G7 2023 HIROSHIMA SUMMIT Sapporo
G7 Ministers' Meeting on Climate, Energy and Environment

Conclusions regarding the Industrial Decarbonisation Agenda

In 2021, the UK G7 Presidency and the United States initiated the G7 Industrial Decarbonisation Agenda (IDA), to unlock market potential through high-level G7 government coordination, including in the areas of market regulation, standards development, investment flows, procurement strategies, and joint research related to industrial decarbonisation. Last year, this work had been continued by the German G7 Presidency 2022, leading to the establishment of an open and cooperative international Climate Club. The G7 Members drew conclusion on objectives and possible joint action, and recognized i) the toolbox of potential policy measures to accelerate industry decarbonisation, especially in the sectors in which emissions are hard to abate ii) the definitions for near-zero emission products as a robust starting point for a common understanding.

While industry is a major source of greenhouse gas emissions, industrial technologies, products and services are key for realizing the necessary emissions reductions and achieving our climate goals. This year, we built on and expand the work of previous achievements of IDA, contributing to other relevant fora, such as the Climate Club, and aimed to advance tangible action with the following two pillars as our priorities: A) Data-based industrial decarbonisation and B) Appropriate evaluation of Avoided Emissions towards net zero society.

Part A: Data-based industrial decarbonisation

The G7 Industrial Decarbonisation Agenda (IDA) group compiled a set of joint actions for decarbonisation in the steel and cement sectors under the German G7 Presidency in 2022. These actions included '[agreeing] on common measurement standards and reporting frameworks to use for evaluating the emissions intensity of production' for steel and cement. Robust data is necessary to advance the dialogues in this area. Under Japan's G7 Presidency in 2023, the IDA group has examined the topics of emissions measurement methodologies and data collection frameworks, to advance the discussion on definitions and procurement of near-zero emission materials, focusing on the iron and steel sector. These measurement methodologies are distinct from normative standards that define specific thresholds. Measurement methodologies describe procedures for data collection, measurement, and analysis.

In order to advance this discussion in a scientific and practical manner, Japan's G7 Presidency commissioned the Organisation for Economic Cooperation and Development (OECD) and the International Energy Agency (IEA) to produce two reports. Each has been peer-reviewed by G7 Member government representatives, steel industry associations, leading steel sector initiatives and members of the research community. The two organisations also hosted a joint workshop to summarise the draft findings of their reports to these stakeholders.

The G7 IDA group welcomes both reports, which comprise a solid basis to begin the work of implementing processes for greater compatibility of standards and measurement methodologies, considering new measurement methodologies, and collecting emissions intensity data for the steel industry. **The G7 IDA group agrees to start working on the implementation of the proposed new Global Data Collection Framework for steel production and product emissions and to continue working on the details within the IDA framework of Japan's 2023 G7 Presidency.**

Below is a summary of actions stemming from the OECD and IEA reports respectively, and as a result of the discussions undertaken in the G7 IDA group in 2023:

1. Based on **the OECD report "The Heterogeneity of Steel Decarbonisation Pathways"**, we recognise the need to take the **heterogeneity** of steel industry structures and decarbonisation pathways into account, when developing emission measurement and data collection frameworks whilst upholding highest possible ambition on transforming our industries towards climate neutrality.

2. Based on **the IEA report "Emissions Measurement and Data Collection for a Net Zero Steel Industry"**:

a) we recognise **the five existing methodologies** in the IEA report to inform initial work of emissions measurement methodologies on steel decarbonisation at the production-level and product-level;

b) we recognise the **"net zero emissions measurement principles"** proposed in the IEA report as the guiding ambition for efforts to review and seek to promote convergence toward best practice. We will engage actively in measurement methodologies development, wherever possible;

c) recognising **the existing architecture** identified by the IEA report and the timeframe proposed in the IEA report, **we begin implementing a Global Data Collection Framework for steel production and product emissions**, in accordance with the **"net zero data collection framework principles"** proposed in the IEA report;

d) to achieve alignment and fitness for purpose in the context of a net zero steel industry and to minimise duplication and support efforts among a broader group of countries, we will actively engage in the technical dialogues and co-ordination activities for emission measurement methodologies and data collection, and analysis for steel and other materials in relevant forums such as **the IEA's Working Party on Industrial Decarbonisation** and in consultation with other initiatives and organisations such as the Clean Energy Ministerial Industrial Deep Decarbonisation Initiative (IDDI);

e) discussions on a Global Data Collection Framework should be **extended beyond the G7, in particular to the major steel-producing countries of the G20**, with outcomes and decision points that take industry viewpoints into account and are **elevated to higher level dialogues** (notably the Climate Club and the G20) where necessary and plausible.

The below principles are summary versions of those contained within the IEA report and are intended as guidelines for furthering this work.

<u>Net zero measurement principles proposed in the IEA report</u>

- Facilitate like for like comparison between production from all facilities;
- Produce coherent and interoperable results for both crude steel production and steel products;
- Have consistent and comprehensive emissions boundary and scope;
- Apply accounting rules for credits and co-products that are compatible with a credible net zero pathway;
- Incentivise the use of measured data, as opposed to generic emissions factors.

