



**ECOWAS
CEDEAO**



ECREEE
Towards Sustainable Energy



West African
Science Service Centre on
Climate Change
and Adapted Land Use



SPONSORED BY THE
**Federal Ministry
of Education
and Research**

CONCEPT NOTE

Regional Capacity Building Workshop of ECOWAS Private Sector Actors on Green Hydrogen

**19th – 20th September 2024
Lagos
Nigeria**



ECOWAS
CEDEAO



ECREEE
Towards Sustainable Energy



West African
Science Service Centre on
Climate Change
and Adapted Land Use

SPONSORED BY THE



Federal Ministry
of Education
and Research

Table of Contents

1. CONTEXT	3
2. OBJECTIVE OF THE WORKSHOP	3
3. EXPECTED RESULTS	4
4. DATE AND PLACE	4
5. PARTICIPANTS	4
6. LANGUAGES	4
7. DRAFT AGENDA	4
8. LOGISTICS INFORMATION	6



ECOWAS
CEDEAO



ECREEE
Towards Sustainable Energy



West African
Science Service Centre on
Climate Change
and Adapted Land Use

SPONSORED BY THE



Federal Ministry
of Education
and Research

1. CONTEXT

Green hydrogen is recognized as an energy source capable of decarbonizing the industrial, transport, agricultural and power sectors. For this reason, it has been the subject of growing interest from the international community in recent years. The global demand for green hydrogen is booming with many countries having specific policies and strategies for the production and massive use of clean hydrogen in the coming decades. The availability of cheap renewable energy is one of the important parameters for the cost of green hydrogen and ECOWAS renewable energy potential is sufficient for competitive green hydrogen production in the world. It is estimated that in the most optimistic scenario, the region can produce about 35% of the total hydrogen production potential at a cost less than USD 1.5 per kg of hydrogen over the next few years.

To this end, the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), in collaboration with the West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL), developed the ECOWAS Green Hydrogen Regional Strategy and Action Plans 2023-2030 and 2031-2050 adopted by ECOWAS Ministers in charge of Energy at their meeting held on October 9, 2023, in Cotonou, Benin. These are the operationalization documents of the ECOWAS Green Hydrogen Policy and Strategy Framework adopted by the 90th Ordinary Council Session of ECOWAS Ministers, held in Bissau, Guinea Bissau, on July 6 and 7, 2023. All these documents aim to promote green hydrogen in ECOWAS Member States, to contribute to strengthening regional integration in the sustainable energy sector with strong local content, while opening to other regions in Africa and the world. These texts provide clear indications in terms of institutional organization, certification schemes, infrastructure investment, capacity building, research, as well as financing mechanisms.

The ECOWAS Green Hydrogen Regional Strategy and Action Plans 2023-2030 and 2031-2050 highlighted knowledge gaps of various stakeholders and the importance of the private sector. The private sector is set to play a critical role in the transition to green hydrogen, due to the prediction of a doubling of the continent's energy needs by 2050, mainly due to population growth. Their contribution is crucial for economic development, job creation, skills training and the promotion of a sustainable economy. Considering the need to develop the capacity of the key stakeholders, ECREEE in collaboration with WASCAL has launched a capacity building series. Following the Capacity Building of ECOWAS Energy Directors held in Praia in April 2024, **a Capacity Building Workshop of ECOWAS Private Sector is planned to hold from 19th – 20th September 2024 in Lagos, Nigeria.**

2. OBJECTIVE OF THE WORKSHOP

This workshop aims to impart a better understanding of green hydrogen and green ammonia



ECOWAS
CEDEAO



ECREEE
Towards Sustainable Energy



SPONSORED BY THE



Federal Ministry
of Education
and Research

production and technologies, the industry challenges and opportunities, economics, and risks to the ECOWAS private sector working in hydrogen demand sectors. The specific objectives are to:

- Sensitise the private sector actors on Green Hydrogen opportunities.
- Share with the private sector the state of art on technologies and end uses.
- Assess Green Hydrogen project development.

This capacity building session will include sessions about technology and applications, coupling with renewables, and economics.

