



8th Bioenergy Week and Study Tour for Capacity Building

Online Conference, 16-18 March 2021

11.00 – 16.00 East Africa Time (EAT)

Concept note and agenda

Hosted by:



With the support of:



1. Background

The 8th Bioenergy Week of the Global Bioenergy Partnership (GBEP) is held in partnership with the United Nations Economic Commission for Africa (ECA), Food and Agriculture Organization of the United Nations (FAO), African Energy Commission (AFREC) and African Union Commission (AUC). Given the current situation of the global pandemic, the event will be taking place online in a virtual format, 16 – 18 March 2021.

GBEP has been holding the GBEP Bioenergy Weeks since 2013 and has visited Brazil, Mozambique, Indonesia, Hungary, Argentina and the Philippines in the first and second cycle of regional events. The GBEP Working Group on Capacity Building (WGCB), under the co-leadership of the ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE) and Argentina, has stressed the enormous added value of these regional events in terms of capacity building and information sharing and has strongly supported a new cycle of these regional events starting with the eighth Bioenergy Week to focus on issues relevant to Africa.

The 2020 Bioenergy Week will enhance learning from positive experiences on sustainable production and use of bioenergy integrated within food production value chains, to support the design and implementation of bioenergy policies in Africa. Furthermore, it will provide the opportunity to continue a dialogue with the private sector and other stakeholders on ways to improve cooperation towards more sustainable production and use of bioenergy.

2. Bioenergy Development in Africa

Many African households depend on traditional bioenergy consumption to fulfil energy demands, and the share of solid fuel use (charcoal and firewood) in total final energy consumption in the region is the highest in the world. In 2017, the bioenergy consumption in Africa represented 50% of the total final consumption, almost 210 943 ktoe. In countries like Niger, Nigeria and Senegal, for example, firewood and charcoal represent 96%, 80% and 82% respectively of residential energy consumption (AFREC Energy Efficiency Indicators 2018).

Production and consumption of bioenergy in Africa have direct impacts on biodiversity, water and soil quality, as well as on many social and economic aspects of primary relevance for developing countries. In particular, indoor household air pollution from traditional cookstoves induces wide-scale respiratory diseases inflicting massive annual casualties, production of solid biomass impacts natural forest ecosystems, and lack of modern energy services can negatively impact social and economic development.

Since the adoption of the resolution on the Africa Bioenergy Policy Framework and Guidelines by the African Union Assembly in 2013, AUC, ECA and AUDA-NEPAD have spearheaded significant activities, in partnership with the Regional Economic Communities (RECs) to encourage African member states to adopt modern bioenergy technologies and practices. The adoption of the Policy Framework was followed by the implementation of a technical support programme directed towards training on modern bioenergy technologies and policies, as well as on bioenergy project development. Lessons learned from this mainstreaming of bioenergy in the energy economy of African countries include:

- The increase in electrification rates across Africa has not brought the expected decrease in biomass energy usage in rural and urban settings.

- Almost all African countries and regional institutions have policies and even targets on renewable energy (mainly in solar, hydro, wind and geothermal) but very few have prioritized modern bioenergy development.
- The majority of African countries have not succeeded in introducing clean cooking fuels and technologies, especially in rural areas.
- Competition within the renewable energy space is high. Bioenergy is competing with other renewable energy technologies for policy prioritization and investment.
- Amongst a myriad of international programmes and financing mechanisms, few focus on the promotion of bioenergy in Africa.
- Many countries have little capacity to develop a range of bankable bioenergy projects. Many of the identified projects are small scale with limited impact.
- The majority of project sponsors or project developers lack financial means to fund some of the early project activities, such as pre-feasibility studies, and project structuring packaging.

As a consequence of the above, the business case for bioenergy is not very strong because of lack of solid networks to assist in incubating ideas as well as the lack of institutional support at country level. In response to this, the AUC Specialized Technical Committee mandated the AUC and ECA to assist RECs to develop and implement bioenergy investment strategies for the African regions and its plans in the period 2019-2020. These plans and strategies provide a roadmap for each African region on bioenergy development as well as catalyzing investments in bioenergy projects.

