



Promoting sustainable use of underutilized lands for bioenergy  
production through a web-based Platform for Europe


## D7.7

# International Workshop Report



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Name	Organization
<i>Lorenzo Traverso</i>	FAO 
<i>Marco Colangeli</i>	FAO
<i>Maria Michela Morese</i>	FAO

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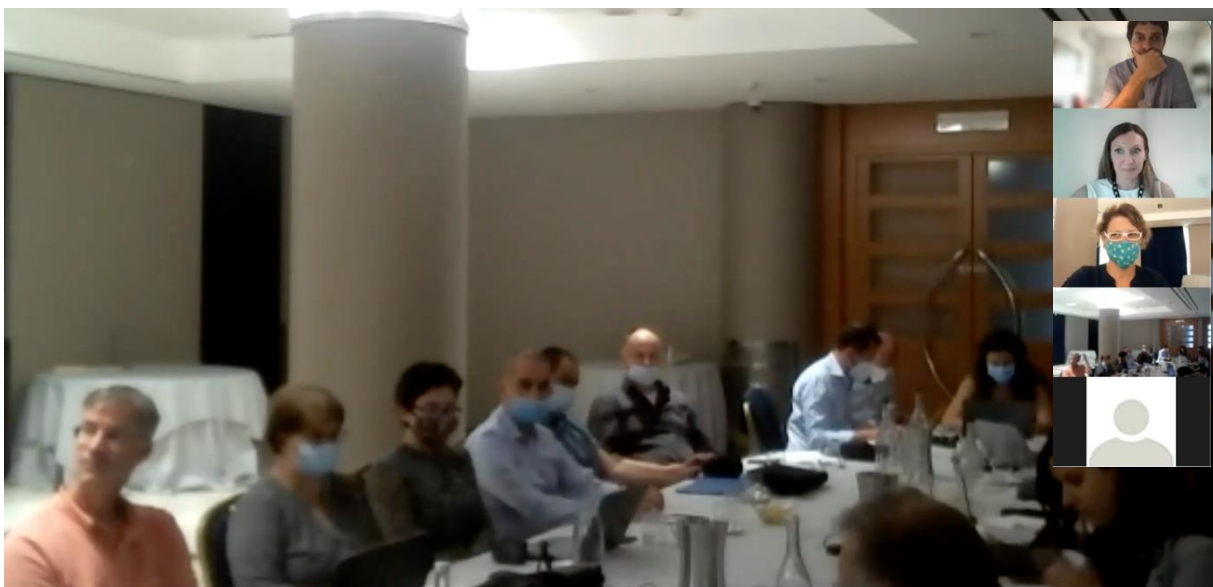
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## Acknowledgments

We are grateful to our colleagues from the BIOPLAT-EU project for their time and inputs to make this workshop happen. Particularly we thank Cosette Khawaja (Senior project manager) and Rainer Janssen (Head of biomass department) and other colleagues from the WIP-Renewable Energies for coordinating the project and supporting the implementation of the international workshop. We also thank Manuela Hirschmugl (Senior researcher) from the Joanneum Research Forschungsgesellschaft and Alfonso Calera and David Cifuentes (Professor, Researcher) of the University of Castilla la Mancha for providing their support and valuable input to the workshop.

Finally, we would like to thank all the participants who participated and contributed to the success of the workshop on 27 September 2021.



# 1 Workshop Summary

This report provides a short summary of the recent hybrid international workshop organized by the Food and Agriculture Organization (FAO) and the BIOPLAT-EU project partners. The workshop was held in Matera, Italy and online using the platform “Zoom<sup>1</sup>” through which also participant’s registrations were collected.

Awareness on the workshop was raised by using social networks such as LinkedIn and Twitter by [FAO Climate change](#), WIP and other project partners. Additional alerts and dissemination of the event’s invitation was carried out by the Global Bioenergy Partnership (GBEP) through its website within its network of partners and observers, its website and LinkedIn account.

In the end, 57 participants registered to the event.



**Fig.1** FAO Climate Change official Twitter page

This report has been prepared for circulation to participants but is also intended as a resource for those interested in the workshop content but who were unable to attend. The recording of the webinar (video) is available on the project website [HERE](#).

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<sup>1</sup> [Video Conferencing, Cloud Phone, Webinars, Chat, Virtual Events | Zoom](#)

## 2 Workshop objectives and programme

### Background

BIOPLAT-EU addressed the Horizon 2020 call for Global leadership in renewables, and more specifically the topic LC-SC3-RES-28-2018-2019-2020: Market Uptake Support.

BIOPLAT-EU, produced a comprehensive online web-based platform for supporting the decision-making process for new bioenergy investment projects that rely on biomass from marginal, underutilized and contaminated (MUC) lands in Europe and Ukraine. The platform includes a user-friendly tool to assess the environmental, social and techno-economic sustainability aspects of bioenergy production.

This International workshop followed a series of project workshops organised by project partners to discuss the results of the project case study sites and demonstrate through live demonstration the platform and the use of the STEN tool particularly.

### Objective

The specific objectives of the international workshop were:

1. To increase participants' understanding of the BIOPLAT-EU project, its WebGIS platform and its methodologies.
2. To showcase live examples of the STEN tool to measure and assess the sustainability of planned investments / value chains
3. To raise awareness on the project and its results and to create a community of possible international users.

