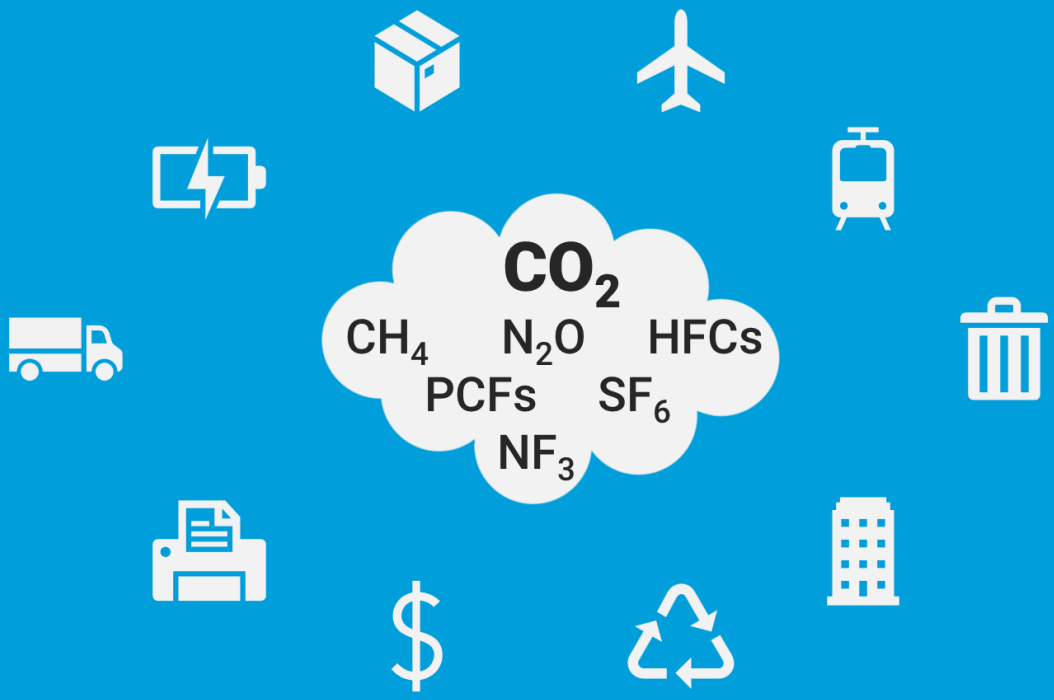
Scope 3 Emissions Accounting and Reporting for the United Nations System

Landscape of Methods and Organizational Practices, with a Case Analysis for Procurement

June 2024



GENEVA GRADUATE INSTITUTE

Authors:

Mohit Choube, Juhui Oh and Sebastian Zünd

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About the Report

This report is the outcome of an applied research project conducted by graduate students- Mohit Choube, Juhui Oh and Sebastian Zünd of the Geneva Graduate Institute (IHEID), Geneva, Switzerland, in collaboration with the UN Environment Programme's Sustainable United Nations (SUN) facility in Geneva. The research was conducted for a period of 19 weeks from 24 Feb 2023 to 07 July 2023 as a part of the curriculum of Master in International and development Studies (MINT) 2022-24 degree program of the Geneva Graduate Institute (IHEID), Geneva, Switzerland. Findings of this report were presented to the Scope 3 Task Team of the United Nations on 17 July 2023.

The authors of this report can be contacted on the following email IDs:

Mohit Choube (mohitc3610@gmail.com), Juhui Oh (juhui.oh@graduateinstitute.ch), Sebastian Zünd (s.g.zuend@gmail.com)

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Disclaimer

List of Acronyms

ABC	Association pour la transition Bas Carbone
ADEME	Agence de la transition écologique
ASR	Annual Statistical Report on United Nations Procurement
BCG	Boston Consulting Group
CAA	Climate Action Accelerator
CH	Switzerland
C3S	Copernicus Climate Change Service
DEFRA	Department for Environment, Food & Rural Affairs, the United Kingdom
EEIO	Environmentally Extended Input-Output
EFRAG	European Financial Reporting Advisory Group
EPEAT	Electronic Product Environmental Assessment Tool
ESG	Environmental, Social, and Governance
EU	European Union
GHG	Greenhouse Gas
GHGP	Greenhouse Gas Protocol
GHGP3	Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Standard
GLEC	Global Logistics Emissions Council
GRI	Global Reporting Initiative
HCC	Humanitarian Carbon Calculator
HSBC	Hongkong and Shanghai Banking Corporation Limited
IAEA	International Atomic Energy Agency
ICRC	International Committee of the Red Cross
IEA	International Energy Agency
IFRS	International Financial Reporting Standards
IHEID	Geneva Graduate Institute, Geneva, Switzerland
IMP	Inventory Management Plan
IPC	International Post Corporation
IPCC	Intergovernmental Panel on Climate Change
IR	Integrated Reporting Framework
ISO	International Organization for Standardization
ISSB	International Sustainability Standards Board
IT	Information Technology
LGA	Local Government Association, the United Kingdom
M&S	Marks & Spencer
MS	Microsoft
OECD	Organisation for Economic Co-operation and Development
PCAF	Partnership for Carbon Accounting Financials
SASB	Sustainability Accounting Standards Board

SBTi	Science Based Targets initiative
SEC	U.S. Securities and Exchange Commission
SSCA	Sustainable Supply Chain Alliance
SUN	Sustainable United Nations facility at UNEP
TCFD	Task Force on Climate Related Financial Disclosures
UK	The United Kingdom
UN	United Nations
UNSCEB	United Nations System Chief Executives Board
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
US	The United States
WBCSD	World Business Council for Sustainable Development
WFP	World Food Programme
WRI	World Resources Institute

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Executive Summary

The world is on course to miss the temperature targets set under the Paris Agreement, which will lead to widespread suffering and deprivation, and possibly societal collapse. Hence, it is critical to stabilize atmospheric greenhouse gas emissions. In this regard, the United Nations (UN) System has a special responsibility and opportunity, to lead by example and reduce its carbon footprint.

Accounting and reporting of GHG emissions is a crucial step in the decarbonization process. Currently, UN entities report Scope 1 and Scope 2 emissions as well as emissions due to business travel under the 'Greening the Blue' initiative of the United Nations Environment Programme (UNEP). Scope 3 emissions, however, are likely the main source of emissions for the UN System. While accounting and reporting of Scope 3 emissions can be challenging, it offers the opportunity to identify key sources of emissions, monitor emission trends, and enable targeted and effective mitigation measures.

This report aims to assist UNEP's Sustainable UN facility (SUN) and its task team for SCOPE 3 emissions in their future work, by assessing how and to what extent there can be a UN-wide approach for accounting and reporting of Scope 3 emission. The report provides a landscape of the accounting and reporting frameworks for Scope 3 emissions and related organizational practices in the UN as well as across organizations in different sectors. Moreover, it explores a major UN activity – procurement of goods and services, in greater detail through a case analysis with the aim to help the readers understand the approaches one might take for accounting and reporting of emissions from such activities. Our key findings and recommendations are drawn from desk research as well as key informant interviews and a survey which in total cover 23 UN entities, 4 humanitarian sector organizations and 4 subject-matter experts.

KEY FINDINGS	
Accounting & Reporting Methodologies	❖ The GHG Protocol is the most widely used methodology for Scope 3 emission accounting and reporting, followed by the ISO 14064:1 standard. Both methodologies are broadly consistent, leading to similar outcomes. ❖ Prevailing Scope 3 accounting approaches serve to identify key emission sources, monitoring, and target setting. They are not fit for the purpose of comparing emission data between entities. ❖ Scope 3 reporting mandates are expanding rapidly across the globe. France made Scope 3 reporting mandatory for major private and public organizations, Switzerland and the UK incorporated the Task Force on Climate Related Financial Disclosures (TCFD) recommendations into law. The EU adopted the "Corporate Sustainability Reporting Directive", which requires Scope 3 reporting for certain corporations. In the United States, the U.S. Securities and Exchange Commission (SEC) is consulting on climate disclosure rules, including a Scope 3 emission reporting mandate.

Organizational Practices	❖ For UN entities, the motivation for Scope 3 emissions accounting and reporting was both due to internal factors (e.g. entity's overall emissions reduction targets) and external factors (e.g. donors, member states, and the general public). ❖ Only two UN entities and two humanitarian organizations were found to have a specific target for reducing Scope 3 emissions. ❖ Many UN entities refer to GHG Protocol and/or Humanitarian Carbon Calculator for calculating Scope 3 emissions and setting organizational boundaries for reporting. ❖ Accessibility, reliability, and accuracy of data is a major challenge for UN entities. ❖ Many UN entities need additional human and financial resources to effectively implement Scope 3 accounting and reporting. ❖ Many UN and humanitarian organizations plan to expand Scope 3 emissions accounting and reporting ❖ There is a demand for more peer-learning opportunities across UN entities and humanitarian organizations, to share the outcomes, challenges and opportunities regarding Scope 3 emissions accounting and reporting.
Best Practices	❖ Some UN entities recognize the Humanitarian Carbon Calculator and Partnership for Carbon Accounting Financials as best practices. ❖ Private organizations adopt Scope 3 best practices like supplier engagement, capacity building programs, using tools like EPEAT, leveraging IT platforms, annually reviewing calculation methods, revising historical data, etc.

RECOMMENDATIONS

For UNEP's SUN Facility	✓ Create avenues for peer learning and knowledge sharing ✓ Develop a common accounting and reporting framework for the UN system ✓ Develop guidance specific to UN entities regarding reporting boundaries and their interpretation ✓ Build a database of emissions factors for the UN system ✓ Consider emerging accounting approaches such as E-liability ✓ Support the development of Science Based Targets for Scope 3 emissions reduction for all UN Entities ✓ Ensure senior-level buy-in ✓ Report Scope 3 emissions separately
For Organizations (UN and non-UN)	✓ Disclose accounting and reporting methodologies for Scope 3 emissions ✓ Focus on the most significant emission sources ✓ Engage with key suppliers ✓ Understand the limitations of accounting practices
For Academia	✓ Develop guidance on Scope 3 accounting and reporting for public and non-profit organizations ✓ Develop emissions factors for goods and services for different global regions

1. Introduction

Today, the world is in a state of "climate emergency" (UNEP, 2021). Due to increased greenhouse gas concentrations in the atmosphere, temperatures globally are increasing and breaking historic records. The average global surface air temperature at the beginning of June 2023 was the warmest on record (C3S, 2023a). Rising temperatures are increase the severity and frequency of extreme weather events, and melting glaciers and polar ice-caps which is increasing sea levels. As a consequence, there are disruptions in ecosystems, loss of biodiversity, and threats to food security, ultimately posing significant risks to human health and well-being (IPCC, 2022). Yet, under the "business as usual" scenario, current policies will lead to a 2.8°C temperature rise by the end of the century, exceeding the Paris Agreement's goal of limiting global warming to well below 2°C, and preferably under 1.5°C (UNEP, 2022).

Mitigating the impacts of climate change requires a comprehensive understanding of greenhouse gas emissions and their sources. In this context, the Greenhouse Gas (GHG) Protocol was jointly developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) in the late 1990s. It categorizes the greenhouse gas emissions of an organization into three scopes. Scope 1 refers to direct emissions from sources owned or controlled by an organization. Scope 2 refers to indirect emissions of an organization from the generation of the electricity purchased by it. Scope 3 refers to all indirect emissions including both upstream and downstream emissions (not covered by Scope 2) which occur in the value chain of the reporting organization (GHG Protocol, 2001).

Scope 3 emissions particularly hold significance in decarbonization because according to CDP (previously known as the 'Carbon Disclosure Project') they account for approximately 75% of total emissions across all sectors of businesses (CDP, 2022c). Moreover, Scope 3 emissions account for about 80% of total emissions in the humanitarian sphere (Salzenstein et al., 2022). As sources of Scope 3 emissions lie outside the direct control of an organization, it is often difficult to measure and reduce them. However, organizations are increasingly starting to account and report Scope 3 emissions (WRI, 2022).

In the public sector, the United Nations has been a torchbearer in generating knowledge on the status of climate change as well as facilitating intergovernmental negotiations for climate change mitigation. It established the United Nations Framework Convention on Climate Change which entered into force in 1994 and has a near-universal membership with ratifications from 198 countries. The UNFCCC has been instrumental in the negotiations of two key international treaties on climate change– the Kyoto Protocol in 1997 and the Paris Agreement in 2015 (UNFCCC, n.d.). Since the United Nations has been advocating for reduction of greenhouse gas emissions by countries and organizations, it also needs to lead by example, by accounting, reporting and reducing its carbon footprint.

