BIOPLAT-EU

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

D5.2

Report on local stakeholder working groups

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 818083.

Project no.	818083
Project acronym:	BIOPLAT-EU
Project title:	Promoting sustainable use of underutilized lands for bioenergy production through a web-based Platform for Europe
Call:	H2020-LC-SC3-2018-RES
Start date of project:	01.11.2018
Duration:	36 months
Deliverable title:	D5.2 - Report on local stakeholder working groups
Due date of deliverable:	September 2021
Project Coordinator:	WIP Renewable Energies

Organisation name of lead contractor for this deliverable: WIP Renewable Energies (01)

Name	Organization
NAME OF AUTHOR	*NAME OF ORGANIZATION*
Cosette Khawaja	*WIP*
Raul Köhler, Rainer Schlepphorst	*FIB*
Attila Uderszky, Péter Gyuris	*GEO*
Tiziana Pirelli, Giuseppe Pulighe, Guido Bonati, Stefano Fabiani	*CREA*
Nicoleta Ion, Cristian Tantareanu	*ENERO*
Alfonso Callera	*UCLM*
Oleksandra Tryboi	*SECB*

Dissemination level		
PU	Public	X
CO	Confidential, restricted under conditions set out in Model Grant Agreement	
CI	Classified, information as referred to in Commission Decision 2001/844/EC	

History			
Version	Date	Reason	Revised by
01	16/10/2021	First draft	All
02	19/10/2021	Final version	WIP

Table of Contents

1 Objectives 7

2 Selection of working group members 7

3 Meetings plan 7

4 Working group in Spree-Neiße, Germany 8

4.1 First working group meeting 8

4.1.1 Introduction 8

4.1.2 Invitation and Agenda 8

4.1.3 Summary of presentations and discussions 10

4.1.4 Conclusions 12

4.2 Second working group meeting 13

4.3 Follow-up actions 14

5 Working group in Dahme-Spreewald, Germany 15

5.1 First working group meeting 15

5.1.1 Introduction 15

5.1.2 Invitation & Agenda 15

5.1.3 Summary of presentations and discussions 17

5.1.4 Conclusions 20

5.2 Second working group meeting 20

5.3 Follow-up actions 21

6 Working group in Bács-Kiskun and Csongrád-Csanád counties, Hungary 22

6.1 First working group meeting 22

6.1.1 Introduction 22

6.1.2 Invitation 22

6.1.3 Agenda 23

6.1.4 Summary of presentations and discussions 23

6.1.5 Conclusions 25

6.2 Second working group meeting 25
6.2.1 Introduction 25
6.2.2 Invitation 26
6.2.3 Agenda 26
6.2.4 Summary of presentations and discussions 26
6.2.5 Conclusions 28
7 Working group in Veszprém and Fejér counties, Hungary 29
7.1 First working group meeting 29
7.1.1 Introduction 29
7.1.2 Invitation 29
7.1.3 Agenda 30
7.1.4 Summary of presentations and discussions 30
7.1.5 Conclusions 31
7.2 Second working group meeting 31
7.2.1 Introduction 31
7.2.2 Invitation 32
7.2.3 Agenda 32
7.2.4 Summary of presentations and discussions 32
7.2.5 Conclusions 33
8 Working group in Cagliari, Italy 34
8.1 First working group meeting 34
8.1.1 Introduction 34
8.1.2 Invitation 34
8.1.3 Agenda 37
8.1.4 Summary of presentations and discussions 38
8.1.5 Conclusions 41
8.2 Second working group meeting 41
8.2.1 Introduction 41
8.2.2 Summary of presentations and discussions 41
8.2.3 Conclusions 42
9 Working group in Basilicata, Italy 43
9.1 First working group meeting 43
9.1.1 Introduction 43

9.1.2 Invitation 44
9.1.3 Agenda 46
9.1.4 Summary of presentations and discussions 47
9.1.5 Conclusions 50
9.2 Second working group meeting 51
9.2.1 Introduction 51
9.2.2 Summary of presentations and discussions 51
9.2.3 Conclusions 52
9.3 Site visit 52
10 Working group in Bacau County, Romania 54
10.1 First working group meeting 54
10.1.1 Introduction 54
10.1.2 Invitation 55
10.1.3 Agenda 56
10.1.4 Summary of presentations and discussions 59
10.1.5 Conclusions 62
10.2 Second working group meeting 62
10.2.1 Invitation 63
10.2.2 Agenda 64
10.2.3 Summary of presentations and discussions 65
10.3 Follow-up actions 67
11 Working group in Gorj county, Romania 68
11.1 First working group meeting 68
11.1.1 Introduction 68
11.1.2 Invitation 68
11.1.3 Agenda 69
11.1.4 Summary of presentations and discussions 73
11.1.5 Conclusions 76
11.2 Second working group meeting 77
11.2.1 Introduction 77
11.2.2 Invitation 78
11.2.3 Agenda 79
11.2.4 Summary of presentations and discussions 79

11.3 Follow-up actions 80
12 Working group in Spain 81
12.1 First working group meeting 81
12.1.1 Invitation 81
12.1.2 Agenda 81
12.1.3 Conclusions 82
12.2 Second working group meeting 82
12.2.1 Introduction 82
12.2.2 Invitation 83
12.2.3 Agenda 83
12.2.4 Summary of presentations and discussions 84
12.2.5 Conclusions 84
13 Working group in in Khmelnytsky and Ternopil, Ukraine 85
13.1 First working group meeting 85
13.1.1 Introduction 85
13.1.2 Invitation 87
13.1.3 Agenda 88
13.1.4 Summary of presentations and discussions 88
13.1.5 Conclusions 94
13.2 Second working group meeting 95
13.2.1 Invitation 95
13.2.2 Agenda 96
13.2.3 Summary of presentations and discussions 96
13.2.4 Conclusions 98
14 Working group in Kyiv and Chernihiv, Ukraine 98
14.1 First working group meeting 98
14.1.1 Introduction 98
14.1.2 Invitation 101
14.1.3 Agenda 101
14.1.4 Summary of presentations and discussions 102
14.1.5 Conclusions 108
14.2 Second working group meeting 108
14.2.1 Invitation 109

14.2.2 Agenda 109
14.2.3 Summary of presentations and discussions 109
14.2.4 Conclusions 111
14.3 Follow-up actions 111

1 Objectives

The main objective of the working groups is to bring together stakeholders from the different group categories in order to firstly inform them about the opportunity of using MUC lands for bioenergy production in their region and secondly to mobilise and encourage stakeholders in the region to start their own projects. During these meetings, working group members are invited to discuss the bioenergy value chains options available in their regions, the main challenges and opportunities of these value chains and the foreseen development of the project and their role in it.

2 Selection of working group members

In each case study area, a list of stakeholders has been developed by the partners. From this list, 10 to 15 persons from different stakeholders' categories are invited to join the working group meetings. They belong to the following categories: Farmers, biomass suppliers, private or public landowners, local and/or regional authorities, politicians, industries, researchers, financing bodies, investors, SMEs, entrepreneurs, others. The project partners responsible for the case studies will organise the set-up of the working groups and will facilitate and guide the discussions among the members.

3 Meetings plan

After accepting the invitation, the working group members are invited to the first working group meeting which is set by the project partner in agreement with the members. The second working group meeting will take place at the occasion of the workshop which will be organised in the case study area. The members of the working group will continue the work through virtual meetings, e-mails exchange even after the project ends with the purpose of making possible the implementation of projects intended to grow biomass on MUC lands for bioenergy production.

4 Working group in Spree-Neiße, Germany

4.1 First working group meeting

4.1.1 Introduction

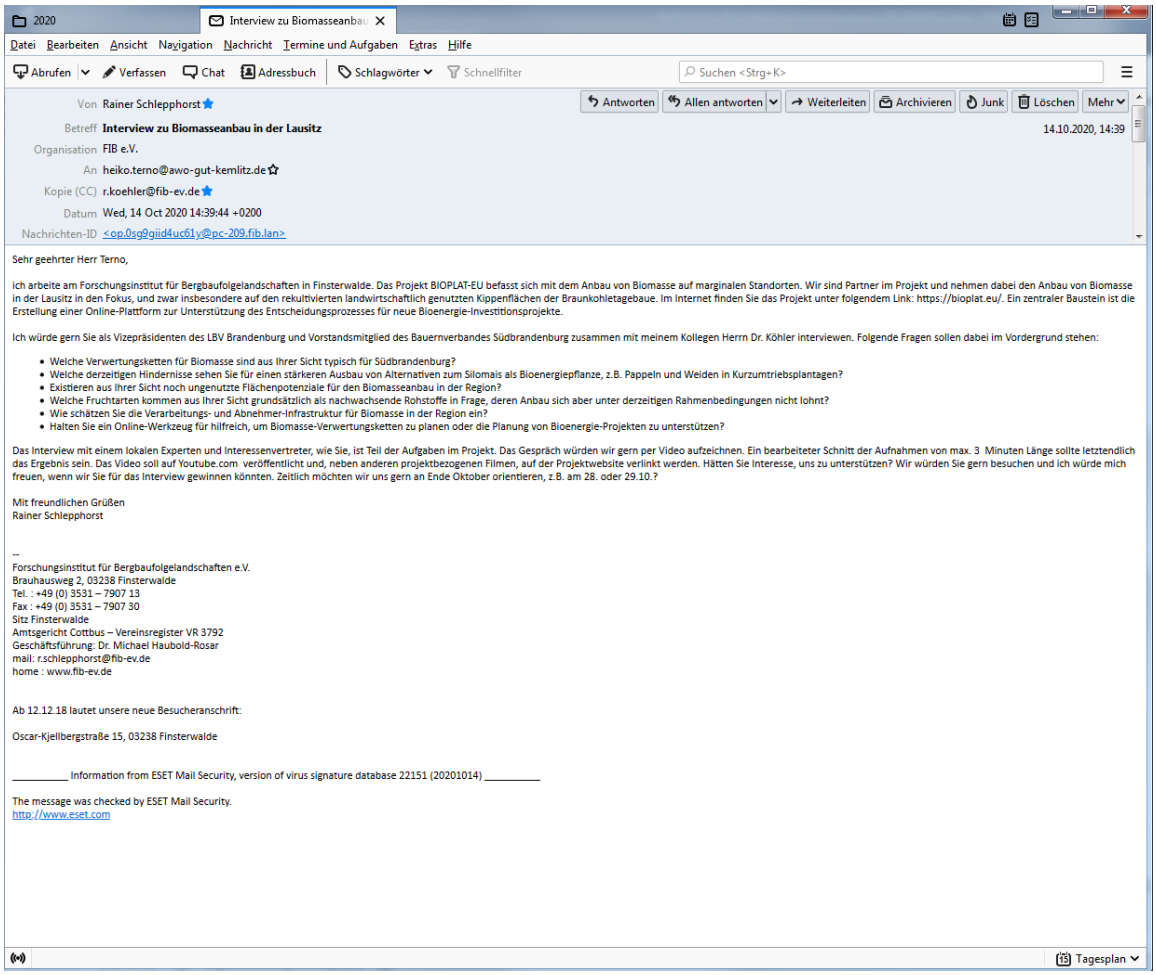
The first working group meeting was conducted in person in October/November 2020. Since a shared date could not be found for all members who agreed to participate, two individual meetings were realized. The first part was held in Cottbus on 27.10.2020. The second part was done after the interview (WP7) on 12.11.2020 in Dahme/Mark. The table below shows the list of participants.