3. EXPECTED RESULTS

The expected results of the workshop are as follows:

- ECOWAS Private sector Actors are sensitized to Green Hydrogen challenges.
- Green Hydrogen business opportunities are presented to the private sector actors.
- Local end uses opportunities of green are presented and discussed with the private sector actors.

4. DATE AND PLACE

The workshop will hold from **19th – 20th September 2024 in Lagos, Nigeria.**

5. PARTICIPANTS

Participants expected at the meeting include:

- Representatives of the private sector actors in the ECOWAS region working in oil and gas, fertilizers, cement, steel, and similar industries.
- Green Hydrogen Association working in the ECOWAS Region
- Representatives of Green Hydrogen production companies
- Representative of ECOWAS Energy Directorate
- ECREEE Green Hydrogen Team
- Representatives of WASCAL
- Representatives of relevant technical and financial partners
- Resource persons/speakers

6. LANGUAGES

Interpretation will be available in English, and French, during the workshop.

7. DRAFT AGENDA

Time	Activity	Responsible
Day 1		
08:30 – 08:45	Registration	ECREEE
08:45 – 09:15	Opening Remarks	WASCAL BMBF ECREEE ECOWAS COMMISSION NIGERIA GOVERNMENT
9:15 – 09:30	Introduction of Participants	All
09:30 – 10:00	Family photo and Coffee Break	ECREEE
10:00 – 10:30	Session 1: Green Hydrogen Potential in WEST AFRICA and Cost Assessment Q&A	Resource Persons
10:30 – 12:30	Session 2: Overview on Green Hydrogen <ul style="list-style-type: none"> • Green Hydrogen Applications • Green Hydrogen Economy • Green Hydrogen Market Development around the World • Incitation Policy Around the World for GH2 Production Q&A	Resource Persons
12:30 - 13:30	Lunch	ECREEE
13:30 – 14:30	Electrolyser Manufacturers around the World Q&A	Resource Persons
14:30 – 15:30	Green Hydrogen Operational and ongoing Project around the World Q&A	Resource Persons
15:30 – 16:00	Coffee Break and Closing	ECREEE
Day 2		
9:00 – 10:30	Session 2: Ammonia Production Practical Case Q&A	Resource Persons
10:30 – 11:00	Coffee Break	ECREEE
11:00 – 11:45	Session 3-1: Transport Sectors Practical Case – E-fuels production Q&A	Resource Persons
11:45-12:30	Session 3-2: Transport Sectors Practical Case – fuel Cells and hydrogen engines Q&A	Resource Persons
12:30– 13:30	Lunch	ECREEE
13:30 – 14:30	Session 4: Steel Industry Sector Practical Case Q&A	Resource Persons
14:30 – 15:00	Coffee Break and Closing Ceremony	ECREEE

8. LOGISTICS INFORMATION

The organisers will provide air tickets and perdiems (ECOWAS Rate) for sponsored participants. Participants are responsible for their own accommodation. However, the organizers will provide a list of hotels.

Before travel to Nigeria, participants will need:

- At least one blank page on their valid passports (ordinary or diplomatic/service passport), with a minimum validity of 6 months.
- Invitation letter from ECREEE.
- A return ticket (provided).

Health: Presentation of the yellow international vaccination card.

Transportation: Murtala Muhammed International Airport pickup and drop off is available for all participants. This applies to participants who have sent confirmation of their reservation at the hotels proposed by the organizers.

Currency and exchange rate: The local currency is Nigerian Naira (NGN): 1 US dollar is equivalent to 1590 NGN (May change) and 1 Euro is 1745.08 NGN (May change).

Contact details:

- ❖ For any questions relating to the organization of the workshop.

Mr Hyacinth ELAYO; Email: helayo@ecreee.org ; WhatsApp: +238 924 53 23

Mr Madi KABORE; Email: mkabore@ecreee.org ; WhatsApp: +226 70 98 47 88

- ❖ For any questions relating to information tickets.

Ms Marie Claire ALIMAN ; Email: maaliman@ecreee.org ; WhatsApp: +238 927 51 70