



## Developing a curriculum on Green Hydrogen Technologies and Applications in Southern Mediterranean Countries

GREEN aims to develop a vocational diploma in green hydrogen technologies and applications by establishing a collaboration network between companies, enterprises, and HEIs.

The project promotes capacity building for academic staff on the basic and recent advancements in green hydrogen technologies, to allow them to acquire the needed knowledge and skills to teach the diploma and the integrated courses and training programs.

The courses will be designed with clear learning outcomes and materials, accredited in each partner university, jointly taught and delivered, and tailored to utilize new technologies, in addition to the diploma, the project aims to deliver new/updated Green Hydrogen courses at the Higher Education Institutions (HEIs) in line with modern European strategies and implement the curricula through accreditation and enrolment of students.

### TOP NEWS

#### Finalization of the Capacity Building Plan

This plan has been delivered to develop the capabilities of faculty staff in green hydrogen technologies.

#### Establishment of Lab Equipment Specifications

UJ has finalized the requirements and specifications for green hydrogen lab equipment, confirming offers from all MENA partners to ensure regional functionality.

#### Successful Hosting of the GE-MENA Conference:

The consortium successfully held its third management meeting, followed by the landmark GE-MENA regional conference, which focused on the intersections of green hydrogen, solar energy, and agrotech.

## PARTNERS

## EU



## MENA



# TARGET GROUPS



Students, academic researchers and postgraduates at the MENA partner universities.

Academic staff at the Schools of Engineering of the Mechanical, Environmental, Chemical, Energy, and Electrical Engineering departments in the partner universities of the MENA region.



Industry and policy experts along with the technical support staff will organize regional training workshops for knowledge transfer and assist in providing guidance and technical training for students to use green hydrogen tools and digital methods, in addition to the "In-House" TOTs.

# PROGRESS

To determine how green hydrogen technologies can be used and how its applications can be integrated into learning process, Al Hussein Technical University (HTU) as the leader of WP4: Capacity Building and Training Workshops have finalized and delivered the Capacity Building Plan with the aim of developing the capabilities of professors who will teach the courses in partner universities on different topics of Green Hydrogen, modern teaching methodologies, and how to actively collaborate with enterprises. This package has four pillars: Capacity Building, Developing Training Materials, Training Workshops, and Online Workshops.



The GREEN consortium also announced the vacant position of the External Evaluator, from Reporting and Analysis to Peer Review and Collaborations, their role will play a constructive part in strengthening the project outcomes by providing an objective review of our quality assurance framework.



The next achievement is the finalization of the green hydrogen lab equipment requirements and specifications. The University of Jordan (UJ) as the WP5 leader have confirmed on the equipment offers list of all MENA partners of the consortium, ensuring the functionality and applicability of establishing labs on such a regional scale. The proceeding step is for partners to complete the procurement process and receive the equipment in the near future.