Member name	Organisation	Stakeholder category
Neumann, Thomas	LEAG (Land Management)	Land use planning, agricultural management
Agricola, Ralf	LEAG (Head of Reclamation Department)	Industry, landowner, investor
Rösler, Michael	LEAG (Forestry)	Forest management
Uhlmann, Matthias	LEAG (Reclamation)	Land use planning
Lehnig, Matthias	LEAG (Reclamation / Land Management)	Land use planning
Knoche, Dirk	FIB	Researcher
Schlepphorst, Rainer	FIB	Researcher
Köhler, Raul	FIB	Researcher
Terno, Heiko	Farmer's Association South Brandenburg (Head), State Farmer's Association Brandenburg	Landowner, Farmer

4.1.2 Invitation and Agenda

Important representatives of stakeholder groups were invited either by telephone calls or directly in a personal conversation to join the working group. In some cases, additional emails were sent referencing the project and explaining the issue (see figure below). Overall, the response was only moderate, possibly due to the tense situation caused by the COVID19 pandemic. Irrespective of this, the main representatives of the relevant MUC land participated in this event.

The meeting agenda was based on the specification of the working group leader, with the focus on presenting and discussing the potential bioenergy value chains, the potential land availability and barriers for a successful implementation of new bioenergy pathways in the case study area (see figure below).



2020 | Interview zu Biomasseanbau

Datei Bearbeiten Ansicht Navigation Nachricht Termine und Aufgaben Extras Hilfe

Abrufen | Verfassen | Chat | Adressbuch | Schlagwörter | Schnellfilter | Suchen <Strg+K>

Antworten | Allen antworten | Weiterleiten | Archivieren | Junk | Löschen | Mehr

Von: Rainer Schlepphorst
Betreff: **Interview zu Biomasseanbau in der Lausitz** 14.10.2020, 14:39
Organisation: FIB e.V.
An: heiko.terno@awo-gut-kemlitz.de
Kopie (CC): r.koehler@fib-ev.de
Datum: Wed, 14 Oct 2020 14:39:44 +0200
Nachrichten-ID: <op.0sg9giid4uc61y@pc-209.fib.lan>

Sehr geehrter Herr Terno,

ich arbeite am Forschungsinstitut für Bergbaufolgelandschaften in Finsterwalde. Das Projekt BIOPLAT-EU befasst sich mit dem Anbau von Biomasse auf marginalen Standorten. Wir sind Partner im Projekt und nehmen dabei den Anbau von Biomasse in der Lausitz in den Fokus, und zwar insbesondere auf den rekultivierten landwirtschaftlich genutzten Kippenflächen der Braunkohletagebaue. Im Internet finden Sie das Projekt unter folgendem Link: https://bioplat.eu/. Ein zentraler Baustein ist die Erstellung einer Online-Plattform zur Unterstützung des Entscheidungsprozesses für neue Bioenergie-Investitionsprojekte.

Ich würde gern Sie als Vizepräsidenten des LBV Brandenburg und Vorstandsmitglied des Bauernverbandes Südbrandenburg zusammen mit meinem Kollegen Herrn Dr. Köhler interviewen. Folgende Fragen sollen dabei im Vordergrund stehen:

- Welche Verwertungsketten für Biomasse sind aus Ihrer Sicht typisch für Südbrandenburg?
- Welche derzeitigen Hindernisse sehen Sie für einen stärkeren Ausbau von Alternativen zum Silomais als Bioenergiepflanze, z.B. Pappeln und Weiden in Kurzumtriebsplantagen?
- Existieren aus Ihrer Sicht noch ungenutzte Flächenpotenziale für den Biomasseanbau in der Region?
- Welche Fruchtarten kommen aus Ihrer Sicht grundsätzlich als nachwachsende Rohstoffe in Frage, deren Anbau sich aber unter derzeitigen Rahmenbedingungen nicht lohnt?
- Wie schätzen Sie die Verarbeitungs- und Abnehmer-Infrastruktur für Biomasse in der Region ein?
- Halten Sie ein Online-Werkzeug für hilfreich, um Biomasse-Verwertungsketten zu planen oder die Planung von Bioenergie-Projekten zu unterstützen?

Das Interview mit einem lokalen Experten und Interessenvertreter, wie Sie, ist Teil der Aufgaben im Projekt. Das Gespräch würden wir gern per Video aufzeichnen. Ein bearbeiteter Schnitt der Aufnahmen von max. 3 Minuten Länge sollte letztendlich das Ergebnis sein. Das Video soll auf Youtube.com veröffentlicht und, neben anderen projektbezogenen Filmen, auf der Projektwebsite verlinkt werden. Hätten Sie Interesse, uns zu unterstützen? Wir würden Sie gern besuchen und ich würde mich freuen, wenn wir Sie für das Interview gewinnen könnten. Zeitlich möchten wir uns gern an Ende Oktober orientieren, z.B. am 28. oder 29.10.?

Mit freundlichen Grüßen
Rainer Schlepphorst

--
Forschungsinstitut für Bergbaufolgelandschaften e.V.
Brauhausweg 2, 03238 Finsterwalde
Tel. : +49 (0) 3531 – 7907 13
Fax : +49 (0) 3531 – 7907 30
Sitz Finsterwalde
Amtsgericht Cottbus – Vereinsregister VR 3792
Geschäftsführung: Dr. Michael Haubold-Rosar
mail: r.schlepphorst@fib-ev.de
home : www.fib-ev.de

Ab 12.12.18 lautet unsere neue Besucheranschrift:

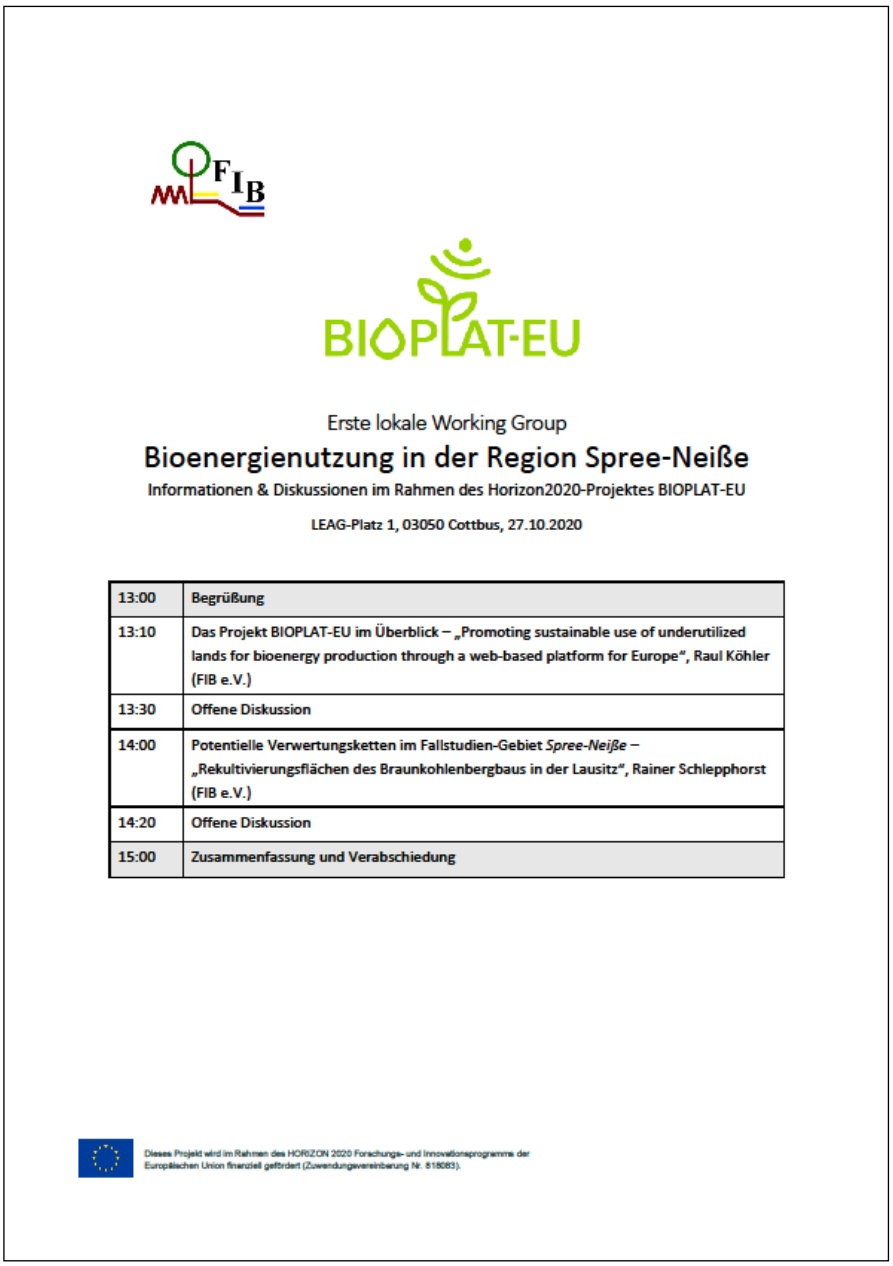
Oscar-Kjellbergstraße 15, 03238 Finsterwalde

_____ Information from ESET Mail Security, version of virus signature database 22151 (20201014) _____

The message was checked by ESET Mail Security.
http://www.eset.com

Tagesplan

Invitation email, sent to one working group member



Erste lokale Working Group

Bioenergienutzung in der Region Spree-Neiße

Informationen & Diskussionen im Rahmen des Horizon2020-Projektes BIOPLAT-EU

LEAG-Platz 1, 03050 Cottbus, 27.10.2020

13:00	Begrüßung
13:10	Das Projekt BIOPLAT-EU im Überblick – „Promoting sustainable use of underutilized lands for bioenergy production through a web-based platform for Europe", Raul Köhler (FIB e.V.)
13:30	Offene Diskussion
14:00	Potentielle Verwertungsketten im Fallstudien-Gebiet *Spree-Neiße* – „Rekultivierungsflächen des Braunkohlenbergbaus in der Lausitz", Rainer Schlepphorst (FIB e.V.)
14:20	Offene Diskussion
15:00	Zusammenfassung und Verabschiedung

Dieses Projekt wird im Rahmen des HORIZON 2020 Forschungs- und Innovationsprogramms der Europäischen Union finanziell gefördert (Zuwendungsvereinbarung Nr. 818083).

Announcement & Agenda of the first work goup meeting in Spree-Neiße

4.1.3 Summary of presentations and discussions

In a brief presentation, Raul Köhler (FIB) introduced the EU project BIOPLAT-EU, funded within the framework of Horizon2020. The overall objective of the project is to promote the market acceptance of sustainable bioenergy in Europe. The focus is on the production of (non-food) biomass on marginal, underutilised and contaminated land. The core task of the project is the development of a web-based decision support tool - an internet platform with integrated WebGIS - to assess the environmental, social and techno-economic sustainability of bioenergy use.

Another contribution was the presentation by Rainer Schlepphorst (FIB) of selected potential bioenergy utilization chains in the case study region, the reclamation areas of lignite mining in the district of Spree-Neiße. A total of about 2,100 ha of agricultural land in the Welzow-Süd and

Jänschwalde opencast mining areas are considered. Potential value chains under discussion are sorghum for biogas or biomethane production and black locust in short rotation for the production of heat and electricity.

Example slide of BIOPLAT-EU project presentation

The presentation was followed by an intensive exchange of views on the area setting, potential energy crops, possible restrictions and barriers, and the planned online tool. The paragraphs below summarize the main contributions to the discussion.

Discussion topic 'Land area potential'

The selected area size of about 2,100 ha of agricultural land is plausible.

The crop rotation on agricultural reclamation sites is legally binding up to the 6th/7th year of reclamation and therefore cannot be opened for bioenergy production. After this time, at least 95% of these areas will be leased to regional farmers.