### Agenda

13:00	13:15	Welcome to the BIOPLAT-EU International Workshop	M Michela Morese, FAO, GBEP Rainer Janssen, WIP
13:15	13:30	Project Presentation	Cosette Khawaja, WIP
13:30	14:15	Mapping of MUC lands for bioenergy production in Europe using Remote Sensing	Manuela Hirschmugl, JR
14:15	15:00	Web-based Platform about MUC lands for bioenergy production in Europe: concept, structure, software development	Lorenzo Traverso, FAO David Cifuentes, UCLM
15:00	15:30	<i>Break</i>	
15:30	16:00	WebGIS Tool Demonstration	Marco Colangeli, FAO
16:00	17:00	Questions and answers	All participants
17:00	17:15	Synergies with current and future work of the Global Bioenergy Partnership	M Michela Morese, FAO, GBEP

17:15	17:30	Final remarks and meeting closure	M Michela Morese, FAO, GBEP Rainer Janssen, WIP
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## Summary of the presentations

Rainer Janssen (WIP) and M. Michela Morese (FAO) opened the workshop by outlining the success of the BIOPLAT-EU project and its case studies. They also stressed how renewable energy technologies can play a crucial role in the next years, leading to an increased share of renewable energy consumed in the EU and to a more active role for the consumers.

Cosette Khawaja (WIP) gave an introduction of the BIOPLT-EU project, describing its partners and its structure, its objectives and the main activities.

Manuela Hirschmugl (JR) presented the work package led by her institution (WP2) by defining the lands that are considered and the process for the mapping of marginal, underutilized and contaminated lands in Europe and Ukraine. In the context of BIOPLAT-EU these lands referred to as “MUC” lands (Marginal lands, Underutilized lands and Contaminated lands). By using Global earth observation data composed by Sentinel II and Landsat maps, Corine Land Cover, Natura 2000 and several georeferenced databases (including fine detail time series images) a pan European map of existing MUC lands was developed. Manuela also explained the two-level approach of i) TIER 1 (area level 1) a pan-European map of MUC lands from various sources; and ii) TIER 2 (area level 2) focuses on hot spot areas, where more detailed analysis was performed.

Lorenzo Traverso (FAO) and David Cifuentes (UCLM) presented the concept, structure, and software development of the webGIS tool. Lorenzo explained the two main components of the tool: i) a database of mapped MUC lands, furnished of data attributes concerning specific useful statistics for the assessment of their sustainability; and ii) the sustainability assessment tool for Europe and neighbouring countries (STEN) that is the calculator’s engine for assessing environmental, social as well as techno- economic sustainability on MUC lands. Consequently, David explained how these components and their methodologies were translated into the current software, the workflow and how the platform was created with the aim to interact with users on a flexible and intuitive way.

After a break, Marco Colangeli (FAO) ran a live demonstration of the STEN tool. By sharing his screen, he opened the webGIS tool and accessed to perform several analyses and the measurement of the sustainability indicators in more than one MUC land in Europe. The demonstration was well received, and a few technical questions were raised by attendees. Predominantly those were connected with the maps and mapping procedure to identify MUC lands and their attributes, including potential suitability and yields.

In the concluding remarks, M. Michela Morese (FAO) presented the possible synergies with current and future work of the Global Bioenergy Partnership and the role that the BIOPLAT-EU platform could play in this context. Michela explained how the GBEP can contribute to inform bioenergy policy development at EU-level on the best use of the WebGIS tool as a means to facilitate sustainable development of bioenergy and achieve the targets of the REDII. The work done in the context of the BIOPLAT-EU project can in fact be included under the GBEP Working

Group on Capacity Building and Task Force on Sustainability. GBEP could contribute to give visibility and dissemination of the results of this important BIOPLAT-EU project, with a view to further inform the bioenergy components of future considerations of EU directives on renewable energy beyond 2030. Michela thanked WIP as coordinator of the consortium and all Partners for the very positive and constructive cooperation during the last three years and for the excellent results of the project and GBEP Partners for their participation and contribution to the discussion.

### 3 Main messages

- The BIOPLAT-EU carried out several webinars at local and national events, promoting the results of the case studies to interested regional stakeholders.
- Excellent results of the project, for the concrete added value of the developed WebGIS tool that support the sustainable development of bioenergy on MUC lands in Europe and neighbouring countries.
- Positive feedbacks received by the international community on the results of the project, this represents a fair credit to the work and efforts made by each of us in the consortium.
- The BIOPLAT-EU project has been the natural continuation of a previous H2020 project: the FORBIO project. These two projects have allowed FAO and all partners to develop policy recommendations and tools for the sustainable development of bioenergy in the EU and potentially other regions of the world.
- A consulting firm is working for a major European heavy duty truck manufacturer on a study to assess the potential biodiesel and HVO production capacity from low iLUC feedstock in Europe. BIOPLAT-EU's webGIS tool was selected for simulations as it was recognized as a solid and trustworthy aid to derive various production scenarios that might represent the basis for the business plan preparation with which the firm has been tasked.
- High level of satisfaction and positive feedback. The BIOPLAT-EU WebGIS tool can be of concrete support to decision making in the bioenergy sector in Europe, contributing to achieve the requirements of the European Directives.

### 4 Evaluation

Feedback was extremely positive. The presentation of the several case studies and the range of contributions from external experts were particularly valued. Participants also enjoyed the opportunity of being able to share and discuss practical issues with the experts.