## CALL FOR TENDER

External Evaluator

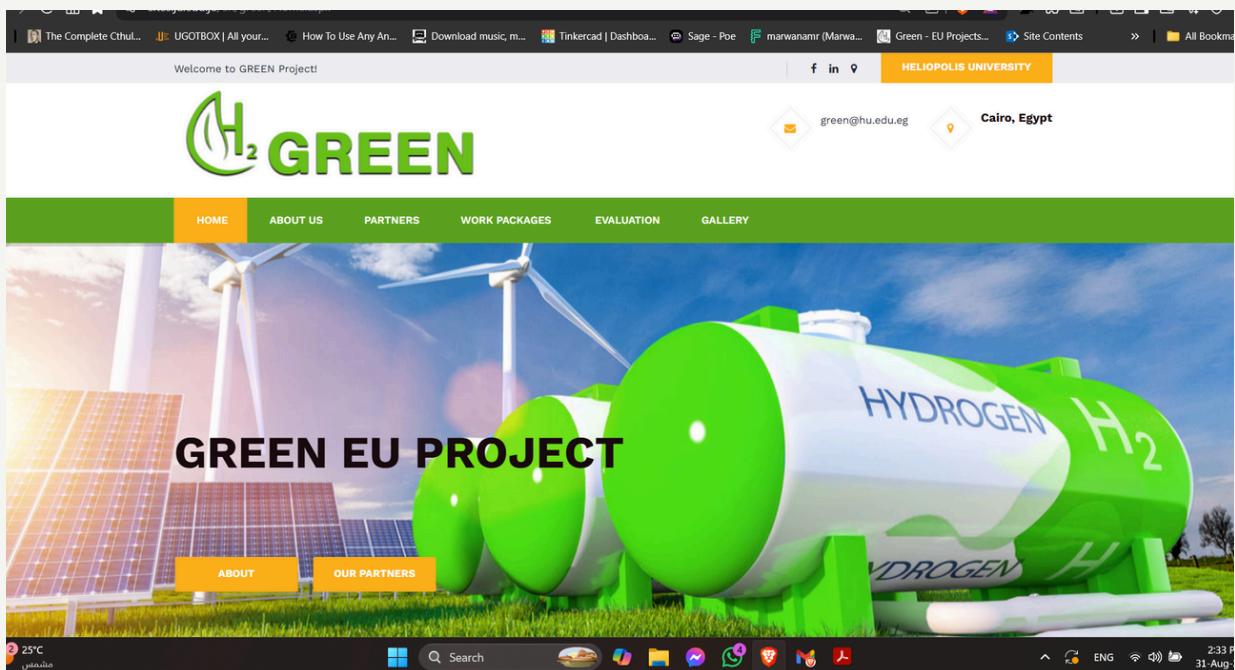
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Project ID  
101183478

Co-funded by  
the European Union

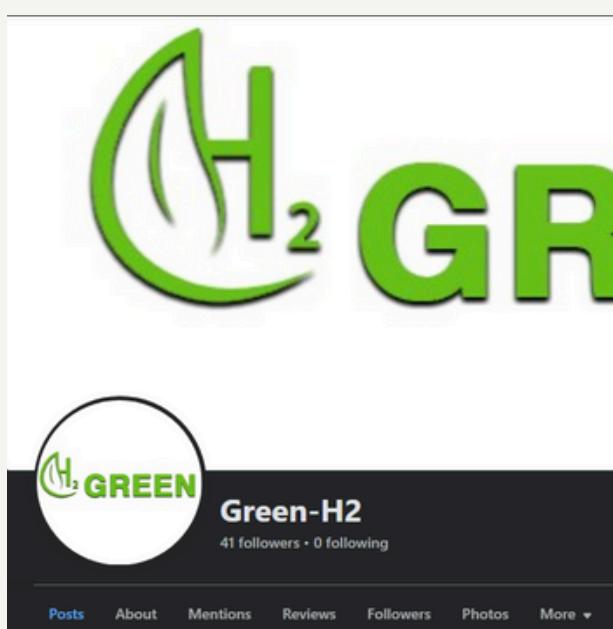
 H<sub>2</sub>GREEN

## Project Website

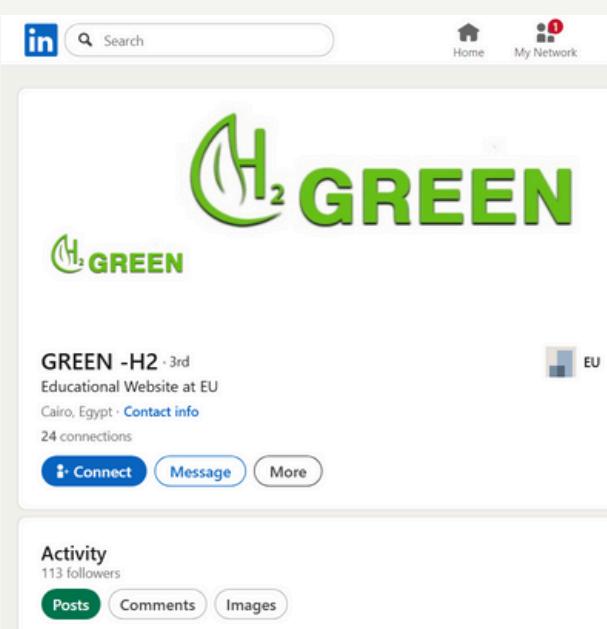


## Social Media

### Facebook



### LinkedIn



# MEETINGS

## GREEN 3<sup>rd</sup> Management Meeting – Amman, Jordan December 1<sup>st</sup>, 2025

The meeting started with Dr. Ahmed El Salaymeh, our Regional Project Coordinator and host from the University of Jordan, giving an uplifting opening session.