Within the framework of the "Green Deal", photovoltaic plants are to be better integrated into the European climate and energy policy. Thus, in the future, agricultural land will be increasingly used as sites for photovoltaic systems and will thus no longer be available for potential biomass production.

There are also some contaminated areas in LEAG ownership, e.g. at the Welzow airfield. Currently, these are designated as wasteland and are partly used for agriculture or forestry, are sealed (taxiway, runways) or are used for photovoltaic systems.

Discussion topic 'Bioenergy crops and energy production'

Miscanthus is an interesting topic, but there is only little experience directly on reclamation soils. Further research is needed to assess the extent to which the plant can be used in an economically feasible and sustainable manner.

There is experience with black locust in short rotation coppices and an existing energy forest in Welzow-Süd. However, the utilization is currently economically not profitable, because wood prices are too low due to the saturation of the wood market after the calamites in the last 3 years.

The cup plant (*Silphium perfoliatum*) is a promising energy crop plant on Lusatian lignite mining reclamation sites, because it has low demands on the climate and the soil.

The cultivation of commercial hemp (material use) favoured by LEAG is in direct competition with potential bioenergy crops.

In addition to lignite, the combustion of sewage sludge that cannot be used for material purposes is a current issue in future energy production.

Discussion topic 'Barriers'

The incentive policy must be considered critical with regard to bioenergy production; the pressure on the farming area is increased (keyword new CAP reform, cross-compliance).

A groundwater-free cover is ensured, which means that subsidence flow of the sites, a problem that occurred on older lignite reclamation sites in the young past, is theoretically no longer possible. Compaction is carried out in areas at risk. It cannot be ruled out that permissible vehicle loads will have to be restricted on vulnerable areas, which could act as a barrier to future agricultural management.

Management of power lines in the forest is only a minor issue for LEAG, as only a few areas are owned by them. The biggest cost factor is the planting (planting, maintenance). Furthermore, the harvesting effort is more costly compared to agriculture. At the same time, current energy wood prices are too low for profitable use.

Discussion topic 'Web platform / STEN tool'

With the STEN tool, a sustainability assessment of individual areas is possible, e.g. the energy forest (SRC) in Welzow-Süd. The tool developed in the EU project could be suitable for a scenario analysis.

The actual target group of the STEN tool are mainly the subsequent users (land tenants and farmers).

However, the utilization of biomass is a critical variable - Are there investment opportunities in promising utilization chains?

4.1.4 Conclusions

In principle, the cultivation of bioenergy crops on reclamation sites is an alternative form of use to conventional agriculture, especially on lower-yielding sites. However, in addition to the possibilities of utilization, economic considerations are crucial for the decision of the farmers. In addition, other utilization concepts compete with biomass production, such as energy generation by means of photovoltaic systems.

The tool developed in the project can support an initial assessment of various potential value chains by calculating and evaluating sustainability, including various economic aspects.

4.2 Second working group meeting

The second working group meeting was held in person during the workshop on 08.09.2021 in Neupetershain. Due to short-term scheduling overlaps, the landowner group was underrepresented. Therefore, an additional online meeting with one key participant (landowner, investor, industry, LEAG) of the working group was held on 14.09.2021. This allowed the feedback of this important working group member to be included. The table below shows the participants list.

Member name	Organisation	Stakeholder category
Böhm, Christian	Agroforestry Association	Consultant, Researcher
Lange, Christian	FIB	Researcher
Laumen, Siegfried	LEAG (Land Management)	Industry, landowner, investor, Land use planning, monitoring
Lückfeldt, Thomas	LEAG (Forestry)	Industry, landowner, investor, forest management
Knoche, Dirk	FIB	Researcher
Köhler, Raul	FIB	Researcher
Schillem, Steffi	BTU Cottbus-Senftenberg	Researcher
Schlepphorst, Rainer	FIB	Researcher

The discussion started during the first working group meeting regarding land area potential, future biomass strategies in the region and the webGIS tool was continued.

Discussion topic 'Land area potential, Bioenergy crops and energy production'

The LEAG company, landowner of all relevant MUC areas in the case study area, operates photovoltaic systems on agricultural land and old industrial sites, which represents a clear economic concurrence to biomass production. However, LEAG identifies itself as a combined provider of infrastructure, landowner and supplier of biomass in the Lusatian post-mining landscape. There will be future flagship projects in the region. Due to rising CO_2 prices, municipalities will switch from conventional to regenerative energy supply in the future. The end of coal production and use will be completed in the region by 2038 at the latest. Thus, district heating from local biomass becomes a worthwhile alternative. One of the LEAG company's future goals is to ensure this sector of energy supply by using, for example, woody biomass, not only from short rotation coppices but also from forestry and landscape maintenance.

Discussion topic 'Web platform / STEN tool'

The webGIS tool can be used for searching MUC areas, analysing different bioenergy pathways, and evaluating measures regarding sustainability. The tool could be interesting for the planning

of processing chains, since, for example, the transport distances between the harvest area and the processing plant are often too long. The BIOPLAT-EU web platform with the webGIS tool was assessed as a possibly helpful search tool for alternative biomass processing plants in a region. The target group includes landowners, authorities and politics. However, farmers from the case study area 'Spree-Neiße' are not very interested in using the tool, because they already use established management tools on their areas, and they know their familiar value chains.

The user needs the information on capacity of the biomass processing plants (BBP) as well as the information whether further biomass is accepted to do a useful planning.

The cultivation suitability map of the tool is generally problematic, as the global data approach (GAEZ) does not often correspond to local experience. The general yield potential is not reliable for the checked region, e.g. there is already positive cultivation experience with different bioenergy crops, but they are classified in the webGIS tool as not suitable for cultivation (e.g. willow).

Furthermore, the restriction to MUC areas is a serious limitation of the webGIS tool, since there are no unused or unplanned areas in Germany. Competition for MUC land is very high, with economic use conflicting with recreational and conservation goals.

Questions were asked about further maintenance and expansion of the tool, suggesting also an open-source model.

Conclusions

The land area competition is very significant. In addition to biomass cultivation, other financially more attractive options are available, e.g. photovoltaics. However, reliable variables are needed to secure the base load in the energy grid in the future. Here, bioenergy from biomass can make an important contribution and the LEAG plans to expand its business from lignite mining and processing to include regional bioenergy value chains, from biomass production and transportation to the final energy product.

The tool supports a first assessment of different potential value chains by calculating and evaluating sustainability, so also different economic aspects. However, the restriction to MUC areas is an obstacle for further dissemination in Germany, as there is only a very low unused or unplanned area potential.

4.3 Follow-up actions

- Email to all working group members with presentation and contact lists
- Telephone call with one working group member (LEAG) on 13.09.2021
- Online meeting with working group member LEAG on 14.09.2021

5 Working group in Dahme-Spreewald, Germany

5.1 First working group meeting

5.1.1 Introduction

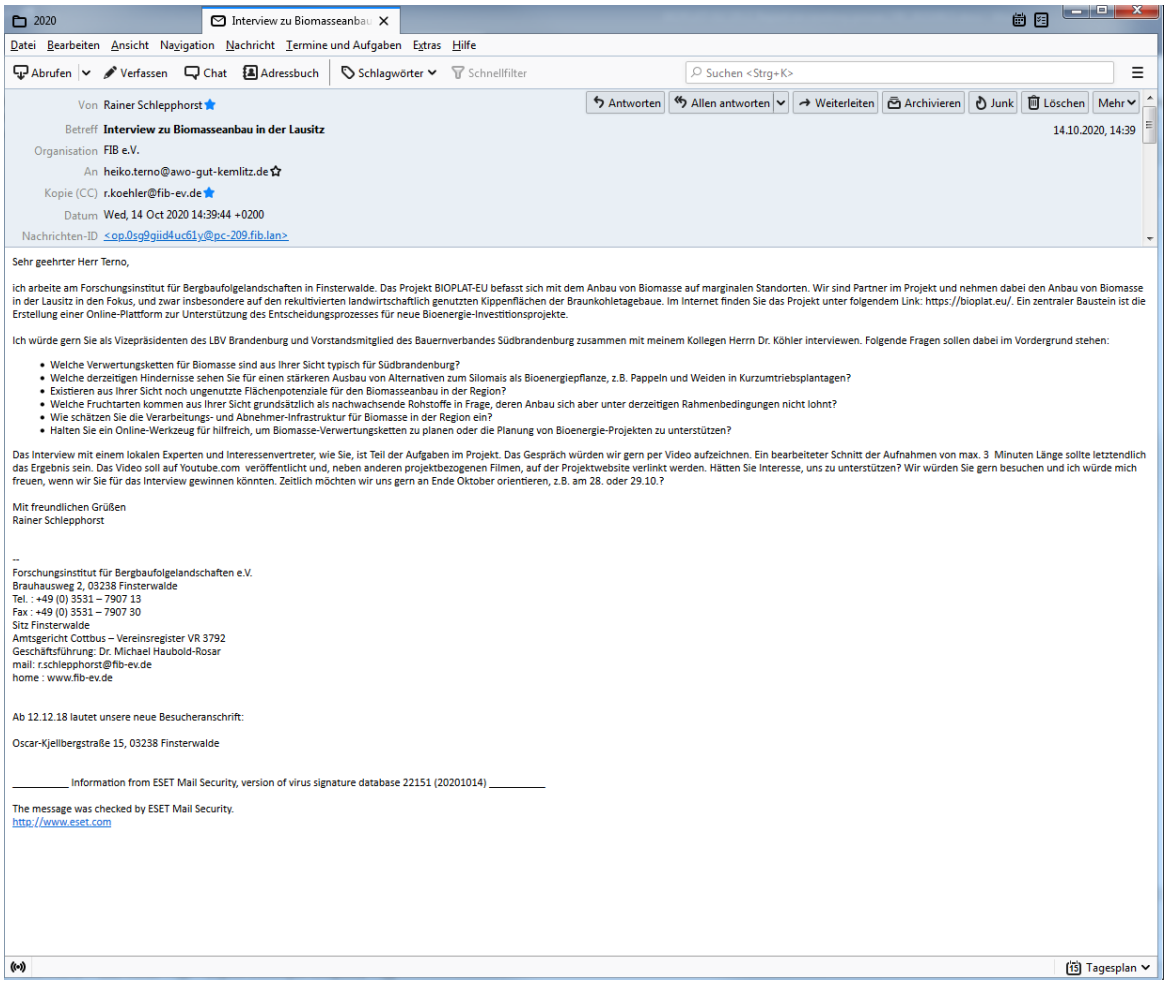
Because of contact restrictions due to the ongoing COVID19 pandemic, the working group meeting could only be conducted online as a video conference on 25.03.2021. Although the response rate to the invitation was low, the landowner as well as managers of the land were represented. A top-level representative of the Farmer's Association South Brandenburg and State Farmer's Association Brandenburg (Mr. Terno) was unfortunately not able to attend, but gave his feedback during a separate meeting. He was added to this working group as well, even though he was a member of the working group in the Spree-Neiße case study area, because his work affects both case study regions and is on a higher level above single regions in Brandenburg. The table below shows the participants list.

Member name	Organisation	Stakeholder category
Lukas, Stefan	FIB	Researcher
Köhler, Raul	FIB	Researcher
Kurtzmann, Daniela	Berliner Stadtgüter GmbH	Landowner
Schlepphorst, Rainer	FIB	Researcher
Terno, Heiko	Farmer's Association South Brandenburg (Head), State Farmer's Association Brandenburg	Landowner, Farmer
Weitz, Michael	Lignovis GmbH	SME, consultant, biomass supplier

5.1.2 Invitation & Agenda

The members of the working group were invited either by telephone calls or by direct contact. Additional emails were sent referencing the project and explaining the issue in more detail in order to gain agreement (see example in the figure below). Overall, the response was only moderate, possibly due to the tense situation caused by the COVID19 pandemic. Irrespective of this, the main representatives of the relevant MUC land participated in this event.

