International Partnership
for Hydrogen and Fuel Cells
in the Economy

G7 Ministers' Meeting on Climate, Energy and Environment in Sapporo

39th IPHE Steering Committee Meeting

26 – 27 April 2023

Pretoria, South Africa

G7 Sapporo Overview

1. Date

April 15 (Sat) and April April 16 (Sun), 2023

2. Venue

Japan / Sapporo, Hokkaido Prefecture

3. Participating Countries and Organizations

G7 member counties:
Japan (G7 Presidency), Canada, EU, France, Germany, Italy, the United Kingdom, the United States

Invited countries and organizations:
India (G20 Presidency), Indonesia (ASEAN Presidency), United Arab Emirates (COP28 Presidency)

Guest Organizations:
UNFCCC, OECD, IEA, IRENA, ERIA, IUCN, WBCSD

G7 2023 HIROSHIMA SUMMIT

Sapporo

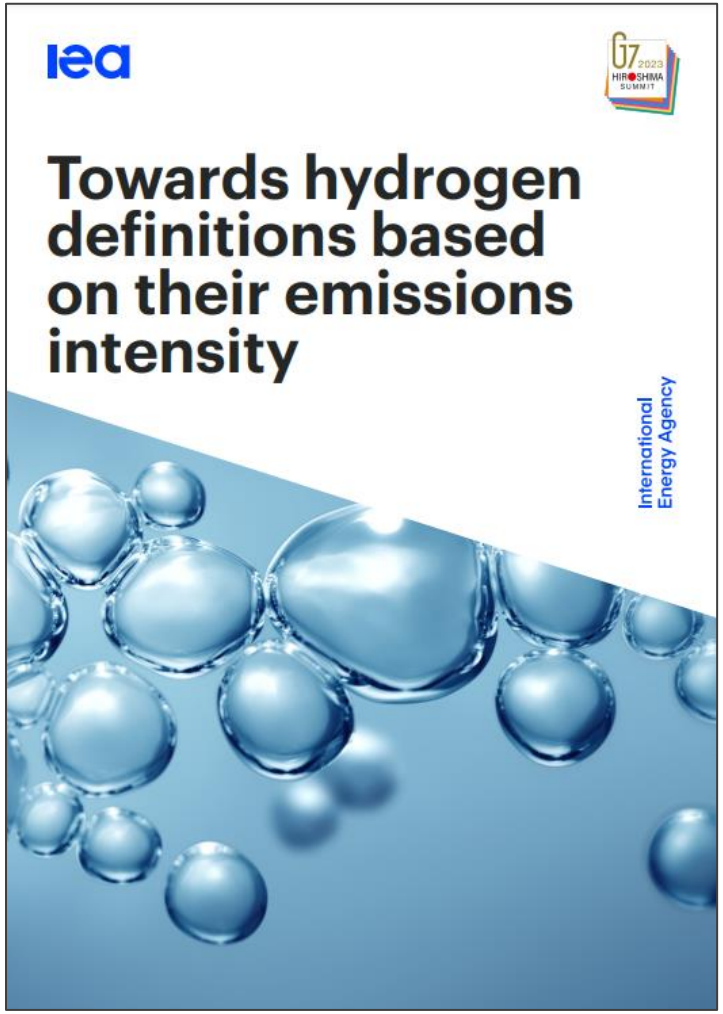
G7 Ministers' Meeting on Climate, Energy and Environment