Work Package leaders discussed the project's progress, achieved deliverables and pending milestones. The partners also discussed the action plan for the upcoming year of 2026. The meeting was attended by more than 25 representatives from the consortium.



The second day was dedicated to the GE-MENA Conference, an international conference created to specifically target the topics of green hydrogen, solar energy and agrotech. Various members of the GREEN consortium had the opportunity to give keynote speeches and panel discussions on their related field of work in green hydrogen specifically and renewable energy in general. The conference is a huge step towards the MENA transition to clean sustainable energy. The conference, held under the patronage of UJ President Prof. Nathir Obeidat, marks years of extensive research efforts and international cooperation through a wide range of EU-funded regional and global projects.

3rd Online  
Management Meeting  
September 10, 2025

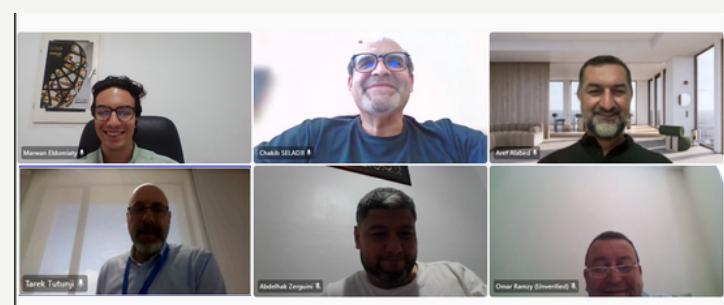
Dr. Martin Hauer, the general coordinator for the project, started the meeting by outlining the main tasks to be prioritized during the second half of 2025 and their progress so far. The meeting included discussion between all partners to discuss the next steps in each Work Package

1st Technical Committee  
Online Meeting  
August 27, 2025

The technical representative from each partner of the GREEN consortium participated in this meeting to discuss the technical highlights to be implemented in the curricula design to ensure smooth and efficient educational process to the beneficiaries.

Curriculum  
Accreditation Meeting  
September 08, 2025

This meeting aimed to explore the organizations and opportunities available to offer the GREEN curricula its needed international accreditation certificates as to ensure the quality delivered is up to both EU and MENA standards.



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# EVENTS

## Online Stakeholders Workshop

August 19<sup>th</sup>, 2025



**GREEN - guidelines**

**What**

- Green Hydrogen is a sustainable energy carrier that will be used for energy transportation in a future economy when it is produced from renewable sources.

**The Need**

- SMCs are in need of vocational programs focusing on Green Hydrogen and its applications in industry and industry within higher education institutions.

**The Purpose**

- Cooperation between companies and HEIs
- The courses will utilize new learning methods
- The ability to practice distance learning

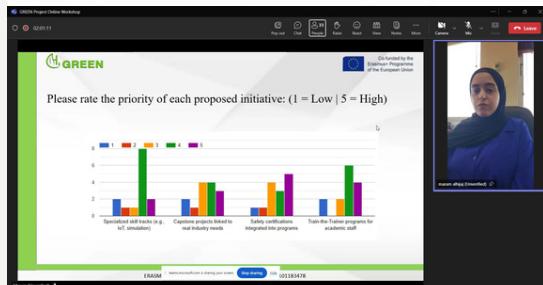


**Key Findings from Stakeholders**

- Skills gap: 78% of industry doubt graduate readiness
- Strong need for practical training, internships, certification
- Industry expectations vary → need for modular, flexible curriculum
- Consensus: close academia-industry collaboration