The agenda was based on the specification of the working group leader, with the focus of the meeting on presenting and discussing the potential bioenergy value chains, the potential land availability and barriers for a successful implementation of new bioenergy pathways in the case study area (see figure below).



2020 | Interview zu Biomasseanbau

Datei Bearbeiten Ansicht Navigation Nachricht Termine und Aufgaben Extras Hilfe

Abrufen | Verfassen | Chat | Adressbuch | Schlagwörter | Schnellfilter | Suchen <Strg+K>

Antworten | Allen antworten | Weiterleiten | Archivieren | Junk | Löschen | Mehr

Von Rainer Schlepphorst

Betreff **Interview zu Biomasseanbau in der Lausitz** 14.10.2020, 14:39

Organisation FIB e.V.

An heiko.terno@awo-gut-kemlitz.de

Kopie (CC) r.koehler@fib-ev.de

Datum Wed, 14 Oct 2020 14:39:44 +0200

Nachrichten-ID <op.0sg9giid4uc61y@pc-209.fib.lan>

Sehr geehrter Herr Terno,

ich arbeite am Forschungsinstitut für Bergbaufolgelandschaften in Finsterwalde. Das Projekt BIOPLAT-EU befasst sich mit dem Anbau von Biomasse auf marginalen Standorten. Wir sind Partner im Projekt und nehmen dabei den Anbau von Biomasse in der Lausitz in den Fokus, und zwar insbesondere auf den rekultivierten landwirtschaftlich genutzten Kippenflächen der Braunkohletagebaue. Im Internet finden Sie das Projekt unter folgendem Link: https://bioplat.eu/. Ein zentraler Baustein ist die Erstellung einer Online-Plattform zur Unterstützung des Entscheidungsprozesses für neue Bioenergie-Investitionsprojekte.

Ich würde gern Sie als Vizepräsidenten des LBV Brandenburg und Vorstandsmitglied des Bauernverbandes Südbrandenburg zusammen mit meinem Kollegen Herrn Dr. Köhler interviewen. Folgende Fragen sollen dabei im Vordergrund stehen:

- Welche Verwertungsketten für Biomasse sind aus Ihrer Sicht typisch für Südbrandenburg?
- Welche derzeitigen Hindernisse sehen Sie für einen stärkeren Ausbau von Alternativen zum Silomais als Bioenergiepflanze, z.B. Pappeln und Weiden in Kurzumtriebsplantagen?
- Existieren aus Ihrer Sicht noch ungenutzte Flächenpotenziale für den Biomasseanbau in der Region?
- Welche Fruchtarten kommen aus Ihrer Sicht grundsätzlich als nachwachsende Rohstoffe in Frage, deren Anbau sich aber unter derzeitigen Rahmenbedingungen nicht lohnt?
- Wie schätzen Sie die Verarbeitungs- und Abnehmer-Infrastruktur für Biomasse in der Region ein?
- Halten Sie ein Online-Werkzeug für hilfreich, um Biomasse-Verwertungsketten zu planen oder die Planung von Bioenergie-Projekten zu unterstützen?

Das Interview mit einem lokalen Experten und Interessenvertreter, wie Sie, ist Teil der Aufgaben im Projekt. Das Gespräch würden wir gern per Video aufzeichnen. Ein bearbeiteter Schnitt der Aufnahmen von max. 3 Minuten Länge sollte letztendlich das Ergebnis sein. Das Video soll auf Youtube.com veröffentlicht und, neben anderen projektbezogenen Filmen, auf der Projektwebsite verlinkt werden. Hätten Sie Interesse, uns zu unterstützen? Wir würden Sie gern besuchen und ich würde mich freuen, wenn wir Sie für das Interview gewinnen könnten. Zeitlich möchten wir uns gern an Ende Oktober orientieren, z.B. am 28. oder 29.10.?

Mit freundlichen Grüßen
Rainer Schlepphorst

--
Forschungsinstitut für Bergbaufolgelandschaften e.V.
Brauhausweg 2, 03238 Finsterwalde
Tel : +49 (0) 3531 – 7907 13
Fax : +49 (0) 3531 – 7907 30
Sitz Finsterwalde
Amtsgericht Cottbus – Vereinsregister VR 3792
Geschäftsführung: Dr. Michael Haubold-Rosar
mail: r.schlepphorst@fib-ev.de
home : www.fib-ev.de

Ab 12.12.18 lautet unsere neue Besucheranschrift:

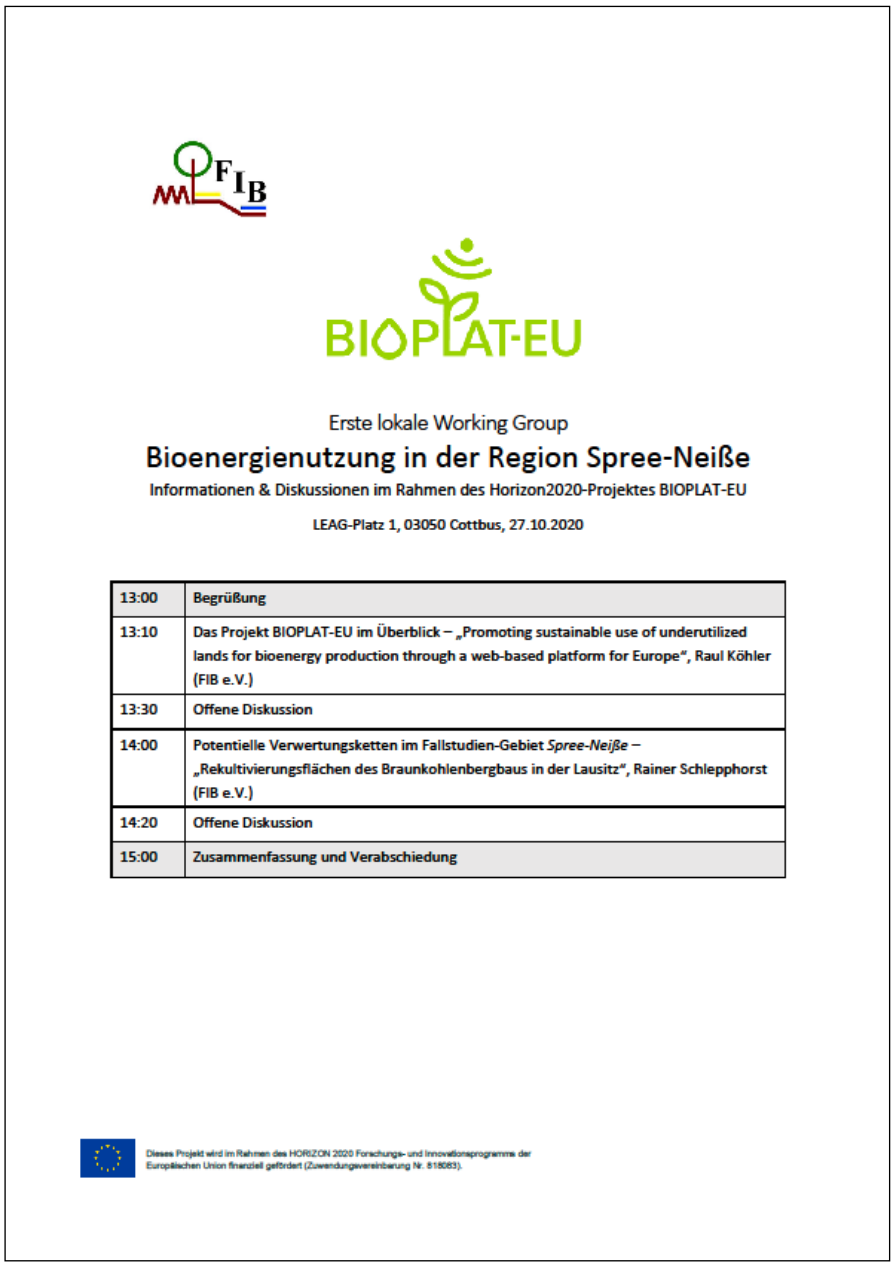
Oscar-Kjellbergstraße 15, 03238 Finsterwalde

_____ Information from ESET Mail Security, version of virus signature database 22151 (20201014) _____

The message was checked by ESET Mail Security.
http://www.eset.com

Tagesplan

Invitation email, sent to two working group member



Erste lokale Working Group

Bioenergienutzung in der Region Spree-Neiße

Informationen & Diskussionen im Rahmen des Horizon2020-Projektes BIOPLAT-EU

LEAG-Platz 1, 03050 Cottbus, 27.10.2020

13:00	Begrüßung
13:10	Das Projekt BIOPLAT-EU im Überblick – „Promoting sustainable use of underutilized lands for bioenergy production through a web-based platform for Europe", Raul Köhler (FIB e.V.)
13:30	Offene Diskussion
14:00	Potentielle Verwertungsketten im Fallstudien-Gebiet *Spree-Neiße* – „Rekultivierungsflächen des Braunkohlenbergbaus in der Lausitz", Rainer Schlepphorst (FIB e.V.)
14:20	Offene Diskussion
15:00	Zusammenfassung und Verabschiedung

Dieses Projekt wird im Rahmen des HORIZON 2020 Forschungs- und Innovationsprogramms der Europäischen Union finanziell gefördert (Zuwendungsvereinbarung Nr. 818083).

Announcement & Agenda of the first work goup meeting in Dahme-Spreewald

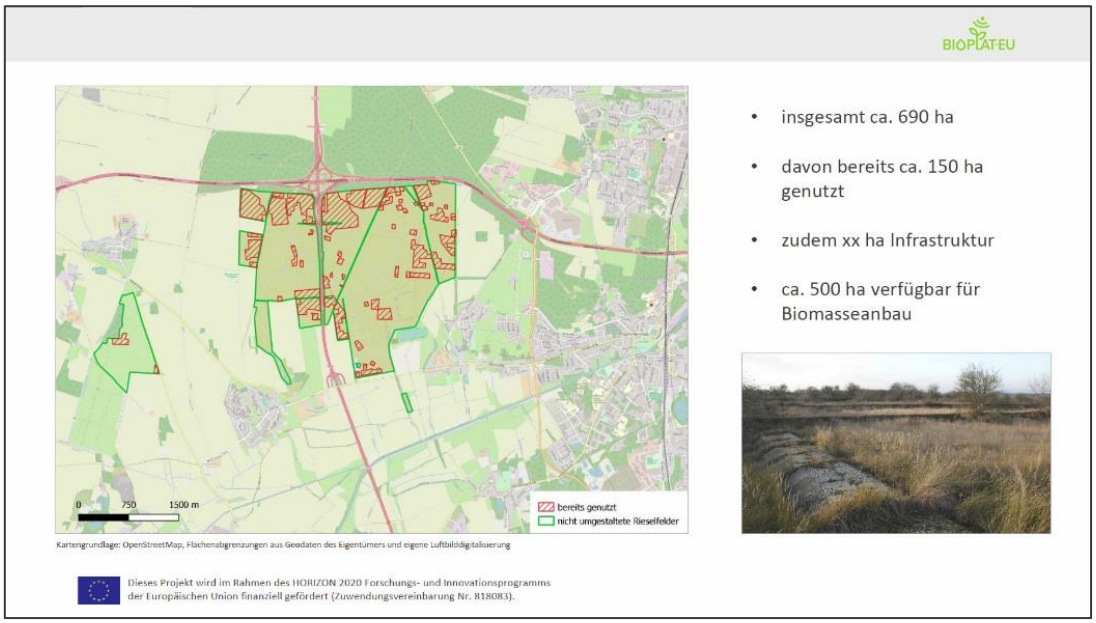
5.1.3 Summary of presentations and discussions

In a brief presentation, Raul Köhler (FIB) introduced the EU project BIOPLAT-EU, funded within the framework of Horizon2020. The overall objective of the project is to promote the market acceptance of sustainable bioenergy in Europe. The focus is on the production of (non-food) biomass on marginal, underutilised and contaminated land. The core task of the project is the development of a web-based decision support tool - an internet platform with integrated WebGIS - to assess the environmental, social and techno-economic sustainability of bioenergy use.

