



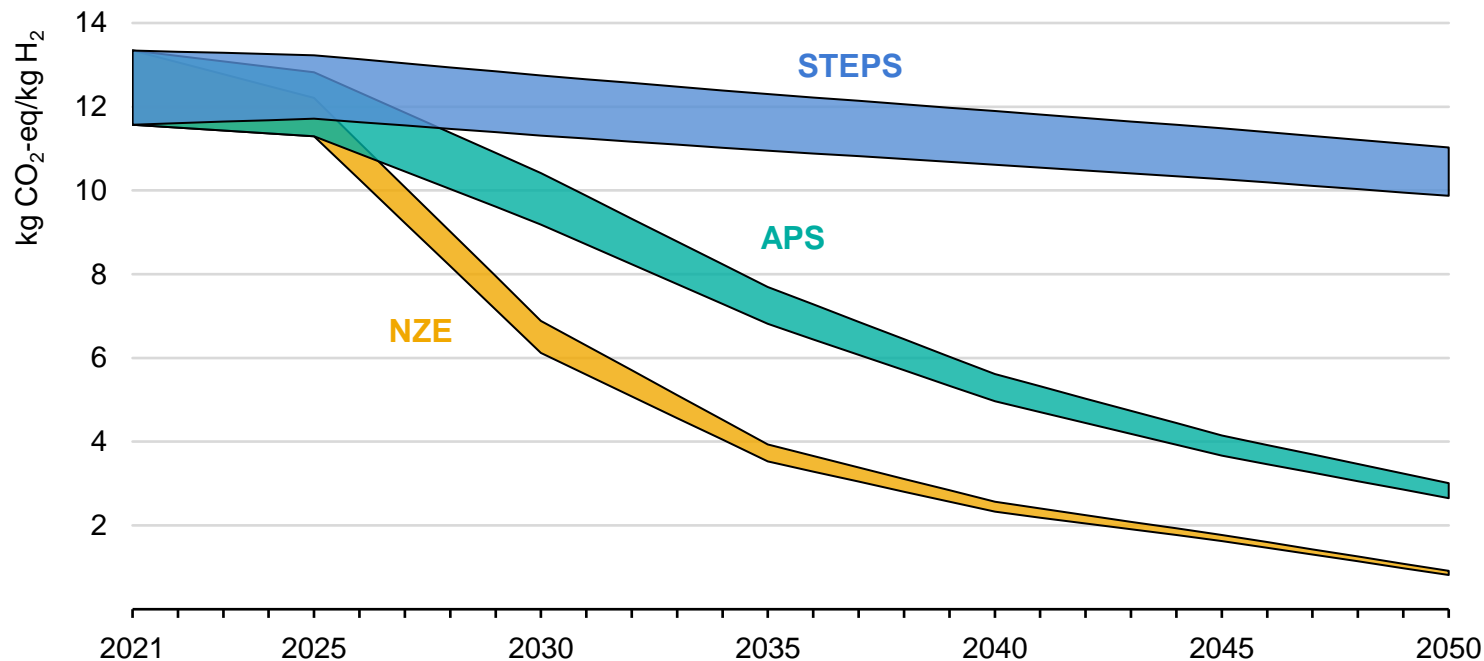
# Towards hydrogen definitions based on their emissions intensity

