











Towards a Just Energy Transition in West Africa

Strategic Partnership for Scaling Green Hydrogen Technologies in West

Africa

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Background

Clean hydrogen is recognized as an energy source capable of decarbonizing the industrial, transport, agricultural, and power sectors. More specifically, green hydrogen, is a promising solution for decarbonizing various sectors thanks to its potential for converting renewable electrical energy into a clean chemical energy form that can easily replace conventional energy use. In ECOWAS region, the potential in terms of renewable energies is sufficient to meet the region's energy needs and to produce green hydrogen competitively. It is estimated that in the most optimistic scenario, the region can produce around 35% of the total hydrogen production potential at less than \$1.5 per kg of hydrogen and has almost 25% of the technical potential of the Sub-Saharan Africa region.

At the Regional level, ECOWAS developed 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. Followed by the Green Hydrogen Regional Strategy and Action Plans 2023-2030 and 2031-2050. All these documents aim to promote green hydrogen in ECOWAS Member States, in order 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.

This Session aims to discuss progress made after adoption of the policy and strategy, various initiatives undertaken within the region and the role of strategic partnership for scaling up green hydrogen technologies in West Africa.



Session Overarching Questions/Objectives:

The session will discuss:

- The various green hydrogen initiatives undertaken at country and regional level in West Africa,
- The technical needs and necessary requirement to reach the goals and objectives as defined in the ECOWAS green hydrogen policy,
- The next steps for successful implementation of the green hydrogen strategy,
- Role of strategic partnership for unlocking green hydrogen potential in West Africa,
- Importance of strong private sector for scaling up green hydrogen technologies



Welcome and Introduction by the Moderator (5 minutes)
Short presentation of the panelists by the Moderator (who is here?) (5 minutes)

Discussion - Interactions with panelists (10mn per panelist, total 40mn)

- Panelist 1: 10 minutes
- Panelist 2: 10 minutes
- Panelist 3: 10 minutes
- Panelist 4: 10 minutes

Session is foreseen for about 1 or 1:15 hour

Short summary of the presentations by the Moderator and opening floor for discussion (5 minutes)

Moderation of interactive exchange between the panelists and the audience (20 minutes)

Closing



Moderator: Dr Bruno KORGO, Regional Coordinator for Renewable Energy and Green Hydrogen, WASCAL.

Panelists:

- Prof. Emmanuel Ramde, Executive Director, WASCAL
- Dr. El Hadji Ndiaye, Director of Renewable Energy Development, Senegal
- Mrs. Kristina Fuerst, Head of the German-Nigerian Hydrogen Office, GIZ
- Mr. Aliou Diallo, Founder and Chairman, Hydroma







Dr. Bruno Korgo

Dr. Bruno Korgo is the Regional Coordinator for Renewable Energy and Green Hydrogen at WASCAL Competence Centre in Ouagadougou, Burkina Faso. He coordinates and develops renewable energy initiatives and services based on the needs of ECOWAS countries while supporting West Africa's sustainable renewable energy supply strategy through research, innovation, and capacity building.

An expert in renewable energy and climate interactions, Dr Korgo holds an engineering diploma in Renewable Energy and a PhD in Atmospheric Physics. He has extensive experience in research and administration within the energy sector. As an Associate Professor at Joseph KI-ZERBO University, he has served as Director General of Renewable Energy in Burkina Faso, a member and chairman of the board of the National Electricity Company (SONABEL), and a focal point for several international organizations.

Dr. Korgo has also undertaken significant consultancy work for both national and international organizations, including the International Finance Corporation (IFC), the World Bank, and the International Renewable Energy Agency (IRENA)





Prof. Emmanuel Wendsongré Ramdé

Professor Emmanuel Wendsongré Ramdé is the Executive Director of the West African Science Service Centre on Climate Change and Adapted Land Use (WASCAL). He is a mechanical engineer, an energy and climate change specialist and project management, monitoring and evaluation expert. He also holds a Master's in Business Administration (MBA), Finance option.

He is a past director of The Brew-Hammond Energy Centre, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana and has also served as Team Leader in a number of programmes/projects such as the European Union funded programme "Improving Governance of the Energy Sector in West Africa (AGoSE-AO, acronym in French) at the ECOWAS Commission (Economic Community of West African States) and the European Union funded project for the development of the Renewable Energy Atlas of Benin Republic.

Prof. Ramdé has about twenty years of experience in designing, implementing, managing, monitoring and evaluating energy related and climate change projects. He has been working with all the major regional and international development partners and national stakeholders including ECOWAS, UNIDO, USAID, GIZ, KfW, BMBF in Germany, AFREC.





Dr. El Hadji Ndiaye

Dr. El Hadji Ndiaye, Director of Renewable Energy Development at Senegal's Ministry of Energy, Petroleum and Mines, is an expert in solar energy and energy efficiency. With a career dedicated to access to clean, affordable electricity, he has played a key role in sustainable energy production and distribution projects. His technical and operational skills, reinforced by a PhD in Renewable Energy, make him a key player in the energy transition in Senegal and Africa.





Mrs. Kristina Fuerst

Kristina Fuerst is an accomplished hydrogen expert. She is head of the German-Nigerian hydrogen office (H2-diplo) which is funded by the German Federal Government.

Kristina's previous workstations include the German energy agency and the German Hydrogen Council where she worked closely with the German government on implementing hydrogen and industrial decarbonization policies. She has also worked at the Research Institute of Sustainability in Potsdam, Germany, where she analyzed the societal acceptance of CO2 utilization technologies. Kristina holds a master's degree in international affairs (international security and sustainability) from the Hertie School Berlin and the Elliot School of International Affairs in Washington DC.

<u>H2-diplo</u> is part of the Global Decarbonisation Diplomacy Project which is financed by the International Climate Initiative (IKI) and implemented by GIZ on behalf of the Federal Foreign Office.





Mr. Aliou Diallo

Aliou is the founder of Hydroma Inc, the pioneer in the discovery and exploitation of natural hydrogen, a new source of primary energy.

After establishing himself as an expert in the financing, negotiation and buybacks of sovereign risk and debts, Aliou has been at the forefront of the exploration and exploitation of natural resources in West Africa for over thirty years.

Through Hydroma, Aliou is driving natural hydrogen developments across the world with two successful pilot projects to produce electricity and other development in Africa and internationally."

