



## Outcomes: IRENA (International Renewable Energy Agency) – European Union Workshop: A Dialogue Between EU and Gulf Cooperation Council States on a Regulatory Framework to Develop Green Hydrogen Supply, Demand and Trade

April 5, 2022

### Background

IRENA, in collaboration with the European Union (DG (Director General) ENER), International PtX Hub Berlin, GIZ (Gesellschaft für Internationale Zusammenarbeit) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and Consumer Protection, organised the second workshop in the series on the Strategic Partnership for the Implementation of the Paris Agreement (SPIPA) on April 5, 2022, entitled, **“Jointly towards a Renewables-based future: A Dialogue Between European Union and Gulf Cooperation Council States on a Regulatory Framework to Develop Green Hydrogen Supply, Demand and Trade”**.

The first workshop covered the North African context on October 13, 2021. This paper provides the outcomes from the second workshop.

The aim of the workshop was to discuss the most conducive setup aim for policymakers to develop green hydrogen across the whole value chain and facilitate trade between the EU and MENA (Middle East and North Africa) regions. This included the topics of regulatory frameworks to decarbonise gas markets, promotion of hydrogen to reduce methane emissions and decarbonisation of energy and sustainability criteria. As well as to deepen the Collaborative Framework for Green Hydrogen activities with the private sector to enable country representatives to better understand the short-term needs of the industry.

The workshop was attended by 135 participants representing governments, the private sector, intergovernmental organisations, regional organisations and others. Further details on speakers and panel structure can be found in [Annex I](#). Key messages and takeaways from the panel discussion and interventions are highlighted below.

### Key messages and takeaways

The dialogue included a presentation titled “International Hydrogen Cooperation” on the EU green hydrogen strategy, the state of development on standards and certifications in the European Union and the role of external cooperation. Following the presentation, a panel discussion between the European Union and the Gulf Cooperation Council (GCC) countries (represented by the Kingdom of Saudi Arabia, Oman and the United Arab Emirates) reflected the need to deepen collaboration between the two parties on green hydrogen. Panellists provided insights into national green hydrogen priorities, opportunities, barriers and actions to address the challenges of ramping-up green hydrogen production.

- Green hydrogen is already playing a central role in the decarbonisation plans of GCC countries with the development of national green hydrogen strategies and roadmaps.
- National partnerships have been established between countries of the GCC Council and the European Union. International collaboration on the development of green hydrogen will be essential for success.
- Cost reduction of hydrogen production and transportation costs will bridge the gap to scale-up access to finance and engage closely with the private sector to increase green hydrogen production.
- At the institutional level, countries are working closely with international partners to set up a certification system aligned with the overall market. Harmonisation of certification schemes and requirements among different trading partners will be crucial.

Following the panel discussion, industry players and private sector associations made interventions on the opportunities and needs to achieve the targets set by the European Union and the countries of the GCC.

Industry players reiterated their interest in green hydrogen development with a clear recognition to scale up green hydrogen for use in the hard-to-decarbonise end use sectors of heavy transport and industry. The private sector highlighted the opportunities and needs to achieve this ambition.

- Availability of land and intellectual property in the GCC will be vital to the success of the EU green hydrogen objectives.



- Harmonisation, certification and trade agreements between the GCC and the EU region, coupled with capacity building, will allow further opportunities to be built in the sector.
- Collaboration will be essential to ensure the success of the green hydrogen market.
- The Green Hydrogen Mediterranean Partnership, presented on May 16, will provide a framework for developing joint standards building on the experience of pilot projects co-developed under the European Global Green Hydrogen Facility.
- Partnerships between stakeholders, including off-takers, manufacturers and policymakers is essential to support the development of green hydrogen. Renewable energy applications need to be considerably increases to meet global green hydrogen demand. Collaboration is key to unlock the opportunities for green hydrogen and its decarbonisation potential.

### Way forward

The workshop concluded that the event was timely, informative, and valuable in creating a dialogue between the participants on topics common to all. IRENA was requested to reconvene the group of Gulf Cooperation Council nations on a regular basis to maintain the worthwhile dialogue. **The next workshop will be proposed for Q2 2023 and may be combined with other events as appropriate.**

IRENA, in collaboration with the European Union (DG ENER), International PtX Hub Berlin, and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and Consumer Protection of Germany, will organise the **second workshop of the series for the North Africa region, tentatively in Q4 2022**. This will follow a similar format to the first workshop to allow for open discussion and robust public/private dialogue over the key issues related to green hydrogen supply, demand and trade.



## **Annex I**

### **IRENA-European Union Workshop**

#### **Jointly Towards a Renewables-Based Economy**

#### **A Dialogue Between EU and Gulf Cooperation Council on a Regulatory Framework to Develop**

#### **Green Hydrogen Supply, Demand and Trade**

**5 April 2022**

**9:00 am (CET)/11:00 am (GST)**

## **Background**

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In December 2015, the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) agreed to limit the global average temperature rise to well below 2 °C above the pre-industrial levels and limit the temperature rise to 1.5 °C by this century.

The recent 6th Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) showed that rapid reduction in greenhouse gas (GHG) emissions is even more urgent than previously thought. Thus, establishing global markets and a global supply chain for green hydrogen and its derivatives is a key enabling step towards full decarbonisation of our economies, especially in sectors that are hard to electrify.