Dr. Uwe Remme, Head of Hydrogen and Alternative Fuels Unit

6 July 2023, International Conference on Green Hydrogen

# Hydrogen production needs to be decarbonised

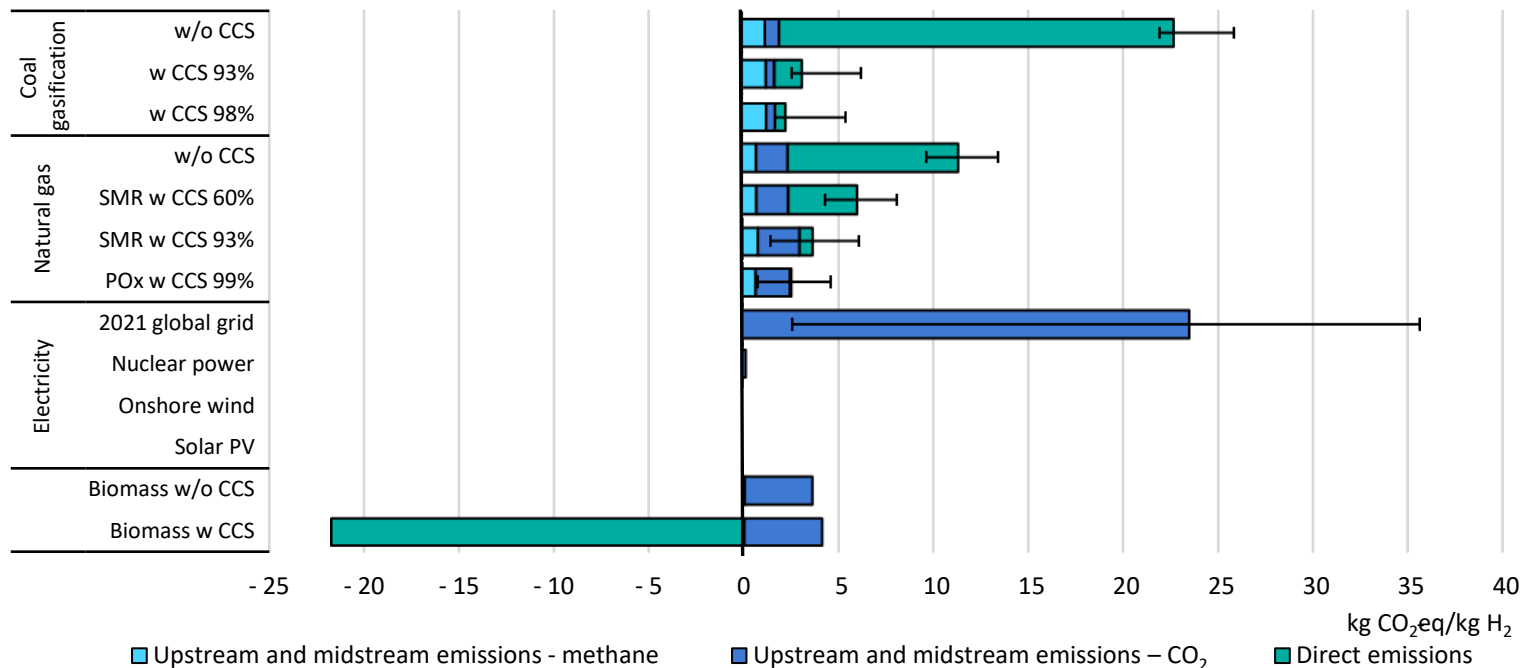
Emissions intensity for hydrogen production by scenario, 2021-2050



**In the NZE Scenario, the global average emissions intensity of hydrogen production has to fall below 1 kg CO<sub>2</sub>/kg H<sub>2</sub> by 2050**

# Transparency on the emissions intensity can facilitate investment

Comparison of the emissions intensity of different hydrogen production routes, 2021

