Deloitte.

January 2024

On the Radar

Greenhouse Gas Protocol Reporting Considerations

The Greenhouse Gas (GHG) Protocol is a set of standards and related guidance on accounting for and reporting GHG emissions. Its ongoing development, which has spanned more than two decades, represents the work of a multistakeholder partnership (the “GHG Protocol organization”) consisting of businesses, nongovernmental organizations (NGOs), governments, and other entities convened by the World Resources Institute (WRI), a U.S.-based environmental NGO, and the World Business Council for Sustainable Development (WBCSD), a Geneva-based coalition of nearly 200 international companies. The timeline below illustrates the issuance dates of key GHG Protocol standards and related guidance.

September 2001	*The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (the "Corporate Standard")
March 2004	Revised edition of the Corporate Standard
November 2005	*The GHG Protocol for Project Accounting* (the "Project Protocol")
September 2011	*Corporate Value Chain (Scope 3) Accounting and Reporting Standard: Supplement to the GHG Protocol Corporate Accounting and Reporting Standard* (the "Scope 3 Standard")
	Product Life Cycle Accounting and Reporting Standard (the "Product Standard")
March 2013	*Accounting and Reporting Standard Amendment: Required Greenhouse Gases in Inventories* (the "Required GHGs Amendment")
April 2013	*Technical Guidance for Calculating Scope 3 Emissions (Version 1.0): Supplement to the Corporate Value Chain (Scope 3) Accounting & Reporting Standard* (the "Scope 3 Technical Guidance")
January 2015	*GHG Protocol Scope 2 Guidance: An Amendment to the GHG Protocol Corporate Standard* (the "Scope 2 Guidance")
2025	Projected update of GHG Protocol standards and related guidance

The GHG Protocol provides a framework for companies and other types of organizations preparing a GHG emission inventory. Specifically, it addresses the accounting for and reporting of seven GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).

Current Reporting Landscape

The current GHG emission reporting landscape is evolving. The number of companies that are reporting on GHG emissions is increasing and will continue to rise as a result of new climate and sustainability standards and regulations across the globe.

While the new climate and sustainability standards and regulations are driving change in the reporting landscape, it is also important to recognize the business value of monitoring a company's GHG emissions. Such monitoring may allow companies to identify business and financial risks that arise from their operations and provide management with insight into how to effectively manage those risks. In addition, it may help companies identify opportunities for transformation and growth so that they can differentiate themselves in the market.

Companies within the scope of the E.U. Corporate Sustainability Reporting Directive (CSRD) are required to report on GHG emissions in accordance with the European Sustainability Reporting Standards or equivalent standards to be determined. The reporting timeline for CSRD varies depending on the structure of the company; however, the earliest reporting requirement begins in 2025. For more information about the CSRD, see Deloitte's January 9, 2023, and August 17, 2023, *Heads Up* newsletters.

Various companies will need to comply with the International Sustainability Standards Board's recently issued IFRS S1 and IFRS S2, which require disclosures such as information about GHG emissions and sustainability- and climate-related opportunities and risks, subject to jurisdictional adoption. IFRS S2 specifically requires reporting of GHG emissions in accordance with the GHG Protocol. IFRS S1 and IFRS S2 are effective for annual reporting periods beginning on or after January 1, 2024, subject to individual jurisdictional mandates. For more information about IFRS S1 and IFRS S2, see Deloitte's June 30, 2023, *Heads Up*.

In the United States, the SEC issued a proposed rule on March 21, 2022, to enhance and standardize the climate-related disclosures provided by public companies. Under the proposed rule, companies would be required to report GHG emissions in a manner similar to that prescribed by the GHG Protocol. For more information about the proposed rule, see Deloitte's March 21, 2022 (updated March 29, 2022), and March 29, 2022, *Heads Up* newsletters.

Whereas the SEC's proposed rule would only apply to public companies, three bills recently signed into law in California — SB-253, SB-261, and AB-1305, the first climate-related bills to be passed in the United States — will require both public and private U.S. companies doing business in California to provide certain climate-related and GHG emission disclosures. The California Air Resources Board must adopt regulations to codify the requirements in SB-253 by January 1, 2025, and to codify the requirements in SB-261 by January 1, 2026. The effective date of AB-1305 is January 1, 2024.[1] For more information about SB-253, SB-261, and AB-1305, see Deloitte's October 10, 2023 (updated December 19, 2023), *Heads Up*.

