable.