TCFD Consortium

Towards Disclosure and Utilization of Corporate Scope 3 Emissions Data
-Paving the way for Appropriate investment Decisions-

1. Growing demand for disclosure of Scope 3[1] emissions

Many companies have made efforts to disclose their Scope 3 emissions since the publication of GHG Protocol established the Scope 3 standard in 2011, and the demand for companies to disclose their Scope 3 emissions has increased in recent years. In the "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures" revised by the TCFD in 2021, it is stated that "(t)he disclosure of Scope 3 GHG emissions is subject to materiality; however, the Task Force encourages organizations to disclose such emissions" and that "(t)he Task Force strongly encourages all organizations to disclose Scope 3 GHG emissions", which places significantly more emphasis on Scope 3 emissions compared to earlier publications.[2] The IFRS S2 "Climate-related Disclosures", published by the IFRS Foundation in 2023 based on the TCFD recommendations with the aim to set a global standard for disclosures, states that entities shall disclose the categories included within the entity's measure of Scope 3 greenhouse gas emissions.

In Japan, the Sustainability Standards Board of Japan (SSBJ) has included similar descriptions to those in IFRS S2 in its Theme-based Sustainability Disclosure Standard No. 2 "Climate-related Disclosures" (Climate Standard), which was developed in line with IFRS S2. The Financial Services Agency (FSA) is currently considering incorporating the SSBJ standards into its statutory disclosures, and it is expected that some companies will be required to disclose Scope 3 emissions as a result.

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[1] Scope 3 emissions refer to indirect greenhouse gas (GHG) emissions generated in the corporate value chain other than Scope 1 (direct emissions from industrial processes, etc.) and Scope 2 (indirect emissions from the use of electricity and heat purchased from other companies). The Corporate Value Chain (Scope 3) Accounting and Reporting Standard (hereinafter referred to as the Scope 3 Standard), which was developed under the initiative of the GHG Protocol, provides a method for calculating GHG emissions from corporate activities, classifies Scope 3 emissions into 15 categories from upstream to downstream of the corporate value chain. It is expected that understanding the scale of emissions by category will lead to more efficient and effective emission reduction planning and implementation.

[2] TCFD, 2021, Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures. It is also stated that the TCFD "recognizes the data and methodological challenges associated with calculating Scope 3 GHG emissions"

2. Current Status and Significance of Calculating Scope 3 Emissions in Corporate Transition

2.1. Current status of Scope 3 emissions calculation and disclosure

As described above, Scope 3 emissions disclosure is being recommended and institutionalized from the perspective that society as a whole can promote efforts across the entire value chain, including not only large companies but also small- and medium-size companies. However, it is also true that there are still many issues associated with Scope 3 emissions, both from the viewpoint of companies who calculate and disclose the metric, as well as of investors who are expected to use the information.

Firstly, calculating Scope 3 emissions reliably is burdensome for companies. The method that can best reflect the actual situation is to accumulate actual measured values (primary data), but it is not realistic to obtain all primary data. From the standpoint of companies included in the value chain, understanding their own emissions and providing this information to client companies may lead to improved competitiveness in the future, but such view is currently not broadly shared. As such, in many cases, Scope 3 emissions are calculated using secondary data which are relatively easily available, such as standard values of the industry. Even in this case, companies are compelled to carefully consider the assumptions and databases to be used in order to derive values that are representative of the actual situation, which is no small task. In addition, concern has been expressed on such values being subjected to assurance, albeit the numbers being calculated based on assumptions and thereby having limited accuracy.

Another challenge is that, for some categories, companies have limited discretion to control their Scope 3 emissions, and the ability to reduce emissions through their own initiatives is restricted. For example, for companies that produce equipment that consume electricity, emissions from Scope 3 Category 11 (use of sold products) are not completely controllable, as they depend not only on the energy efficiency of their products but also on the CO2 intensity of the electricity chosen by the user. Similarly, Category 1 (purchased goods and services) also depends on factors such as the activities taken by upstream companies to reduce their Scope 1 and 2 emissions. The limitations on controllability inherent in Scope 3 are a major challenge, especially when companies set targets for Scope 3 emission reductions or are evaluated on their reduction performance.

For investors and other users of disclosed information, the treatment of Scope 3 emissions is also an issue. As mentioned above, Scope 3 emissions are often calculated

using secondary data, and the data used for calculation may differ even among the same industry and category, which hinders comparisons of Scope 3 emissions between companies. As such, there may be a limitation on the usefulness of Scope 3 emissions in investment decisions, and it has been expressed that it is difficult to use Scope 3 emissions data for that purpose. While investors can purchase and use data from external data vendors that independently estimate the Scope 3 emissions of each company, there are views that this poses challenges because it becomes difficult to understand a company's thinking and initiatives, and there is a risk of deviation from the actual situation because the data is not calculated by the company itself.