Net zero data collection framework principles proposed in the IEA report

- Facilitate maximum possible coverage, whether mandated or strongly incentivised;
- Facilitate the maximum possible degree of transparency;
- Facilitate parallel reporting from multiple measurement methodologies, with a system to combine into one unified dataset;
- Accommodate the collection of highly granular data on GHG emissions, energy and material flows;
- Accommodate frequent reporting with a maximum two-year lag;
- Minimise the reporting burden to the extent possible.

Part B: Appropriate evaluation of avoided emissions towards net zero society

We stress the importance and recognize as priority continuous efforts by various entities in immediate, rapid and sustained GHG emissions reductions for themselves and throughout the value chains to keep a limit of 1.5 °C temperature rise within reach. In order to encourage more positive climate action, including in the private sector, and encourage entities to commit for themselves and throughout the value chains on their path to GHG net-zero emissions, **there is also value in acknowledging the contribution of a certain entity to emission reductions of other entities by providing decarbonisation solutions in a given system, in other words "avoided emissions"**[1].

The discussion of avoided emissions is already arising in the private sector, as a potential mechanism to facilitating innovation and scale-up investment in clean goods and services, which are key for realizing the necessary emissions reductions and achieving our climate goals, but until now there has been no widely recognized standardized method of calculation or reporting such as the GHG Protocol for the measuring of SCOPE1-3 emissions. **A shared, international standard for measuring avoided emissions is recommended to enable a common understanding and reduce the risk of inappropriate use of avoided emissions.**

In this context, we note the World Business Council For Sustainable Development's first version of the guidance on avoided emissions in March as a private sector contribution to the discussion on avoided emissions claims, which includes the eligibility gates (climate action credibility, the latest climate science alignment and contribution legitimacy) that companies must abide by to be able to claim avoided emissions.

We stress that claims on the environmental performance of various entities should be reliable, comparable, and verifiable to empower consumers, companies, and investors to accelerate efficient emission reductions and reduce the risk of inappropriate use.

We underline the value of recognizing the following in sharing the importance of diffusing clean technologies, noting that a trusted mechanism for avoided emissions may mobilize financial resources to accelerate the deployment of solutions.

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[1] avoided emission is defined in The Net Zero Guidelines (IWA 42) (https://www.iso.org/netzero)
3.2.6
avoided emission
avoided GHG emission
potential effect on greenhouse gas emission (3.2.2) that occurs outside the boundaries of the organization (3.4.1) but arising through the use of its products or services, outside Scope 1 emissions (3.2.3), Scope 2 emissions (3.2.4) and Scope 3 emissions (3.2.5)
Note 1 to entry: Avoided emissions cannot be included in claims of progress towards Scope 1, Scope 2, and Scope 3 targets.

In recognizing the potential value of avoided emissions, we acknowledge that this:

[Differentiation]

1. is an **additional perspective to encourage companies' positive action towards net zero society**. **Avoided emissions should not lead to discouraging companies to accelerate reducing their own SCOPE1-3 emissions**. Accelerating efforts to reduce SCOPE1-3 emissions remains essential and indispensable.
   Furthermore, avoided emissions should not **be subtracted from SCOPE1-3 emissions, nor NDCs**. It is **not for creating or expanding a voluntary crediting mechanism nor a crediting mechanism under Article 6 of the Paris Agreement**.

[Usage]

2. is expected to be used as an additional perspective to **promote/facilitate/provide recognition of the diffusion of clean goods and services needed globally to reach net-zero**. e.g.) Promoting investment from financial sectors by evaluating and unlocking the value from companies/solutions with high contribution to global emission reductions. Financial sectors can make use of this information to assess the company's climate-related opportunities and to formulate financial instruments for promoting investment.
   Furthermore, it can also be used as a key metric to support decision-making within a company to prioritize and scale the deployment of solutions in markets with the greatest decarbonisation potential.

[Criteria]

3. is **not to be claimed by companies/solutions incompatible with keeping a limit of 1.5°C temperature rise within reach** e.g.), i) the company has set and externally communicated a climate strategy consistent with the latest climate science toward net-zero emissions by 2050 for their own SCOPE1-3 emissions, such as the Science Based Targets Initiative, and has reliable track records on emissions reductions; ii) the solution is compatible with scenarios achieving net-zero by 2050 at the latest and keeping a limit of 1.5 °C temperature rise within reach such as the Intergovernmental Panel on Climate Change Sixth Assessment Report Working Group III mitigation options.

[Next Steps]

4. **requires further discussion within the private sector for an agreed and common international standard for sectoral calculation methods to be fully utilized**. A robust and reliable calculation methods is essential to allow for a fair and transparent comparison between different companies/solutions, and to reduce the risk of inappropriate use of avoided emissions. Enhanced collaboration across standards bodies, business sectors including financial sectors when developing methodologies for practical usage, and third-party certification will contribute to refined methodologies and validated results.

As a first step, we acknowledge that calculations methods for the electrical engineering and electronic technology, including solar PV, wind turbine, electrolyser, battery, and heat pumps, are to be encouraged as a priority. Taking account of the full lifecycle emissions and supply chain security of various products/producers in these technologies sectors is critical to ensure that irresponsible supply is not encouraged. We also acknowledge the contribution of non-technology based solutions in emissions reductions.

[Inclusiveness]

5. is **not designed to exclude small medium enterprises (SMEs) or start-ups**, while ensuring robust criteria and measurement standard for claiming avoided emissions. Any proposed avoided emissions criteria and measurement standard will be expected to develop with consideration of minimizing disproportionate impacts to small businesses.