

# E-learning programme on hydrogen projects for project developers and project financiers from developing emerging countries.

## RESULTS FACTSHEET



**Figure:** RENAC's Online Academy training programme on green hydrogen (Source: RENAC, 2024)

## The Challenge

Green hydrogen and its derivatives are considered to be a key element for decarbonising the economy around the world. However, the development of such a global green hydrogen economy and its generation capacities is still in its infancy.

In order to build such projects or facilities, key actors, especially project developers and project financiers, need to have the knowledge and skills relevant to their tasks and areas of work:

- Project developers need to understand the business opportunities associated with hydrogen and what is needed to realise them, and they should be able to develop bankable project proposals;
- Financial institutions need the knowledge to evaluate business proposals, mitigate technology-specific risks and reduce transaction costs.

Many developing and emerging countries offer excellent conditions for the production of green hydrogen based on renewable energies. So far, however, there are very

few training concepts specifically tailored to project development and financial assessment in these countries to drive the construction of hydrogen production plants. This planned training programme is intended to close this gap.

## The Solution

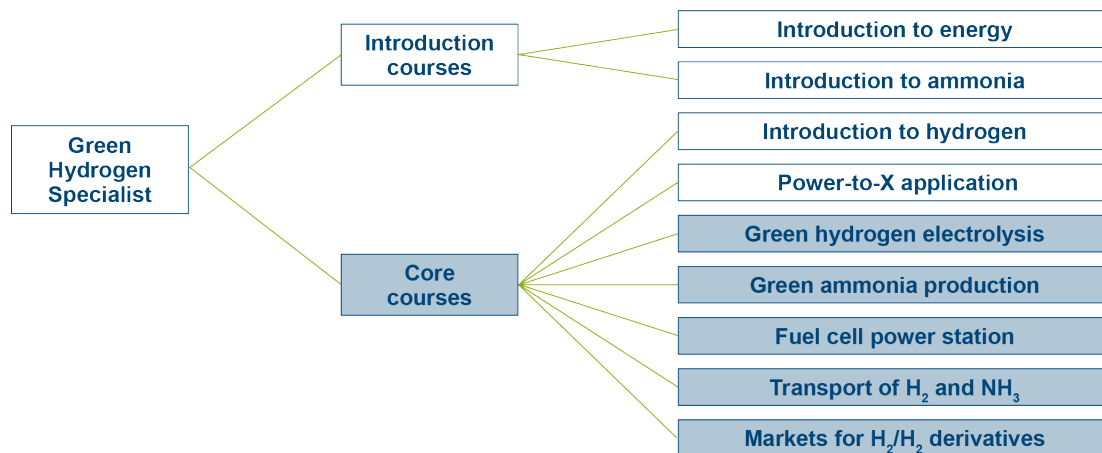
The e-learning programme has the following objectives:

- Describe markets for green hydrogen and their development.
- Explain the value chain for hydrogen and its derivatives in detail.
- Teach the basics of project development.
- Enable to assess and implement sustainability aspects when evaluating hydrogen projects.
- Be able to assess the economic viability of project proposals.

## Our Services in the PPP

As part of the PPP measure, the e-learning programme **“Green Hydrogen Specialist: Project Development and Economics”** is being offered free of charge to a certain number of participants from developing and emerging countries. The training programme is available in the online academy of Renewables Academy AG (RENAC). The programme combines asynchronous and synchronous e-learning.

Participants have access to texts, assignments and instructional videos, and they have the opportunity to participate in virtual classrooms. The e-learning programme concludes with an online examination. Successful participants receive a certificate that they can use for their professional career.



**Figure:** Course overview for the Green Hydrogen Specialist training. The blue courses are considered in final exam (Source: RENAC, 2024)

## Main Results and Findings

Main Results of the **“Green Hydrogen Specialist: Project Development and Economics”** training include:

- Within the H2Uppp project, Renewables Academy (RENAC) AG awarded a total of 200 scholarships for the certified programme **“Green Hydrogen Specialist: Project Development and Economics”** to participants from the private sector in H2Uppp focus countries.
- From September to December 2023, these dedicated individuals delved into the intricacies of green hydrogen, expanding their knowledge and skills in green hydrogen electrolysis, green ammonia production, fuel cell power stations, transport of hydrogen and ammonia as well as markets for hydrogen and hydrogen derivatives. The total study time was approx. 155 hours. Participants had to submit three assignments and to pass an online exam successfully to get the certificate.
- E-learning training programme is officially certified by the Staatliche Zentralstelle für Fernunterricht/State Agency for Distance Learning (ZFU).
- The first cohort of the training programme has concluded with remarkable success. More than 100 experts from around the world have successfully

passed the programme’s rigorous examination. Their knowledge will be instrumental in driving the development of green hydrogen projects and navigating the complex economic landscape of this emerging industry.

- By gender: 38 female, 62 male
- By field of business: 16 finance/banking, 84 project development
- By country: 2 Algeria, 8 Brazil, 7 Colombia, 10 Egypt, 11 India, 3 Indonesia, 1 Malaysia, 10 Mexico, 11 Morocco, 12 Namibia, 3 Nigeria, 1 Philippines, 7 South Africa, 2 Thailand, 2 Tunisia, 7 Turkey, 1 Ukraine, 2 Viet Nam
- RENAC is offering the training programme **“Green Hydrogen Specialist: Project Development and Economics”** twice a year in its Online Academy on a self-pay basis. The next intakes will start on 01 April and 01 October 2024.

### Further information

<https://www.renac.de/trainings-services/trainings/ready-made-trainings/product/green-hydrogen-specialist-project-development-and-economics>

The International Hydrogen Ramp-up Programme (H2Uppp) of the German Federal Ministry for Economic Affairs and Climate Action (BMWK) promotes projects and market development for green hydrogen in selected developing and emerging countries as part of the National Hydrogen Strategy.

**Published by:**  
Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices  
Bonn and Eschborn, Germany

Address  
T +49 61 96 79-0  
F +49 61 96 79-11 15  
E [info@giz.de](mailto:info@giz.de)  
I [www.giz.de](http://www.giz.de)

**Author:**  
Regine Dietz

**Layout:**  
peppermint werbung berlin GmbH, Germany

**Photo credits/sources:**  
GIZ

**URL links:**  
Responsibility for the content of external websites linked in this publication always lies with their respective publishers. GIZ expressly dissociates itself from such content.

GIZ is responsible for the content of this publication.

**Contact:**  
GIZ  
N Janka Clauder  
E [Janka.Clauder@giz.de](mailto:Janka.Clauder@giz.de)  
I [www.giz.de](http://www.giz.de)