G7 Climate, Energy and Environment Ministers' Communiqué

67. Low-carbon and renewable hydrogen and its derivatives such as ammonia: We recognize low-carbon and renewable hydrogen and its derivatives such as ammonia should be developed and used where they are impactful as effective emission reduction tools to advance decarbonization across sectors and industries, notably in hard-to-abate sectors in industry and transportation. We also note that some countries are exploring the use of low-carbon and renewable hydrogen and its derivatives in the power sector to work towards zero-emission thermal power generation if this can be aligned with a 1.5°C pathway and our collective goal for a fully or predominantly decarbonized power sector by 2035, while avoiding N2O as a GHG and NOx in general as a regional air pollutant and precursor to tropospheric ozone. Some countries also consider to utilize hydrogen for the conversion of electricity surplus from renewable energy. We affirm the importance of taking action to reduce the cost gap between low-carbon and renewable hydrogen and its derivatives and fossil fuels, including RD&D, and enabling infrastructure. We will enhance our efforts to develop the rule-based, transparent global market and supply chains based on reliable international standards and certification schemes while adhering to environmental and social standards, in particular with regard to water use conflict in diverse ways including liquefied hydrogen and liquid organic hydrogen carriers, and promote organic collaboration between supplier and consumer countries to reduce costs. We will build the enabling environment to encourage safety use of hydrogen, promote relevant regulations, safety codes, and standards in order to accelerate deployment and emissions reductions from hydrogen use. We affirm the importance of developing international standards and certification including for a GHG calculation methodology for hydrogen production and mutual recognition mechanism for carbon intensity-based tradability, transparency, trustworthiness and sustainability. We welcome the IEA report "Towards hydrogen definitions based on their emissions intensity" as a contribution to the discussion towards reliable international standards and certification schemes on expanding low-emission hydrogen and its derivatives and fostering common understanding. We note with appreciation that the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE) has advanced progress of the hydrogen standards and certification action. We also stress that countries producing low-carbon and renewable hydrogen for export and domestic use should fully benefit from and advance its development.

IEA Report "Towards hydrogen definitions based on their emissions intensity"

This report assesses the greenhouse gas emissions intensity of the different hydrogen production routes and reviews ways to use the emissions intensity of hydrogen production in the development of regulation and certification schemes. An internationally agreed emissions accounting framework is a way to move away from the use of terminologies based on colours or other terms that have proved impractical for the contracts that underpin investment. The adoption of such a framework can bring much-needed transparency, as well as facilitating interoperability and limiting market fragmentation, thus becoming a useful enabler of investments for the development of international hydrogen supply chains.



https://www.iea.org/reports/towards-hydrogen-definitions-based-on-their-emissions-intensity

G7 Hydrogen related workshops

Achieving scale-up of low-emission hydrogen and ammonia for net-zero in G7 countries on Feb 21, 2023

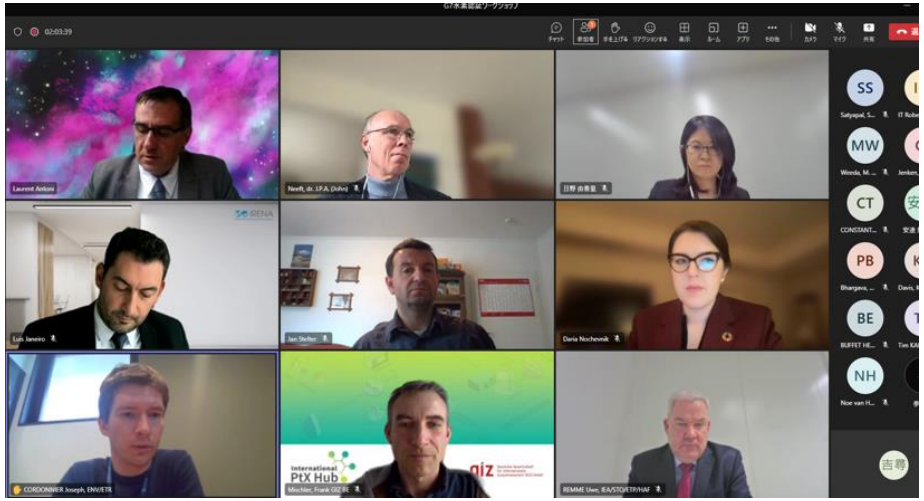
IEA hosted in co-operation with METI and IPHE

1. Introduction
2. Identifying the need for definitions based on carbon intensity of hydrogen and ammonia production to develop and scale up supply chains
3. Defining hydrogen and ammonia production according to its carbon intensity
4. Implementing definitions in regulatory frameworks and certification schemes
5. Recap and next steps

G7 Hydrogen Certification Workshop on Mar 10, 2023

METI hosted in co-operation with IPHE

1. Introduction
2. Opening Presentation
3. Initial analysis and technical assessments on mutual recognition between certification schemes
4. Interventions by G7 delegation leads, International H2 Initiatives, and Non-G7 countries working on hydrogen certification
5. Summary and next steps



G7 Sapporo Excursion

The liquefied hydrogen carrier “Suiso Frontier” tour at Otaru Port, hosted by Kawasaki Heavy Industries and METI.

Photos provided by Kawasaki Heavy Industries

Thank you

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