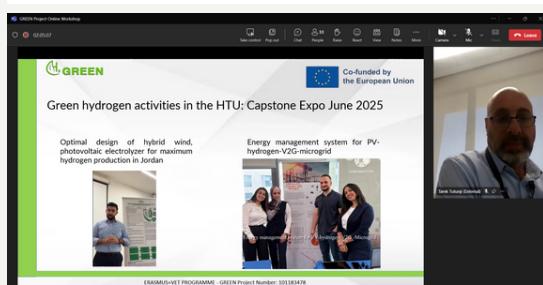
**Priority of each proposed initiative**

Initiative	1 (Most important)	2 (Second important)	3 (Third important)	4 (Fourth important)	5 (Least important)
Specialized software (e.g. ITC simulations)	3.0	2.5	2.0	1.5	1.0
Customer projects linked to real industry needs	2.5	2.0	1.5	1.0	0.5
Training certifications	2.0	1.5	1.0	0.5	0.0
Integrated into programs	1.5	1.0	0.5	0.0	0.0
From the Faculty of Science	1.0	0.5	0.0	0.0	0.0
From the Academic staff	0.5	0.0	0.0	0.0	0.0



**Please rate the priority of each proposed initiative: (1 = Low | 5 = High)**

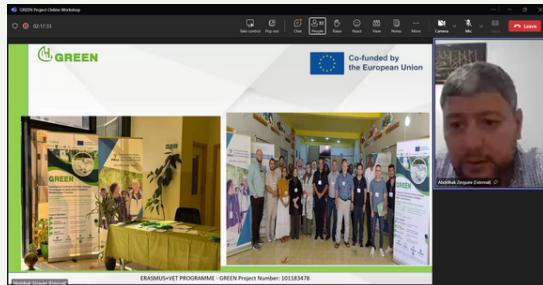
Initiative	1	2	3	4	5
Specialized software (e.g. ITC simulations)	1	2	3	4	5
Customer projects linked to real industry needs	2	3	4	5	1
Training certifications	3	4	5	1	2
Integrated into programs	4	5	1	2	3
From the Academic staff	5	1	2	3	4



**Green hydrogen activities in the HTU: Capstone Expo June 2025**

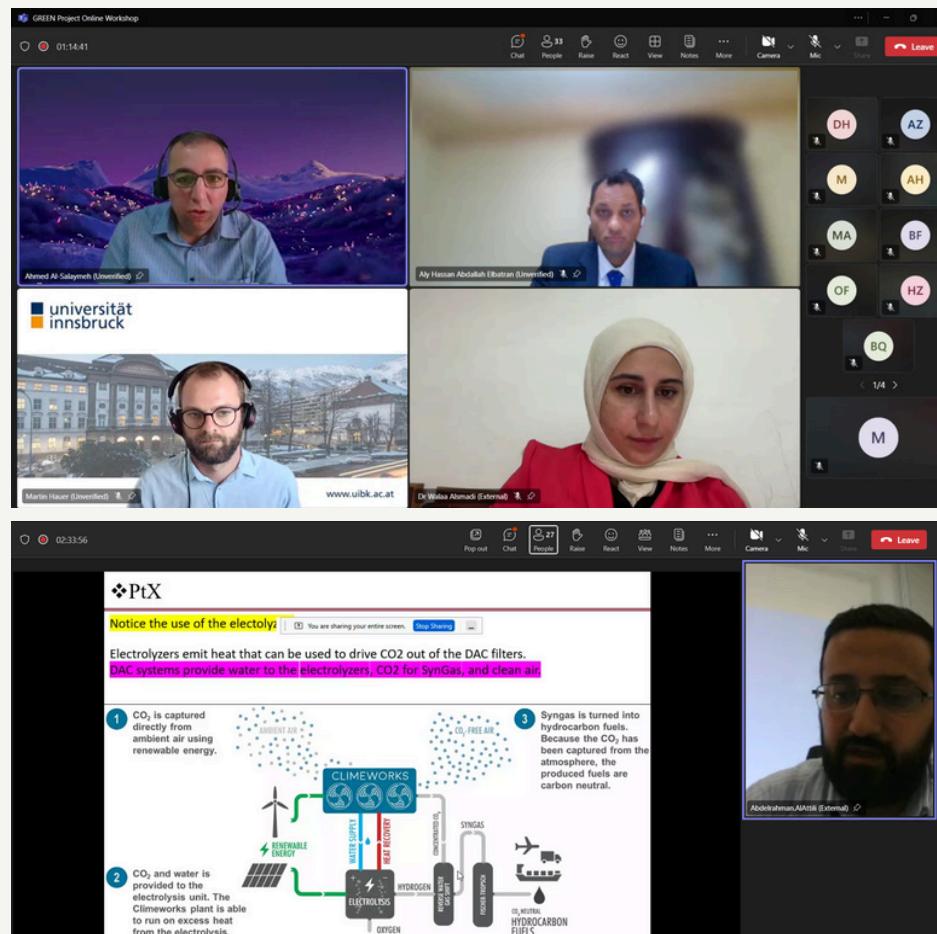
Optimal design of hybrid wind-photovoltaic electrolyzer for maximum hydrogen production in Jordan

