



**COP²⁸
UAE**



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ROYAUME DU MAROC
KINGDOM OF MOROCCO

SIDE EVENT

SCALING UP GREEN HYDROGEN TECHNOLOGIES, A LEVERAGE FOR A DEEP INDUSTRIAL DECARBONIZATION

December 5th, 2023 - 9:30am to 11:00am

CONTACT Mr. Ayoub HIRT hirt@iresen.org 00212663431636
VENUE COP28, Expo City Dubai, United Arab Emirates - Moroccan Pavilion Blue Zone

Organized by



SCALING UP GREEN HYDROGEN TECHNOLOGIES, A LEVERAGE FOR A DEEP INDUSTRIAL DECARBONIZATION

The Paris Agreement has set strong constraints on emission reduction for all countries, especially for the hard-to-abate sectors such as industry, transport and power generation. To achieve the ambitious goals of limiting global warming to well below 2°C, and pursuing efforts to limit it to 1.5°C, new solutions are needed to decarbonize these sectors and create a circular and low-carbon economy.

One of these solutions is green hydrogen, which is produced by electrolysis using renewable electricity. Green hydrogen can be used as a fuel or a feedstock for various applications, such as power generation, mobility, industry and agriculture. By combining green hydrogen with captured CO₂, it is possible to produce synthetic fuels and chemicals, such as methanol and kerosene, through a process called power-to-X (PtX). These products can be used to replace fossil fuels and reduce emissions in sectors that are difficult to electrify.

Morocco has a huge potential to produce green hydrogen and its derivatives, thanks to its abundant renewable energy resources and its strategic location. According to a recent study, Morocco could cover 4% to 8% of the worldwide demand for green hydrogen by 2030, creating up to 500,000 jobs and generating up to \$20 billion in annual revenues. Morocco has also adopted a national strategy that positions PtX as a priority for the country's energy transition and economic development. Several projects are already underway or planned, such as the Morocco PtX Reference project, which aims to produce green ammonia and green methanol from renewable electricity and seawater desalination, and the GreenH2A Research Platform, which will test different technologies for green hydrogen production and utilization.

In this side event, we will discuss how scaling up green hydrogen technologies can be a leverage for a deep industrial decarbonization and a green economy. We will also showcase Morocco's achievements and ambitions in this field, as well as the opportunities and challenges for international cooperation among exporting and importing countries of green hydrogen byproducts. We will invite experts from academia, industry, government and civil society to share their insights and recommendations on how to accelerate the deployment of this promising sector.

The objectives of this side event are:

- To demonstrate that green hydrogen enables a deep and sustainable emission reduction, via a circular and a sector-coupling approach
- To demonstrate that green hydrogen fosters the development of a green industry/economy, with long-lasting international and regional cooperation perspectives among exporting and importing countries of green hydrogen byproducts
- To demonstrate that green hydrogen has positive environmental and socio-economic impacts for the global partnership created
- To highlight the main opportunities and challenges for scaling up green hydrogen technologies to decarbonize hard-to-abate sectors
- To suggest actions to remove the remaining hurdles and challenges, in terms of political, regulation and financial support to unleash the large scale deployment of this sector
- To highlight Morocco's policies that aim to unleash the potential of green hydrogen

SIDE EVENT AGENDA

Venue Morocco Pavilion

Time 9:30am - 11:00am | December 5th, 2023

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MODERATOR

Ayoub HIRT – Head of Department Green Chemistry, Bioenergy & Agritech, IRESEN

09:30- 09:40 Introduction

09:40- 09:50 **Peter Terium**, CEO, ENOWA (tbc)

09:50 - 10:00 **Carlos Funez Guerra** – Green Hydrogen Development Manager, IBERDROLA (tbc)

10:00 - 10:10 **Ali Zerouali** - Chief Development Officer Middle-East & Africa, HIF Global /co-president of the international partnership committee, Cluster Green H2 Maroc

10:10 - 10:20 **Anders Ødegård** - Senior Project Manager, REFHYNE/ SINTEF (tbc)

10:20 - 10:30 **Marco Raffinetti** – CEO, Hyphen

10:30 - 10:35 Q&A

Round table : Regional updates

10:35 – 10:50 **Mourad Hajjaji** - Director of Cluster Green Hydrogen Morocco

Raphaël Rinaldi Director Energy Systems Europe/International at Capenergies - H2Global Organization (tbc)

Jonas Moberg – CEO Green H2 Organization - AGHA Alliance (tbc)

Cornelius Matthes, CEO Dii Desert Energy – MENA Hydrogen Alliance (tbc)

10:50 – 11:00 Q&A