

JUST-GREEN AFRH2ICA



PROMOTING A JUST TRANSITION TO GREEN HYDROGEN IN AFRICA

Project ID	101101469
PRR 2024	Pillar 5 – Cross-cutting
Call topic	HORIZON-JTI-CLEANH2-2022-05-05: Research & innovation co-operation with Africa on hydrogen
Project total costs	EUR 999 995.00
Clean H₂ JU max. contribution	EUR 999 995.00
Project period	1.2.2023–31.1.2025
Coordinator	Università degli Studi di Genova, Italy
Beneficiaries	African Hydrogen Partnership, Artelys, BluEnergy Revolution SCRL, Commissariat à l'énergie atomique et aux énergies alternatives, Forschungszentrum Jülich GmbH, Fundación IMDEA Energía, Impact Hydrogen BV, Institut de Recherches en Énergie Solaire et Énergies Nouvelles, Noordwes-Universiteit, STAM SRL, Strathmore University, Technologie Solutions Limited

<https://just-green-afrh2ica.eu/>

PROJECT TARGETS

Target source	Parameter	Unit	Target	Achieved to date by the project	Target achieved?
Project's own objectives	Modelling tools from the consortium updated	number	5	N/A	
	Number of trainees	number	> 200	60	
	Approval of the project roadmaps	%	> 70 %	N/A	⚙️
	Modelling AU green H ₂ scenarios using unique consortium tools	number of use cases	4	N/A	
	Number of users of the JUST GREEN AFRH2ICA matchmaking/stakeholder platform	number of registered users	> 150	N/A	
	Number of AU countries' policies analysed	number	10	25	
	Stakeholders' interaction – number of stakeholders engaged in activities	number	At least 25 stakeholders always present and active in planned stakeholder-driven activities	> 25	✓

PROJECT AND GENERAL OBJECTIVES

JUST GREEN AFRH2ICA aims to develop a green hydrogen just transition roadmap that would make African-European transition pathways to H₂ synergic and sustainable (from environmental and social points of view), while avoiding any new EU hydrogen colonisation of Africa and promoting a mutually beneficial collaboration between the two continents for the development of independent and collaborative hydrogen economies, research and development ecosystems and value chains. To do so, JUST GREEN AFRH2ICA has involved key partners from the EU and African Union (AU) sides at the association (African Hydrogen Partnership and Hydrogen Europe), academia, research and technology organisation and policymaking levels. JUST GREEN AFRH2ICA aims to be a stepping stone to a collaborative hydrogen roadmap that, based on the analysis of different AU green H₂ scenarios at the socioeconomic-technical level via partners' tools (also assessing local resources – renewable energy sources and water are the key ones for green hydrogen production), will also drive future investments and policies and the set-up of local manufacturing lines.

NON-QUANTITATIVE OBJECTIVES

- Support the mutual benefit collaboration between Africa and Europe on green hydrogen initiatives.
- Promote a just green hydrogen transition on both continents.
- Stimulate the sharing of know-how between the continents.
- Identify the most interesting African countries for investing in green hydrogen, looking at both domestic markets and export to Europe.

PROGRESS AND MAIN ACHIEVEMENTS

- Assessment of the green hydrogen potential of African countries using a multisectoral approach.
- Identification of the use cases to be modelled as archetypes of potential African hydrogen offtakers.

- Definition (partly based on stakeholders' insights) of the hydrogen hub approach inspired by and in comparison with the European hydrogen valley approach.
- Detailed assessment of AU-EU green hydrogen policies and points of interaction.
- Analysis of existing natural gas infrastructure's potential to be enriched by hydrogen to transport it to the EU.
- Development and enhancement of partners' models to be adapted to the African context and data availability (e.g. innovative water modelling/assessment approaches).
- Interaction with stakeholders through surveys and at events to collect inputs to project actions in work packages 1–3.
- Launch of the e-learning platform and of the first package of training materials.
- Organisation of a training workshop in Nairobi in concomitance with a large EU-AU workshop.
- Participation in > 10 events, delivery of three speeches at international conferences, organisation of five stakeholders' workshops, running of a robust social media campaign and release of the first project videos.

FUTURE STEPS AND PLANS

- Modelling of the project use cases to collect information and results to drive the drafting of the project's joint EU-AU roadmaps (research and development, financing, manufacturing and electrolyser installation).
- Set-up of the second e-learning package.
- Organisation of further stakeholders' workshops and trainings.
- Organisation of a final event to present the project roadmaps and findings.