



e-Workshop

# Opportunities of bioenergy and biofuels in developing economies

22-23 May 2023



Online workshop organized by IEA Bioenergy in collaboration with UNIDO

### **INTRODUCTION**

Over the past decades and in multiple countries, bioenergy has supported the development of local economies, while helping to reduce the dependency on imported fossil fuels. If biomass resources are produced sustainably, their energy use can lead to a substantial reduction of GHG emissions compared to fossil energy.

Developing countries have a history in the production and use of biofuels as exemplified in countries of Latin America and Asia that produce and export bioethanol and biodiesel. Still, many developing economies rely heavily on 'traditional' bioenergy use for cooking and heating in inefficient and highly polluting devices or open fires. The aim is to phase out these practices and move towards clean cooking and heating appliances, and overall to develop sustainable and circular bioenergy solutions for all energy uses (electricity, heat, fuels). This fits in the goal to fight energy poverty, increase energy security and ensure energy access, which is preferentially broadly based on local renewable energy sources. Generally biomass is one of the important local renewable energy sources and its sustainable production and use can offer both socio-economic and environmental benefits to local communities. Moreover, in regions with high biomass productivity opportunities may arise to produce biofuels for national or even international markets.

This workshop, which is organised by the IEA Bioenergy Technology Cooperation Programme and the United Nations Industrial Development Organization (UNIDO), aims to show examples of bioenergy and biofuel related opportunities in developing economies, both for the production of (local) energy and for providing economic, social and environmental co-benefits. It will also provide guidance on tools to accelerate clean energy transitions and improved energy access in emerging economies.

The workshop will consist of three separate sessions:

- The first session (on Monday 22 May) will provide examples how clean energy transitions and improved energy access in emerging economies can be supported.
- The second session (on Tuesday 23 May) will consider opportunities for sustainable biomass supply and its co-benefits, e.g., in landscape restoration, improved livelihoods or cleaner air.
- The third session (also on Tuesday 23 May) looks into opportunities of sustainable biofuel production in developing economies to produce transport fuels and clean cooking fuels.

Each session will have keynote presentations, followed by a panel discussion. Interactive tools will be used to gather input from the audience.

# PROGRAMME

Status 6 April 2023

## Monday 22 May 2023

13.00 CEST Session 1: Supporting clean energy transitions and improved energy access in emerging economies

Moderators: Dina Bacovsky, IEA Bioenergy & Tareq Emtairah, UNIDO

Workshop introduction:

- Dina Bacovsky, IEA Bioenergy: General introduction to the workshop
- **Tareq Emtairah, UNIDO:** Importance of bioenergy opportunities for decarbonization and energy access
- Jeremy Moorhouse, IEA: Role of bioenergy in developing economies in the Net Zero by 2050 roadmap

Supporting clean energy transitions and improved energy access in emerging economies:

- **Mikael Melin, SEforALL:** Integrated energy access planning unlocking action and finance for clean cooking in developing countries
- Jossy Thomas, UNIDO: The role of bioenergy in the clean energy transition and sustainable development lessons from developing countries
- **Stefan Nowak, REPIC Platform**: Promoting renewable energy and resource efficiency in Developing and Transition Countries
- Léonard Lévêque, LGI Sustainable Innovation & Fatma Ashour, University of Cairo: LEAP-RE Long-Term Joint European Union - African Union Research and Innovation Partnership on Renewable Energy; example of a supported project: PyroBioFuel

Moderated panel discussion

15.30 CEST End of session 1 of the workshop

## Tuesday 23 May 2023

10.00 CEST Session 2: Biomass supply opportunities in developing economies and sustainability of supply

Moderators: Mark Brown, Forest Industries Research Centre, USC (Australia) & Bah Saho, ECOWAS (West Africa)

Presentations:

- Michela Morese, FAO: New sustainable bioenergy value chains in India to avoid open burning
- Himlal Baral, CIFOR-ICRAF: Bioenergy for landscape restoration and livelihoods in Indonesia
- Werner Euler, Coega Biomass: The use of Invasive Alien Plants for Bioenergy in South Africa invited
- Craig Jamieson, Straw innovations: Rice Straw Energy in the Philippines
- Tiziana Pirelli, GBEP & Guillermo Parra Romero, DICAPAR (Paraguay) & Tuyet Nguyen Thi Anh, Hanoi University of Sciences and Technologies (Viet Nam): Application of GBEP bioenergy sustainability indicators in developing countries

Moderated panel discussion

12.30 CEST End of session 2 of the workshop

#### 15.00 CEST Session 3: Sustainable biofuel production

Moderators: Ricardo Gorini, IRENA & Gerard Ostheimer, Biofuture Campaign

Presentations:

- Rainer Janssen, WIP Renewable Energies: Unlocking the Bioethanol Economy: A pathway to inclusive and sustainable industrial development in developing countries
- Glaucia Souza, FAPESP BIOEN / University of São Paulo: Sustainability of biofuels in emerging economies - Latin America
- Robert Malina, Hasselt University & Megersa Abate, World Bank: SAF Production Challenges and Opportunities in Developing Countries
- Farai Chireshe, WWF South Africa: Local value chains for certified sustainable biojet fuel in South Africa

Moderated panel discussion

17.30 CEST Closure of the workshop by IEA Bioenergy and UNIDO representatives

#### Participation:

The workshop sessions will be held online. Participation is free of charge, but pre-registration for each session is required.

**Registration Session 1** 

**Registration Session 2** 

Registration Session 3

#### More information:

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