In June 2007, the former UN Secretary General Ban Ki-moon had publicly called on all UN agencies, funds and programmes to become climate neutral. In 2008, the UN Environment Programme in Geneva established the Sustainable United Nations (SUN) facility to support UN System's efforts to measure and reduce its environmental impact. Since 2008, the UN system has been reporting its greenhouse gas emissions every year, under the "Greening the

Blue" initiative (UNEP, n.d.). In 2019, the United Nations System Chief Executives Board (UNSCEB) had endorsed the 'Strategy for sustainability management in the United Nations system, 2020–2030' with the first phase considering environmental sustainability in the area of management (UNSCEB, n.d.).

Under the 'Greening the Blue' initiative, UN entities currently report Scope 1 and 2 emissions, and only one category of Scope 3 emissions (business travel) out of the fifteen categories[1] described in the GHG Protocol (GtB, 2022) because business travel was the most critical and methodologically homogeneous to track. While some UN entities find it difficult to account and report their Scope 3 emissions due to issues related to the availability, quality or appropriateness of data, other entities find it challenging to adopt major Scope 3 accounting and reporting methodologies like the GHG Protocol and ISO 14064-1. This is because most methodologies were designed for businesses, while the operations of UN entities are similar to those in the public and humanitarian aid sector and involves non-commercial activities.

Therefore, there are three needs to be met at the UN: (1) getting a holistic view of the Scope 3 accounting and reporting methodologies used by organizations globally across different sectors, (2) understanding the challenges UN agencies face in Scope 3 emissions accounting, including those related to adopting the well-recognized methodologies and reporting standards, and (3) identifying good practices of organizations in the humanitarian, academic and private sectors, which could be adopted by UN entities.

In response to these needs, this report aims to support the efforts of the UNEP's SUN facility in exploring methodologies of Scope 3 emissions accounting and reporting practices by entities within the UN system. The report provides a landscape of the key accounting and reporting frameworks for Scope 3 emissions, the organizational practices inside and outside the UN system and best practices. In addition, the report provides a case analysis on the procurement activities of the UN system and the applicability of key accounting and reporting guidelines for Scope 3 to the same. The final section of this report provides recommendations for UNEP's SUN facility, the organizations accounting and reporting Scope 3 emissions, as well as for academia.

[1] The GHG Protocol identifies 15 categories of Scope 3 emissions:
1) Purchased goods and services, 2) Capital goods, 3) Fuel- and energy related activities, 4) Upstream transportation and distribution, 5) Waste generated in operations, 6) Business travel, 7) Employee commuting, 8) Upstream leased assets, 9) Downstream transportation and distribution, 10) Processing of sold products, 11) Use of sold products, 12) End-of-life treatment of sold products, 13) Downstream leased assets, 14) Franchises, 15) Investments

Research Method

This section aims to provide an overview of the research methodology and sources of data used in this report, provides rationale behind the choice of methodology, and acknowledges the limitations that could be addressed by future research.

Research Process

The basic scope and objectives of this study were proposed by UNEP, which were then refined in an iterative process with the authors of this report and with input from UN's Scope 3 Task Team.

The intricacies of Scope 3 accounting and reporting, along with a broad scope of research, posed a key challenge to the authors in approaching the research questions. In order to provide concrete suggestions as well as portray an accurate holistic view of where UN agencies stand with regards to Scope 3 emissions reporting, the authors pursued a landscaping approach by first developing an overview of existing Scope 3 accounting and reporting methodologies and standards, and then looking into the organizational practices. Additionally, a case analysis concerning the UN entities' procurement activities was developed to complement the landscaping exercise.

The authors began by conducting a non-systematic scoping review of the literature based on desk research of publicly available information. The authors assessed existing standards and guidelines on Scope 3 accounting and reporting and reviewed the corresponding academic literature. The authors then examined emissions reports of different organizations across sectors (private, public, humanitarian, and academia) to identify good practices and challenges.

Subsequently, the authors collected primary data via an online survey among UN entities and semi-structured key-informant interviews with individuals from UN entities, humanitarian organizations, and standard-setting bodies. These data collection methods were designed to work in tandem. Both cover the same themes. While the survey provides a cross-section of the practices and experiences of UN entities, the key-informant interviews provide in-depth knowledge, including from experts outside of the UN system.

The authors drafted the framework and questions for key-informant-interviews and survey with the help of feedback received from UNEP and the Scope 3 Task Team. UNEP facilitated the interviews with UN personnel involved in the annual greenhouse gas inventory process, while the authors organized interviews with personnel involved in sustainability initiatives at humanitarian organizations as well as with subject-matter experts. UNEP had circulated the survey among the Greening the Blue focal points of UN entities.

Lastly, the authors conducted a case analysis on the applicability of existing guidelines to UN entities' procurement activities. The aim was to enhance the landscaping exercise by zooming in on one key activity which is common to all UN entities. The authors chose procurement because it likely makes up one of the major sources of GHG emissions for the UN system.

Data Sources

The data sources underlying this report broadly correspond to three categories: desktop research, key-informant interviews, and the on-line survey with UN entities.

Data relating to desktop research involves standards and guidelines on Scope 3 accounting and reporting, organizational GHG emissions reports as well as academic and non-academic (websites, newspaper articles, reports, etc.) documents about Scope 3 accounting and reporting. This type of data was primarily accessed through keyword searches on Google, Google Scholar, and Swisscovery. In addition, some documents were also provided by UNEP.

15 key-informant interviews were conducted. All interviewees and their organizations have been anonymized in this report. The interviewees belonged to one of the following three groups:

1. Personnel from seven UN entities (referred to as UNEntity_1, UNEntity_2, etc.)
2. Personnel from four humanitarian organizations (referred to as HumanitarianOrg_1, HumanitarianOrg_2, etc.)
3. Four subject-matter experts who have been involved in the development of GHG emissions accounting and reporting methodologies at leading international standard-setting organizations as well as academia (referred to as SubjectExpert_1, SubjectExpert_2, etc.).

All interviews followed a semi-structured style. While the interview framework and questionnaire were strictly followed for group 1, questions for groups 2 and 3 were adjusted to match the unique background and expertise of the interviewees.

The survey was circulated among the 53 focal points of the Greening the Blue team. Among those, 20 UN entities responded to the survey. The survey comprised a mix of multiple choice, Likert scale, and open-ended questions. The framework and questions for key-informant-interviews and survey are provided in Annexure-2.

Limitations

This research faced limitations in terms of data availability and lack of academic literature. In total, this study captures the Scope 3 accounting and reporting practices of 23 UN entities. While the authors tried their best to capture representative data by circulating a survey and requesting interviews across the UN system, some UN entities could not be captured, especially those that are less engaged in sustainability and matters related to Scope 3. Therefore, the sample of data can be expanded in a future research to generalize results. With regards to secondary data, there is a marked lack of literature on accounting of GHG emissions for non-corporate entities, particularly regarding public and humanitarian organizations. While this is part of what motivated this research, it poses limits in terms of the theoretical foundations.

2. Background

The GHG Protocol introduced the concept of scopes in the GHG Protocols revised version published in 2004. The accounting and reporting of Scope 3 emissions have been steadily gaining attraction since 2011 when the GHGP Corporate Value Chain Accounting and Reporting Standard (GHGP3) was published. Nevertheless, it has not yet reached the level of acceptance of Scope 1 and 2 reporting (Patchell, 2018). Scope 3 emissions correspond to the Scope 1 emissions of other organizations. This leads to duplicative counting, meaning that different organizations include the same emissions in their inventory (Shrimali, 2021). Consequently, careful reporting of Scope 3 emissions is necessary, particularly regarding data aggregation.

To account and report Scope 3 emissions, organizations must set inventory boundaries. There are two types: namely operational (or reporting) boundaries and organizational boundaries. Whereas operational boundaries determine the *emissions* associated with an organization's operations that are to be included in the inventory, organizational boundaries determine the *operations* owned or controlled by the reporting organization (GHGP3, 2011).[1] To demarcate organizational boundaries, there are three so-called consolidation approaches: equity share, financial control, and operational control. While under the equity share approach, an organization accounts for emissions according to its share of equity in the operation, under the two control approaches, an organization accounts for 100% of the emissions under either financial or operational control. Setting inventory boundaries poses major challenges, especially for non-commercial activities with fluid boundaries.

Prevailing Scope 3 reporting practices face criticism regarding comparability, systematicity, accuracy, and greenwashing (Patchell, 2018; Klaaßen and Stoll, 2021; Ramanna and Kaplan, 2021; Jia, 2023). Given that organizations need to report on emissions over which they have only partial control, organizations commonly resort to estimations based on industry or sector-specific averages.[2] Additionally, reporting organizations have large discretion over inventory boundaries (Nguyen et al., 2022). This leads to inconsistent and incomplete reporting and high measurement errors, resulting in missed opportunities for climate action. It also opens the door for bias and corporate greenwashing. A study conducted by Klaaßen and Stoll (2021) concludes that emission data disclosed in corporate reports omit on average half of the total emissions.

Scope 3 accounting and reporting is a long-term process that requires continuous improvements. Current approaches are suitable for identifying key emissions sources, monitoring emission trends, and target setting. However, they are not fit for the purpose of making comparative assertions between emission estimates of different reporting organizations (GHGP, 2011; Klaassen, 2011; Jia, 2023). The utility of Scope 3 reporting in mitigation efforts depends on the granularity of the data (Interview of SubjectExpert_4, 2023; Klaaßen and Stoll, 2021). If data is product or supplier-specific, organizations can reduce emissions by shifting towards more sustainable alternatives instead of avoiding carbon-intensive activities altogether.

3. Landscape of Accounting and Reporting Frameworks

This section provides a landscape of the relevant accounting and reporting frameworks for the UN system. The first part begins with a comparison of the core methodologies, which could provide the foundation for a UN's Scope 3 inventory, followed by relevant sector-specific tools and guidance. The second part examines the regulatory environment and describes the key existing and prospective governmental policies concerning Scope 3 reporting. The last part disentangles the web of voluntary disclosure programs and other initiatives, providing a brief description of each program.

A. Methodologies for Scope 3 Accounting and Reporting

Principal Methodologies

There are two principal sets of methodologies for organizational GHG reporting, the Greenhouse Gas Protocol[2] and ISO 14064-1[3,4]. Both are based on methods from the IPCC's guidelines for national GHG inventories (Jia 2023). Other methodological documents generally build upon these frameworks. Furthermore, fundamentally different approaches are also emerging, like the E-liability method.

The Greenhouse Gas Protocol (GHGP) is the dominant reporting framework. It has come to define the language and practices of GHG emissions reporting (ex. Harangozo and Szigeti, 2017). Under the GHGP, organizations have large discretion on *whether* and *which* Scope 3 emissions to report (Nguyen et al., 2022). If organizations opt to report Scope 3 emissions, the GHG Protocol provides 15 distinct emission categories.[5] Each category has a corresponding minimum boundary of activities that need to be included.[6] The GHGP permits excluding emissions due to lack of data or other limiting factors. However, omissions should not compromise the relevance of the inventory, and it is important that organizations document and justify omissions (GHGP, 2011). It is noteworthy that the GHGP standards and guidance are undergoing revision, with the updated version expected to come into force in 2025 (GHGP, 2023).

The GHGP and the ISO frameworks, though different in certain minor areas, are largely consistent and complementary (Klopsch, 2022). One notable difference is that the ISO mimics financial reporting and appears like a balance sheet with analogue line-item classification (ISO, 2022b). The reasons behind GHGP's success are mostly practical: GHGP appeared first,

[2] For Scope 3 emissions accounting and reporting relevant are in particular: the Corporate Value Chain Accounting and Reporting Standard (2011) and the Technical Guidance for Calculating Scope 3 Emissions (2013).
[3] In addition to ISO 14064-1:2018, the ISO provides a technical report ISO/TR 14069:2013, which details principles, concepts and methods relating to the quantification and reporting of direct and indirect emissions.
[4] For an overview of all relevant documents related to the GHGP and the ISO framework see Annexure-1.
[5] For an overview and comparison of the GHGP's, ISO's, and the Human Carbon Calculator's emissions categorization see Annexure-3.
[6] For an overview of the GHGP's Scope 3 emissions reporting categories and the corresponding minimum boundaries and calculation methods see Annexure 4.

is freely available, and is perceived as more accessible (Wiegmann et al., 2022). In contrast, the ISO framework is the product of an internationally more inclusive process (ISO, 2023; Interview of SubjectExpert_3, 2023) spearheaded by a UN entity. Furthermore, the two frameworks vary in function. While the GHGP's emphasis is on providing streamlined guidance on how to account for GHG emissions, the ISO sets minimum requirements and principles for reporting, without detailing the specific methods (Wiegmann et al., 2022; Interview of SubjectExpert_3, 2023).

The E-Liability method is a cutting-edge alternative developed by professors from Harvard and Oxford, George Kaplan and Karthik Ramanna (E-Liability Institute, n.d.; Kaplan & Ramanna, 2021, 2022, 2023). It is not standard per se, but an accounting algorithm using standard cost-accounting techniques based on balance sheets. Analogous to value-added calculations, each organization allocates its E-liabilities (Scope 1 emission) to individual products. When a product is sold (or transferred), the price includes not only the manufacturer's price but also the product's aggregated E-liabilities (UNISOT, n.d.). The E-liability logs are stored in a public blockchain. The approach seeks to address the deficiencies in traditional accounting of GHG emissions which is based on imprecise sector-specific averages, and replaces it with arm's-length and auditable Scope 1 transactions. It eliminates duplicative emission counting and reduces incentives for gaming and manipulation (Kaplan & Ramanna, 2023). The E-liability method is in the public domain and is currently in the pilot phase.

Complementary Sector-Specific Methodologies

There is a wide array of sector-specific tools and guidance available that complement or help implement the GHGP and ISO 14064. This section is confined to the most relevant for the UN, the Humanitarian Carbon Calculator (HCC), the Global Logistics Emissions Council (GLEC) Framework, and the Partnership for Carbon Accounting Financials (PCAF) standards.[7]

The Humanitarian Carbon Calculator is an accounting tool to measure direct and indirect GHG emissions associated with the activities of humanitarian organizations. The HCC was developed under the umbrella of the Sustainable Supply Chain Alliance (Climate Charter, n.d.), led by the ICRC. The HCC comes in an MS Excel file, where an organization's activity data can be inserted (ICRC and al., 2023a). Based on a database of over 600 emissions factors, the HCC provides an estimate of GHG emissions as well as a quality score, which depends on data and emission factor uncertainty. The HCC's methodology is based on the GHGP. However, it designates certain emission categories as irrelevant and adds subcategories to the purchased goods and services category (in-kind donations, cash assistance, financial support). Moreover, it adds a new category measuring the downstream emissions of the aforementioned subcategories.[8] The methodological guide (ICRC and al, 2023b) also assigns priority levels to the categories[9], which reflect both the likely significance and feasibility (ICRC representative, interview, 2023). Additionally, there is an aggregation tool that allows to aggregate the results of currently up to 30 sub-entities. (ICRC and et al., 2023c).

The GLEC Framework (Smart Freight Centre, 2014) is a methodology for GHG emissions calculations and reporting that aims to harmonize the efforts of the logistics sector. The

[8] For an overview and comparison of the GHGP's, ISO's, and the Human Carbon Calculator's emissions categorization see Annexure 3.
[9] See Annexure 4.

framework is aligned with the GHG Protocol. It provides guidance on setting operational boundaries, base calculation methodologies, and necessary considerations. In addition, the GLEC provides logistic-specific emissions factors and default carbon intensity values. Furthermore, a large part is devoted to how to use calculation results, both in terms of reporting and mitigation policies. The GLEC Framework emphasizes the calculation of emissions intensity values.

PCAF pursues setting global accounting and reporting standards for the financial industry. PCAF issued standards on *financed emissions* (PCAF, 2020) and *insurance-associated emissions* (PCAF, 2022). An additional one on *facilitated emissions* will be published shortly. The standards are in line with the GHG Protocol and provide detailed guidance on accounting and reporting investment activities (GHGP category 15), including on project financing. PCAF could play a significant role in developing a consistent approach within the UN (WB representative, interview, 2023).

UN-Specific Methodologies

In addition to the general frameworks, UN entities also refer to internal documents, most notably the UN Inventory Management Plan (IMP) (SUN, 2023). The IMP details the UN's inventory process with the aim of monitoring and mitigating the UN System's environmental footprint. Furthermore, the IMP recommends that each UN entity develops an entity-specific IMP. Apart from GHG emissions, the IMP also concerns water and waste footprints. The IMP's GHG emissions reporting is based on the GHGP methodology. The IMP includes UN-specific and detailed guidance on timeframes, personnel, facilities. According to the IMP, UN entities should include activities in their organizational over which the UN has financial and/or operational control.[10] In departure of GHGP's Scope, the IMP also includes Montreal Protocol gases with global warming potential. Regarding Scope 3 emissions, only business travel falls within the UN inventory's common minimum boundary. The inclusion of additional Scope 3 emissions categories is optional. The IMP contains a list of optional Scope 3 categories, which omits GHGP categories 13 (downstream leased assets), 14 (franchises), and 15 (investments).

Although only Scope 3 emissions related to business travel have been publicly reported, several UN entities are undertaking efforts to calculate additional Scope 3 emissions. Prior to our research, UNEP conducted a stock-taking exercise in February 2023 based on interviews with five focal points from the Working Group on Environmental Sustainability in the Area of Management. This exercise provides a partial assessment of the state of play, and is a starting point for the research undertaken for this report.

[10] In contrast, the GHGP advises to choose either one or the other.

B. Governmental Policies

From a regulatory perspective, Scope 3 emissions reporting has been overwhelmingly voluntary. However, the policy landscape is rapidly changing. The European Union adopted the "Corporate Sustainability Reporting Directive," which will make comprehensive Scope 3 emissions reporting mandatory for public-interest companies with more than 500 employees. The rules will apply starting from the 2024 financial year. On 6 June 2023, EFRAG (2023) opened for consultation the first set of draft standards. The standard gives preference to the GHG Protocol but allows for reporting based on ISO 14064.

In the United States, the Securities and Exchange Commission (SEC) is finalizing rules on carbon-related disclosures, including mandatory Scope 3 reporting. In the draft rules (SEC, 2022) published, any company that files documents with the SEC ("registrants") would be required to disclose Scope 3 emissions if material or if the registrant has set a GHG emissions target or goal that includes Scope 3 emissions. The draft rules provide flexibility in terms of accounting approach, but the rules were drafted explicitly with the GHG Protocol in mind.

Furthermore, France already has rules in force since the start of 2023 that mandate the reporting of Scope 3 emissions for companies, public establishments, and local authorities of a certain size.[11] The relevant legislation (Décret n° 2022-982) requires coverage of 80% of total emissions. Most GHG emissions reporting in France is undertaken primarily based on the Bilan Carbon® standard, which in turn heavily relies on ISO 14064-1.

In the UK, although Scope 3 reporting is strongly recommended, only Scope 3 emission related to business-travels have been included in direct emission disclosure mandates. This being said, the UK has rendered mandatory the alignment of publicly quoted and large private companies with TCFD recommendations in 2022. The TCFD framework asks for the disclosure of Scope 3 emissions if material and refers to GHG Protocol as the relevant methodology. The same is the case in Switzerland, where the implementation of TCFD recommendations will become binding for large companies beginning from 1 January 2024.

[11] (1) Companies with more than 500 employees are subject to the DPEF. (2) Local authorities with over 50,000 inhabitants. (3) Public establishments with more than 250 employees.

C. Voluntary Disclosure Frameworks & Related Initiatives

In addition to the standard-setting organizations mentioned prior, there exists a complex network of non-governmental organizations and initiatives that provide services related to GHG emissions accounting and reporting. These services involve disclosure platforms, industry-specific recommendations, and assistance for organizational emissions accounting and reporting. A non-exhaustive overview is provided in the table below.

Table-1: Overview of Voluntary Disclosure Frameworks and Related Initiatives

Organization/ Program	*Description*
CDP	**Carbon Disclosure Programme:** The largest global GHG emissions disclosure system and database for investors, companies, cities, and regions. (CDP, n. d.)
TCFD	**Task Force on Climate Related Financial Disclosures**: Provides recommendations to standardize climate-related disclosures. Recommends "if appropriate" Scope 3 emissions disclosure (TCFD, n. d.). The recommendations are mandatory for large companies in certain jurisdictions (UK, CH).
IR / **ISSB** / **IFRS**	**International Financial Reporting Standards Foundation:** Non-profit organization overseeing financial reporting standard-setting. **International Sustainability Standards Boards**: Standard-setting body established in 2021 under the IFRS foundation. Develops sustainability-related reporting standards designed to disclose financially-material information to investors. Its standards will require Scope 3 reporting starting from 2023 (ISSB, 2022).
SASB	**Integrated Reporting Framework:** Provides a reporting framework for corporations that integrates financial and other relevant values, including environmental information. **Sustainability Accounting Standards Board**: SASB Standards provide industry-specific sustainability standards and supporting material for their implementation. They are complementary to the TCFD recommendations.
GRI	**Global Reporting Initiatives:** Standard-setting organization that provides widely used sustainability reporting standards (e.g., on ESG reporting), including one on GHG emissions based on the GHG Protocol (GRI 305: Emissions 2016).
SBTi	**Science Based Target initiative**: Helps corporations set emission reduction targets in line with climate science. Developed the Corporate Net-Zero Standard.
Carbon Trust	**Carbon Trust:** UK-based organization that assists organizations in climate mitigation efforts. It also provides voluntary carbon certification services and labelling schemes.
CAA	**Climate Action Accelerator:** Geneva-based non-profit assisting in particular humanitarian organization with GHG accounting, as well as decarbonization roadmaps and solutions.

4. Landscape of Organizational Practices

This section describes the landscape of organizations' practices regarding Scope 3 emissions accounting and reporting. The first part, based on the interviews and survey, examines the current practices, attitudes, and experiences of UN entities and humanitarian organizations. The second part contains an overview of organizational practices across sectors, including a compilation of best practices in the private sector. The third and last part summarizes the key insights gathered from the interviews of subject matter experts.

A. UN Entities and Humanitarian Organizations

Main findings

- The motivation for Scope 3 emissions reporting was both internal and external for UN entities - internal motivation being the ability to align with GHG emissions reduction targets by monitoring Scope 3 (which is one of the major sources of emissions), and external motivation being meeting up to the expectations of the general public, member states and other partners, due to UN's significant presence in international governance.
- Only two UN entities and two humanitarian organizations have a specific target for reduction of Scope 3 emissions. There is a general trend that many UN entities refer to GHGP and HCC to calculate Scope 3 emissions and set the boundaries of reporting.
- While comparability across UN entities' emission estimates should not be the purpose of Scope 3 emissions reporting, coherence in emission factors and reporting boundaries are valuable.
- The biggest challenges in Scope 3 emissions accounting and reporting are technical challenges, in particular the accessibility, reliability, and accuracy of data. Also, the lack of human resources and financial support deter UN entities from providing a more detailed breakdown of their Scope 3 emissions.
- Many UN and humanitarian organizations plan to expand Scope 3 emissions reporting and there is a high demand for more peer-learning opportunities across UN entities (and humanitarian organizations) to share the outcomes, challenges and opportunities related to Scope 3 emissions accounting and reporting.

i. Motivation for Scope 3 emissions reporting

Our key informant interviews reveal that the primary motivation for Scope 3 emissions reporting is the overall reduction of greenhouse gas emissions for mitigating climate change. UNEntity_5 mentioned that while Scope 3 emissions reporting is an option in GHGP, in view of the interviewee it is no longer optional for large international organizations.

While we asked about intrinsic motivation during our interviews, in the survey we asked UN entities if there are any external factors or pressures contributing to their motivation for Scope 3 emissions reporting. There were three main external reasons: (1) public perception, (2) request from donors, member states, auditors, staff or partners, and (3) a will to align with

UN's environmental agreements (ex. UNFCCC, Paris Agreement) or initiatives (Greening the Blue, SUN, and Annual Environmental Sustainability Report).

Furthermore, the interview queried about the benefits of Scope 3 reporting. Aside from climate change mitigation, the most common responses included identifying the distribution of emissions and monitoring emission trends/long-term impact assessment. HumanitarianOrg_1 also mentioned the benefits of Scope 3 reporting in raising awareness within the organization and connecting different departments.

ii. Current Status of Reporting

1) Scope 3 Emissions Reduction Target

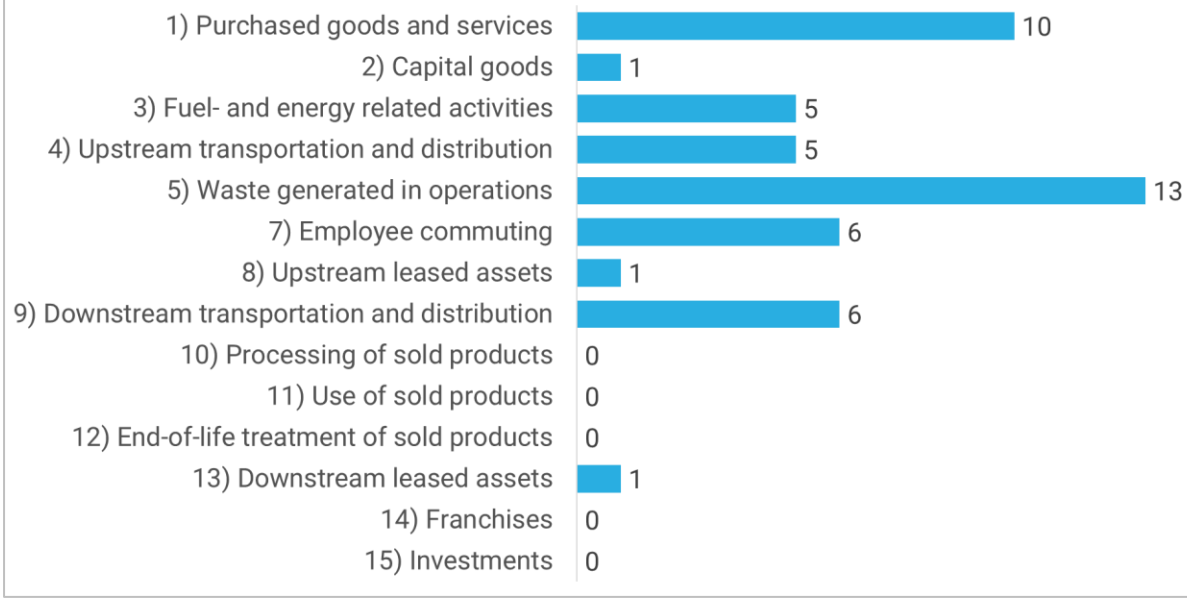
With regards to the specific reduction targets for Scope 3 Emissions, while most organizations covered through interviews had concrete targets of overall emissions reduction (Scope 1, 2 or all, which they aim to meet by the end of the decade or two), only UNEntity_5 and HumanitarianOrg_3 had concrete targets for Scope 3 emissions reduction. Also, HumanitarianOrg_1 had a general target of reducing 50% of Scope 3 emissions by 2030. These targets were often set in collaboration with the SBTi.

Our survey showed a similar result. Personnel from only one UN entity stated that they had a concrete target of reducing Scope 3 emissions - by 30% by 2025 and 45% by 2030, while two UN entities reported that they are working to identify their Scope 3 targets.

2) Coverage

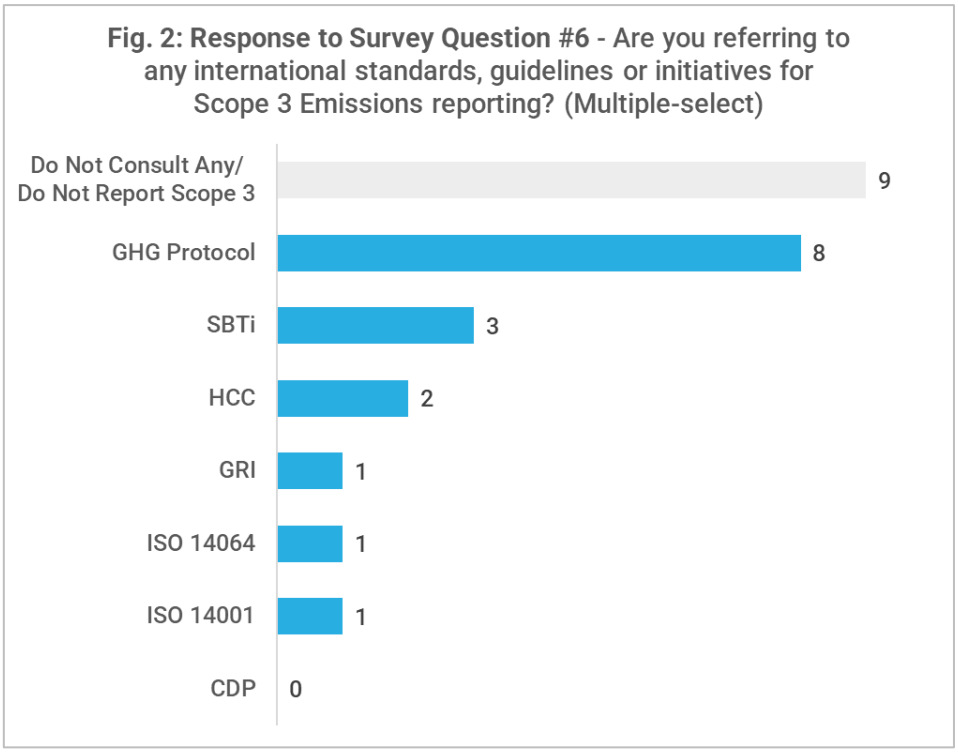
Fig. 1 shows survey results for the different categories of Scope 3 emissions activities addressed by UN entities, other than business travel. 'Waste from Operations' was at the highest (13 out of 20 UN entities) followed by 'Purchased Goods and Services' (10 out of 20 UN entities). None of the surveyed entities were reported to be involved in franchise, end-of-life treatment of sold products, using of sold products, and processing of sold products.

Fig. 1: Response to Survey Question #4 - What types of Scope 3 emission categories apart from business travel does your organization address? (You can choose more than one option)



3) Accounting and Reporting Methodologies and Alignment with International Standards

In terms of reporting methodologies, organizations used a wide array of methodologies for quantifying emissions. For example, HumanitarianOrg_1 conducted a life-cycle analysis. UNEntity_4 used an internal footprint assessment tool, while UNEntity_1 used a mix of different methodologies, except for business travel, for which all the UN entities are already provided with an internal calculation tool.

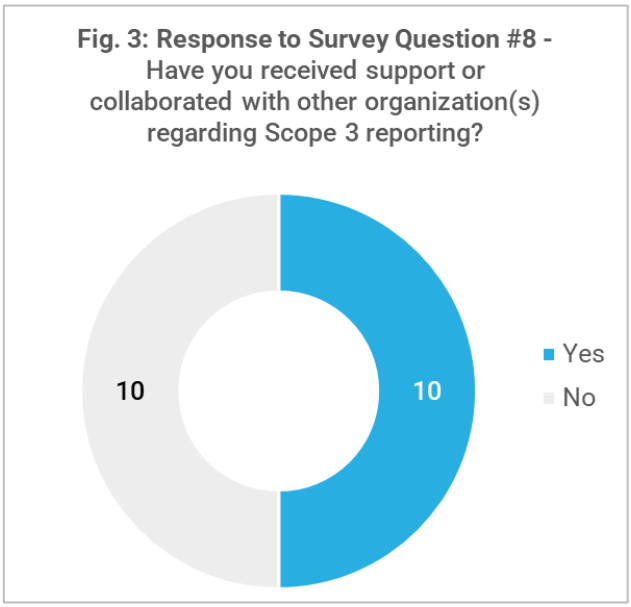


Most UN entities that made reference to one of the core accounting standards referred to the GHG Protocol instead of ISO 14064. Moreover, HumanitarianOrg_3 and HumanitarianOrg_4 mentioned that GHGP is very thorough and useful to identify different categories of Scope 3 Emissions. In terms of complementary methodologies, many humanitarian organizations consulted the Humanitarian Carbon Calculator. UNEntity_5 referred to PCAF while many other UN entities referred to the GLEC framework.

The answer to the follow-up question on the difficulty of applying common reporting methodologies may explain this trend. When we asked how easy it is to apply common reporting methodologies like GHG Protocol, ISO 14:064, etc. to each organization's activities, 2 out of 9[12] reported that it is very difficult, 1 said difficult, 4 were neutral, and none reported it to be easily applicable. This result implies that many adjustments need to be made in the international Scope 3 emission reporting guidelines, for them to be easily adopted by organizations in the public and humanitarian sectors.

[12] It is out of 9 responses because we left this question as optional and made respondents answer only if their organizations have Scope 3 Emissions reporting in place.

For Scope 3, UN entities usually collaborate within the UN community, e.g., Greening the Blue, the SUN facility and the Scope 3 Task Team. Some entities also mentioned that they have consulted with private organizations.



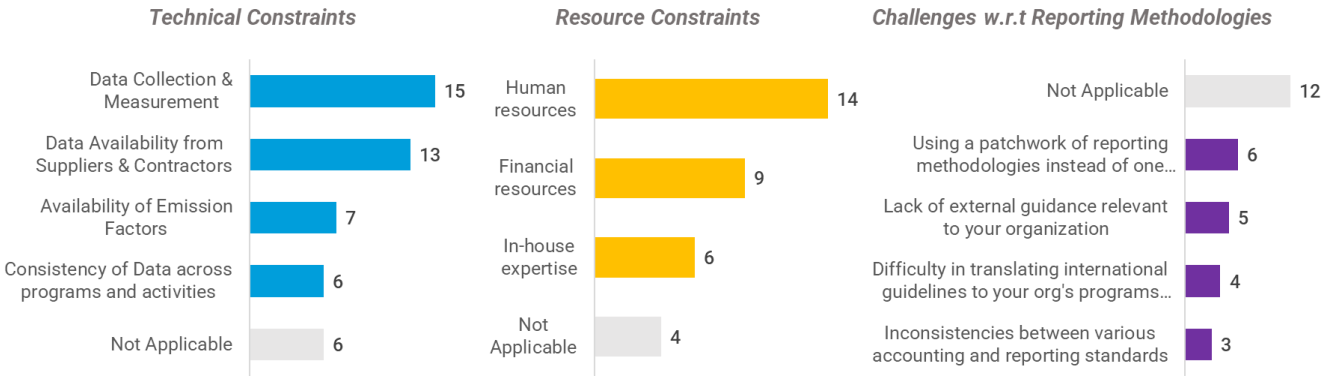
iii. Organizational Boundaries

The majority of UN entities and humanitarian organizations interviewed raised no particular concern regarding the demarcation of organizational boundaries. However, few entities have a deliberate policy as to the emissions associated with which operations count towards the inventory. In terms of general approach, no entity stated that they employ the equity share approach. Entities use either financial control or a mix of financial and operational control to set their boundaries. As a consequence, what Scope 3 emissions are included or not varies between entities. For instance, UNEntity_1 conducted an exercise to account Scope 3 emissions from infrastructure under their control. However, opting for the operational control approach meant the exclusion of emissions related to project-financing, which is one of the entity's core activities. For humanitarian organizations, in particular where the procurement and supplies of goods and services are done without external collaborators, some mentioned that they count all estimated Scope 3 emissions where data is available in accordance with GHGP or HCC. This aligns with the trend shown in our survey where 11 out of 20 UN entities responded that a criterion to set the reporting boundaries is “unknown” or they are “not reporting yet” while 5 use operational control and 2 use financial control.

iv. Challenges

All the organizations shared the challenges they face with Scope 3 emissions reporting, whether that be technical, resource-related, or challenges related to reporting boundaries. Fig. 4 shows survey response by 20 UN entities.

Fig. 4: Response to Survey Question #11- Are there any challenges that you are facing in your work addressing and/or reporting Scope 3 emissions in your organization? *(You can choose more than one option within each section)*



1) Technical Challenges

According to the interviews, there were two main types of technical challenges: (1) lack of reliable and complete data and (2) absence of precise emission factors.

The lack of precise and comprehensive data may lead to the exclusion of material emission sources or high uncertainties regarding emission estimates. This is particularly acute for entities that do not operate in office settings and have widely dispersed staff. The problem is amplified by a lack of specific and up-to-date emission factors and because emission factors are in-general tailored for certain, mostly highly developed regions of the world. This poses a problem not only in the accuracy of emissions estimated but also makes it difficult to track the impact of sustainability measures.

One example provided by UNEntity_7 regarding the first type of technical challenge was the lack of data on land transport. Since this entity works a lot with suppliers, to estimate GHG emissions accurately they need data on the vehicle (vehicle age, vehicle type, fuel type) as well as the kilometers travelled, which is often not available and cannot be cross-checked.

An example of the second type of technical challenge can be drawn from HumanitarianOrg_4. According to GHGP, there is only one emissions factor regarding medical equipment. However, since HumanitarianOrg_4 often provides various types of medical kits, its personnel mentioned that a variety of emission factors on different medical equipment will help more accurate reporting of Scope 3 emissions and prevent the issue of over-simplification.

Other than these two challenges, HumanitarianOrg_1 also mentioned that measurement of cash (money given to beneficiaries) and consequent emissions are hard to track as there is no coherent guide on how to calculate this type of emissions. Furthermore, UNEntity_3 voiced concerns about the exclusion of emissions related to working from home.

As observed numerically in the survey in Fig. 4, the most prevalent technical challenges were data collection & measurement (relevant to 15 out of 20 UN entities), followed by data availability (13 out of 20 UN entities), availability of emission factors (7 out 20 UN entities), and consistency of data across programs and activities (6 out 20 UN entities).

2) Resource Constraints

Most of the organizations highlighted the importance of having a full-time employee for emissions reporting within an organization or a GHG emissions accounting expert specifically for field activities. Many interviewees mentioned that technical challenges need to be addressed first as compared to resource-constraints (whether financial or human-resources). In terms of challenges related to resource constraints, in the survey of 20 UN entities, 14 mentioned that they are struggling with lack of human resources, 9 with lack of financial resources, and 6 with lack of in-house expertise.

3) Reporting Boundaries

When asked about challenges regarding methodologies on reporting boundaries, 12 out of 20 UN entities answered 'not applicable,' followed by 6 entities responding 'Using a patchwork of reporting methodologies instead of one coherent method' and 5 responding 'Lack of external guidance relevant to organization'. 4 UN entities also identified 'Difficulty in translating international guidelines to your organization's programs and activities, while 3 UN entities identified "Inconsistencies between various accounting and reporting standards" as the main challenges.

To tackle these challenges, UN entities hope to have support from Sustainable United Nations (SUN) facility on - (1) consistent and reliable guidelines on Scope 3 emissions factors and boundary setting that are aligned with UN-specific activities (or even a concrete suggestion on which existing guideline to refer to), and (2) Training within the UN system (workshops, etc.) as well as knowledge exchange across different UN entities (i.e. peer-learning opportunities).

The importance of collaborative action to address the challenges faced were highlighted in the interviews with humanitarian organizations as well.

Also in the survey, we asked all UN entities to give preference, in terms of priority between (a) comparability of emissions data across UN entities and (b) providing flexibility to organizations to choose reporting methodologies which suit them best. 14 out of 20 responded that comparability of emissions data should be prioritized, while only 5 chose (b).

v. Future Plans

According to the survey, few UN entities have concrete plans to expand work on Scope 3 emissions, yet all of them are interested and some efforts have been discussed within each organization. One UN entity, for example, has developed guidance on how to measure Scope 3 emissions for telecommunication operators.

Since Scope 3 emissions reporting includes many activities and a variety of categories (15 according to GHGP), we also asked our interviewees to identify activities that would be relatively easier and significant to start Scope 3 emissions reporting on. For easier activities, many organizations chose "business travel" due to easier access to data (flight ticket price, miles explored, etc.) and existing calculation methods within the UN in this category. UNEntity_1 identified infrastructure, procurement, and waste management as possible good starting points. HumanitarianOrg_2 pointed out that the purchase of services and goods might be easier to report as well since they are based on financial accounts. In terms of significance, while many organizations declined to answer due to uncertainty of their current progress, UNEntity_1 and UNEntity_3 highlighted the importance of accounting for procurement, as it contributes to the majority of their organization's emissions.

vi. Best Practices

During interviews, many humanitarian organizations and UN entities referred to the HCC created by ICRC as a good example of the existing Scope 3 emissions reporting methods. One more initiative highlighted was PCAF (Partnership for Carbon Accounting Financials)'s work on aligning GHG emissions accounting for financed emissions and its potential role in developing a consistent emissions reporting approach across UN entities. Other useful approaches to consider are WFP's Scope 3 emissions reporting on supply chain, CAA's Climate Charter, and the work of European Civil Protection and Humanitarian Aid Operations.

According to our survey across UN entities, other organizations which have adopted best practices for Scope 3 emissions accounting and reporting include M&S (Marks and Spencer), HSBC, the European Parliament, United Nations Conference Centre Bangkok (particularly in waste management), the European Central Bank (in adoption of SBTi target), and Green Roof. Some good frameworks mentioned in the survey responses include ICRC's Humanitarian Carbon Calculator and Global Logistics Emissions Council's Framework (GLEC).

B. Organizational practices in Academia, Public and Private Sector

In the **academia,** higher education institutions have a special role in Scope 3 GHG emission reporting because they possess both extraordinary expertise and serve as models. These characteristics are reflected in the disproportionate share of academic institutions conducting (Scope 3) emission reporting, not just in the OECD countries but throughout the world. Nonetheless, in absolute terms, Scope 3 reporting remains limited and, inconsistent due to different analysis methods (Helmers et al., 2021). Academic institutions that do report Scope 3 GHG emissions frequently include mobility and emissions linked to water and waste. Yet, supply chain emissions from purchased products and the construction and maintenance of buildings, which may be equally or more significant than mobility, are oftentimes lacking (Allea, 2022).

In the **public sector**, local authorities in certain countries assumed a leading role in Scope 3 emission reporting, particularly in the UK and in France. In the UK, the LGA Climate Change Survey (2021) found that 54% of local authorities in the UK report Scope 3 emissions. In France, Scope 3 emissions reporting is mandatory for local authorities administering more than 50'000 inhabitants. Emissions related to buildings and procurement dominate the public sector's carbon footprint. Additionally, public authorities issue relevant tools and guidance, for e.g., the German Environment Agency (2021) published an extensive plan on the "path towards a GHG neutral public administration" which involves guidance on Scope 3 accounting. The governments of France (ADEME, 2022) and the UK (NAO, 2022) also issued respective guidance and reports.

In the **private sector**, many corporations have embraced GHG emissions reporting. The CDP counts 18'600 companies around the world that disclose emissions data on their platform (CDP, 2022). Among the largest corporations, according to the IEA (2022), 281 (55%) of S&P 500 companies disclose Scope 1 Scope 2, and 191 (38%) disclose Scope 3. Disclosure rates in other parts of the world are significantly higher (Watanabe and Cote, 2022). In 2016, 92% of Fortune 500 companies responding to the Climate Disclosure Project (CDP) used GHG Protocol directly or indirectly (WRI, n.d.). The sources of emissions depend on industry, but one source that is rapidly growing are emissions associated with databases (Lavi, 2022). Despite increasing disclosure rates, few reports are validated by external companies, and a lot of data input is misleading and incomplete (Pucker, 2021). The next sub-section further elaborates on the best practices in the private sector with regards to Scope 3 emissions.

Best Practices in the Private Sector

Fig. 5 provides a compilation of best practices regarding Scope 3 accounting and reporting in the private sector:

Fig. 5: Best Practices in Scope 3 Emissions Reporting in the Private Sector
(Source: IKEA, 2022 and SBTi, 2023)

IKEA

Has estimated its emissions for each stage of the value chain, including materials, food ingredients, product transport, co-worker commuting and business travel, customer travel and home deliveries, product use at home, and product end-of-life. IKEA calculates them based on GHG Protocol guidelines. The calculation models are annually reviewed to reflect the IKEA value chain and its parts as accurately as possible. Historical data is always revised to ensure that all disclosed performance reflects progress and not a change in accounting (more information is provided in the case analysis on Procurement).

TESCO

Commits to reduce its Scope 3 GHG emissions by 17% by 2030, using a 2015 base-year. The emissions categories covered by the Scope 3 target are purchased goods and services (supply chain), fuel and energy related activities, upstream transportation and distribution, and waste generated in operations. Tesco conducted a full supply-chain footprint survey of its product portfolio to identify the hotspots that should be targeted for GHG emission reductions. Through this process it learned that it needed to set different targets for agricultural emissions and emissions from food manufacturing. This reflects the contribution of these life cycle stages to its overall supply-chain footprint and provides the best route to working with its suppliers.

Microsoft

Has developed the 'Microsoft Emissions Impact Dashboard'- an innovative web-based user interface that allows its cloud customers to access the Microsoft emissions associated with their cloud usage. The dashboard allows segmenting customer Scope 3 emissions data by service type (Azure, M365, etc.), region, and timeframe and provides information on public reporting.

JLL

Is making significant investments in technology solutions to take clients on a rapid journey towards decarbonization across their real estate. JLL is also partnering with clients, focusing on energy efficiency and emissions reduction programs. JLL is also engaging its supply chain to set shared targets and KPIs.

AstraZeneca

Is trying to ensure that 95% of spending with key suppliers is with companies with approved science-based targets by 2025.

Landsec

Did not realize how stringent the requirements of SBTi would be for Scope 3 emissions – and what data would be needed to set those targets successfully. The targets submitted by the company were hence rejected the first time they were submitted. The Carbon Trust's experience, expertise and Sectoral Decarbonization Approach helped Landsec develop its emissions reduction targets.

International Post Corporation

Has been working closely with Verisk Maplecroft, an independent global risk analytics and advisory firm, since 2008 to develop and deliver the annual Sustainability Reports and broader Environmental Measurement and Monitoring System (EMMS) programme. Verisk Maplecroft undertakes thorough inspections of participant data via multiple rounds of plausibility checks and reviews of supplementary evidence in order to ensure consistently high levels of accuracy and was involved in the collection and analysis of participants' data in the development of the new delivery efficiency target. Furthermore, International Post Corporation ensures that its data is accurate and credible through a third-party review from our external accountant, PricewaterhouseCoopers (PwC). The IPC Board asked the IPC EMMS program to develop an emissions reduction target including Scope 3 emissions. Following careful and considered participant consultation including multiple webinar discussions and surveys during 2014, it was determined that the most appropriate intensity indicator is emissions per item of letter mail and per parcel.

C. Key Insights from Experts

In addition to humanitarian organizations and the UN entities we also conducted interviews with experts involved in the development of major international standards for GHG emissions reporting, because many interviewees had shared concerns over the applicability of existing Scope 3 emissions reporting standards (such as ISO, GHGP, HCC, etc.), the comparability of emissions factors due to the variability of activities of each organization, and the absence of guidance on which emission standards to use when reporting Scope 3 emissions. Following are the key insights drawn from our interviews with four subject-matter experts who have been involved in the development of GHG emissions accounting and reporting methodologies at leading international standard-setting organizations and the academia:

i. GHG Protocol remains a major influence in Scope 3 emissions reporting, yet some coherence and standardization are necessary

SubjectExpert_1, SubjectExpert_2 and SubjectExpert_3 agreed that the GHGP methodology is the most widely used and that it is applicable to UN entities. The GHGP provides streamlined guidance on GHG accounting, but it was created targeting the private sector. According to SubjectExpert_3, it is important to adapt GHGP to UN entities by focusing on the underlying principles and the overall integrity, rather than blindly applying the step-by-step instructions. Furthermore, some experts mentioned that the GHGP guidance is not exhaustive regarding certain activities, such as emissions related to working from home, bank deposits, downstream emissions of services or emissions related to donations and cash transfers.

ii. Financial aid and the purchase of goods and services are likely to be the main source of Scope 3 emissions for UN entities

The experts believe that emissions related to the purchase of goods and services as well as financial aid (including cash-based transfers) constitute UN's largest emissions sources. At the same time, these sources are frequently neglected in emission inventories because of data availability issues. UN entities should address these areas, where material, to ensure the integrity of the Scope 3 inventory and to drive climate action.

iii. Start from a comprehensive picture of emission sources, then focus data collection efforts on where it matters

SubjectExpert_1 and SubjectExpert_4 stressed on the importance of comprehensively identifying major sources of emissions, for example through a hot spot analysis or materiality assessment. Subsequently, priority in terms of data collection improvements should be accorded to areas with the highest mitigation potential. SubjectExpert_2 and SubjectExpert_4 highlighted that engaging with suppliers to obtain primary data on key products from suppliers can be crucial for implementing sustainability measures.

iv. The ultimate goal of Scope 3 emissions reporting should be driving climate action, and seeking comparability should not always be the priority

There was a consensus among the experts, that Scope 3 emission accounting and reporting must be directed at enabling climate actions, meaning methodological choices should be structured to enable such action. At the moment, the GHG Protocol is not designed to provide estimates for reliable comparisons between different organizations. In this context,

SubjectExpert_1 and SubjectExpert_3 recommended not to overemphasize seeking comparability and instead to focus enabling targeted and effective climate action. SubjectExpert_4 suggested employing E-liability approach to generate data that is both comparable and actionable.

v. Scope 3 emission reporting is rapidly gaining ground

According to SubjectExpert_1 and SubjectExpert_2, Scope 3 emissions reporting is becoming more frequent among large companies, accompanied by mounting public pressure due to exacerbating climate change. There are important changes in legislation and standards incoming that will mandate Scope 3 reporting for certain organizations. In this context, SubjectExpert_1 also argued that while an incremental approach (starting with a few emission categories) to Scope 3 reporting would have been adequate 10 years ago, comprehensive emissions accounting is more appropriate now in view of the climate crisis.

5. Case Analysis: Applicability of Key Scope 3 Accounting and Reporting Methods to UN System's Procurements

Procurement by the UN System

UN can consider procurement as a starting point for Scope 3 emissions accounting and reporting, due to the magnitude of its importance in the overall UN expenditure, ready availability of data, as well as high-level of awareness among UN entities regarding the environmental aspects of procurement. Organizations in general also have direct control over their procurement activities, making it easier to measure them and reduce emissions caused by them.