Rainer Schlepphorst (FIB) showed selected potential bioenergy value chains in the case study region, the former sewage irrigation fields in the district of Dahme-Spreewald. In total, an area

of about 690 ha of former sewage irrigation field in the district is considered, of which currently about 500 ha are still unused.

Potential value chains under discussion are fast-growing hybrid poplar in short rotation or also miscanthus for the generation of heat or electricity, as well as the use of the already existing grass growth for biogas or biomethane production. As an example, the results of two scenario calculations on the economic feasibility of bioenergy use of miscanthus were presented.



Example slide of the bioenergy value chains presentation

The presentation was followed by an intensive exchange of views on the area setting, the energy crops, possible restrictions and barriers, and the planned online tool. The paragraphs below summarize the main contributions to the discussion.

Discussion topic 'Land area potential'

The selected area size of about 500 ha is plausible. This number is based on data provided by the landowner, Berliner Stadtgüter GmbH, as part of the predecessor project FORBIO and a current aerial photo analysis.

However, these areas are not available for biomass cultivation at the moment, because the Berliner Stadtgüter GmbH as owner focusses on nature and species conservation. Thus, 370 ha of the considered area have already been certified as a land pool for compensation measures of the intervention compensation regulation (according to the Federal Nature Conservation Act, the Building Act and the Nature Conservation Act of the State of Brandenburg).

Peripheral areas are reserved for other projects such as photovoltaics and further areas, e.g. in the municipality Großbeeren, are leased to other stakeholders.

Discussion topic 'Bioenergy crops and energy production'

The landowner, Berliner Stadtgüter GmbH, has had bad experience with the establishment and use of short-rotation plantations. Therefore, an expansion of the currently managed areas is not conceivable. Existing short rotation areas are leased and will be reclaimed in the future.

An intensive use of sewage irrigation fields, e.g. for biomass production, represents a conflict of objectives: unused sewage fields are usually more ecologically valuable than, for example, short rotation coppices.

Regardless of the considered irrigation fields, agroforestry systems will show a stronger development in the future. They have ecological advantages over intensively used agricultural land.

Discussion topic 'Barriers'

Although the areas do not have any protection status under nature conservation law (e.g. as a nature reserve), the area protection (in the sense of nature conservation) is stipulated by land register entry (as part of the certification as a land pool for compensation measures).

The status as agricultural land (grassland) is maintained, and the land is mulched once a year (obligatory). The biomass remains on the land. Furthermore, landscape maintenance measures are carried out.

The current energy wood prices are too low for a profitable use. This financial uncertainty leads to the fact that currently no recommendation is given by consultants for the establishment of short rotation plantations. They are not economically viable at the moment.

Still existing infrastructure, e.g. dams, complicate the cultivation of the former sewage fields. For example, harvesting short rotation coppices with large machinery is limited, which has a negative impact on economic efficiency.

The soil condition is very heterogeneous, and water is often a limiting factor on the well-draining soils.

Discussion topic 'Web platform / STEN tool'

The web-based tool to be developed in the BIOPLAT-EU project for decision support and evaluation of the sustainability of bioenergy production can theoretically also be applied to former sewage fields in Brandenburg. However, bioenergy production on these areas is not under consideration in the future, which means that the application of the tool, with the exception of an academic gain in knowledge, does not result in any directly usable benefit for the landowner Berliner Stadtgüter GmbH.

On the other hand, the demand for land will continue to increase, e.g. to supply existing biomass power plants. Then the tool can be interesting for a first estimation of value chains as well as the comparison of different options.

Other landowners may have other utilization goals for their sewage irrigation fields (e.g. city of Cottbus, Finsterwalde), which means that they can possibly benefit from the application.

5.1.4 Conclusions

The cultivation of bioenergy crops on former sewage irrigation fields in the district of Dahme-Spreewald is currently not an alternative, since this type of use conflicts with the current use as a land pool for compensation measures within the framework of the intervention compensation regulation in terms of nature conservation. In addition, economic considerations are crucial for the decision of the farmers. However, since the areas retain their status as agricultural land, regular maintenance is necessary. The biomass resulting from this landscape maintenance currently remains on the land, but it represents a potential for bioenergy production.

Besides, other utilization concepts compete with biomass production, such as energy generation by means of solar systems.

The tool to be developed in the project supports an initial assessment of different potential value chains by calculating and evaluating sustainability, including various economic aspects. By using the tool on the set of areas discussed here, no major impact on the decision of the landowner Berliner Stadtgüter GmbH is expected, but a successful presentation of the functionality of the tool is relevant for other landowners and especially authorities in South Brandenburg.

5.2 Second working group meeting

The second working group meeting was held in person during the workshop on 07.09.2021 in Lichterfeld. An important contribution to the topic of cultivation of bioenergy crops on sewage irrigation fields was provided by a working group member who was only able to attend the meeting on 08.09.2021 in Neupetershain (Mr. Grundmann). The table below shows the participants list.

Member name	Organisation	Stakeholder category
Domin, Thomas	Agroforestry Association	Land owner, farmer
Grundmann, Jan	Energy Crops GmbH	Industry, SRC management, biomass supplier
Hampel, Gerd	Biogas Association	Consultant
Köhler, Raul	FIB	Researcher
Knoche, Dirk	FIB	Researcher
Rademacher, Anne	Landwirtschaftsbetrieb Rademacher	Land owner, farmer
Schlepphorst, Rainer	FIB	Researcher

The discussion started during the first work group meeting regarding land area potential, future biomass strategies in the region and the webGIS tool was continued.

Discussion topic 'Land area potential, Bioenergy crops and energy production'

Energy from biomass is necessary to achieve the energy transition. Even though competition for land is high, there will be increased demand for land for biomass production in the future.

The experience with SRC on fields is rather negative. The financial risk is high due to the heterogeneous soil conditions and the low water availability. On the other hand, there are also positive examples with good yields.

Poplar cultivation is very demanding in the establishment phase. Black locust is also problematic from a nature conservation perspective, e.g. in impact and compensation measures.

Biomass production with poplar in SRC is not feasible under power lines due to growth height limitation. Alternatively, biomass created by natural regeneration or seeding could be used, reducing the main cost of planting.

Discussion topic 'Web platform / STEN tool'

The tool is promising at the European level, but of limited use at the local level, because the basis input data does not fit. However, all input parameters can be adjusted for the advanced user, which should allow a reliable evaluation of sustainability.

The approach of the tool is good, but there are no areas available in Germany.

In the future, the Renewable Energy Act (EEG) will probably not consider the further financing of biogas plants. However, the increasing prices of conventional energy due to CO_2 certificates will be beneficial for renewable energy. After adjustments to the legislation, the tool could make a contribution to the assessment of sustainability (e.g. air quality) of a certain local value chain.

Conclusions

Although the largest landowner of sewage irrigation fields, Berliner Stadtgüter GmbH, in Dahme-Spreewald does not plan to expand biomass production areas, a political discussion is ongoing about obtaining the energy supply in the state of Brandenburg and throughout Germany. And this is where bioenergy from biomass plays a significant role in securing the future base load of the energy grids. However, the low area potential of MUC land in the case study area will not be sufficient to ensure this, thus increasing the pressure on other agricultural land as well, like e.g. marginal managed agricultural land.

5.3 Follow-up actions

- Email to all working group members with presentation and contact lists (13.09.2021)
- Email to regional officer of Biogas Association for promoting and disseminating workshop results (21.09.2021)

6 Working group in Bács-Kiskun and Csongrád-Csanád counties, Hungary

6.1 First working group meeting

6.1.1 Introduction

The first working group meeting in Hungary occurred on 28 October 2020 between 11:00 AM and 13:00 PM. The online event provided a general overview of the BIOPLAT-EU project to stakeholders and introduced options to implement unconventional cropping value chains on underutilised Hungarian lands. The list of working group members is shown in the table below, but unfortunately not all of them attended the meeting.

Member name	Organisation	Stakeholder category
Dr Kis Zoltán	Gabonakutato Nonprofit Kft	Seed producer
Angyalné Dr. Alexy Márta	ELTE University	Researcher
Dr. Novák László	Gazda Kontroll Kft.	Industries
Heltai Miklós	Szent István Egyetem, Vadbiológia Tanszék	Researcher
Ádám Máté	University of Debrecen	Researcher
Beatrix Bakti	Nemzeti Agrárkutatási és Innovációs Központ/National Agricultura Research and Innovation Center	Researcher
Barna Kovacs PhD	Counsellor BIOEAST Secretary General	Policy
Gyenes Adrienn	Nemzeti Agrárgazdasági Kamara/National Chamber of Agriculture	Farmers association

6.1.2 Invitation

MEGHÍVÓ

Művelésből kivett területek gazdasági hasznosításának lehetőségei Magyarországon – Online Előadás és Workshop a BIOPLAT-EU projekt (https://bioplat.eu/) keretében

Dátum: 2020. október 28, délelőtt 11:00 óra
Helyszín: Zoom Meeting (további bejelentkezési lehetőségek a 2. oldalon)
{https://zoom.us/j/98353323226?pwd=ckNHcDZndXpNT3phaFllSkFNRVlkZz09}

BIOPLAT-EU

6.1.3 Agenda

BIOPLAT-EU

Program

11:00 – 11:05 – Bemutatkozás és bevezető

11:05 – 11:15 – A BIOPLAT-EU projekt bemutatása, célkitűzések és munkaprogram.

11:15 – 11:20 – A csicsóka (Helianthus tuberosus L.) termesztési és felhasználási lehetőségei

11:20 – 11:25 – A cirok (Sorghum bicolor/ sudanense) termesztési és felhasználási lehetőségei

11:25 – 11:30 – Olajos magvak termesztési és felhasználási lehetőségei

11:30 – 11:40 – Kérdezz-felelek, interaktív megbeszélés

11:40 – 11:45 – Az előadások és interaktív megbeszélés összefoglalója és konklúziói

Az előadásokon szó lesz a programban jelölt növények termesztési lehetőségeiről marginális és művelésből kieső területeken, továbbá fenntarthatósági kérdésekről és arról, hogy milyen felhasználási lehetőségei vannak ezen növényeknek a biomassza alapú gazdaságban és projektekben.

A rendezvénnyel kapcsolatos további információról a következő e-mail címen lehet érdeklődni:
peter.gyuris@geonardo.com

BIOPLAT-EU projekt partnerek

A BIOPLAT-EU projekt az Európai Unió támogatásával, a H2020 program társfinanszírozásával valósult meg. A kiadványban kifejtett nézetek kizárólag a szerzők véleményét tükrözik, és az Európai Bizottság nem vállal felelősséget az itt szereplő információk további felhasználásáért.

