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# H<sub>2</sub>

Green Banking Online Training Programme

# Green Hydrogen Economics and Project Development



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## PROGRAMME SUMMARY

### Building a Green Hydrogen economy

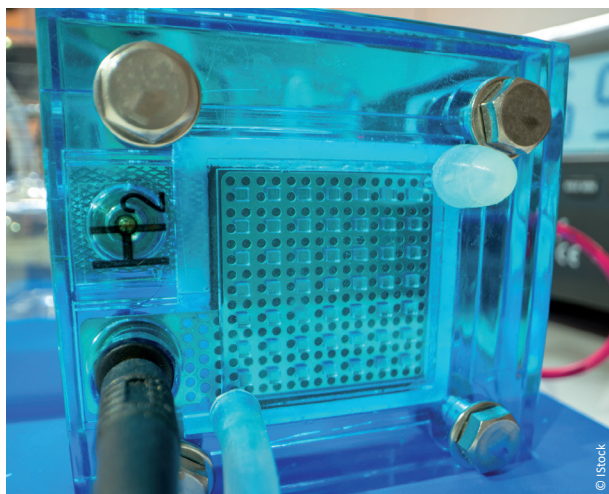
Global demand for Green Hydrogen and its derivatives has grown rapidly. Completing the online training programme, *Green Hydrogen Economics and Project Development*, will enable participants to understand the complex economic and project development aspects of this key element in the transition to a low-carbon future.

Participants will gain basic knowledge of hydrogen electrolysis, ammonia production, fuel cell power plants, transport options, and Green Hydrogen markets. This training provides a useful basis for setting up initial Green Hydrogen projects around the world, thus supporting the market ramp-up. Furthermore, it prepares participants to lead economic and political discussions on the Green Hydrogen market development. They will be able to formulate the right questions about expanding the Green Hydrogen market and project-specific parameters, such as approval procedures. Professionals in this online training will also learn essential facts about proven technological developments in Green Hydrogen. They can incorporate this information into their project development plans and present technological options that make their projects more competitive and profitable.

### Is this programme for you?

This training programme is designed specifically for key players in the banking sector, project development and implementation, such as project developers and financiers. Project developers require the ability to plan financially viable projects, while financial institutions need comprehensive knowledge to evaluate these plans and identify potential risks. This is especially important as Green Hydrogen projects involve various risks, and thorough risk assessment is crucial to attract potential investors and ensure financial stability.

A unique feature of this five-month online programme is the opportunity to network with other professionals and experts. Thus, fostering potential collaborations or career opportunities.



## WHAT IS THE GREEN BANKING PROGRAMME?

The Green Banking - Capacity Building on Green Energy and Climate Finance is a scholarship programme within the German International Climate Initiative (IKI). The Renewables Academy AG (RENAC) has been commissioned by the German Federal Ministry for Economic Affairs and Climate Action (BMWK) to provide a capacity building programme on green energy and climate finance in the partner countries.

The Green Banking project aims to support target groups in the development and implementation of green energy and climate finance throughout the entire banking value chain. Through the holistic trainings offered, professionals from the banking sector, project developers and policy makers will gain knowledge on financing renewable energy and energy efficiency projects.

<https://www.renac.de/projects/current-projects/green-banking-project>

## TARGET GROUPS

This training suits you if you are:

- An employee of a company that develops projects involving cutting-edge technologies, such as production of hydrogen using electrolyzers.
- An employee of a bank, insurance company, or financial institution seeking to evaluate the financial aspects of Green Hydrogen, green ammonia, and fuel cell power stations.
- An employee of a company that makes informed decisions regarding opportunities for:
  - production of Green Hydrogen using electrolyzers
  - production of ammonia from Green Hydrogen
  - transport of hydrogen and ammonia
  - production of energy from Green Hydrogen via fuel cells
- Citizen of one of the partner countries: Colombia, Brazil, Indonesia, Vietnam, Kenya and South Africa.

Whether you are part of a company looking to venture into these exciting areas of project development or a financial institution seeking to assess the viability of financing such projects, this programme is designed to provide you with fundamental knowledge. You will be prepared to make informed decisions regarding project development and financing opportunities.

