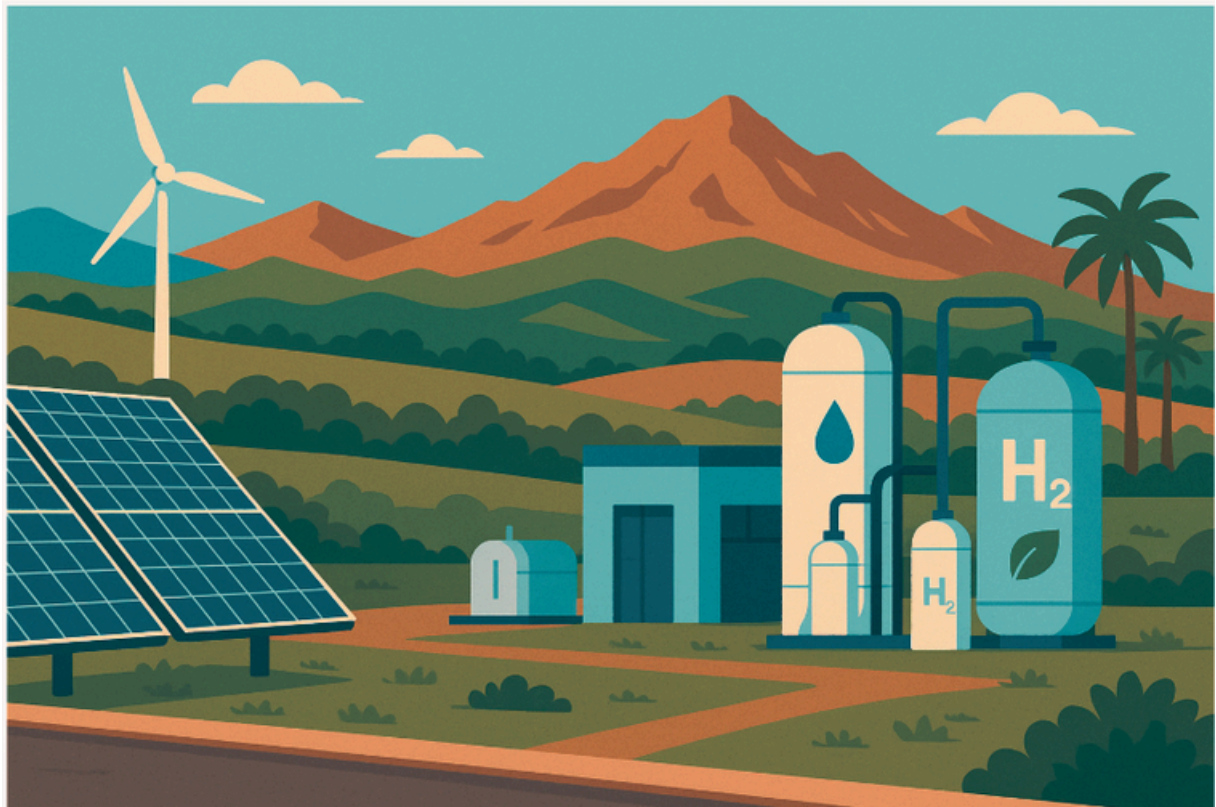


Concept Note

2nd EDITION OF THE GREEN HYDROGEN SUMMER CAMP

Ifrane , MOROCCO from 7th to 12th July 2025



1. BACKGROUND

Morocco has launched a regional strategy to develop an economic and industrial sector focused on green molecules such as hydrogen, ammonia, and methanol. The overriding objective is to strengthen the country's energy transition, reduce greenhouse gas emissions and support the decarbonisation of its partners. This approach is based on the exploitation of an exceptional potential in renewable energies, supported by expertise acquired over the last decade.

The production of green hydrogen in Morocco is envisaged as an engine for economic growth, playing a key role in the decarbonisation of industry and strengthening the country's security of energy and non-energy supply. It will also add value to the production of renewable electricity, offering the prospect of exporting green energy to major economies around the world.

Following the success of the inaugural Green Hydrogen Morocco Camp, which brought together 40 students from across Morocco, we are pleased to launch the second edition of this national flagship training initiative. This program supports Morocco's ambition to become a regional leader in green hydrogen by investing in youth capacity and innovation. The 2nd edition of the Green Hydrogen Summer Camp organised by the German International Cooperation Agency (GIZ) and the Solar Energy and New Energies Research Institute (IRESEN) in collaboration with al Akhawayn University in Ifrane, is a great opportunity to immerse yourself in the dynamic world of sustainable energy. Our aim is to arm you with in-depth knowledge, practical skills and a comprehensive understanding of the current and future applications of this revolutionary technology.