Energy management system for PV-hydrogen-V2G-microgrid



After the completion of the physical stakeholders workshops in Egypt, Algeria and Jordan. The GREEN project hosted an inclusive online stakeholders workshop with more than 35 participants from different industrial and academic backgrounds across the EU and MENA region. The online workshop discussed project progress and updates, baseline study results & stakeholder findings and national workshop summaries from Jordan, Egypt, and Algeria. The workshop brought together experts to discuss new and innovative research findings for green hydrogen and its teaching methodologies, as well as data-driven presentations for linking academia with industry.

The workshop concluded with an engaging interactive discussion, highlighting the shared commitment of our partners and experts to advancing green hydrogen technologies and building a more sustainable future.



**universität innsbruck**

**Notice the use of the electrolyte**

Electrolyzers emit heat that can be used to drive CO<sub>2</sub> out of the DAC filters. DAC systems provide water to the electrolyzers, CO<sub>2</sub> for SynGas, and clean air.

**PtX**

1. CO<sub>2</sub> is captured directly from ambient air using renewable energy.

2. CO<sub>2</sub> and water is provided to the electrolysis unit. The ClimeWorks unit is able to run on excess heat from the electrolysis.

3. SynGas is turned into hydrocarbon fuel. Because the CO<sub>2</sub> has been captured from the atmosphere, the produced fuels are carbon neutral.

The University of Jordan's School of Engineering recently inaugurated the first regional conference on "Green Energy in MENA Region" (GE-MENA 2025), a landmark event highlighting the critical intersection of solar energy, green hydrogen, and smart agriculture. Supported by extensive EU-funded projects and international partnerships, the conference underscored that the transition to sustainable energy is an urgent economic and environmental necessity for the region's future. Industry experts and academics from over 15 countries gathered to discuss the "water-energy-food nexus" and the transformative role of AI and big data in managing intelligent energy systems. By showcasing years of collaborative research and innovation, GE-MENA 2025 reinforced the vital role of academic institutions in driving regional climate action and equipping the next generation with the green skills needed to lead the global energy transition.

AMMAN, JORDAN

December 2-3, 2025



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The GREEN Project Consortium is proud to announce a high-level online workshop series dedicated to the future of sustainable energy. We invite students, researchers, and industry professionals to join these deep-dive sessions led by international experts from our partner universities.

All sessions will take place at 4:00 PM Jordan Time (8:00 AM EST). Mark your calendars for these first three confirmed sessions:

Host	Topic	Date
University of Tlemcen	Mineral needs for the green hydrogen economy: a systems science perspective	January 22, 2026
Technical University of Hamburg	Oxygen production via electrolysis: A model-based assessment of its impact on a climate-neutral German energy system	February 11, 2026
University of Cyprus	Green Hydrogen: Technology Fundamentals	March 11, 2026

### Why Participate?

By joining this series, you will:

- Gain Expert Insights: Learn directly from leading academics in Algeria, Germany, and Cyprus.
- Network Across Borders: Connect with a community of professionals and students focused on the MENA energy transition.
- Stay Informed: Understand the latest research driving the global shift toward green hydrogen.

### How to Join?

No prior registration is required for these sessions.

Use the details below to join the live sessions via Zoom:

[Click Here to Join the Zoom Meeting](#)

Meeting ID: 981 4324 3838

Passcode: 173108