More than half of the annual expenditure of the UN system is on procurement. In the year 2021, the average ratio of procurement expense to the total expense for 33+ UN entities (representing 84.5% of the total expense of the UN system) was approximately **58%** (UN ASR 2021, UNSCEB 2023). In terms of monetary value, **$29.6 billion** was reported to be spent by 41 UN entities in the year 2021. Goods and services related to health make up more than one-third of the total procurements by United Nations (UN ASR 2021).

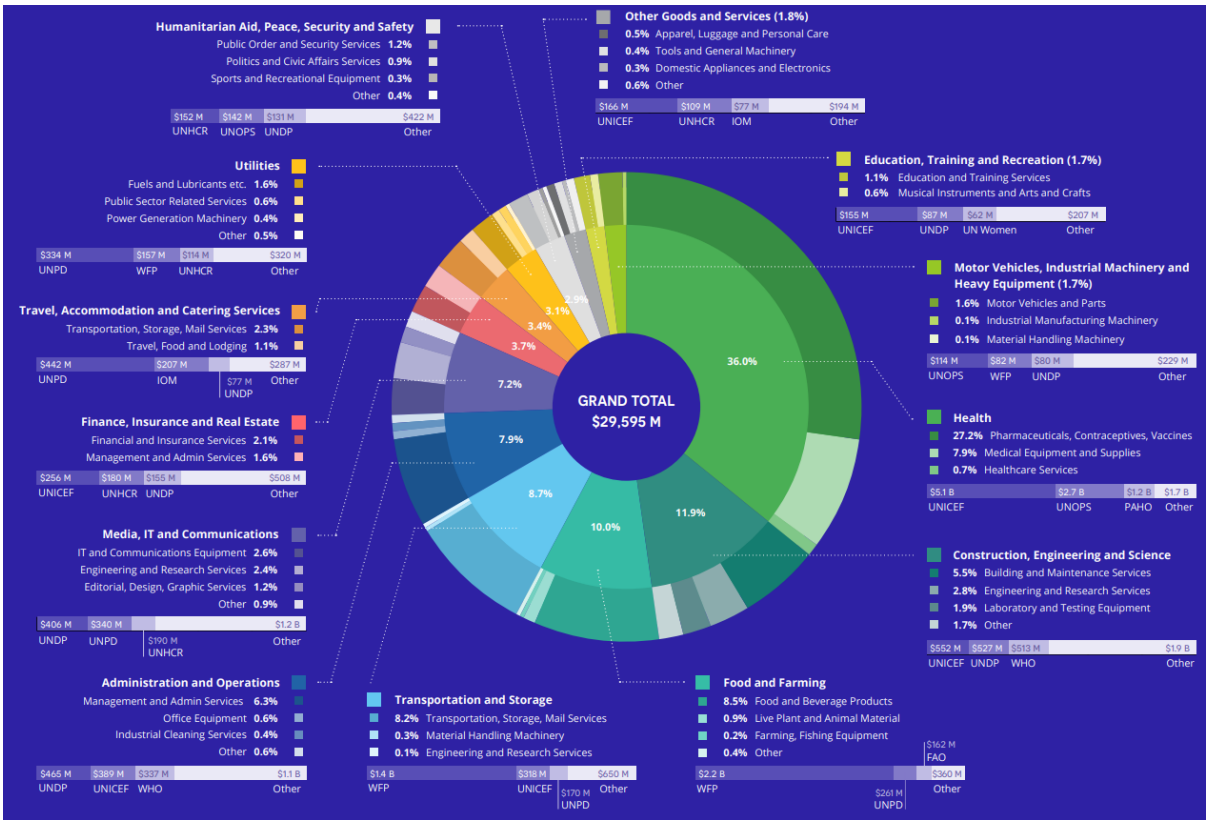


Fig. 6: Overview of UN procurement by sector and category in the year 2021 (UN ASR 2021)

The United Nations also maintains a comprehensive database of its procurements across various UN entities which is publicly available on the UN Global Marketplace (https://www.ungm.org/Shared/KnowledgeCenter/Pages/asr_data). Also, according to Greening the Blue Report 2022, 95% of the organizations considered in the report already had environmental considerations in procurement processes (GtB, 2022). 9 out of 19 UN entities surveyed in this project mentioned that they are taking initiatives related to mapping, measuring, reducing or reporting of Scope 3 emissions caused by the purchase of goods and services.

Procurement-related Scope 3 reporting guidelines and practices in the UN System

The UN-Wide Inventory Management Plan (IMP) 2022-2023 (environmental inventory) issued by the SUN facility in March 2023 briefly explains calculations of emissions from procurement and is based on the GHG Protocol. However, the IMP recommends the UN entities to undertake a relatively more thorough study on the materials procured and their emission factors, in order to comprehensively measure their Scope 3 emissions from the procurement of materials. While the IMP refers to DEFRA emission factors published by the Government of the U.K., the Defra database does not include emissions factors for the wide variety of goods and services procured by the UN system.

UNEntity_5 measures the emissions of the food it procures for its global headquarter with the support of the World Resources Institute. It uses emission factors from two global databases (Poore and Nemecek, 2018; Searchinger et al., 2018) and provides total food-related emissions from agricultural supply chains and food related carbon opportunity costs.

Relevance of International Guidelines and Principles on Scope 3 Emissions Reporting for the UN System

Since the UN-wide Inventory Management Plan is based on the GHG Protocol and 8 out of 19 UN entities responded on the survey that they have referred to GHG Protocol, the protocol can be considered as a basis for Scope 3 emissions accounting and reporting. Although GHG protocol standards for Scope 3 were designed for corporations, its guidance as provided in the documents “Corporate Value Chain (Scope 3) Accounting and Reporting Standard” and “Technical Guidance for Calculating Scope 3 Emissions” can also be interpreted for activities of the UN system. UN entities involved in humanitarian services like UNICEF, WFP, UNHCR, etc. can also refer to the Humanitarian Carbon Calculator (HCC). HCC’s categorization of Scope 3 emission sources is based on the GHG protocol (ICRC & Ecoact, & Help Logistics, 2023c). Table-2 maps the different types of procurement activities which UN entities may undertake, mapped to the Scope 3 emissions categories of the GHG protocol which would be directly or indirectly associated with those activities.

Table-2: Applicability of GHG Protocol's Scope 3 emissions categories to different types of procurements done by UN entities		
Procurement Type	*GHG Protocol's Scope 3 Emissions Categories*	
	Directly associated (at the time of procurement)	*Indirectly associated (after procurement)*
1. Procurement for internal consumption by UN entities at their headquarters, field offices and project sites. Example: Procurement of printers, papers, files, medical protective gear, construction material for building offices, oil and gas purchased for field operations, etc. for use by the UN entities and their staff.	• Category-1: Purchased goods and services • Category-2: Capital goods • Category-3: Fuel- and energy related activities • Category-4: Upstream transportation and distribution	• Category-5: Waste generated in operations
2. Procurements which are handed over to partner organizations for processing before handing over to beneficiaries Example: Procurement of foodgrains in bulk from a supplier, which are then handed over to partner organizations on the field to make small packets of foodgrains for distribution to affected individuals in conflict zones.		• Category-9: Downstream transportation and distribution • Category-10: Processing of sold products • Category-11: Use of sold products • Category-12: End-of-life treatment of sold products
3. Procurements which are handed over to the end beneficiary for direct consumption Example: Procurement of contraceptives, medicines, cooking stove, temporary shelter material, etc. which is directly handed over to end beneficiary for consumption.		• Category-9: Downstream transportation and distribution • Category-11: Use of sold products • Category-12: End-of-life treatment of sold products

While the Table-2 above can help in understanding how different types of procurements have different sets of associated emission categories, Table-3 provides details of already available guidelines and resources which UN entities can refer to at different stages of Scope 3 emissions accounting and reporting.

Table-3: Applicability of Key Scope 3 Accounting and Reporting Guidelines to UN System's Procurements Source: GHG Protocol (2011 & 2015), ICRC & Ecoact, & Help Logistics. (2023c)	
Steps	*Relevant Guidelines/Standards/Methods*
1. Determining Operational Boundaries	**GHG Protocol:** GHGP's document "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" provides guidance on setting boundaries for Scope 3 emissions (along with examples), including: • Mapping the value chain • Boundary requirements • Disclosing and justifying exclusions • Accounting for downstream emissions • Accounting for emissions and removals from biogenic sources **Humanitarian Carbon Calculator:** HCC's 'Methodological Guide (Dec 2022)' provides guidance on setting operational boundaries for the humanitarian sector.
2. Data Collection & Management	**GHG Protocol:** GHGP's documents "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" and "Technical Guidance for Calculating Scope 3 Emissions" provide guidance on: • Screening to prioritize data collection and identification of key scope 3 activities • Activity data needed for calculation • Types of data: primary and secondary (EEIO, process based, proxy data) • Improving data quality over time • Data Management Plan (mentioned in the appendix of the standard) **Humanitarian Carbon Calculator:** HCC's 'Methodological Guide (Dec 2022)' provides guidance on: • Data collection • What kind of data is needed to realize a carbon footprint • Filling data gaps and creating estimates.
3. Emission Factors	**GHG Protocol:** GHGP's document "Technical Guidance for Calculating Scope 3 Emissions" provides guidance on: • Types of emission factors to be considered (material/product v/s energy, life cycle, cradle-to-gate, combustion, upstream emissions of purchased fuels, upstream emissions of purchased electricity, etc.) • Relevance of different types of emissions factors to the different calculation methods for each Scope 3 category More than 50 third-party life cycle and emissions databases are available on https://ghgprotocol.org/life-cycle-databases **Humanitarian Carbon Calculator:** HCC's 'Methodological Guide (Dec 2022)' provides guidance on how to use and find emissions factor. HCC also has compilation of Emissions Factors within its Microsoft Excel based emissions accounting tool. These emission factors are for products and services specific to the activities and needs of humanitarian organizations.
4. Calculation	**GHG Protocol:** GHGP's document "Technical Guidance for Calculating Scope 3 Emissions" provides guidance on: • Calculation Methods (Supplier-specific, Hybrid, Average-data, Spend-based) and respective formulae • "Decision Tree" for selecting calculation method for each Scope 3 category • Examples of calculations for each category **Humanitarian Carbon Calculator:** HCC's 'Methodological Guide (Dec 2022)' provides guidance on calculation methods and respective formulae. HCC's Microsoft Excel based emissions accounting tool can also be referred to.

Best Practices in Emissions Reporting for Procurement

Fig. 7 provides examples of best practices adopted by the private sector to facilitate Scope 3 emissions accounting, reporting and emissions reduction:

Fig. 7: Best Practices in Emissions Reporting for Procurement in the Private Sector
(Source: IKEA, 2022 and SBTi, 2023)

IKEA

Estimated its emissions for each stage of the value chain, including the materials and food ingredients it uses which comprise 52.2% and 3.1% of its total emissions respectively. IKEA has identified the top-5 materials (metals, paper, plastics, textile and comfort materials, and wood) which cause 90% of the emissions caused by procurement of materials. In Financial Year 2022, IKEA has initiated two projects- 1) to develop a solution for measuring the material amounts from each supplier, and 2) mapping the material amounts of its products. IKEA is also working to implement an automated data collection tool that will increase the efficiency and accuracy of its reporting.

Kellogg's

Has committed to reduce absolute value chain emissions by 20% from 2015-2030 (Scope 3) and has a long-term target to reduce absolute value chain emissions by 50% from 2015-2050 (Scope 3). Kellogg had to engage with its suppliers, establish a baseline, and work with them to decide what changes could be made. Since Kellogg set the target, it has already begun to engage 75% of its suppliers (over 400 of them) by requesting they respond to the CDP Supply Chain questionnaire on GHG emissions. Kellogg has also developed materials to help them understand the challenge and the options they have. Kellogg has 35 programs globally designed to help farmers decrease their footprint. It has committed to supporting half a million farmers to implement smart agricultural practices focused on emission reduction and resilience. It is collating research and aggregating learning from best practices and then sharing back with individual farmers so they can benefit from the collective information.

Moody's

Is actively engaging with its value chain, and was named 2021 Supplier Engagement Leader by CDP for the second consecutive year. The company's Supplier Code of Conduct encourages suppliers to disclose their carbon footprint and set their own science-based targets. In 2021, Moody's engaged nearly 500 suppliers in partnership with the CDP supply chain. In 2021, 28% of suppliers by spend, covering purchased goods and services and capital goods, had science-based targets; almost halfway to the company's target of 60% by 2025. Since 2022, Moody's has made it mandatory for its sourcing managers to complete a responsible sourcing module with a focus on factoring metrics into award decisions - including science-based targets and supplier diversity metrics (SBTi, 2023).

wipro

Adopted the Electronic Product Environmental Assessment Tool (EPEAT) standard for IT hardware procurement, which helped to bring down GHG emissions by 600 Tonnes of CO_2 equivalent in 2019.

