

## **14<sup>th</sup> Meeting of the GBEP Working Group on Capacity Building for Sustainable Bioenergy (WGCB)**

*Online 12.00 – 14.30 CET time (UTC +1)*

Monday, 21 November 2022

### **Co-Chairs Conclusions**

The GBEP Working Group on Capacity Building for Sustainable Bioenergy (WGCB) held its 14<sup>th</sup> meeting online on 21 November 2022. Argentina, Brazil, Germany, Italy, Japan, Netherlands, Spain, United Kingdom, Viet Nam, ECOWAS/ECREEE, FAO, ICAO, IEA Bioenergy, IRENA, and UNDP participated in the meeting as Partners and Observers. External experts from the Biofuture Campaign, Polytechnic University of Turin and Assoro Biometano also joined the meeting.

The Co-Chair, Miguel Almada (Argentina), welcomed participants during his opening of the meeting, and the agenda of the meeting was formally adopted.

The meeting began with an overview by Maria Michela Morese, GBEP Executive Secretary, of the work done under the various Activity Groups in 2022 (see [presentation](#) and related [background document](#) circulated) and plans for 2023. In this regard, the GBEP Executive Secretary mentioned the importance of the recent agreement signed with the Italian Government, Ministry of the Environment and Energy Security, with new financial support to GBEP. This will allow the Partnership to continue its role as the most widely recognized international initiative dealing with sustainable bioenergy in the next biennium 2023-2024.

### **Activity Group 2 “Raising awareness and sharing of data and experiences from the implementation of the GBEP indicators”**

[Maria Michela Morese](#), GBEP Executive Secretary, gave an overview of the work that was conducted under AG2 in 2022.

[Marco Colangeli, FAO](#), gave a presentation to share the experience of the H2020 project “*BIKE Biofuels Production at low – ILUC Risk for European Sustainable Bioeconomy*” to highlight how the GBEP Sustainability Indicators for Bioenergy (GSIs) have been representing a basis for sustainability considerations in that framework. He presented the value chains and related case studies involved in the project, and showed the methodology adopted to tailor the GSIs to the specific context of the BIKE project. The Sustainability Indicators adopted in the project are 15 (of which 12 quantitative and 3 qualitative). Data concerning the different stages of the bioenergy pathways involved have been collected through Data Entry Tools provided to the project Partners. Mr. Colangeli also showed a preliminary evaluation of some indicators, and introduced the next steps to be accomplished.

A brief discussion followed the presentation, where the importance of the inclusion of gender considerations in the study was highlighted.

The following suggestions, concerning activities to be conducted under AG2 in 2023 were presented and agreed:

- backstop of piloting the Rapid Implementation Framework Handbook;
- continue organising relevant dissemination events; and
- finalise the BIKE project (August 2023) and share the results within the GBEP network.

Partners and Observers were invited to send further suggestions and input to the GBEP Secretariat by 20 January 2023.

### **Activity Group 3 “Study Tour for capacity building and training”**

[Maria Michela Morese](#), GBEP Executive Secretary, gave an overview of the 9<sup>th</sup> Bioenergy Week held in Asunción (Paraguay), 26-29 September 2022, which was the successful result of a joint effort with the Government of Paraguay, the FAO office in Paraguay, as well as MERCOSUR and IICA that led some thematic sessions, and USGC generously supporting the event. The event saw the participation of more than 160 experts (in person and online) from all over the world and was a great opportunity to discuss paramount topics including: global, regional and national policies; wood energy and land restoration nexus; role of biofuels in the energy transition; biogas and biomethane; and bioenergy in the context of the broader bioeconomy. In the course of the event, the 2022 GBEP Youth Award was also awarded to a young student from the Yucatan Center for Scientific Research in Mexico who presented her research on “Sargassum Biorefineries”. The event ended, on the fourth day, with a field visit at the biofuel plant INPASA, in Guayaibi.

Thereafter, Ms. Morese mentioned the plan to hold the 10<sup>th</sup> GBEP Bioenergy Week in Hanoi, Viet Nam, in October 2023, and introduced some thematic areas and potential sessions to be included in the agenda and that could be of interest for the Asia and the Pacific region. In this context, Dao The Anh, Vice President of the Vietnam Academy of Agricultural Science (VAAS), intervened to express his enthusiasm and commitment to collaborate with GBEP for the organisation of this important event.