2. OBJECTIVES

The Green Hydrogen Summer Camp is an intensive one-week training program designed to build expertise in renewable energy and green hydrogen technologies. The first two days focus on Renewable Energy, covering solar, wind, hybrid systems, and energy storage—laying the groundwork for understanding hydrogen production.

The three last days explore the green hydrogen value chain, from production to end use, with sessions on electrolysis, fuel cells, hydrogen storage, and integration into smart microgrids. Participants will also examine regulatory frameworks, industry standards, and conduct Life Cycle Assessments (LCA) to evaluate environmental impact.

Led by experts from academia and industry, the program combines lectures, workshops, and real-life case studies, culminating in a Business Game mini-hackathon, where teams develop and pitch green hydrogen project concepts. This hands-on approach equips participants with both technical knowledge and strategic insight to navigate the evolving hydrogen sector.

Business Game : GREEN HYDROGEN Mini-HACKATHON:

As part of the summer camp, participants will engage in a Business Game, a simulation-based mini-hackathon where teams compete to design and pitch a viable green hydrogen project under realistic technical, economic, and environmental constraints.

The goal is to help participants apply what they've learned in a practical, team-based setting, simulating real-world challenges faced by developers, investors, and policymakers in the green hydrogen sector.

3. Summer School Content:

Structure of the Program

- Duration: 1 week
- Participants: 80 students selected through a national call
- Format: A blend of technical training, interactive workshops, site visits, and project-based learning

4. Curriculum Breakdown

Day 1 & 2 – Renewable Energy Fundamentals

- Overview of Morocco's energy landscape and the global energy transition
- Solar, wind, and hybrid systems: design, operation, and economics
- Energy storage and smart grid integration
- Morocco renewable energy framework

Day 3,4 & 5 2 – Green Hydrogen Ecosystem

- Introduction to hydrogen and its role in decarbonization
- Green hydrogen production: electrolysis powered by renewables
- Hydrogen storage, transport, and end-use applications (e.g., industry, mobility)
- H2 derivatives : Green ammonia, methanol, e-fuels.
- Environmental and water resource considerations
- Visit to on-campus H2 pilot project

5. Expected Outcomes

- 80 trained young professionals with practical and theoretical knowledge in RE and hydrogen
- Project ideas or prototypes addressing real challenges in green hydrogen
- Strengthened network of institutions, academia, and industry actors in Morocco's hydrogen ecosystem

Dates and Venue

- Dates: 7–12 July 2025
- Venue: Al Akhawayn University, Ifrane

4. ELIGIBILITY CRITERIA

To be eligible for this program, applicants must meet the following requirements:

- Be a citizen of an African country and currently residing in Africa.
- Be currently enrolled in a bachelor's, master's, or engineering degree program in a field related to energy—such as renewable energy, electrical engineering, mechanical engineering, energy systems, environmental engineering, or any other relevant discipline.
- Demonstrate a genuine interest in energy-related topics, sustainability, and energy transition.
- Be available and fully committed to attending all sessions and activities throughout the program.
- Applicants must have excellent verbal and written communication skills in English.

5. Selection procedures

80 students will be enrolled to the summer school.

16 teams of 5 members will be formed for the Business game.

3 winner teams will be selected at the end of the business game.

6. Application

- Applicants must complete the application form (uploading their CV and a 1 min motivational Video).
- Guidance for the video is specified in the application form.
- The deadline for submitting the application form is **23:59 on 15th June 2025**.
- Applications received incomplete or after the deadline will not be considered.

7. Cost & Practical information

The Green Hydrogen Camp is **fully sponsored** and covers all program-related costs, including meals and accommodation for the entire duration of the camp.

Students coming from other Moroccan cities must arrange and cover their own travel to Meknes. A shuttle service from Meknes to Ifrane will be provided by the organizers as the only included transportation.

8. CERTIFICATION

At the end of the training, participants will receive certificates of attendance.

Prizes will be delivered to the winners after the end of the hackathon.

9. Trainers

The program is delivered by high-level international experts from partner institutions, including academia, research centers, and industry, ensuring a rich and multidisciplinary learning experience.