Classifying GHG Emissions

Under the GHG Protocol, GHG emissions are classified into three scopes as follows:

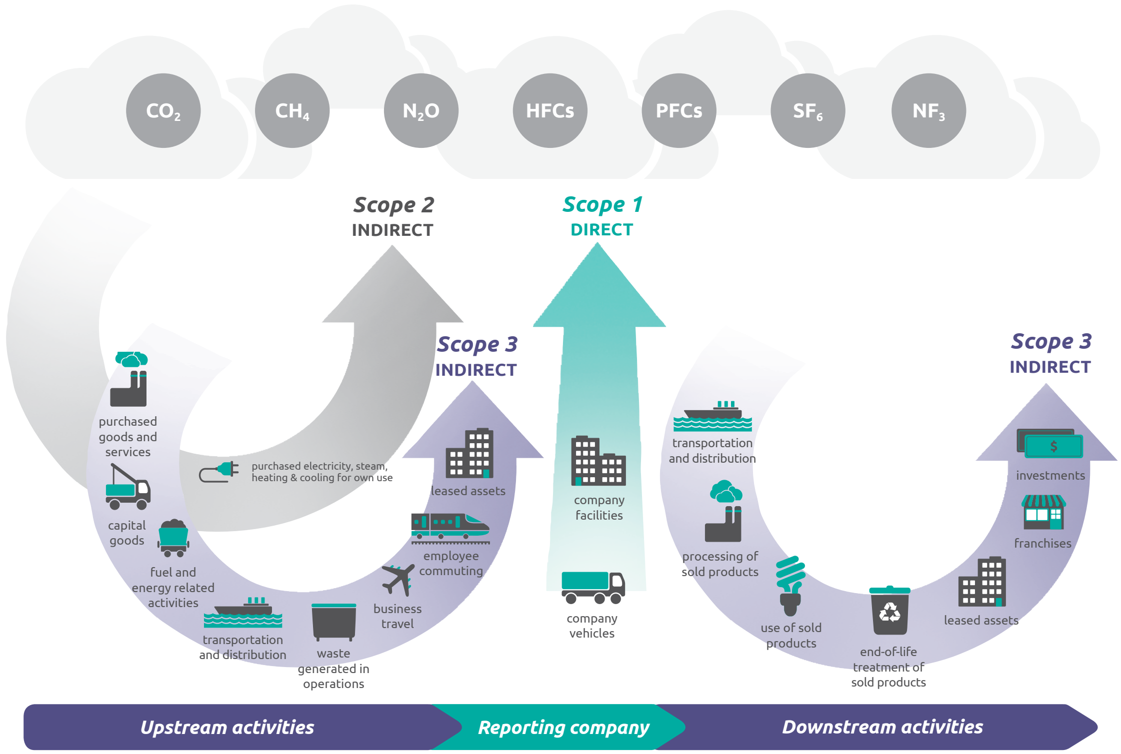
Scope 1 emissions	Represent emissions generated directly from sources owned or controlled by the reporting company. Examples of Scope 1 emissions include GHG emissions from the generation of heat, electricity, and steam; GHG emissions from physical or chemical processing; fugitive emissions; and GHG emissions from the transportation of materials, products, waste, and employees.
Scope 2 emissions	Represent indirect emissions that are derived from purchased electricity, heat, steam, and cooling. Scope 2 emissions are often the most significant source of emissions for office-based or service companies. Two calculation methods are used to report on Scope 2 emissions: the location-based method and the market-based method. The location-based method reflects the average emission intensity of grids on which energy consumption occurs, while the market-based method reflects emissions from electricity that companies have purposefully chosen.
Scope 3 emissions	Represent all other indirect emissions that are a consequence of the activities of the reporting company but occur at sources not owned or controlled by the company. Reporting on Scope 3 emissions generally involves the greatest amount of estimation in the current reporting landscape because of the infancy of data collection and data quality. There are 15 categories of reportable Scope 3 emissions.

Figure I of the Scope 3 Technical Guidance, which is reproduced below, illustrates a reporting company's value chain and the classification of GHG emissions into Scope 1, Scope 2, and the 15 categories of Scope 3.