Pfizer

Set a Scope 3 target in 2015, committing that 100% of its key suppliers will manage their environmental impacts, including GHG emissions, through effective sustainability programs and that 90% of key suppliers will institute GHG reduction targets by the end of 2020. It is planning to work with the Science Based Targets Initiative to help its suppliers choose methodologies that suit their business.

SBTi has also provided a detailed supplier engagement strategy, and procurement policy and choices for reducing Scope 3 emissions in its publications- "Value Change in the Value Chain: Best Practices In Scope 3 Greenhouse Gas Management" (November 2018) and "Engaging Supply Chains on the Decarbonization Journey: A Guide to Developing and Achieving Scope 3 Supplier Engagement Targets" (May 2023).

Practices to Avoid in Emissions Reporting for Procurement

During interviews with UN entities, some interviewees had mentioned that using the 'expense-based method' for calculating emissions is not a good practice. This is because this method does not differentiate between two products (and their suppliers) if their quoted price is the same, even though their emissions might be different. Hence, this method does not help the procurement staff in estimating how their choice of supplier or product affects their Scope 3 emissions. One interviewee suggested to use the expense-based method to screen the organization's portfolios, identify 'key suppliers', and then source actual emissions data from these suppliers and engage in GHG emissions reduction with them, while continuing to use

expense-based method for all other suppliers, with the intention to increasingly replace it with activity-based emissions data over time.

6. Conclusion

Scope 3 accounting and reporting is rapidly gaining importance across organizations and sectors. The climate crisis is exacerbating and requires organizations to accelerate the reduction of their climate footprint. Scope 3 emissions represent a major part of UN entities' emissions. Hence, accounting and reporting these emissions constitutes a critical step in driving climate action as it helps identify key sources of emissions in an organization's value chain, guides effective measures, and raises awareness throughout the organization and its ecosystem of partners, clients, suppliers and beneficiaries.

This research seeks to assist UNEP in building the foundations for UN-wide accounting and reporting of Scope 3 emissions, by providing a holistic understanding of existing methodologies and initiatives and by identifying organizational practices as well as potential challenges and priority areas. The study is based on desktop research, key-informant interviews conducted with UN entities, humanitarian organizations and subject-matter experts, along with a survey conducted among SUN focal points of UN entities.

The landscape of Scope 3 accounting and reporting frameworks provided in this report includes two principal methodologies, namely the GHG Protocol and ISO 14064:1. Though both are broadly consistent, the GHG Protocol predominates in the private sector. Alternatively, the E-liability method is an emerging methodology that facilitates accurate, auditable, and actionable data. Furthermore, the landscape includes three sector-specific tools and guidelines - the Humanitarian Carbon Calculator, the GLEC Framework (logistics), and the PCAF standards (investment). The landscape also covers the regulatory environment, which is undergoing drastic changes. A major development comes from the European Union, which is mandating Scope 3 reporting for certain corporations from 2024 and has recently released the corresponding draft standards in June 2023.

For UN entities, the motivation for accounting and reporting Scope 3 emissions was both due to internal and external factors. Only two UN entities and two humanitarian entities were found to have specific target for reducing these emissions. Many UN entities refer to GHG Protocol and/or Humanitarian Carbon Calculator for calculating Scope 3 emissions and setting organizational boundaries for reporting. While comparability across data should not be achieved at the expense of accuracy, coherence in emission factors and reporting boundaries is needed. Accessibility, reliability, and accuracy of data is a major challenge for UN entities. Many UN entities also need additional human and financial resources to effectively implement Scope 3 accounting and reporting. Standardization experts advise that the ultimate goal of emissions reporting should be driving climate action and GHG emissions reduction, rather than blindly prioritizing comparability of emission factors.

The GHG Protocol can be applied to UN's procurement activities by categorizing procurements based on the way UN utilizes and handles the procured goods and services. The 15 categories of Scope 3 emissions as provided by the GHG Protocol can be attributed to the different types of procurement, as illustrated in this report.

UN can also refer to the best practices adopted by private organizations, like supplier engagement, capacity building programs, using tools like EPEAT, leveraging IT platforms, reviewing calculation methods annually, revising historical data, etc.

This research work has its own limitations. The primary data collection methods have covered almost half of all the entities in the UN system, and key informant interviews were not conducted with private sector representatives. Moreover, the broad research scope of this project required a high-level analysis, and as a result landscaping was adopted as the principal approach. Special emphasis has been given to the humanitarian sector and UN's procurement activities. Nevertheless, many areas deserve further research.

The authors wish to highlight the need for additional guidance for Scope 3 emissions accounting and reporting in context of activities and processes which are specific to the UN (such as policy advice, grants, etc.) and boundary setting in the context of non-commercial activities. There is also great potential for collaborative platforms within the humanitarian sector to build capacity and share knowledge on Scope 3 emissions. Non-governmental organizations are looking to the UN for leadership in this domain.

In future research, more interviews with UN entities which have not been covered in this study and an in-depth analysis of reporting approaches adopted in other sectors such as the private sector and academia could be further explored.

7. Recommendations

The authors of this report recommend the following actions to be taken (or facilitated) by the SUN facility at UNEP, to improve the adoption of Scope 3 accounting and reporting practices.

For UN Environment Programme's SUN Facility

1. **Create avenues for peer learning and knowledge sharing:** Organize regular capacity-building workshops and meetings amongst UN entities as well as other organizations with similar operations, for e.g., humanitarian organizations, multilateral and bilateral development agencies, and private firms. Create online platform to facilitate online discussions, troubleshooting and exchange of reports, standards, emissions factors, and good practices.
2. **Develop a common accounting and reporting framework for the UN System:** UN entities recognize the need for a coherent approach, while taking into account the varying characteristics between entities. This can be fulfilled, by developing a Scope 3 reporting framework grounded in shared principles, inventory boundaries, and methodological guidelines.
3. **Develop guidance specific to UN system regarding reporting boundaries and their interpretation:** Prepare detailed accounting and reporting guidelines on core UN activities like procurement, from the GHG Protocol emission categories and make them required components of the Scope 3 emissions reporting by UN entities. This will enhance data comparability across UN entities but also bring coherence in emissions factors, reducing uncertainty and confusion.
4. **Build a database of emissions factors for the UN system:** The SUN facility can support the development of a common database of emissions factors varying across goods, services, activities, global regions and geographies. Till the time such a database is published, organizations can share emissions factors databases amongst themselves to facilitate the standardization of data and enable common reporting.
5. **Consider emerging accounting approaches such as E-liability:** The E-liability method is at the cutting edge of emissions accounting. It provides a pathway to more accurate and reliable emissions accounting. While it is currently at an early stage of deployment and the method relies on the participation of suppliers, its adoption by the UN has the potential to improve UN's GHG emissions accounting practices.
6. **Support the development of Science Based Targets for Scope 3 emissions reduction for all UN Entities:** Scope 3 emissions are likely to make up the majority share of UN entities' GHG emissions. In order to achieve the global temperature target set out by the Paris Agreement and avoid catastrophic climate change, UN entities should set science-based targets and comprehensively pursue emission reductions.
7. **Ensure senior-level buy-in:** Scope 3 accounting and reporting requires a serious commitment from the entire organization as it involves collaborations between different departments. Additionally, sufficient human and financial resources must be made available, especially during the conception and development of the Scope 3 accounting system.
8. **Report Scope 3 emissions separately:** Given the indirect and complex nature of Scope 3 emission accounting, supply chains emissions should be reported separately from Scope

1 and 2 in the Greening the Blue report. This also allows for differentiated mitigation targets and policies. At the same time, it is important to specify the corresponding scope of emission estimates.

For Organizations (UN and non-UN) Reporting Scope 3 Emissions

1. **Disclose accounting and reporting methodologies for Scope 3 emissions:** Transparency regarding methodological choices is of particular importance for Scope 3. Consistency is fundamental to aggregate emissions for the whole UN system for the Green the Blue Report. Moreover, this enables informed interpretations of the emission estimates and facilitates the propagation of good practices among UN entities and beyond.
2. **Focus on the most significant emission sources:** Identify material emission sources through an expenditure-based screening or mapping of GHG emissions. Subsequently, prioritize collection of data for the areas with the highest mitigation potential.
3. **Engage with key suppliers:** The UN entities can leverage their purchasing power to demand (where appropriate and possible) emissions data and science-based emissions reduction targets from suppliers/contractors of goods and services. Collaboration with procurement teams within the organization is advisable for this purpose. This can also generate positive spill-over effects for non-UN organizations.
4. **Understand the limitations of accounting practices:** Commonly used Scope 3 accounting practices are useful to understand key emission sources and to monitor long-term emissions trends. However, they are not sufficiently precise to allow for meaningful comparisons between entities. The goal must remain to reduce GHG emissions, not the numbers that result from the estimate. It is also important to consider other environmental indicators besides emissions data.

For Academia

1. **Develop guidance for public and non-profit organizations**: Current methodologies are tailored towards the private sector and neglect non-commercial activities and processes.
2. **Develop emissions factors for goods and services for different global regions:** There is a strong need to develop more specific and regionally diverse emissions factors in order to increase the accuracy of emissions estimates for organizations all over the world.

8. Appendix

Annexure-1: Overview of Methodological Documents Associated with GHGP & ISO 14064

Table-4: Overview of Methodological Documents Associated with GHGP and ISO 14064 Source: (Jia, 2023)

Methodology	*Relevant Documents*
GHGP	• The greenhouse gas protocol: A corporate accounting and reporting standard, revised edition (WRI/WBCSD, 2004) • Corporate value chain (Scope 3) accounting and reporting standard: Supplement to the GHG protocol corporate accounting and reporting standard (WRI/WBCSD, 2011a) • Technical guidance for calculating Scope 3 emissions (version 1.0): Supplement to the corporate value chain (Scope 3) accounting & reporting standard (WRI/WBCSD, 2013) • Product life cycle accounting and reporting standard (WRI/WBCSD, 2011b)
ISO	**Quantification of GHG emissions** • ISO 14064-1 greenhouse gases part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (BSI, 2019a) • ISO 14064-2 greenhouse gases part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements (BSI, 2019b) • ISO 14064-3 greenhouse gases Part 3: Specification with guidance for the verification and validation of greenhouse gas statements (BSI, 2019c) **Organizational reporting of GHG emissions** • ISO/TR 14069 Greenhouse gases — Quantification and reporting of greenhouse gas emissions for organizations — Guidance for the application of ISO 14064-1 (BSI, 2013) **Which uses**: • ISO 14067 Greenhouse gases – Carbon footprint of products - Requirements and guidelines for quantification (BSI, 2008) **Which relies on**: • ISO 14040 Life cycle assessment – Principles and framework (BSI, 2020a) • ISO 14001 Environmental management systems – Requirements with guidance for use (BSI, 2015) • ISO 14044 Life cycle assessment – Requirements and guidelines (BSI, 2020b)

Annexure-2: Framework and Questions of Key-Informant-Interviews and Survey

Table-5: Framework and Questions of Key-Informant-Interviews and Survey (developed by authors of this report)			
Mode	**KEY INFORMANT INTERVIEW**		**SURVEY**
Theme	UN Entities	Humanitarian Orgs.	UN Entities
General Information	1. What are your responsibilities within the organization and how do they relate to GHG emissions accounting and reporting? 2. What are the main types of activities organization involved in?	- same -	1. Which of the following activities is your organization engaged in? [MCQ, multi-select] *(Capacity Building / Policy Advice/ Giving Grants & Providing Financial Support/ Cooperation, Facilitator of Exchanges, Collaboration/ Monitoring & Evaluation/ Information, Education & Communication/ Research & Publications/ Quality Assurance/ Purchase of Goods & Services/ Providing Humanitarian Aid Material/ Providing Development Infra or Equipment/ Advocacy/ Supply Chain and Logistics/ Technical Assistance/ Microfinance)/ Others (specify)*
Motivation for Scope 3	3. What is the importance given to Scope-3 emissions reporting in your organization? What factors are driving Scope 3 reporting within your organization?	- same -	2. In your opinion, how important is Scope-3 emission reporting to your organization? [Scale 1 to 5 | Low to High Priority] 3. Are there any external factors which motivate your organization to measure