3. Objectives

The 2021 Bioenergy Week fosters the discussion and exchange of experiences and skills, and showcases the practicality of sustainable bioenergy services to support its accelerated implementation in Africa. It also builds on the ongoing support of AFREC, AUC, ECA and other regional partners in accelerating the role of bioenergy in the energy economy of Africa. It will serve as a platform for strengthening cooperation between African member states and specialized institutions for increasing the provision of sustainable energy services.

Specifically, the Forum aims to:

- Demonstrate the state of global and regional bioenergy, policies and regulations;
- Present the state of the regional bioenergy situation and efforts to enhance further the share of modern bioenergy within the regional energy mix;
- Present the current status of the bioenergy sector in Africa, sharing challenges, lessons learned and opportunities from all over the world, to stimulate modern bioenergy implementation and replication in Africa;
- Discuss successful, replicable bioenergy systems that provide sustainable modern energy services;
- Showcase available relevant technologies, R&D, feedstock and financial instruments of partners and investment firms;
- Engage stakeholders on bioenergy best practices to maximize sustainability and contribute to meeting SDGs and countries' NDCs; and
- Provide a platform to the private sector to facilitate a viable bioenergy market in Africa, as well as investments in new bioenergy technologies for local applications.

GBEP Working Group on Capacity Building (WGCB)

Study tour for capacity building and training (Activity Group 3) Agenda for the 8th Bioenergy Week

DAY 1	DAY 2	DAY 3
<p>OPENING Welcome speeches</p> <p>***</p> <p>GLOBAL, REGIONAL AND NATIONAL POLICIES</p> <p>Bioenergy development and regulatory frameworks in Africa. State of the art, challenges and lessons learned</p>	<p>SUSTAINABLE BIOENERGY AS A CONTRIBUTION TO LAND CONSERVATION AND RESTORATION</p> <p>Exchange of experiences and opportunities for feedstocks, technologies and investments. Speakers will be invited to make cross cutting references to sustainability and to value chains approaches, challenges and opportunities.</p>	<p>ROUNDTABLE: <i>Discussion between policymakers, business sector and international Banks/Funds</i></p> <p>BANKABILITY OF BIOENERGY PROJECTS: CHALLENGES AND OPPORTUNITIES</p> <p>***</p> <p>BREAK-OUT GROUP DISCUSSIONS</p>
Lunch break	Lunch break	Lunch break
<p>SUSTAINABLE VALUE CHAINS FOR FOOD, ENERGY AND LIVELIHOOD SECURITY</p> <p>Exchange of experiences and opportunities for biomass, technologies and investments. Speakers will be invited to make cross cutting references to sustainability and to value chains approaches, challenges and opportunities.</p> <p>***</p> <p>BIOENERGY REPORTING AND STATISTICS IN AFRICA</p>	<p>LIQUID BIOFUELS IN URBAN AREAS</p> <p>Exchange of experiences and opportunities for feedstocks, technologies and investments. Speakers will be invited to make cross cutting references to sustainability and to value chains approaches, challenges and opportunities.</p> <p>***</p> <p>GBEP YOUTH AWARD</p> <p>Certificate awards will be delivered in recognition of the most remarkable and outstanding research works in the field of bioenergy carried out by students. Brief presentation of the awarded researches and delivery of the award certificates.</p>	<p>BIOECONOMY OPPORTUNITIES IN AFRICA</p> <p>***</p> <p>KEY MESSAGES AND CONCLUSIONS</p>