[1] The author of AB-1305, California State Assembly Member Jesse Gabriel, sent a letter to the chief clerk of the assembly to clarify his intent related to the timing of disclosures required under AB-1305. While the effective date of AB-1305 remains January 1, 2024, Mr. Gabriel's letter may affect enforcement decisions by the California attorney general. Companies should continue to consult with their legal advisers regarding how to approach the disclosure requirements in AB-1305 and the January 1, 2024, effective date.

Scope 3 Technical Guidance, "Introduction," Page 6

Figure I Overview of GHG Protocol Scopes and Emissions Across the Value Chain



Defining an Organizational Boundary

The organizational boundary provides the basis for identifying emission sources from assets owned or controlled by the reporting company. For this reason, it is critically important to correctly identify the organizational boundary.

Applicable climate and sustainability standards and regulations, such as the SEC's proposed rule on climate-related disclosures, may prescribe organizational boundaries that differ from those delineated in the GHG Protocol. Therefore, if a company is reporting on emissions in accordance with a specific standard or regulation, it should carefully consider the organizational boundary requirements of that standard or regulation.

If a company is reporting on emissions in accordance with the GHG Protocol rather than a specific standard or regulation, it may choose one of three approaches to identify its organizational boundary. However, once the company selects an approach, it must apply that approach consistently across the organization. The three approaches are outlined below.

Equity Share Approach	Financial Control Approach	Operational Control Approach
Account for emissions on the basis of the company's percentage ownership or economic interest in its subsidiaries, investments, and assets.	Account for emissions on the basis of the company's ability to direct the financial and operational policies in its subsidiaries, investments, and assets.	Account for emissions on the basis of the company's ability to introduce and implement operational policies in its subsidiaries, investments, and assets.

A company may need to use judgment to identify subsidiaries, investments, and assets within its organizational boundary. Once a company identifies its organizational boundary, it will be required to identify the activities and sources of emissions, including how emissions are categorized (i.e., Scope 1, Scope 2, or Scope 3) — also known as an operational boundary.

Judgment in Measuring and Reporting Emissions

The GHG Protocol standards and related guidance provide latitude in application and related judgments, which has led to diversity in practice in how companies report GHG emissions. The WRI and WBCSD are currently evaluating this diversity through their transformation process, which is discussed below. Companies are encouraged to consult with their advisers on the application of the GHG Protocol to ensure that their accounting and reporting treatment is appropriate.

The GHG Protocol was initially developed over two decades ago to achieve multiple objectives, one of which, as stated in the Corporate Standard, is "[t]o provide business with information that can be used to build an effective strategy to manage and reduce GHG emissions." Since that time, the regulatory landscape has evolved to reflect the capital markets' heightened demand for disclosures about companies' GHG emissions, resulting in an increased focus on transparency, consistency, and standardization. Such evolution has shifted how the GHG Protocol is being applied by companies to suit their purposes.

As business models evolve and transform, some companies may find that the current guidance in the GHG Protocol on accounting for emissions does not clearly address their circumstances. For example, since the GHG Protocol was developed before the introduction of circular business models (i.e., reduce and reuse), companies operating under such models must use greater judgment to apply the guidance. In such instances, companies are encouraged to provide clear and robust disclosures to ensure that users of their GHG emission reports can understand the judgments, inputs, and assumptions on which their GHG emission calculations are based.

Setting GHG Emission Targets

As companies evolve, investors shift their focus, and the economy transforms, companies are starting to set GHG emission targets. These targets are widely focused on reducing Scope 1 and Scope 2 emissions. Companies often cite their ability to more easily control Scope 1 and Scope 2 emissions as the primary reason for focusing GHG emission targets solely on Scopes 1 and 2. Management uses these GHG emission targets in transforming their businesses but are also increasingly linking them to compensation and bonuses. Lenders are also using GHG emission targets in debt covenant agreements and financing arrangements.

Companies may use renewable energy credits to offset their Scope 2 emissions. Given the prevalence of renewable energy credits in the marketplace, companies may have the opportunity to completely offset their reported Scope 2 emissions and meet GHG emission targets even though they may still generate a significant amount of Scope 2 emissions.