	4. How would scope 3 emissions reporting benefit your organization?		and report Scope 3 emissions? If yes, please specify. [Written Response]
Current Status of Scope 3 Reporting	5. Current Status: What steps has your organization taken so far for Scope 3 emissions reporting? Have you determined reduction targets for Scope 3 Emissions (for e.g., reducing X% by the year 20XX)? 6. Coverage: Which organizational activities or Scope-3 Emissions Categories (GHG Protocol) do you account for and report? 7. Methodology: What methodology do you use for Scope-3 emissions reporting for various organizational activities/ emissions categories? [Also, does your organization have a relevant document that you can share with us]	- same -	4. What types of Scope 3 emission categories apart from business travel does your organization address? Note: Any category for which there is any current initiative related to mapping, measuring, reducing or reporting can be considered in your selection. (You can choose more than one option) [MCQ, multi-select: Select the relevant among the 15 Scope 3 categories] 5. Have you determined reduction targets for Scope 3 Emissions (for e.g., reducing X% by the year 20XX)? If yes, please specify, else you may write 'No'. [Written Response] 6. Are you referring to any international standards, guidelines or initiatives for Scope 3 Emissions reporting? (You can choose more than one option) [MCQ, multi-select: GHG Protocol, ISO14064, SBTi, GRI, HCC, CDP, Other (specify)]

Compliance with International Standards, Guidelines, Certifications, etc.	8. International Guidelines: Are you referring to any international guidelines for Scope 3 Emissions (e.g. GHG Protocol, ISO, GRI, Carbon Trust, SBTi, etc.)? Or Disclosure Frameworks like CDP? 9. Third-party Support: Have you sought or received expert guidance from any other organization to help you with reporting Scope 3?	- same - (+) • Are you aiming for any certifications (e.g. GRI, CDP, Carbon Trust)?	7. To what extent are commonly used methodologies (GHGP, ISO14064, GRI etc.) applicable to your organization? [Scale of 1 to 5, Directly Applicable to your Org.to Not Applicable / Require major adjustments to apply them to organization's activities] 8. Have you received support or collaborated with other organization(s) regarding Scope 3 reporting? If yes, please specify. [Written Response]
Reporting Boundaries	10. Regarding your organization's different activities, what types of partnerships (non-commercial or commercial) does your organization engage in and how are they structured? 11. What has been your approach or which criteria did you use to determine your reporting boundaries? And specifically in the case of projects, programs, and partnerships? 12. Do you face any difficulties in determining Scope 3 reporting boundaries? How did you address them? Can you provide examples?	- same -	9. If you are currently measuring and reporting on any Scope 3 emission categories outside the UN Environmental Inventory, which criteria did you use to set the boundaries? (You can choose more than one option) [MCQ, multi-select: Operational control, Financial control, Equity share, Other (specify), Unknown] 10. How has your organization set reporting boundaries, in the context of projects, programs, and partnerships? [Written Response]

Challenges & Concerns	13. For your organization, what are the primary concerns regarding comprehensive Scope 3 reporting? ***Technical challenges*** (data availability, data collection, EFs, etc.) ***Resource constraints*** (human resources, financial resources) ***Reporting methodologies*** (lack of adequate or coherent guidance) 14. How do you plan to address these challenges? 15. What kind of support do you need from outside the organization?	- same -	11. Are there any challenges that you are facing in your work addressing and/or reporting Scope 3 emissions in your organization? *(You can choose more than one option within each section)* *[MCQ, multi-select]* **Technical challenges** • Data Collection & Measurement • Data Availability from Suppliers & Contractors • Availability of Emission Factors • Consistency of Data across programs and activities • Not Applicable • Other (specify) **Resource constraints** • Human resources • Financial resources • In-house expertise • Not Applicable • Other (specify) **Reporting methodologies** • Difficulty in translating international guidelines to your organization's programs and activities

			• Lack of external guidance relevant to your organization • Inconsistencies between various accounting and reporting standards • Using a patchwork of reporting methodologies instead of one coherent method • Not Applicable • Other (specify) 12. What kind of support or guidance would you like the Sustainable United Nations (SUN) to provide to your organization? [Written Response] 13. In the situation of developing a UN-wide approach for Scope-3 emissions, which of the following criteria should be given preference? [MCQ: single-select: Comparability of emissions data across UN entities, Providing flexibility to organizations to choose reporting methodologies which suit them best, Other (specify)]

Good Practices	16. Are you aware of any good practices followed by other organizations (ex. humanitarian sphere, business, academia, government, etc) which can be adopted by your organization or by other UN entities?	Would you like to share any Good Practices which your organization follows for Scope 3 emissions reporting? Are you aware of any good practices for Scope 3 reporting which are followed by other organizations in your sector?	14. Are you aware of any good practices implemented by other organizations (ex. humanitarian sphere, business, academia, government, etc.) that can be relevant to your entity or other UN entities? Please feel free to share weblinks and names of the organizations. [Written Response]
Future Prospects of Prospective Scope 3 Reporting	17. What are your plans regarding Scope 3 reporting in the future? Please share details. 18. Which are the top 3 activities of your organization which are the main sources of your Scope-3 emissions? 19. Which of these activities would be relatively easy to report?	- same -	15. Does your organization have concrete plans to expand work on scope 3 emission? If yes, please describe. [Written Response]
Additional Information	20. If there is any other information you would like to share that might be relevant, please feel free to share.	Some Additional Question specific to the organization may be added	16. If there is any other information you would like to share that might be relevant, please feel free to share below. [Written Response]

Annexure-3: Overview of GHG Emissions Categorization by Reporting Methodology

Table-6: Overview of GHG Emissions Categorization by Reporting Methodology (Source: Based on Jia 2023 and ICRC et al., 2023c)

GHG Protocol	*ISO/TR 14069*	*Humanitarian Carbon Calculator (HCC)*	*Priority (HCC)*
Scope 1 - GHG emissions from sources they own or control. This includes stationary sources, mobile sources, physical or chemical processing and fugitive emissions	**Category 1** - Direct emissions from stationary Combustion **Category 2** - Direct emissions from mobile combustion **Category 3** - Direct process related emissions **Category 4** - Direct fugitive emissions	**Scope 1 – Category 1** Direct emissions from stationary combustion sources **Scope 1 – Category 2** Direct emissions from mobile combustion sources **Scope 1 – Category 3** Direct emissions from processes **Scope 1 – Category 4** Direct fugitive emissions	**1** **1** **1** **1**
N/A	**Category 5** - Direct emissions and removals from land use, land use change and forestry	Not relevant	
Scope 2 - Emissions from generation of acquired and consumed electricity, steam, heat, or cooling (collectively referred to as "electricity")	**Category 6** - Indirect emissions from imported electricity consumed **Category 7** Indirect emissions from (steam, emissions heating, cooling, compressed air) excluding electricity	**Scope 2 – Category 1** Indirect emissions from electricity consumption **Scope 2 – Category 2** Indirect emissions from steam, heat and cooling consumption	**1** **1**
Scope 3 - Category 1 Purchased goods and services	**Category 9** - Purchased products	**Scope 3 - Category 1** Purchased goods and services - In-kind donations - Cash transfer - Financial support (upstream emissions)	**1** **2/3** **1/2** **1/2**
Scope 3 - Category 2 Capital goods	**Category 10** - Capital equipment	**Scope 3 - Category 2** Capital goods	**1**
Scope 3 - Category 3 Energy-related activities not included in Scope 1 or Scope 2	**Category 8** - Energy-related activities not included in direct and energy indirect	**Scope 3 - Category 3** Energy-related activities not included in Scope 1 or Scope 2	**1**

Scope 3 - Category 4 Upstream transportation and distribution	**Category 12** - Upstream transport and	**Scope 3 - Category 4** Upstream transportation and distribution	**1**
Scope 3 - Category 5 Waste generated in operations	**Category 11** - Waste generated from organizational activities	**Scope 3 - Category 5** Waste generated in operations	**3**
Scope 3 - Category 6 Business travel	**Category 13** - Business travel	**Scope 3 - Category 6** Business travel	**1**
Scope 3 - Category 7 Employee commuting	**Category 22** - Employee commuting	**Scope 3 - Category 7** Employee commuting	**1**
Scope 3 - Category 8 Upstream leased assets	**Category 14** - Upstream leased assets	Not relevant	
Scope 3 - Category 9 Downstream transportation and distribution	**Category 17** - Downstream transport and distribution	**Scope 3 - Category 9** Downstream	**1**
Scope 3 - Category 10 Processing of sold products	**Category 18** - Use stage of the product	**Scope 3 - Category 10** Processing of sold products	**1**
Scope 3 - Category 11 Use of sold products		**Scope 3 - Category 11** Use of sold products	**1**
Scope 3 - Category 12 End-of-life treatment of sold products	**Category 19** - End of life of the product	**Scope 3 - Category 12** End-of-life treatment of sold products	**1**
Scope 3 - Category 13 Downstream leased assets	**Category 21** - Downstream leased assets	Not relevant	
Scope 3 - Category 14 Franchises	**Category 20** - Downstream franchises	Not relevant	
Scope 3 - Category 15 Investments	**Category 15** - Investments	Not relevant	
N/A	**Category 16** - Client and visitor transport	N/A	
N/A	**Category 23** - Other indirect emissions or removals not included in the other 22 categories	N/A	
N/A	N/A	**Scope 3 – Category 1bis** - In-kind donations - Cash transfer - Financial support (downstream emissions)	 **2/3** **1/2** **1/2**

Annexure-4: Overview of GHGP's Scope 3 Emission Categories, Boundaries and Methods

Table-7: Overview of GHGP's Scope 3 Emission Categories, Boundaries and Methods (Source: GHGP, 2011)

Category	*Description*	*Minimum Boundary*	*Method*
1. Purchased goods and services	Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in Categories 2–8	All upstream (cradle-to-gate) emissions of purchased goods and services	1. Supplier-specific method
2. Capital goods	Extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year	All upstream (cradle-to-gate) emissions of purchased capital goods	1. Supplier-specific method
3. Fuel- and energy related activities	Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in Scope 1 or Scope 2, including:	a. For upstream emissions of purchased fuels: All upstream (cradle-to-gate) emissions of purchased fuels (from raw material extraction up to the point of, but excluding combustion)	a. Upstream emissions of purchased fuels 1. Supplier-specific method 2. Average-data method
4. Upstream transportation and distribution	Transportation and distribution of products purchased by the reporting company in the reporting year between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or	The Scope 1 and Scope 2 emissions of transportation and distribution providers that occur during use of vehicles and facilities (e.g., from energy use)	a. Transportation 1. Distance-based method 2. Spend-based method

	controlled by the reporting company)		
5. Waste generated in operations	Disposal and treatment of waste generated in the reporting company's operations in the reporting year (in facilities not owned or controlled by the reporting company)	The Scope 1 and Scope 2 emissions of waste management suppliers that occur during disposal or treatment	1. Supplier-specific method
6. Business travel	Transportation of employees for business-related activities during the reporting year (in vehicles not owned or operated by the reporting company)	Optional: The life cycle emissions associated with manufacturing vehicles or infrastructure	1. Fuel-based method
7. Employee commuting	Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company)	The Scope 1 and Scope 2 emissions of employees and transportation providers that occur during use of vehicles (e.g., from energy use)	1. Fuel-based method
8. Upstream leased assets	Operation of assets leased by the reporting company (lessee) in the reporting year and not included in Scope 1 and Scope 2—reported by lessee	The Scope 1 and Scope 2 emissions of lessors that occur during the reporting company's operation of leased assets (e.g., from energy use)	1. Asset-specific method
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	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)	a. Transportation 1. Fuel-based method 2. Distance-based method 3. Spend-based method

	and facilities not owned or controlled by the reporting company)		
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)	1. Site-specific method
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)	a. Direct Use-Phase Emissions 1. Method for products that directly consume energy during use 2. Method for fuels and feed-stocks 3. Method for GHG and products that contain or form GHG that are emitted during use
12. End-of-life treatment of sold products	Waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life	The Scope 1 and Scope 2 emissions of waste management companies that occur during disposal or treatment of sold products	1. Waste-type-specific method
13. Downstream leased assets	Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not included in Scope 1 and Scope 2—reported by lessor	The Scope 1 and Scope 2 emissions of lessees that occur during operation of leased assets (e.g., from energy use) Optional: The life cycle emissions associated with manufacturing or constructing leased assets	1. Asset-specific method

14. Franchises	Operation of franchises in the reporting year, not included in Scope 1 and Scope 2—reported by franchisor	The Scope 1 and Scope 2 emissions of franchisees that occur during operation of franchises (e.g., from energy use)	1. Franchise-specific method
15. Investments	Operation of investments (including equity and debt investments and project finance) in the reporting year, not included in Scope 1 or Scope 2	A reporting company's Scope 3 emissions from investments are the Scope 1 and Scope 2 emissions of investees (proportional share of investment in the investee)	a. Emissions from equity investments 1. Investment specific method 2. Average-data method

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