

## **Fourteenth session of the IRENA Assembly**

### **Side Event**

**18 April 2024, 13:00 – 14:30 GST**

**St. Regis Hotel, Saadiyat Island, Abu Dhabi**

### **Enablers for trade in green hydrogen and derivatives**

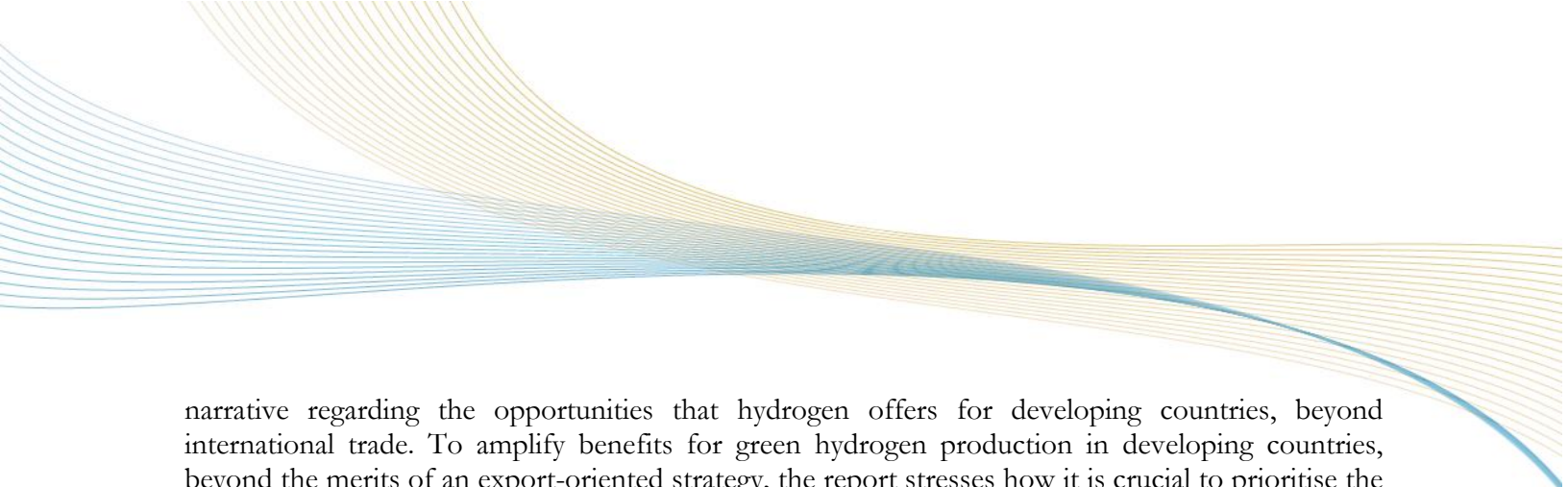
#### ***Background***

Hydrogen produced exclusively from renewable power – known as green hydrogen – is widely recognised as a key pillar in replacing fossil fuels and decarbonizing sectors that cannot easily be electrified, such as some industrial processes, shipping and aviation. Green hydrogen production expansion will require the development of new supply chains, with implications for international trade of renewable hydrogen itself, or commodities produced with it, as well as the trade of the necessary equipment and services along the value chain.

To inform the ongoing global discussion, IRENA and the World Trade Organization (WTO) joined forces to analyse the status and enablers for green hydrogen trade. The resulting report was presented at COP28, showcasing the role of trade in developing hydrogen markets. The publication highlights how lowering tariffs on key products, building reliable infrastructure, realigning domestic support programmes and developing green government procurement can foster the development of green hydrogen supply chains and the transition to a low-carbon economy. International trade could also play a significant role in matching supply and demand for green hydrogen, as the potential for domestic production in some economies might not be enough to satisfy domestic demand.

Another key aspect of the joint IRENA-WTO report is an acknowledgement that internationally aligned certification schemes will be essential to guarantee the origin and transparency on emissions intensity of traded flows of hydrogen. This is also true of trade flows in hydrogen-derived commodities like ammonia and methanol, as well as commodities which could be produced with green hydrogen, such as reduced iron ore and green steel. Schemes for the certification of sustainability attributes of these derivatives and commodities are even less well developed than for green hydrogen, and further international collaboration is required in this area.

The potential for growing trade flows in hydrogen and its derivatives offers an exciting opportunity for renewable-rich developing countries around the globe. The recent report developed jointly by IRENA, the United Nations Industrial Development Organization (UNIDO) and the German Institute of Development and Sustainability (IDOS) aims to provide a reframing of the current



narrative regarding the opportunities that hydrogen offers for developing countries, beyond international trade. To amplify benefits for green hydrogen production in developing countries, beyond the merits of an export-oriented strategy, the report stresses how it is crucial to prioritise the domestic utilisation of green hydrogen to address immediate local energy needs and environmental goals, to also stimulate the development of a local industry. By focusing on local consumption before exports, developing countries can ensure that the green hydrogen sector contributes more holistically to their economies, fostering job creation, technological advancement, and sustainable industrial growth. Furthermore, this approach aligns with global efforts to ensure a just and equitable transition to renewable energies, where the benefits of such transitions are more evenly distributed across and within countries.

### ***Objectives***

This event will convene Members with an interest in developing green hydrogen value chains, either for domestic energy transition or for export to demand centres elsewhere. The presentations and panel discussion will consider insights from recent collaborative work carried out by IRENA and partner organisations (WTO, UNIDO, IDOS). These insights and discussions on related topics should inform delegates on the development of trade policy as well as holistic strategies for the deployment of green hydrogen solutions as part of energy transition policymaking, especially in developing countries.

### ***Associated Publications***

[International trade and green hydrogen: Supporting the global transition to a low-carbon economy](#)  
(2023)

[Green hydrogen for sustainable industrial development: A policy toolkit for developing countries](#)  
(2024)

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