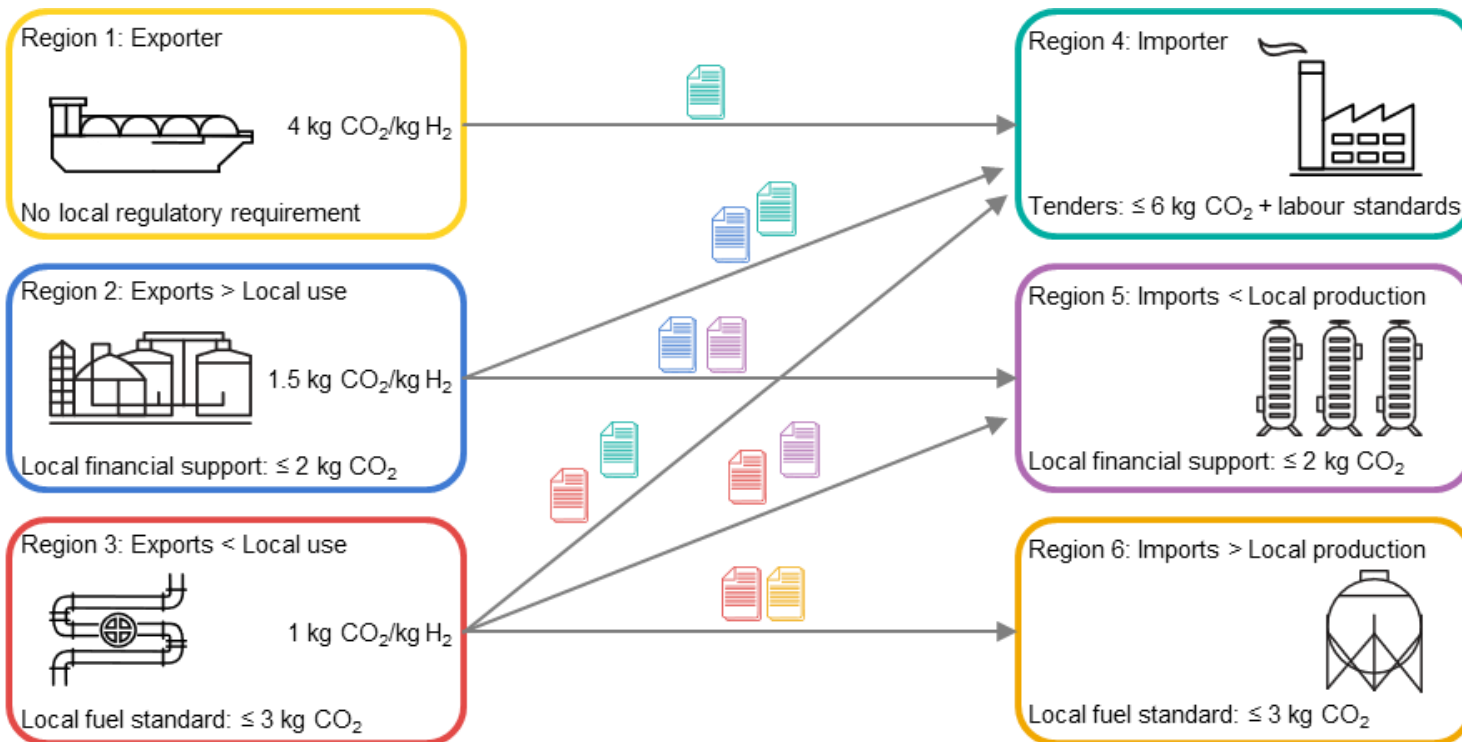


Analysis based on the Methodology for Determining the Greenhouse Gas Emissions Associated with the Production of Hydrogen of the IPHE.