The heightened focus in the marketplace on GHG emissions and the increasing linkage of GHG emission targets to compensation and bonuses make it important for companies to measure their GHG emissions accurately. Management and the board of directors may want to consider focusing on the GHG emission targets set by the company and the targets' potential impact on the company's financial or operational metrics or other risks within the company. Specifically, they may want to ask themselves the questions below.

1. Does the company have a process for measuring progress toward meeting (1) its GHG emission targets or claims or (2) other GHG emission goals?
2. What is the purpose of the GHG emission targets? Are these targets tied to the company's business strategy and overseen by the board?
3. Are the GHG emission targets linked to management's compensation or bonus structure? If so, how is the company ensuring that the GHG emissions are being accurately measured?
4. Does the company generate or purchase renewable energy credits to offset its Scope 2 emissions? If so, are the GHG emission targets established and monitored in consideration of renewable energy credits, which reduce the reportable Scope 2 emissions?
5. Do investors act on how the company is able to effectively reduce its GHG emissions? What factors do they consider?

How the GHG Protocol Is Transforming

The WRI and WBCSD have undertaken a process to gather feedback from stakeholders to refine, amend, and provide enhancements to the GHG Protocol standards and related guidance. Feedback was gathered in the first quarter of 2023, and revisions to the standards and guidance are expected to be issued in early 2025.

The WRI and WBCSD have released a webinar recording discussing their findings on Scopes 1 and 3, as well as a summary of findings on Scope 2. Key themes and points raised by stakeholders are summarized in the figure below.

Scope 1

Governance, Organization, and Alignment

Formalize governance over the GHG Protocol and standard development, and provide greater consistency and harmonization among the standards.

Organizational Boundaries

Explore whether the current level of flexibility in setting organizational boundaries is appropriate, or whether to make boundary setting more standardized.

Operational Boundaries

Determine whether to require Scope 3 emission reporting in certain circumstances, or whether the current flexibility in reporting is appropriate.

Tracking Emissions Over Time

Consider whether to require both a consistent base year across all scopes of emissions and a significance threshold, or whether the current requirements for reporting emissions over time are appropriate.

Verification and Assurance

Revisit the current verification and assurance requirements to determine whether to make changes to align them with other regulatory requirements.

Data Quality, Methods, and Reporting

Provide additional requirements, guidance, and updates for new technologies in connection with data quality and methods, including reporting considerations.

Scope 2

Maintain Dual Reporting Requirements or Require a Single Reported Number

Revisit the current reporting requirements to determine whether to maintain the current dual reporting (i.e., location-based and market-based), or whether to provide for the reporting of only one method.

Data Requirements and Market-Based Quality Criteria Requirements

Consider whether to provide specific requirements related to data quality to improve reporting and comparability, or whether the current guidance is appropriate.

Introduction of an Emission Impact Reporting Requirement

Since there currently is no meaningful way to report a company's impact on GHG emissions, a new reporting requirement is needed to alleviate this reporting gap.