- 11:00 – 11:20 **Opening and Welcome Remarks**
- Ms Vera **SONGWE**, Executive Secretary and UN Under-Secretary, UN Economic Commission for Africa (ECA)
 - Dr Amani **ABOU-ZEID**, Commissioner for Infrastructure, Energy & Tourism, Infrastructure, Energy & Tourism Department, AU/AFREC
 - Dr David **PHIRI**, FAO Sub-regional Coordinator for Eastern Africa & Representative to the African Union (AU) and ECA
 - Amb. Luiz Eduardo de Aguiar **VILLARIHNO-PEDROSO**, Embassy of the Federative Republic of Brazil, GBEP Co-Chair
 - His Excellency, Dr Frehiwot **WOLDEHANNA**, State Minister for Energy, Ministry of Water, Irrigation and Electricity, Ethiopia
- 11:20 – 12:30 **Global, regional and national policies**
Moderator: Mr Robert LISINGE, Chief, Energy, Infrastructure and Services Section, ECA
- International Energy Agency (IEA) global vision for bioenergy to regional and local strategies to accelerate deployment.
Mr Paolo FRANKL, International Energy Agency (IEA)
 - Overview of the role of bioenergy in the African energy sector.
Mr Rashid Ali ABDALLAH, Executive Director, AFREC/African Union
 - Sustainable Biofuels Development Programme in Ethiopia.
Mr Michael Gessese TESEMA, Director, Biofuels Development, Ministry of Mining, Petroleum and Natural Gas, Ethiopia
 - The contribution of the Global Bioenergy Partnership (GBEP).
Ms Maria Michela MORESE, Executive Secretary, GBEP
- 12:30 – 13:30 **Lunch break**
Interactive Slido “word wall”
- 13:30 – 15:00 **Sustainable Value Chains for Food and Energy Security**
Moderator: Mr Crispen ZANA, Principal Energy Advisor, Secretariat of the Africa-EU Energy Partnership (AEEP), GIZ GmbH, Ethiopia
➔ **LIVE POLLS**
- The experience in the ECOWAS region with programmes supporting sustainable value chains.
Mr Bah F.M SAHO, Executive Director, ECREEE, Praia, Cape Verde
 - The experience in the SADC region with programmes supporting sustainable value chains.
Mr Kuda NDHLUKULA, CEO, SACREEE, Windhoek, Namibia
 - Sustainable bioethanol and biogas from cassava as an opportunity for food security.
Mr James OGBONNA, University of Nigeria, Nsukka

- Role of bioenergy in enhancing agricultural value chains.
*Mr Medhat **EL-HELEPI**, ABEE, UNECA*
- The Cogen for Africa project.
*Ms Farhana **NAKHOODA**, Project Director, Uganda*
- Cookstoves in refugee camps.
*Harry **STOKES**, Project GAIA*
- Increasing food security through bioenergy plants: The experience of the East Africa Renewable Energy Partnership (EAREP) Project.
*Ms Esther N **NYANZI**, Chief Executive, Uganda National Renewable Energy and Energy Efficiency Alliance, Uganda*

Q&A session

15:00 – 16:00

Bioenergy reporting and statistics in Africa

*Moderator: Mr. Jean Yves **GARNIER**, International Energy Expert, France*

➔ **LIVE POLLS**

- *Mr. Biram **FAYE**, Bioenergy Specialist at the Ministry of Energy, Senegal*
- *Mr Jean Marie **BADIATA KAYEMBE**, Head of Households and Biomass at the Ministry of Energy, DR of Congo*
- *Ms. Nolwazi Innocentia **KHUMALO**, Senior Energy officer, Energy Data, planning and economy, Eswatini*
- *Mr. Ian **KISAWUZI**, Statistician at the Ministry of Energy and Mineral Development, Uganda*

11:00 – 13:00 **Sustainable bioenergy as a contribution to land conservation and restoration**

*Keynote speaker and Moderator: Ms Joan Cuka **KAGANJWA**, Chief, Agriculture and Business Enabling Environment (ABEEE), Private Sector Development and Finance Division, UNECA*

➔ **LIVE POLLS**

- Sustainability of biogas and solid biomass value chains in Ethiopia. *Berhane **KIDANE**, Ethiopian Environment and Forest Research Institute*
- Cross border charcoal trade: implications for sustainable woodfuel value chains in Africa. *Phosiso **SOLA**, ICRAF*
- Sustainability assessment of the sugarcane bagasse briquettes residues by the tea industry in Kenya. *Rocio A. **DIAZ-CHAVEZ**, Stockholm Environment Institute (SEI), Kenya*
- Experience from Ghana and Togo. *Cisco **AUST** and Andreas **SCHLEENBAECKER**, GIZ*
- Sustainable bioenergy and reforestation experience in Kenya. *Meshack **MUGA**, FAO Kenya*
- Challenges and opportunities to produce biochar and briquettes in Togo. *Koffi Elom Towodjo **DZOTSI**, MTSP Togo*
- Producing pellets in Ghana. *Pragnesh **MISHRA**, Abellon CleanEnergy Ghana*
- Agro-forestry practices using Gliricidia to increase food and sustainable food and energy access. The case of Sri Lanka and opportunities in West Africa. *Lucky **DISSANAYAKE**, Biomass Group Sri Lanka, Dennis **GARRITY**, Global EverGreening Alliance and Bah **SAHO**, ECOWAS/ECREEE*