## LEARNING OUTCOMES

### Programme learning objectives

By the end of this five-month online training programme, participants will have a good understanding of Green Hydrogen economics and project development. They will be equipped with the knowledge and skills to identify opportunities in the rapidly evolving Green Hydrogen sector. Whether you are a project developer or a finance institution looking to enter the Green Hydrogen market, this programme will provide you with the tools and insights needed to succeed in this promising industry.

After completing these courses, participants should be able to:

- apply the basic principles of project development in the production of Green Hydrogen via electrolysis, green ammonia production, and for small fuel cell power plants,
- evaluate and implement sustainability aspects into project planning and operation,
- assess project economic viability and identify associated project risks,
- explain the various markets and transport options available for Green Hydrogen and ammonia,
- explain the fundamentals of hydrogen as an energy carrier and its potential in various applications and
- assess investment opportunities in the evolving Green Hydrogen economy.



## PROGRAMME STRUCTURE

Module	Module 1	Module 2	Module 3	Module 4
Courses	<p>Introduction to GH<sub>2</sub></p> <p><b>Mandatory courses</b></p> <ul style="list-style-type: none"> <li>• Introduction to hydrogen</li> <li>• Power-to-X: applications and cost development</li> </ul> <p><b>Optional course</b></p> <ul style="list-style-type: none"> <li>• Introduction to Energy</li> </ul>	<p>Green Hydrogen Electrolysis</p> <p><b>Mandatory courses</b></p> <ul style="list-style-type: none"> <li>• Green Hydrogen production by electrolysis - project development and financial evaluation</li> </ul> <p><b>Optional course</b></p> <ul style="list-style-type: none"> <li>• Introduction to Ammonia</li> </ul> <p>Assignment A: Hydrogen Feasibility Roadmap</p>	<p>Green Ammonia &amp; Fuel Cells</p> <p><b>Mandatory courses</b></p> <ul style="list-style-type: none"> <li>• Green ammonia production – project development and financial evaluation</li> <li>• Fuel cell electric power generation</li> </ul> <p><b>Optional course</b></p> <ul style="list-style-type: none"> <li>• Energy storage - application and technology</li> </ul> <p>Assignment B: Hydrogen Offtakers</p>	<p>Markets and Transport</p> <p><b>Mandatory courses</b></p> <ul style="list-style-type: none"> <li>• Green hydrogen and ammonia transport – overview</li> <li>• Markets for hydrogen and its derivatives</li> </ul> <p>Assignment C: Levelised Cost of Hydrogen</p>
Assignment				
Virtual Classroom	<p>Introduction</p> <p>21.07.-17.08.2025</p>	<p>Power to X (PtX) pathways</p> <p>18.08.-21.09.2025</p>	<p>Hydrogen feasibility Roadmap</p> <p>22.09.-26.10.2025</p>	<p>Hydrogen Markets and off-taker profiles</p> <p>27.10.-30.11.2025</p>
Duration				
Final exam: takes place weekend after Module 4				

Fig. 1: Green Hydrogen Training Overview.

## PROGRAMME BACKGROUND AND PARTICIPATION

### 1 Application process

As part of the Green Banking project, RENAC will be able to offer 20 scholarships to participants from each partner country: Brazil, Colombia, Nairobi, Indonesia, South Africa and Vietnam. Individuals who wish to participate in the training programme must submit a completed application form, available on the RENAC website.

The programme takes into account a balanced gender selection of participants and promotion of career opportunities.

The deadline for scholarship applications is **16th June 2025**.

RENAC will inform candidates via email as soon as possible if they have been selected for a scholarship for the online training. The applicant must confirm their acceptance of the scholarship offer by replying to the invitation from RENAC via email.

**NOTE:** Scholarship recipients **must log into** the learning platform **no later than 2 weeks after the start** of the training programming.

### 2 Language

The programme language is English, Spanish and Portuguese. All programme material (including course content, videos, pre-recorded lectures, assignments, and exams) will be available in the language of the target country.