A brief discussion took place and it was suggested to involve regional organisations (i.e. ASEAN) to organize some sessions of the next Bioenergy Week, following the good experience of the 9<sup>th</sup> Bioenergy Week. Connected but not strictly related to this, it was also highlighted the importance for GBEP to be involved in the 2023 G20 in India, and Partners and Observers were encouraged to facilitate the involvement of the GBEP Secretariat in the related technical discussions.

Last but not least, two potential options for the venue of the 11<sup>th</sup> GBEP Bioenergy Week in 2024, i.e. Europe or Africa, were mentioned and will be further discussed.

Also in this case, Partners and Observers were invited to send to the GBEP Secretariat further suggestions and inputs on the agenda and on potential speakers for the next Bioenergy Week, by 20 January 2023.

#### **Activity Group 4 “Towards sustainable wood energy development”**

[Maria Michela Morese](#), GBEP Executive Secretary, gave an overview of the activities carried out in 2022 concerning AG4. Potential activities for AG4 in 2023 that were suggested and agreed are to:

- organize a series of webinars on the links between sustainable wood energy and FLR, and on biohydrogen;
- hold an AG4 session during the 10<sup>th</sup> Bioenergy Week and keep updated the 2020 Collection of examples on positive links between sustainable wood energy and FLR;
- draft a stocktaking report on biohydrogen (making best use of existing reports, such as the 2019 paper by IEA Bioenergy), including a collection of best practices with a view to support policy making; and

Some Partners highlighted the importance for AG4 to consider discussions on carbon accounting for woody biomass and/or estimates of woody biomass availability for bio-based fuels and for bioeconomy.

Partners and Observers were encouraged to send further suggestions to the GBEP Secretariat by 20 January 2023.

#### **Activity Group 7 “Biogas”**

[Maria Michela Morese](#), GBEP Executive Secretary, presented all the activities carried out during 2022 by GBEP as regards AG7.

There was then an interesting presentation from [Edoardo Bonaccorsi](#), CEO of Assoro Biometano, that presented a good practice of a short biomethane value chain in Sicily (Italy). He showed an overview of the industrial processes as part of the Assoro Biometano value chain, and gave some details concerning operational aspects, mass balances, and biomass characteristics, emphasising the local dimension of the activity and the good value given to residues (also from other value chains). Moreover, Mr. Bonaccorsi highlighted that the Assoro agricultural area was under a serious risk of desertification before the installation of the value chain, and he presented some data showing that, thanks to the application of digestate as a fertilizer, the soil fertility has been restored.

Subsequently, future activities for AG7 to be held in 2023 were mentioned and agreed, including to:

- organise a series of webinars in collaboration with regional biogas initiatives on co-benefits of biogas for sustainable development;
- hold an AG7 session during the 10th Bioenergy Week; and

- update the 2020 GBEP stocktaking paper on regional analysis of biogas value chains.

Partners and Observers were invited to send to the GBEP Secretariat further suggestions for 2023 activities of AG7 by 20 January 2023.

### **Activity Group 8 “Advanced Liquid Biofuels”**

[Maria Michela Morese](#), GBEP Executive Secretary, gave an overview of the 2022 activities of the AG8 and gave the floor to David Chiaramonti, Professor at Polytechnic University of Turin, to give an overview on the added value, opportunities and challenges concerning advanced liquid biofuels, in particular in the aviation sector.

[David Chiaramonti](#) focused on the hard-to-abate sector, i.e. aviation, maritime, steel, cement, and chemicals. He mentioned the availability of numerous technological options that could deliver aviation fuels, and presented future EU scenarios and targets. Additionally, he showed the status of technology and commercialization of different types of biofuels, such as HVO, HEFA, lignocellulosic ethanol, Bio-DME, PtL, Bio-Kerosene, etc. He also mentioned the research work carried out as concerns nature-based carbon offsetting solutions, including biochar, in the framework of some projects he currently coordinates, including BIKE that was presented earlier. Prof. Chiaramonti also showed evidence from projects he is involved in, confirming that reversing the indirect land use change impacts of biofuels (ILUC) is possible, thanks to the application of biochar and compost in soil. He highlighted the importance of land management, carbon accounting and carbon credit.