Q&A session

13:00 – 14:00 **Lunch break**
Interactive Slido “word wall”

14:00 – 15:20 **Liquid biofuels in urban areas**
*Moderator: Suani **COELHO**, USP, Brazil*
➔ **LIVE POLLS**

- Ethanol production business in Lusaka. *Prof Thomson **SINKALA**, Chairman, Thomro Biofuels, Zambia*
- Sugarcane bioenergy potentials in Southern Africa – Study by IRENA.

*Seungwoo **KANG**, IRENA*

- The experience in Mozambique.
*Marcelina **MATAVEIA**, Deputy Director, National Directorate of New and Renewable Energy, Mozambique*
- The experience of Brazil.
*Suani **COELHO**, USP, Brazil*
- Economic Assessment of the rollout of ethanol-blended fuel in Eswatini and the development of the business case.
*Mrs. Winnie **STEWART**, Permanent Secretary, Ministry of Energy and Natural Resources, Eswatini*

Q&A session

15:20 – 16:00

GBEP Youth Award

Certificate awards will be delivered in recognition of the most remarkable and outstanding research works in the field of bioenergy carried out by students.

- *Delivery of the award certificate*
- *Brief presentation of the awarded research*

11:00 – 12:00 Roundtable - Bankability of bioenergy projects: Challenges and Opportunities

*Moderator: Mr William **LUMGWENO**, Director, Private Sector Development and Finance Division, UN Economic Commission for Africa*

→ LIVE POLLS

- No silver bullet: the need for building coalition within the renewable energy sector.
*Brian **HEALY**, USGC*
- *Flavio **CASTELLARI**, APLA, Brazil*
- Enabling advanced biofuels industrial deployment: key factors
*Dario **GIORDANO**, Versalis*
- Bioenergy for Sustainable local energy services and Energy Access in Africa.
*Chris **SIM**, E4Tech*
- Project development and preparation – the mandate of the AfDB in supporting energy project, *African Development Bank representative, Addis Ababa*
- Experience project preparation: Lessons learned in addressing the bottleneck of preparation of bankable projects.
*Mr Mohale **RAKGATE**, General Manager, DBSA Project Preparation Fund, South Africa*

12:00 – 13:00 Bioenergy Week Outcome Document

12:00 – 12.40 Discussion in break-out groups

Participants will be divided into break-out groups to discuss the outcomes of the Bioenergy Week and future vision of bioenergy in Africa.

Moderators: tbd

12.40 – 13.00 Break-out groups reporting back to the Plenary

13:00 – 14:00 Lunch break

Interactive Slido “word wall”

14:00 – 15:40 Bioeconomy opportunities in Africa

*Moderator: Mr Monga **MEHLWANA**, Energy Infrastructure and Services, Private Sector Development and Finance, ECA*

→ LIVE POLLS

- Lessons learnt from mainstreaming modern bioenergy development in Africa (2012-19).
*Mr Peter **KINITHUA**, Energy Division, Department of Infrastructure and Energy, AUC*
- Opportunities for generating diesel from animal fat in Botswana.

*Mr Boikie **MABOWE**, Managing Director, Biodiesel Botswana, Gaborone*

- Making opportunities for urban waste for energy production in Addis Ababa.

*Mr Samuel **ALEMAYEHU**, founder, Reppie Waste-to-Energy Plant, Ethiopia*

- Integrated phytomining and Ethanol Production in the Zambian Copperbelt.

*Prof Thomson **SINKALA**, Chairman, Thomro Biofuels*

- Bioenergy Development Strategy and Investment Plan for the Central African Region.

*Mr Demba **DIOP**, Owner, EPM Consulting, Senegal*

Q&A session

15:40 – 16:00

Conclusions, approval of Outcome Document and closing remarks

- *Ms Maria Michela **MORESE**, GBEP Executive Secretary*
- *Mr Rashid Ali **ABDALLAH**, Executive Director, AFREC/African Union*
- *Mr Robert **LISINGE**, Chief, Energy, Infrastructure and Services Section, ECA*