(Excerpt from interviews)

- ✓ Different industries have different categories of emissions. Since Category 11, which accounts for the majority of our emissions, is dependent on the circumstances in which our customers use our products, we cannot control the amount of emissions, and the values that account for the different lifetime of each product collectively are only estimates. It should be understood that Scope 3 emissions is not a value that allows simple side-by-side comparison. (Operating company)
- ✓ Calculating Scope 3 emissions involves uncertainty, and it is difficult to make inter-company comparisons because the assumptions, calculation methods, and information sources differ from company to company. Should comparisons be made, it would be more appropriate to have them evaluated on a per unit of product basis. (Operating company)
- ✓ Scope 3 emissions are estimates. Investors should recognize the difference from Scope 1 and 2 emissions and make a distinction between metrics which they place importance and reference information. Regarding Category 1, while it is unrealistic to thoroughly trace to the producer of raw materials, the meaning of using default values is also questionable. Evaluation on the basis of supplier engagement efforts is preferable. (Operating company)
- ✓ Detailed tracking of Category 1 and obtaining all primary data is impractical. There are also issues such as raising awareness for the many small and medium-sized companies that support our supply chain, providing support for measurement and calculation, as well as the issue of developing a digital transformation tool that is not costly. (Operating company)

✓	Scope 3 emissions may be one of the monitoring items in some ESG-labeled funds operated overseas, but if the company does not disclose this information, it becomes necessary to use the estimations by service providers which may be inaccurate. (Investor) In many cases, investors do not understand the issues and problems of operating companies, and operating companies do not know how investors use information. This is a theme that requires harmonization of recognition on both sides. (Investor)

2.2. Significance of Scope 3 emissions calculation and disclosure

As discussed above, Scope 3 emissions is a disclosure metric that presents many challenges both for companies to calculate and disclose and for investors to use. In contrast, how meaningful are these efforts beyond what is required by the disclosure standards?

(Business Perspective)

While there is a societal demand for companies to reduce emissions throughout the value chain, they face the difficulty that their efforts are not necessarily reflected in the overall amount of Scope 3 emissions, due to the reasons stated above. Conversely, if a company can indicate its own reduction efforts in the value chain and if such efforts lead to an increase in corporate value, it may find meaning in disclosing its Scope 3 emissions. For example, if a company procures materials from products which have undertaken GHG emission reduction measures instead of conventional materials, it can visualize such efforts through disclosure of its upstream Scope 3 emissions or reflect efforts to reduce energy consumption in the product life cycle in the disclosure of downstream Scope 3 emissions. If this leads to an increase in corporate value, companies may also benefit from Scope 3 emissions disclosure. In this case, it is conceivable to disclose not only the total amount of Scope 3 emissions, but also the difference in relevant categories over time, its breakdown such as product intensity, or as a combination with other

indicators such as reduced emissions of products[3] and avoided emissions.[4]

Calculating Scope 3 emissions by category will also help companies understand the risks and opportunities associated with their transition to a carbon-neutral society. This will enable the company to undertake more efficient planning to reduce GHG emissions and meet the expectations of investors and other stakeholders by persuasively explaining its initiatives.

In addition to the above, if a company has set targets related to Scope 3 emissions but is deemed to have insufficient efforts to understand and reduce them, it risks being evaluated as having a lack of governance over its value chain. Even for companies that are not subject to mandatory disclosure, there are cases where it is desirable to calculate and disclose Scope 3 emissions from a governance perspective.

(Investor Perspective)

For investors, information on Scope 3 emissions of a company may be meaningful in terms of understanding where the risks and opportunities lie in the value chain for the business in question, even if it does not directly lead to investment decisions. For example, if there is an increased demand for Scope 3 emission reductions in the industry or business in question, it will lead to an assessment of the risk of incurring additional costs, such as substituting raw materials with low-carbon alternatives or reconsidering the performance of its products. At the same time, by identifying materials that have a significant impact on emissions throughout the value chain, it would also be possible to obtain suggestions in what product areas a "Green Transformation (GX) market" could be created in the future, in which GX measures are recognized as added value. From this perspective, as the international GX trend develops, Scope 3 emission trends may provide insights in analyzing the extent of impact as well as sensitivity to changes in the market environment. In addition, through information on Scope 3 and the company's

[3] “Reduced emission of products” indicates emission reductions that reflect measures that have actually reduced their own emissions, on a per product basis. (Study Group on the Creation of GX Product Markets that Contribute to Demand Generation for the Realization of Industrial Competitiveness and Emission Reductions, 2024, "Approach to the Creation of GX Markets"). Although specific definitions and concepts have not yet been established, the metric is considered to evaluate the actual emissions reduction related to product manufacturing processes and resource inputs, as opposed to the reduction as a result of product use.