Following the presentation, a brief discussion took place, in which considerations on technology readiness, economic conditions and policy support concerning the biofuels options explored were made. The importance of developing supply chains that are truly sustainable and well-designed has been underlined.

Thereafter, Ms. Morese shared suggested future activities to be held in 2023 as concerns AG8, including:

- a series of webinars on the sustainable growth of the advanced liquid biofuels sector;
- news articles to be published on the GBEP website; and
- annual update of the 2021 Collection of Experiences in Advanced Liquid Biofuels.

Partners and Observers were invited to send to the GBEP Secretariat further suggestions for 2023 AG8 activities by 20 January 2023.

### **YOUTH**

[Maria Michela Morese](#), GBEP Executive Secretary, gave an overview of the main youth connected activities performed in 2022, including the “Bioenergy Supplement to the Energy Challenge Badge” of the Youth and United Nations Global Alliance (YUNGA), which was presented by [Constance Miller](#) of the GBEP Secretariat. She outlined the scope of the Supplement, which is to inspire youth to learn about bioenergy, and to encourage youth to

explore, play and discover through dedicated activities accompanied by background educational material. The Supplement was developed by the GBEP Secretariat, with inputs from the FAO Energy team, and is now finalized in English and ready for printing. Ms. Miller also provided a few examples of the different sections of the Supplement and mentioned the importance to translate it into other language to facilitate wider use.

After the presentation, Partners and Observers were informed on the planned GBEP activities on youth for 2023:

- The GBEP Youth Award 2023 will be associated with the 10<sup>th</sup> GBEP Bioenergy Week to be held in Viet Nam. The call for papers will be open in early 2023 to University students studying in research institutions in Asia and the Pacific; and
- YOUTH Capacity development events will be organized.

Partners and Observers were invited to send further suggestions for activities in 2023 on Youth by 20 January 2023.

### **Informal e-group “Linking Bioenergy with Food Security and Nutrition”**

[Maria Michela Morese](#), GBEP Executive Secretary, gave an overview of the activities carried out in 2022 and gave the floor to [Constance Miller and Tomoko Kato](#) (GBEP Secretariat and Food and Nutrition Division of FAO respectively) to give an overview of the *Literature Review on the Linkages between Bioenergy and Nutrition*. Ms. Kato outlined the background and the scope of the work carried out, which is to explore bioenergy practices for policy recommendations on potential nutrition outcomes, and develop knowledge products on the bioenergy-nutrition nexus. Ms Miller continued going through the main findings of the literature review and its limitations. The literature review is broken down into the bioenergy value chain stages, i.e. production, use and by-products. For each of those stages, some bioenergy practices that could have positive implications on nutrition have been identified, mainly due to their impacts on soil quality. Ms. Miller also showed some examples of bioenergy practices that have great positive impacts on nutrition, such as: micro-gasification value chains to increase access to sufficient, safe and nutritious food, while also using biochar as soil amendment; and biogas systems to produce clean and renewable energy for cooking, while also using the digestate to enhance soil fertility for nutritious food. The findings from the articles reviewed show evidence of multiple indirect or implied linkages between bioenergy and nutrition.

Ms. Morese continued by presenting the planned 2023 GBEP activities for this work:

- collection of best practices to be included into the Literature Review;
- side event at EUBCE 2023 and other visibility opportunities;
- finalization of a peer-reviewed article; and
- further investigation on the bioenergy and nutrition nexus.

Partners and Observers were invited to send further suggestions for 2023 activities concerning the Bioenergy and Nutrition nexus by 20 January 2023.

## **Further activities and capacity development events**

[Maria Michela Morese](#), GBEP Executive Secretary, gave an overview of some of the most relevant 2022 activities and events organized by the GBEP Secretariat or in which it participated.

Thereafter, Ms. Morese proposed some initial ideas for 2023 activities, including:

- other events to be organized (and co-organized);
- capacity development material to be disseminated to give visibility to the GBEP programme of work; and
- GBEP website to be renewed.

The GBEP Executive Secretary also announced the idea to organize the next GBEP Annual meetings in person, in Rome, mid May 2023. The event would coincide with the celebration of the GBEP Anniversary (11 May 2023). Connected to this, she proposed to request to the United Nations to establish an “*International Day of Sustainable Bioenergy*” possibly on the 11<sup>th</sup> of May.