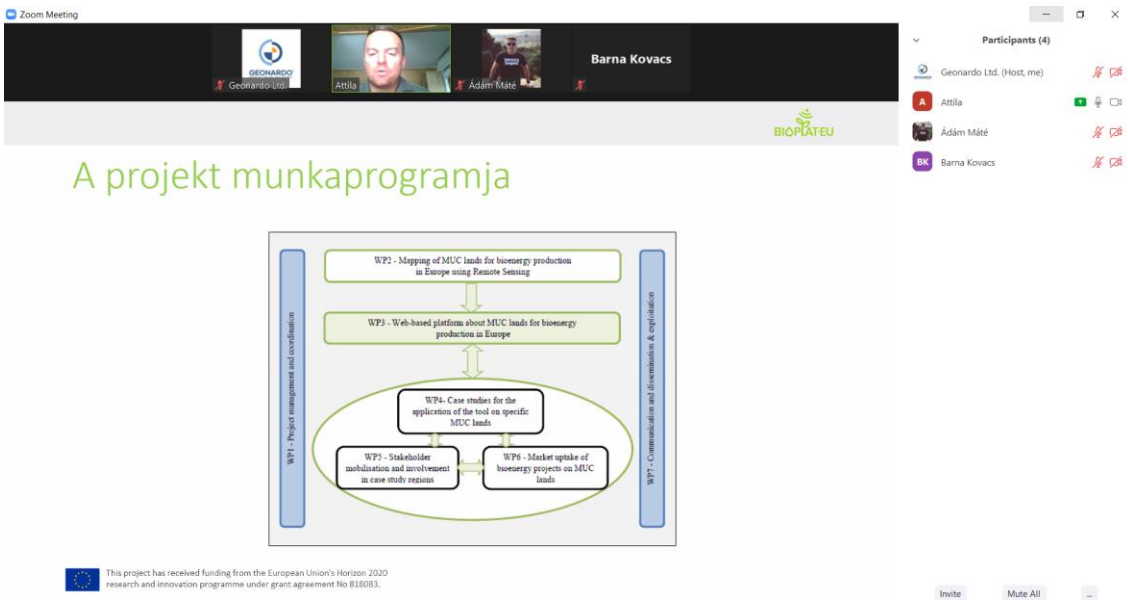
6.1.4 Summary of presentations and discussions

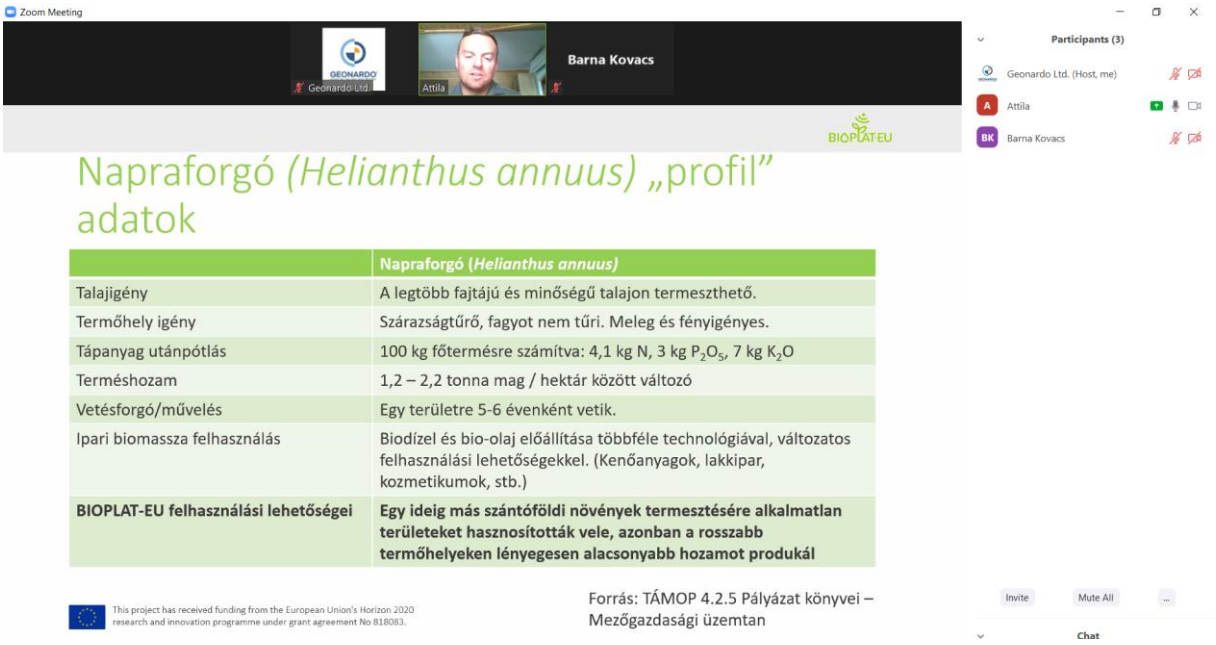
Mr. Péter Gyuris opened the event and welcomed the participants. Mr. Attila Uderszky then shortly presented the project in general with objectives and work programme. The next presentation was held by Mr. Péter Gyuris about the value chain options of Jerusalem artichoke and sorghum. None of these crops are very well known among Hungarian farmers and landowners as alternative value chains.

Jerusalem artichoke: the cropping characteristics and potential processing pathways of the plant for bioenergy was introduced in the mapped region in Hungary, taken into account local biophysical conditions.

Sorghum: the cropping characteristics and potential processing pathways of the plant for bioenergy was introduced in the mapped region in Hungary, taken into account local biophysical conditions.

Mr. Attila Uderszky held the presentation about oil seeds and crops, which is currently mainly limited to the cultivation of rapeseed (Brassica napus) and sunflower (Helianthus annuus) in Hungary. Both crops were introduced as viable options for alternative cultivation in underutilised Hungarian lands. Rapeseed can be grown in relatively sandy soil of the Southern part of Hungary and some of its subspecies are even more prone to the effects of negative temperature. Sunflower is actually recognised again by farmers and landowners as an excellent replacement of regular crops in lands where the soil quality is suboptimal. He also introduced further optional oily crops, like oil radish (Raphanus sativus L. convar, oleiferus). He also introduced the great variety of applications and further alternative use of oily crops as economically sound investment options.





6.1.5 Conclusions

The main topic of the discussions part was about the potential cultivated crops (suitability e.g. sorghum) for specific region. Beyond this the participants were much looking to the project results, especially the publicly available MUC maps. This was considered a great asset of the project that can support regional development planning processes and decision making.

6.2 Second working group meeting

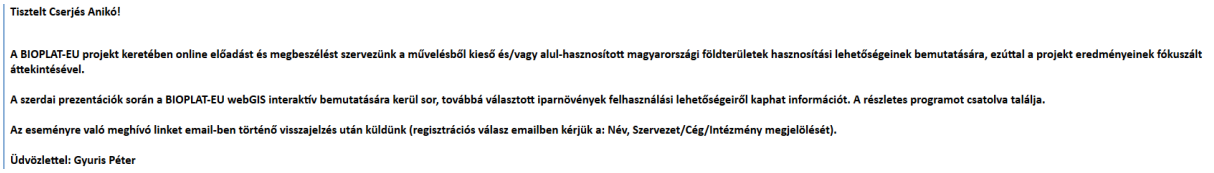
6.2.1 Introduction

The second working group meeting in Hungary took place on 1 September 2021 between 10:30 and 12:00. The online event provided a general overview of the BIOPLAT-EU project to stakeholders and introduced the WebGIS Tool for possible stakeholders who are considering the options to implement unconventional cropping value chains on underutilised Hungarian lands.

Two additional members attended the meeting. They are listed in the table below.

Member name	Organisation	Stakeholder category
Ádám Pab	Self-employed	farmer
Gergely Folberth	Kiskunsági National Park	Governmental organisation

6.2.2 Invitation



Tisztelt Cserjés Anikó!

A BIOPLAT-EU projekt keretében online előadást és megbeszélést szervezünk a művelésből kieső és/vagy alul-hasznosított magyarországi földterületek hasznosítási lehetőségeinek bemutatására, ezúttal a projekt eredményeinek fókuszált áttekintésével.

A szerdai prezentációk során a BIOPLAT-EU webGIS interaktív bemutatására kerül sor, továbbá választott iparnövények felhasználási lehetőségeiről kaphat információt. A részletes programot csatolva találja.

Az eseményre való meghívó linket email-ben történő visszajelzés után küldünk (regisztrációs válasz emailben kérjük a: Név, Szervezet/Cég/Intézmény megjelölését).

Üdvözlettel: Gyuris Péter

MEGHÍVÓ

Művelésből kivett területek gazdasági hasznosításának lehetőségei Magyarországon – Online Előadás és Workshop a BIOPLAT-EU projekt (https://bioplat.eu/) keretében

Dátum: 2021. Szeptember 1., délelőtt 10:30

6.2.3 Agenda

10:30 – 10:35 – Résztvevők bejelentkezése a ZOOM platformra

10:35 – 10:45 – A BIOPLAT-EU projekt rövid bemutatása

10:45 – 11:00 – A BIOPLAT-EU projekt online platform interaktív bemutatója (UN-FAO által fejlesztett metodológia alapján): iparnövény és értéklánc választása, társadalmi-környezeti indikátorok bemutatása

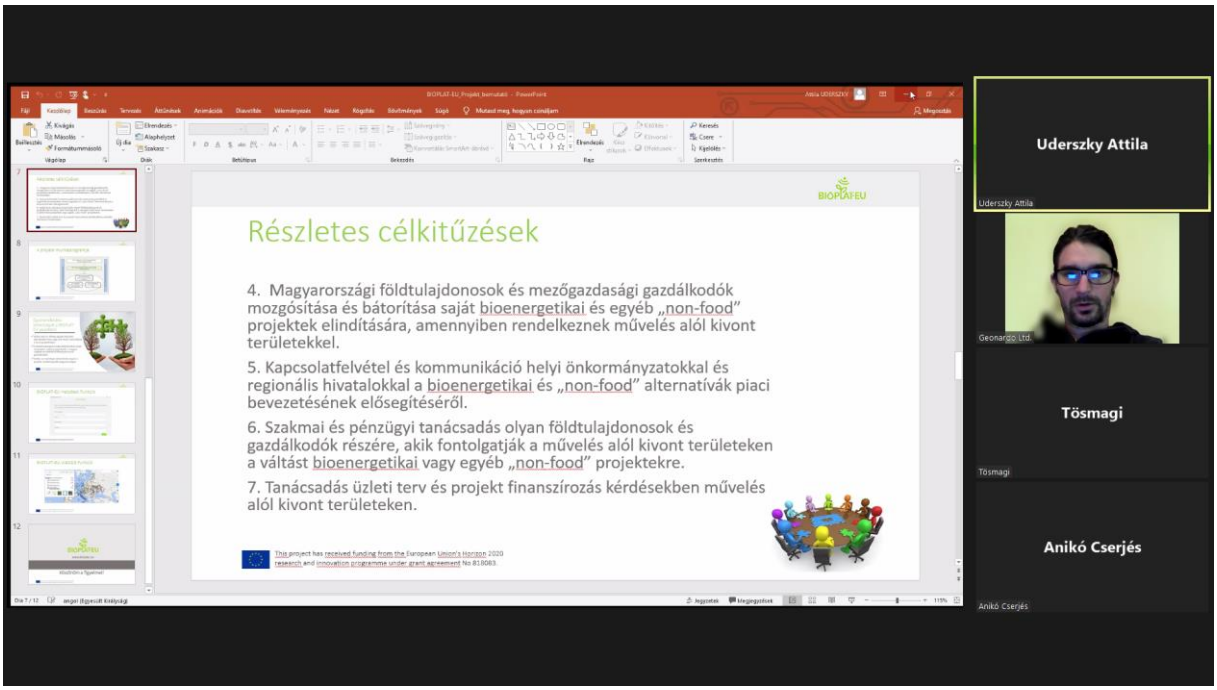
- Standard felhasználó elemzési lehetőségeinek bemutatása
- Szakértői szintű felhasználó elemzési lehetőségeinek bemutatása