[4] Defined as “quantified amount of contribution of the target product to reduced greenhouse gas emissions through the whole life cycle of final product(s) which achieve the reduction effect s on environmental loads, in comparison to a baseline amount”, (The Institute of Life Cycle Assessment, Japan, 2015, "Guidelines for Assessing the Contribution of Products to Avoided Greenhouse Gas Emissions"). It is regarded as one of the indicators to visualize the results of emission reductions in the value chain as added value (environmental value).

policies on Scope 3, it is possible to obtain information on the overall societal impact of the business and its governance structure such as the extent to which the supply chain is being monitored.

(Excerpt from interviews)

- ✓ It is not clear from what perspective that disclosure of Scope 3 emissions is required, but Scope 3 is not always appropriate as a metric of risk and opportunity, and it may be necessary to reconcile the recognition of both operating companies and investors, taking into account other indicators such as avoided emissions. (Operating company)
- ✓ In making investment decisions, it is important not only to look at short-term KPIs and values, but also the policies and structure of management on how the company intends to tackle the issue over the long term. (Investor)
- ✓ At least within Japan, Scope 3 information is not used to make investment decisions by itself, but it is one important piece of information that forms the basis for investment decisions and is particularly important for evaluating the feasibility and reliability of transition plans and as a starting point for engagement. (Investor)
- ✓ In Europe, companies are required to present detailed plans to meet the 2050 net zero target. Scope 1 and 2 are used as indicators of risk, and Scope 3 is used as indicators of opportunity. Since corporate GHG information is disclosed after various internal company reviews and examinations, investors engage with companies based on their data and use it to evaluate future corporate value and the feasibility of long-term growth (Investor)

3. Scope 3 emissions disclosure and utilization

Based on the above discussion, a framework for consideration of how Scope 3 emissions should be disclosed and used in a way not to become an excessive burden for companies yet also can be used as a meaningful indicator is shown below.

(Business Perspective)

- First, it is necessary to obtain an overview of which categories in the value chain

of the relevant business activities are material in terms of climate change countermeasures. In these categories, while it is not necessary to obtain detailed and precise information through primary data, it would be important to present an overview of overall emissions by utilizing estimates, whose accuracy have been improving in recent years. Through this process, companies can understand their own risks and opportunities, and use this information to formulate effective reduction plans and their explanation.

- Calculation and disclosure of Scope 3 emissions for the categories deemed material will be needed. However, the nature of Scope 3 emissions varies greatly depending on the category (e.g., upstream or downstream, and whether the company can or cannot undertake reduction measures). Therefore, for categories deemed as material, it may be necessary to select the items to be disclosed in such a way that the company's efforts can be properly evaluated, such as by showing the assumptions and values used in the calculation process as well as changes over time, including whether the company's efforts can address the issue or whether the issue is influenced by external factors.
- It may not always be possible to reflect efforts by focusing on the total emissions in each Scope 3 category. It may be more effective to make multifaceted disclosures by combining metrics such as emission intensity of products, reduced emissions of products, and avoided emissions.

(Investor Perspective)

- Firstly, as mentioned above, it is difficult to compare Scope 3 emissions among companies, and there are many factors that the company may find hard to control. Further, the implications of Scope 3 emissions vary greatly from category to category. Therefore, it must be recognized above all that it is difficult to evaluate a company's efforts based solely on the total amount of Scope 3 emissions.
- That being said, Scope 3 emissions is a useful metric from the perspective of understanding risks and opportunities in the entire value chain of the relevant business activity or society as a whole. For this purpose, it is important to focus on material categories rather than total emissions, and to look at the breakdown of calculated amount as well as changes over time. In addition, depending on the calculation method, metrics such as emission intensity, reduced emission of products, and avoided emissions may be those that directly reflect corporate efforts, and it is desirable to include these indicators to gain a multifaceted view of corporate efforts.

- If the practice of investors positively evaluating the proactive efforts of companies through their Scope 3 emissions takes root, companies will be able to find strategic value in reducing Scope 3 emissions, and this will have a significant impact on the overall economy through the creation of markets for GX products through changes in procurement practices and increased reduction efforts in cooperation with business partners in the value chain.

4. Conclusion

As mentioned above, it is important to consider disclosing Scope 3 emissions not as disclosure for the sake of disclosure, but from the perspective of finding a way to bring about actual emission reductions in the value chain, while recognizing that there are certain limitations. To this end, society as a whole need to make efforts to ensure that reductions throughout the value chain are not solely the responsibility of companies, but something that should also be evaluated by investors and consumers. For this purpose, an enabling environment should be created, including through support by the government. In terms of practice, it is also necessary to hold dialogues between business companies that disclose information and investors that use the information to gain a common understanding of how Scope 3 disclosure should take shape. In doing so, it may be useful to pick out specific industries and summarize the key issues they face, since the calculated Scope 3 emissions values have attributes which vary according to industry and business model. The TCFD Consortium has provided opportunities for discussion through activities such as "round tables", and intends to continue exploring this issue, including the publication of a guidebook.