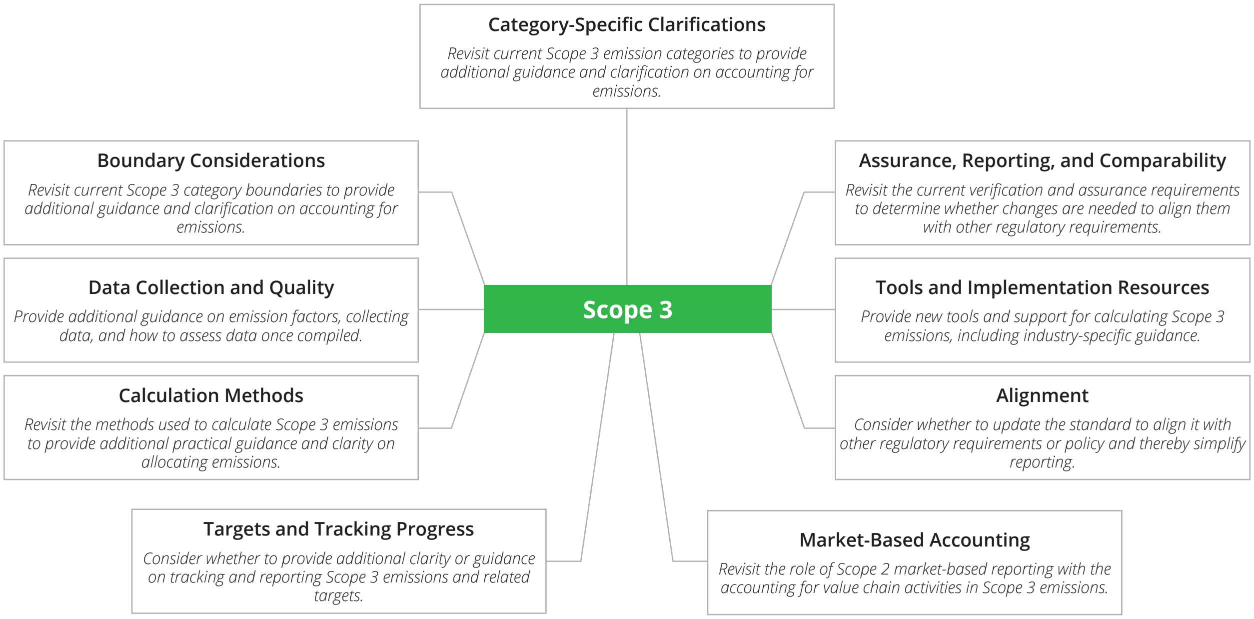
Guidance on New Technologies

Provide updated guidance on advancements in new technology.

Align With Policy, Regulatory, and Voluntary GHG Disclosure Programs

Consider whether to update the guidance to align it with other regulatory requirements or policies and thereby simplify reporting.

(Figure continued)



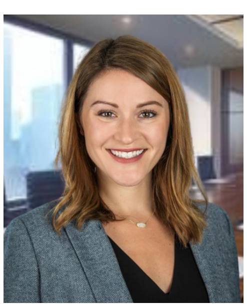
On the basis of the feedback provided to the WRI and WBCSD, a significant number of revisions to the GHG Protocol may lie ahead. Companies are encouraged to carefully monitor the activities of the WRI and WBCSD to stay informed of any developments related to implementation guidance and revisions.

Deloitte's Roadmap *Greenhouse Gas Protocol Reporting Considerations* discusses how companies account for and report GHG emissions under the GHG Protocol.

Contacts

Eric Knachel
Audit & Assurance
Partner
Deloitte & Touche LLP
+1 203 761 3625
eknachel@deloitte.com

If you are interested in Deloitte's service offerings related to the reporting of GHG emissions, please contact:



Jamie Davis
Audit & Assurance
Partner
Deloitte & Touche LLP
+1 312 486 0303
jamiedavis@deloitte.com

Dbriefs for Financial Executives

We invite you to participate in Dbriefs, Deloitte's live webcasts that give you valuable insights into important developments affecting your business. Topics covered in the Dbriefs for Financial Executives series include financial reporting, tax accounting, business strategy, governance, and risk. Dbriefs also provide a convenient and flexible way to earn CPE credit — right at your desk.

Subscriptions

To subscribe to Dbriefs, or to receive accounting publications issued by Deloitte's Accounting and Reporting Services Department, please visit My.Deloitte.com.

The Deloitte Accounting Research Tool

Put a wealth of information at your fingertips. The Deloitte Accounting Research Tool (DART) is a comprehensive online library of accounting and financial disclosure literature. It contains material from the FASB, EITF, AICPA, PCAOB, and SEC, in addition to Deloitte's own accounting manuals and other interpretive guidance and publications.

Updated every business day, DART has an intuitive design and powerful search features that enable users to quickly locate information anytime, from any device and any browser. Users can also work seamlessly between their desktop and mobile device by downloading the DART by Deloitte mobile app from the App Store or Google Play. While much of the content on DART is available at no cost, subscribers have access to premium content, such as Deloitte's *FASB Accounting Standards Codification Manual*. DART subscribers and others can also subscribe to *Weekly Accounting Roundup*, which provides links to recent news articles, publications, and other additions to DART. For more information, or to sign up for a free 30-day trial of premium DART content, visit dart.deloitte.com.

DART by Deloitte Mobile App

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/us/about to learn more about our global network of member firms.

Follow us @DeloitteAcctg