11:00 – 11:15 – Iparnövény(ek) feldolgozási/konverziós technológiájának bemutatása és gazdaságossági elemzésének rövid ismertetése

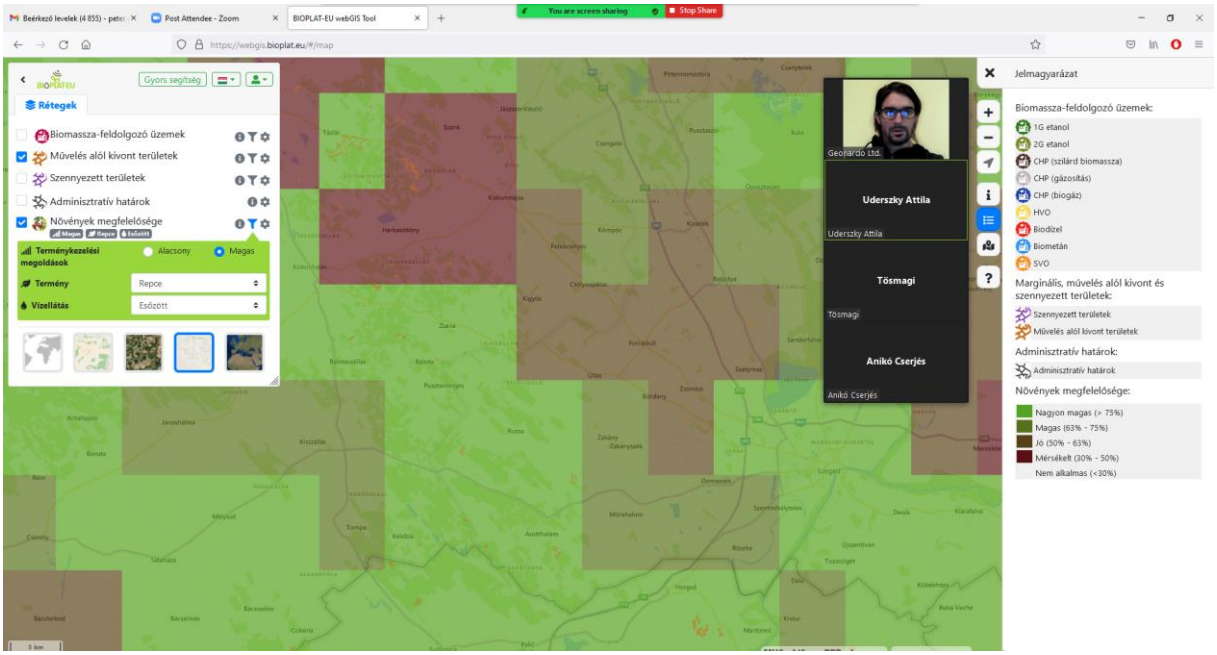
11:15 – 12:00 – Interaktív megbeszélés

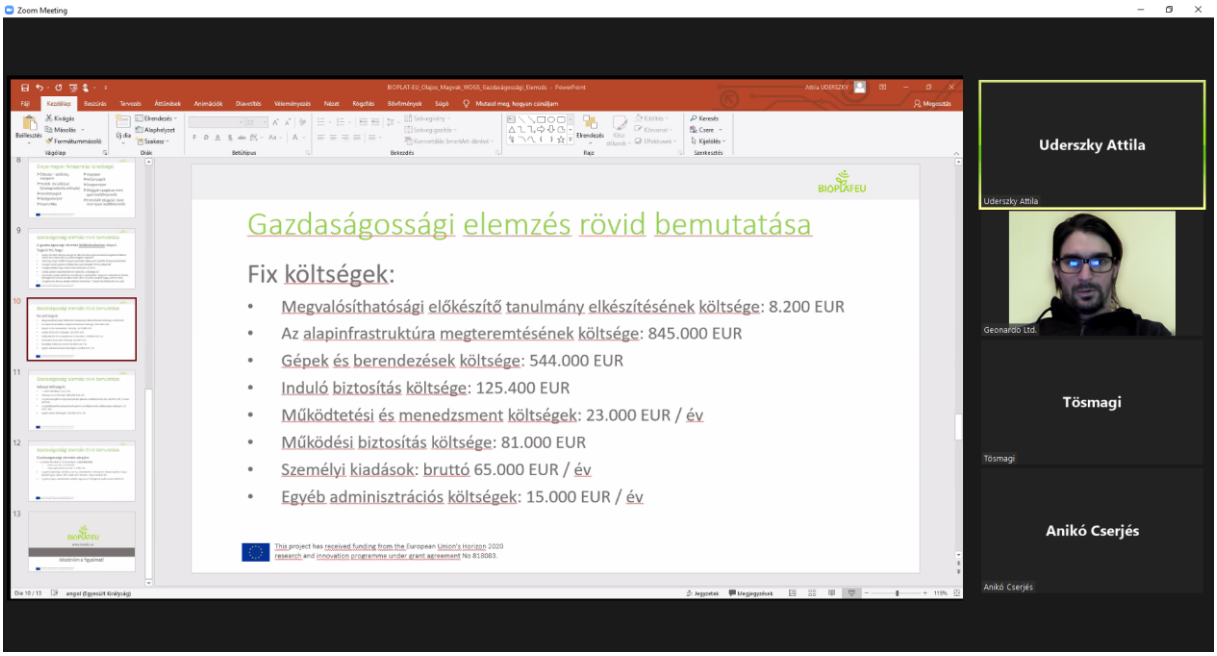
6.2.4 Summary of presentations and discussions

Mr. Péter Gyuris opened the event and welcomed the participants. Mr. Attila Uderszky then shortly presented the project in general with objectives and work programme.



The next presentation was held by Mr. Péter Gyuris about the WebGIS tool and the STEN tool.





6.2.5 Conclusions

The crop suitability and economic viability was the main topic for this meeting. Basically, the proposed (by the project's tool) industrial crops were discussed in more details, as what is their potential on marginal (e.g. sandy soils) lands with low management practices e.g.: non-irrigated production. The other main discussion topic was the potential uptake of such crops for bioenergy production in the region.

7 Working group in Veszprém and Fejér counties, Hungary

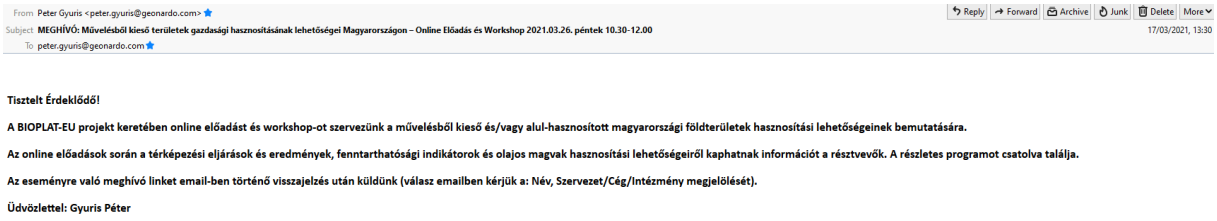
7.1 First working group meeting

7.1.1 Introduction

The first working group meeting in Hungary took place on 26 March 2021 between 10:30 and 12:00. The online event provided a general overview of the BIOPLAT-EU project to stakeholders and introduced options to implement unconventional cropping value chains on underutilised Hungarian lands. Below is the list of working group members.

Member name	Organisation	Stakeholder category
Dr. Katalin Dobó	president of the DÉLI NAPFÉNY LEADER EGYESÜLET	Land owner, farmer association leader
Éva, Kinorányi	Ministry of Agriculture	Policy maker
Hegedüs Csaba	Ministry of Justice Agricultural referent	Policy maker
Anikó Cserjés	Self-employed	Farmer

7.1.2 Invitation



From Peter Gyuris <peter.gyuris@geonardo.com>
Subject MEGHÍVÓ: Művelésből kieső területek gazdasági hasznosításának lehetőségei Magyarországon – Online Előadás és Workshop 2021.03.26. péntek 10.30-12.00
To peter.gyuris@geonardo.com

Reply | Forward | Archive | Junk | Delete | More

17/03/2021, 13:30

Tisztelt Érdeklődő!

A BIOPLAT-EU projekt keretében online előadást és workshop-ot szervezünk a művelésből kieső és/vagy alul-hasznosított magyarországi földterületek hasznosítási lehetőségeinek bemutatására.

Az online előadások során a térképezési eljárások és eredmények, fenntarthatósági indikátorok és olajos magvak hasznosítási lehetőségeiről kaphatnak információt a résztvevők. A részletes programot csatolva találja.

Az eseményre való meghívó linket email-ben történő visszajelzés után küldünk (válasz emailben kérjük a: Név, Szervezet/Cég/Intézmény megjelölését).

Üdvözlettel: Gyuris Péter

MEGHÍVÓ

Művelésből kivett területek gazdasági hasznosításának lehetőségei Magyarországon – Online Előadás és Workshop a BIOPLAT-EU projekt (https://bioplat.eu/) keretében

Dátum: 2021. március 26., délelőtt 10:30

7.1.3 Agenda

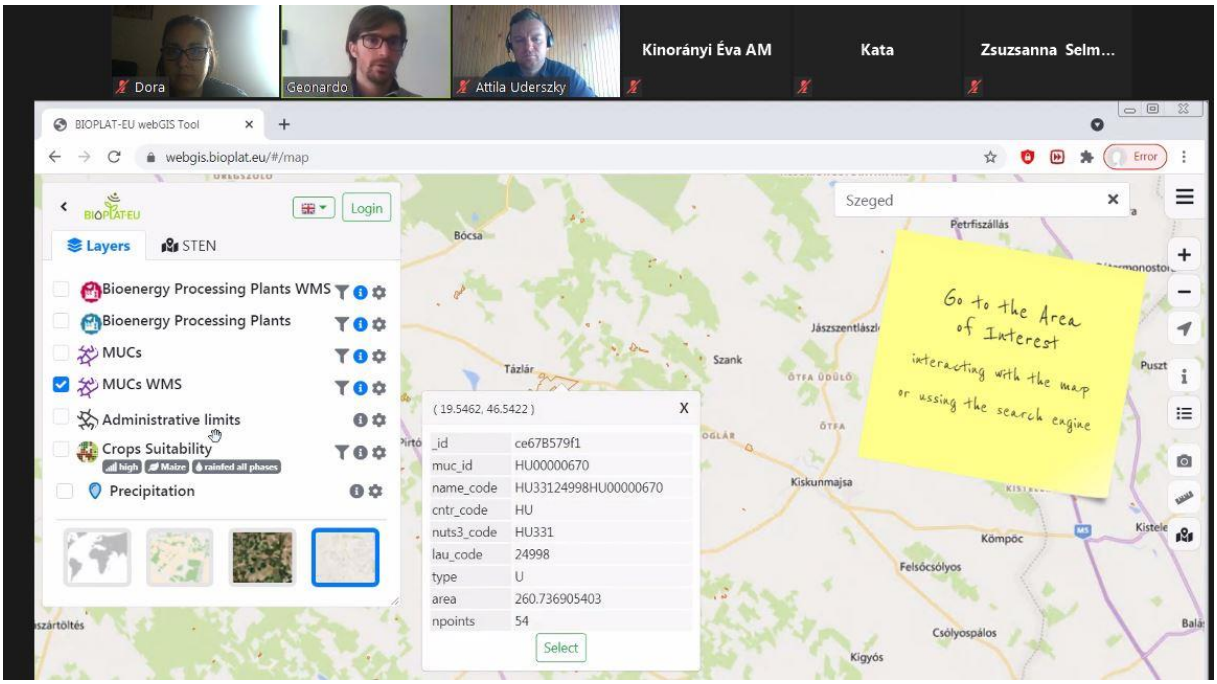
Program

10:30 – 10:35 – Köszöntő és bemutatkozás
10:35 – 10:45 – A BIOPLAT-EU projekt rövid bemutatása
10:45 – 10:55 – A projekt által használt térképezési eljárások és eredmények művelésből kieső területek meghatározására az Közép-Dunántúli régióban
10:55 – 11:05 – A BIOPLAT-EU projekt interaktív bemutatója a webGIS és fenntarthatósági index kalkulátorának használata (UN-FAO által fejlesztett metodológia alapján)
11:05 – 11:30 – Kérdések és válaszok: webGIS eszköz és a fenntarthatósági indexek használata
11:30 – 11:40 – Olajos magvak termesztési és felhasználási lehetőségei gyenge minőségű talajon
11:40 – 12:00 – Kérdezz-felelek, interaktív megbeszélés

7.1.4 Summary of presentations and discussions

Mr. Péter Gyuris opened the event and welcomed the participants. Mr. Attila Uderszky then shortly presented the project in general with objectives and work programme. The next presentation was held by Mr. Péter Gyuris about the GIS techniques that were used in the project to map the target region and a brief introduction to the WebGIS tool and the STEN tool.