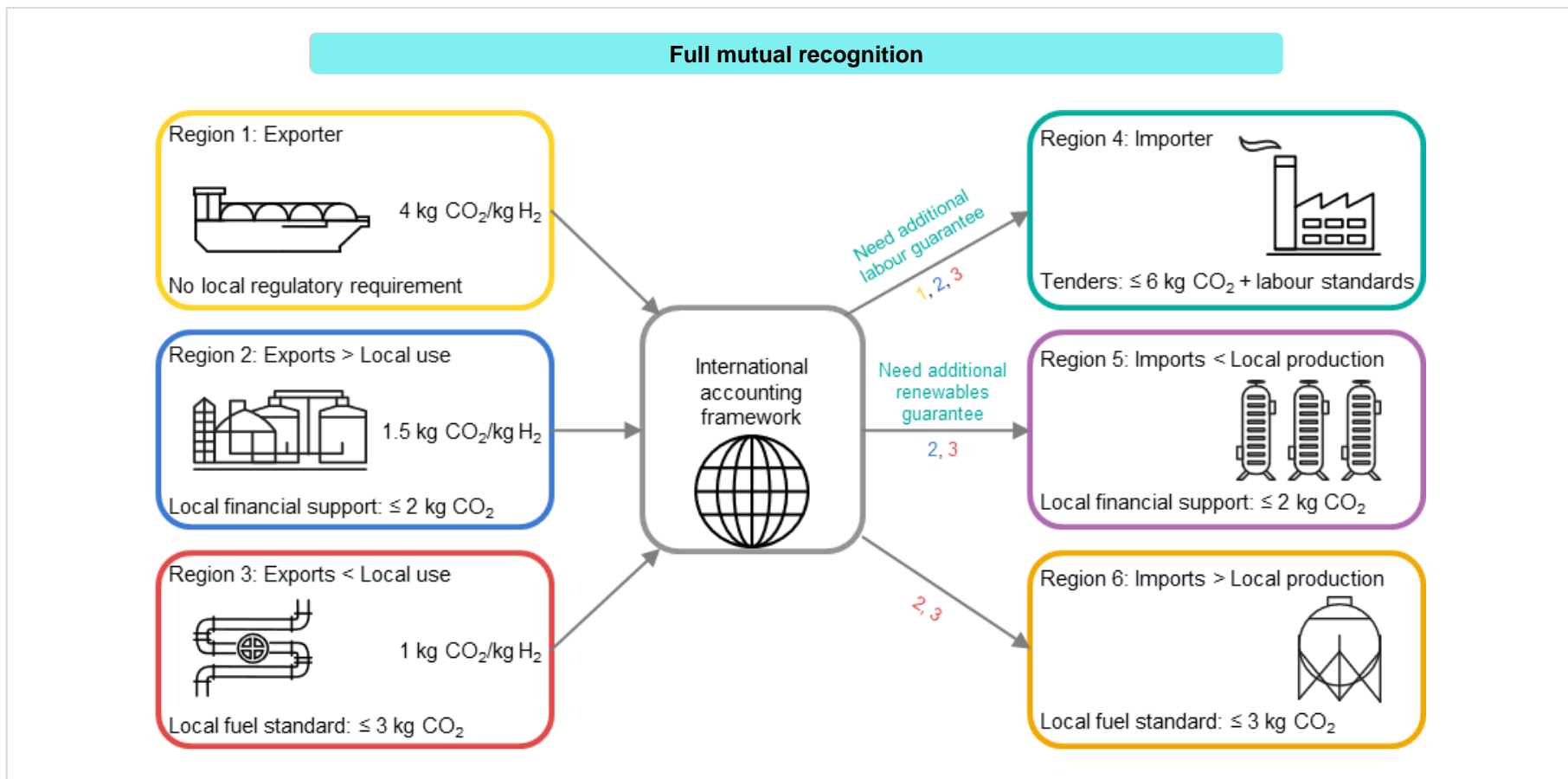
**Using colours to refer to different production routes, or terms such as “sustainable”, “low-carbon” or “clean” hydrogen, obscures many different levels of potential emissions**

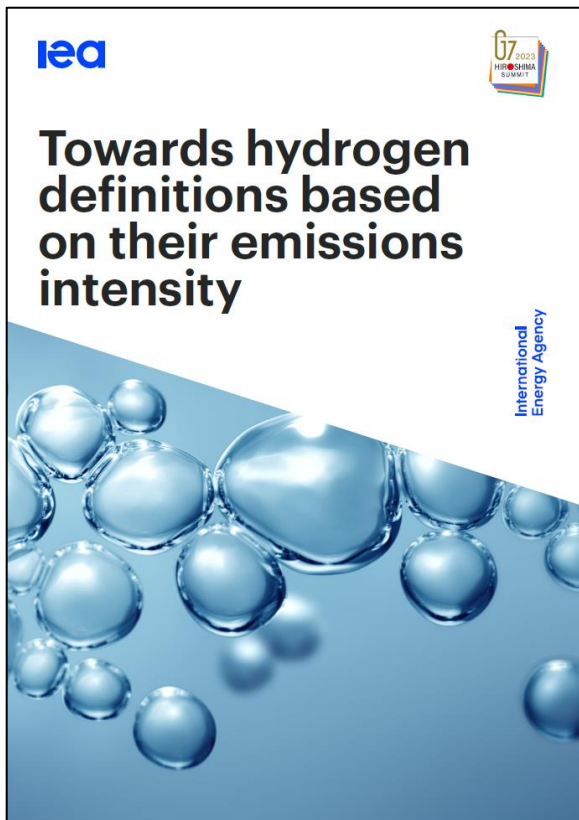
# Common accounting framework enables mutual recognition

5 certificates and 5 ongoing monitoring and auditing systems



# Common accounting framework enables mutual recognition





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