However, transitioning green hydrogen from its current niche role to a globally used energy carrier with widespread usage across sectors will require an integrated policy approach to overcome challenges and reach a minimum threshold for market penetration. Policymakers need to adopt measures such as national hydrogen strategies and road maps as soon as possible<sup>2</sup>. At the same time, barriers that hinder a global trading system for green hydrogen and its derivatives require dedicated policy action<sup>3</sup>. Transparent, credible and reliable frameworks, standards and certification methods at the international level are essential to achieve a global market ramp-up of (preferably green) H<sub>2</sub> and its derivatives, as well as for the establishment of international export-import value chains.

In countries with abundant renewable energy resources, such as those in the Gulf Cooperation Council with particularly low renewable electricity prices, green hydrogen may emerge as a key enabler of the energy transition. This is because it offers, together with direct electrification, a way to contribute to countries' energy security. Countries can use existing renewable resources to produce green hydrogen for domestic consumption while producing green hydrogen for export, improving the resilience of their energy systems and reaching the fringes of energy systems. Crucially, with international cooperation, the emerging hydrogen market has the potential to be both decentralised and inclusive, with opportunities for countries at different stages of the energy transition alike.



## Introduction

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The European Union (EU) hydrogen strategy aims to develop an integrated hydrogen value chain. With the *Fit for 55* package, the EC has proposed a regulatory framework and governance system to facilitate trade in hydrogen and its derivatives. It recognises that not all member states are equally endowed with renewable energy resources. This may necessitate international trade and a market for green hydrogen, particularly between EU member states and the Gulf Cooperation Council countries.

IRENA, the EU, and the PtX Hub are collaborating on a series of workshops that enhance the dialogue over the challenges and policy measures needed to develop green hydrogen and support the development of a related global regulatory framework. On 13 October 2021, the first workshop covered the North African context; this workshop will focus on the GCC region.

## Alignment with other initiatives

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The workshops fit within the scope of the IRENA Collaborative Framework on Green Hydrogen (CFGH), co-chaired by IRENA Members of the European Commission and Morocco. The CFGH serves as a platform to enhance the dialogue over the challenges for both policymakers and private industry to develop green hydrogen. Four meetings of the CFGH country members have been held to date. The most recent meeting was held on 4 November 2021 and focused on key enabling measures needed to scale up green hydrogen production and infrastructure. These included developing common global principles for standardisation and certification, stimulating demand from hard-to-abate sectors and maintaining industrial competitiveness whilst creating export opportunities. In addition, the joint Enabling Measures Workshop with the World Economic Forum was held on 22 January 2022, which facilitated collaboration between IRENA members and the private sector. The EU participated in these two events as co-chair of the CFGH.

## Objective

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Aims of the workshop:

- (1) Discuss the most conducive regulatory framework to develop green hydrogen across the whole value chain and facilitate trade between the EU and MENA regions (baseline: EU policy framework: EU hydrogen strategy and *Fit for 55* package, including the framework to decarbonize gas markets, promote hydrogen and reduce methane emissions, and the delegated act on sustainability criteria (including additionality).
- (2) Deepen the CFGH activities with the private sector to enable country representatives to better understand the short-term needs of the industry.

## Audience

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The event will gather participants from government institutions, private sector representatives, development partners, academia and non-governmental organisations. The workshop will be conducted in a virtual format (Zoom platform) with the option of translation between Arabic and English.



## Programme

Duration	5 April 2022	
5 min	Welcome and Introduction	<ul style="list-style-type: none"><li>- Johanna Friese, Advisor, PtX Hub Brussels</li></ul>
15 min	Opening remarks	<ul style="list-style-type: none"><li>- Gauri Singh, Deputy Director General, IRENA</li><li>- Johannes Baur, Deputy Head of Unit, DG ENER, European Commission</li></ul>
10 min	Keynote Speaker	<ul style="list-style-type: none"><li>- Johannes Baur, Deputy Head of Unit, DG ENER, European Commission: "The proposed regulatory framework of the European Union for hydrogen trade"</li></ul>
45 min	Scene Setting	<p>Production potentials and planned strategies on renewable hydrogen in GCC countries</p> <p>Moderator: Binu Parthan, Head of Regions, IRENA</p> <p>Potential Panelists (Representatives from the following countries):</p> <ul style="list-style-type: none"><li>- Dr. Nawal Al Hosany, UAE's Permanent Representative to IRENA, Ministry of Climate Change and Environment</li><li>- Ahmed Al Dowsary, Business Development, Ministry of Energy, Kingdom of Saudi Arabia</li><li>- Dr. Khalil Al Hanashi, National Hydrogen Alliance (Hy-Fly), Petroleum Development, Oman</li></ul>
45 min	<p>Q&amp;A with the private sector</p> <p><i>What are the challenges and what support is needed for the private sector?</i></p> <ul style="list-style-type: none"><li>- Frank Wouters, Director, EU GCC Network</li><li>- Ahmed Samir Elbermbali, Director of Strategy and Operations, Clean Energy Business Council</li><li>- Jorgo Chatzimarkakis, Secretary General, Hydrogen Europe</li><li>- Karim Meghrebi, Director, Transaction Advisory, Dii Desert Energy</li><li>- Johannes Baur, Deputy Head of Unit, DG ENER, European Commission</li></ul>	
15 min	Closing Remarks	<ul style="list-style-type: none"><li>- Johanna Friese, Advisor, PtX Hub Brussels</li><li>- Reem Korban, Associate Programme Officer, IRENA</li></ul>

The workshop is conducted under the EU-funded *Strategic Partnership for the Implementation of the Paris Agreement* (SPIPA), a climate diplomacy program that facilitates exchange between the EU and non-EU major economies.



This event has been organised with the financial support of the European Union's Partnership Instrument and the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU) in the context of the International Climate Initiative (IKI). The opinions expressed are the sole responsibility of the speakers and do not necessarily reflect the views of the funders.