### 3 Online training programme features

The Green Hydrogen Project Development and Economics programme combines asynchronous and synchronous learning methods. Participants will have access to texts, assignments, and instructional videos, and they will have the opportunity to participate in virtual classrooms.

Learning with RENAC is done asynchronously in two steps. First, participants work through each course's content, and then get the opportunity to apply the newly acquired knowledge and skills, consolidating them in their minds. In practice, both steps are accomplished in several ways. The online training also contains written assignments that not only further reinforce learning outcomes but may also complement their exam marks.

### 4 Final examination and certificate

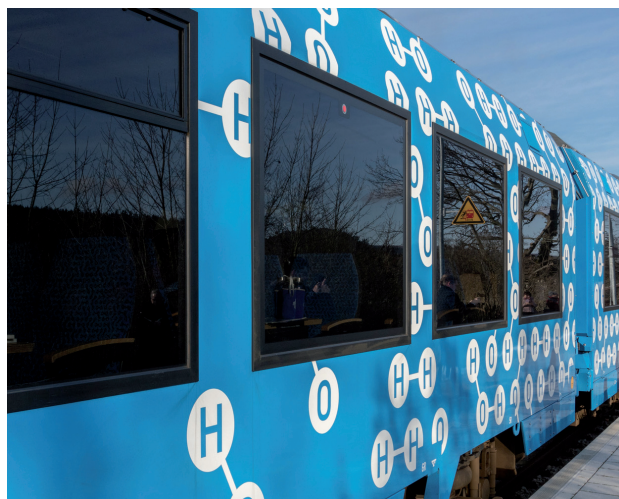
In order to finalise the training successfully, participants will need to complete and pass an online examination with a grade of at least 70%. Successful participants will receive a digital certificate from RENAC.

### 5 Workload for participants

Depending on prior knowledge, participants should expect to spend about 200 hours to successfully complete the course. This includes: Reading and understanding the material, watching videos, answering self-test questions, participating in virtual classrooms, and joining the Q&A forum. It also includes submitting short assignments, completing administrative work (familiarising with the Moodle platform and creating profiles, etc.), and successfully preparing for and taking an online exam.

Criteria for the selection of participants are:

1. Citizen of an eligible country: Brazil, Colombia, Nairobi, Indonesia, South Africa or Vietnam.
2. English language skills level B2.
3. Not currently enrolled students:
4. A robust application and the provision of a CV within the application window.



## 6 Assignments

During the training, participants are required to complete three assignments. The first two involve researching a specific topic and submitting a written response of approximately 500 words via the course's assignment forum. The third assignment additionally requires the use of a Levelised Cost of Hydrogen (LCOH) calculation tool provided by RENAC.

The average grade across the three assignments will contribute 30% to the final course grade; the remaining 70% will be based on the online exam.

Each assignment submission must be accompanied by:

- A declaration regarding the use of AI tools, and
- A list of references used

## 7 Dates and programme schedule

The Green Banking Scholarship for the Green Hydrogen Economics programme lasts 20 weeks and is scheduled to **start on 21 July 2025** and **end on 30 November 2025**.

## 8 Content

The Green Hydrogen Project Development and Economics online programme provides project developers and representatives from finance institutions with the necessary knowledge and skills to navigate the emerging field of Green Hydrogen economics and project development. Through a combination of 10 courses, participants will gain a deep understanding of Green Hydrogen energy systems and hydrogen transport, hydrogen electrolyser technologies, ammonia production and transport, fuel cell power stations, Power-to-X applications, and fuel cell power station projects. This programme aims to equip participants with the expertise needed to capitalise on the growing opportunities in the Green Hydrogen market.

### DATE OF TRAINING

21 July 2025 - 30 November 2025

### DEADLINE FOR SCHOLARSHIP APPLICATION

16 June 2025

### RECOMMENDED STUDY TIME

About 10 hours per week

About 200 hours

### DURATION

5 months (20 weeks)

### REGISTRATION

<https://form.jotform.com/250284680163355>



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## Green Hydrogen Economics and Project Development

