



Shared Prosperity Dignified Life



Webinar:

Potential Blue and Green Hydrogen Developments in the Arab Countries

Date & Time: Tuesday, the 14th of December 2021 from 11:00 A.M. to 13:00 P.M. Beirut Time (UTC+2) (10:00 A.M. – 12:00 P.M. Geneva Time (GMT+1))

Virtual Events Platform: ZOOM: https://us06web.zoom.us/meeting/register/tZYkd-yvqz0tHtT0uhsErGsx3Grn_t6EqYD3

Language: Arabic and English

Background:

The development of low carbon hydrogen, whether it is blue or green, in the economies of the Arab region would be an important part of efforts to address the environmental and economic vulnerability the region is exposed to and reduce reliance on fossil fuels, either as a source of revenue from exports or in the energy consumption mix.

In the long-term, the production and use of low carbon hydrogen will provide a new source of clean energy, falling neatly in line with SDG 7: 'Ensure access to affordable, reliable, sustainable and modern energy for all,' and by extension, SDG 7.2: 'increase substantially the share of renewable energy (RE) in the global energy mix by 2030' due to the need for a significant ramp-up of RE for green hydrogen. Notwithstanding the relevance in regard to SDG 7, the adoption of clean hydrogen will further impact the progress on several other SDGs that include clean water and sanitation (SDG 6), as well as climate action (SDG 13).

In 2018, a total of 117 million tons of hydrogen were produced globally. About 60% of this total was pure hydrogen produced by dedicated hydrogen plants and just over 40% percent was hydrogen produced as a by-product with other gases. The recent global enthusiasm for low carbon hydrogen is driven mainly by rapidly rising international actions to address climate change and attain the long-term carbon neutrality target. It is also reinforced by the impressive declining pattern of renewable energy generation costs and its beneficial impact on the potential production of green hydrogen.

Except for very few blue hydrogen projects in the Gulf Cooperation Council (GCC) area, all the hydrogen that is consumed in the Arab region is grey hydrogen produced from fossil fuel sources without CCS or CCUS. The bulk of the hydrogen used in the Arab region is in oil refining, petrochemicals (ammonia and methanol) and to a lesser extent steel production. In the framework of a sustainable energy transition and the achievement of sustainable development goals, abating the carbon footprints of these industries is a challenging and needs to be addressed. Clean hydrogen production as well as the technologies required to reach blue or green hydrogen from CCUS to RE are also key components of the circular carbon economy framework, which is to play an instrumental role in transforming the extractive industries within the Arab region as an engine for sustainable development

Each Arab country or group of Arab countries is likely to follow a different pathway to potentially develop low carbon hydrogen and introduce it in its economy, leveraging on either their natural gas resources and/or favourable existing and future renewable energy potential. Only a handful of Arab countries are actively pursuing and/or planning new low carbon hydrogen developments, including blue and green hydrogen projects.

However, the journey to a viable, scaled up, low carbon hydrogen industry, would be a long and challenging one. Even in Arab countries well-endowed with large natural gas resources, large renewable energy capacity, and a favourable financial position, the timeline for attaining the scaled up green hydrogen capacity milestone would take time, probably beyond 2030/2035. To make the scaling up of blue and green hydrogen capacity commercially viable, markets for low carbon need to be secured. This equation would be difficult to solve without government support and incentives. As such, over the next ten or fifteen years, the prospects for blue and green hydrogen developments in the Arab region is likely to be limited to a very small number of countries in the GCC area and North Africa with projects located mainly in industrial parks or clusters and ports that could become low carbon hydrogen hubs

Purpose:

In this context, ESCWA is organising a Webinar on the “**Potential Blue and Green Hydrogen Developments in the Arab Countries**” on the **14th of December 2021 from 11:00 A.M. to 13:00 P.M. Beirut Time (UTC+2) (10:00 A.M. – 12:00 P.M. Geneva Time (GMT+1))**. The purpose of this webinar is to shed light on existing and planned hydrogen developments in the Arab region and discuss the major challenges and opportunities of hydrogen production and uses to support the region’s energy transition within the context of the 2030 Agenda for sustainable development and climate actions as well as net-zero emission (NZE) targets by 2050.

The Webinar will address and discuss the following:

- Hydrogen production, transport, usage and existing and potential hydrogen uses
- Interlinkages of Hydrogen with the Sustainable Development Goals
- International case studies on hydrogen strategies
- Existing and planned hydrogen developments in the Arab region
- The potential for renewable and non-renewable energy sources in the Arab region and implications for clean hydrogen production
- Challenges obstructing the path towards clean energy and opportunities in the region
- Recommendations and ways forward

Agenda:

Time	Programme
11:00 - 11:05	Welcoming <i>Ms Radia Sedaoui</i> , Chief Energy Section, UN ESCWA
11:05 - 11:15	Presentation: Hydrogen global perspective Jose M Bermudez, Energy Technology Analyst, IEA
11:15 - 11:25	Presentation: Potential for the development of Blue and Green Hydrogen in Arab Countries ESCWA
11:25 – 12.25	Experts Panel discussion Moderator: <i>Ms. Radia Sedaoui</i> , Chief Energy Section, UN ESCWA <i>Emanuele Taibi</i> , Lead, Power Sector Transformation Strategies, IRENA <i>Rami Shabaneh</i> , Senior Research Associate, KAPSARC <i>Suhail Shatila</i> , Senior Energy Specialist, Strategy, APICORP <i>Khalil Al Hanashi</i> , Energy Technology Lead, PDO
12:25 – 12.55	Q&A Moderator: <i>Ms. Radia Sedaoui</i> , Chief Energy Section, UN ESCWA
12:55 - 13:00	Closing Remarks