Partners and Observers expressed appreciation and support to these proposals; bilateral exchanges will follow up to outline the Agenda of the next GBEP Annual meetings, but in the meantime Partners and Observers were invited to send their further suggestions by 20 January 2023.

## **Conclusions of the WGCB**

Maria Michela Morese, GBEP Executive Secretary, thanked Partners and Observers for their participation in the 14<sup>th</sup> meeting of the GBEP Working Group on Capacity Building for Sustainable Bioenergy. The next steps for the WGCB in 2023 were decided as follows (see also [background document](#) circulated in advance to the meeting):

**Activity Group 2** will continue to collect and disseminate information on the implementation of the GSI, while also backstopping of piloting the Rapid Implementation Framework Handbook. The GBEP Secretariat will continue organizing relevant dissemination events while also finalising the BIKE project (August 2023) and share the results within the GBEP network.

Under **Activity Group 3**, the 10<sup>th</sup> Bioenergy Week to be held in 2023 (tentatively in October), will be hosted in Viet Nam and will focus on the Asia and Pacific Region. The 11<sup>th</sup> Bioenergy Week is planned to be held in Europe or in Africa in 2024; further discussions will follow.

**Activity Group 4** will hold a series of webinars on the links between sustainable wood energy and FLR, and on biohydrogen. A session during the 2023 Bioenergy Week will also be organized to include issues related to landscape governance for forest management and product utilization. The 2020 collection “Positive linkages between wood energy and forest landscape restoration” will also be updated with the best practices presented during the

Bioenergy Week, together with a short brief that will be created based on the discussions during the Bioenergy Week session. It was also proposed to draft a stocktaking report on biohydrogen (making best use of existing reports like the 2019 one by IEA Bioenergy), including a collection of best practices with a view to support policy making. Finally, it was proposed that AG4 considers discussions on carbon accounting for woody biomass and/or estimates of woody biomass availability for bio-based fuels and for bioeconomy.

**Activity Group 7** will host a further series of webinars in 2023 in collaboration with regional biogas initiatives on co-benefits of biogas for sustainable development, as well as organising a session during the 2023 Bioenergy Week and keep updated the 2020 GBEP stocktaking paper on regional analysis of biogas value chains.

**Activity Group 8** will hold a series of webinars (and a session at the GBEP Bioenergy Week 2023) on the sustainable growth of the advanced liquid biofuels. Short news articles will be prepared on these webinars, to be published on the GBEP website, to include the main discussions and conclusions. On the basis of new experiences and contributions from the above webinars, the “Collection of experiences in Advanced Liquid Biofuels” will be updated.

In terms of the work on **Youth**, the GBEP Secretariat will launch (early 2023) the call for papers for the 2023 GBEP Youth Award that will be assigned to outstanding research conducted by young researchers from the Asia and the Pacific region, and presented to the winning student in the context of the 10<sup>th</sup> Bioenergy Week. Other Youth Capacity development events will be organized as possible.

**Linking Bioenergy with Food security and nutrition** – Further to the literature review on the bioenergy-nutrition nexus, developed by FAO/ESN in collaboration with the GBEP Secretariat, it was agreed to collect best practices to be included into the Literature Review. Furthermore, it was agreed to organize a side event at EUBCE 2023 and any other visibility opportunity that may arise.

**Other Events and Activities in 2023** – The GBEP Secretariat will organize several events and will attend a number of conferences in 2023 for visibility and dissemination purposes. Furthermore, the GBEP Secretariat will renew the GBEP website. It was also agreed that the next GBEP Annual meetings will take place in person, in Rome, mid May 2023. The event would coincide with the celebration of the GBEP Anniversary (11 May 2023). Connected to this, GBEP will request to the United Nations to establish an “*International Day of Sustainable Bioenergy*” possibly on the 11<sup>th</sup> of May.

*Partners and Observers were invited to suggest further activities for the 2023 Programme of Work for the specific Activity Groups by 20 January 2023.*

The Co-Chairs John Yeboah and Bah Saho (ECREEE/ECOWAS) intervened with concluding remarks expressing strong appreciation to the GBEP Secretariat for its continued high quality work and for the successful negotiations with the Italian donor that will allow the GBEP Partnership to smoothly continue its activities for the next biennium.