Mr. Attila Uderszky held the presentation about oil seeds and crops, which is currently mainly limited to the cultivation of rapeseed (Brassica napus) and sunflower (Helianthus annuus) in Hungary. Both crops were introduced as viable options for alternative cultivation in underutilised Hungarian lands. Rapeseed can be grown in relatively sandy soil of the Southern part of Hungary and some of its subspecies are even more prone to the effects of negative temperature. Sunflower is actually recognised again by farmers and landowners as an excellent replacement of regular crops in lands where the soil quality is suboptimal. He also introduced further optional oily crops, like oil radish (Raphanus sativus L. convar, oleiferus). He also introduced the great variety of applications and further alternative use of oily crops as economically sound investment options.



7.1.5 Conclusions

The discussion centred around the usability of the tool for instance for individual farmers. Also a discussions topic was the production of TIER 1 and TIER 2 maps, more specifically how the areas with protected status and soil erosion were taken into accounts in producing the results map.

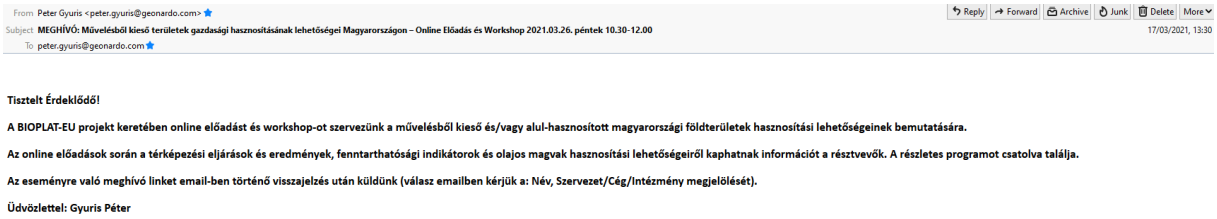
7.2 Second working group meeting

7.2.1 Introduction

The second working group meeting in Hungary occurred on 31 August 2021 between 10:30 and 12:00. The online event provided a general overview of the BIOPLAT-EU project to stakeholders and introduced the WebGIS Tool for possible stakeholders who are considering the options to implement unconventional cropping value chains on underutilised Hungarian lands. Two additional members attended the meeting. They are listed below.

Member name	Organisation	Stakeholder category
Ádám Pab	Self-employed	farmer
Gergely Folberth	Kiskunsági National Park	Governmental organisation

7.2.2 Invitation



From Peter Gyuris <peter.gyuris@geonardo.com>
Subject MEGHÍVÓ: Művelésből kieső területek gazdasági hasznosításának lehetőségei Magyarországon – Online Előadás és Workshop 2021.03.26. péntek 10.30-12.00
To peter.gyuris@geonardo.com

Reply | Forward | Archive | Junk | Delete | More

17/03/2021, 13:30

Tisztelt Érdeklődő!

A BIOPLAT-EU projekt keretében online előadást és workshop-ot szervezünk a művelésből kieső és/vagy alul-hasznosított magyarországi földterületek hasznosítási lehetőségeinek bemutatására.

Az online előadások során a térképezési eljárások és eredmények, fenntarthatósági indikátorok és olajos magvak hasznosítási lehetőségeiről kaphatnak információt a résztvevők. A részletes programot csatolva találja.

Az eseményre való meghívó linket email-ben történő visszajelzés után küldünk (válasz emailben kérjük a: Név, Szervezet/Cég/Intézmény megjelölését).

Üdvözlettel: Gyuris Péter

MEGHÍVÓ

Művelésből kivett területek gazdasági hasznosításának lehetőségei Magyarországon – Online Előadás és Workshop a BIOPLAT-EU projekt (https://bioplat.eu/) keretében

Dátum: 2021. augusztus 31., délelőtt 10:30

7.2.3 Agenda

10:30 – 10:35 – Résztvevők bejelentkezése a ZOOM platformra

10:35 – 10:45 – A BIOPLAT-EU projekt rövid bemutatása

10:45 – 11:00 – A BIOPLAT-EU projekt online platform interaktív bemutatója (UN-FAO által fejlesztett metodológia alapján): iparnövény és értéklánc választása, társadalmi-környezeti indikátorok bemutatása

- Standard felhasználó elemzési lehetőségeinek bemutatása
- Szakértői szintű felhasználó elemzési lehetőségeinek bemutatása

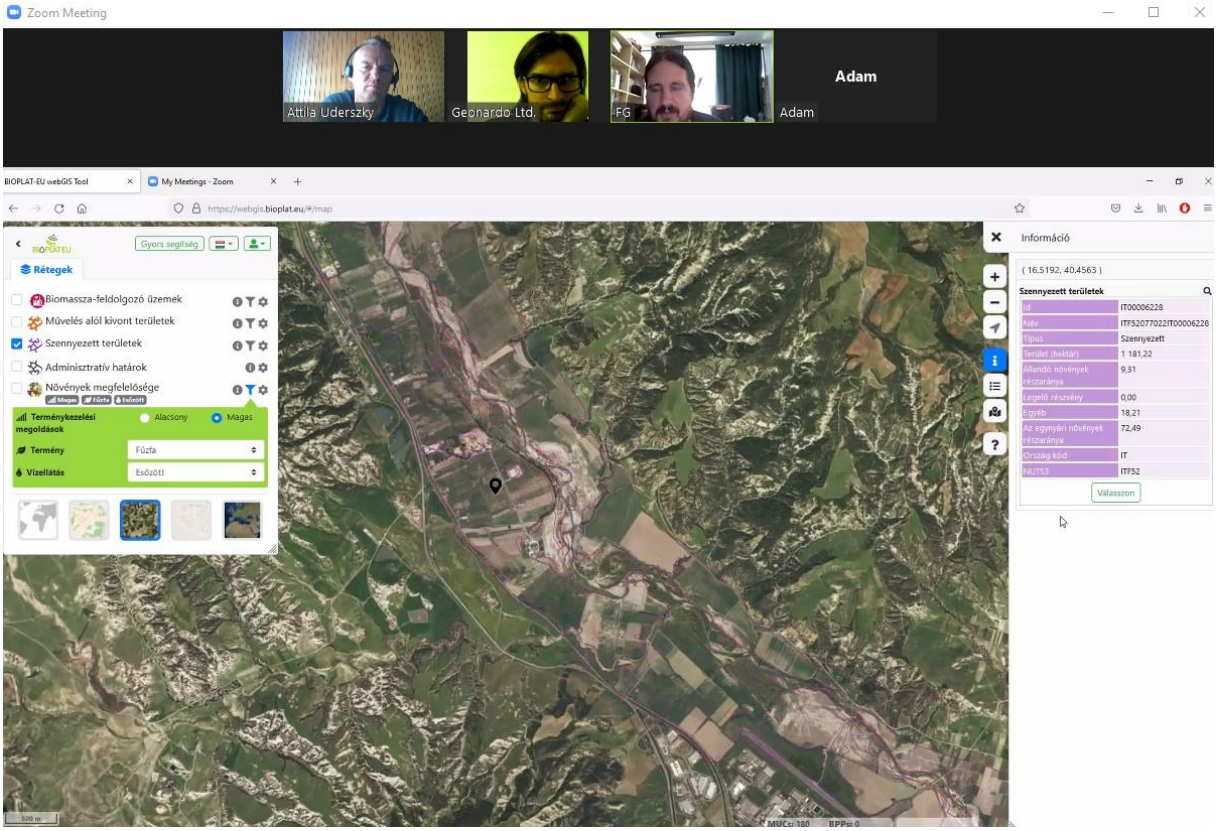
11:00 – 11:15 – Iparnövény(ek) feldolgozási/konverziós technológiájának bemutatása és gazdaságossági elemzésének rövid ismertetése

11:15 – 12:00 – Interaktív megbeszélés

7.2.4 Summary of presentations and discussions

Mr. Péter Gyuris opened the event and welcomed the participants. Mr. Attila Uderszky then shortly presented the project in general with objectives and work programme.

The next presentation was held by Mr. Péter Gyuris about the WebGIS tool and the STEN tool.



7.2.5 Conclusions

The main topic was in this workshop the data source and quality used for producing the map layers in the tool. Beyond this theme a raised issue was that local stakeholders need to be involved in such a (mapping) practice as local protection status applies for areas and therefore limitation may apply in developing the actual value chains that may be present, theoretically.

8 Working group in Cagliari, Italy

8.1 First working group meeting

8.1.1 Introduction

The first WG meeting of the BIOPLAT-EU project in Sardinia was held at the Hotel Panorama in Cagliari on 15 September 2020. Due to COVID-19 related constraints, some of the members of the WG participated in the meeting remotely, via TEAMS. The full list of the members of the WG formed in Sardinia is listed in the table below.

Member name	Organisation	Stakeholder category
Prof. Pierpaolo Roggero	University of Sassari. Department of Agriculture.	Researcher
Laura Mula	University of Sassari. Department of Agriculture.	Researcher
Carla Asquer	SARDEGNA RICERCHE - Biofuels and Biomass Lab	Researcher
Emanuela Melis	SARDEGNA RICERCHE - Biofuels and Biomass Lab	Researcher
Valentina Carta	CREA – PB (Sardinia Regional office)	Researcher
Federica Floris	CREA – PB (Sardinia Regional office)	Researcher
Giuseppe Pulighe	CREA – PB (Sardinia Regional office)	Researcher
Marco Naseddu	CRP - Regione Sardegna - Centro Regionale di Programmazione	Regional authority
Giorgio Culazzu	Arpas - Dipartimento del Sulcis	Regional authority
Marina Monagheddu	Department of Agriculture and agri-pastoral reform. Service for the competitiveness of agricultural farms	Regional authority
Tiziana Pirelli	CREA – PB. National office - Rome	Researcher
Guido Bonati	CREA – PB. National office - Rome	Researcher

8.1.2 Invitation

The selection of the candidate members of the Stakeholders Working Group (WG) was performed in a joint effort with the regional focal point, Dr. Valentina Carta. This approach allows the organizers to count on a deep knowledge of the local context, which brought to a smoother selection of the stakeholders invited to participate as members in the WG.

Candidate members of the WG were contacted on a one-to-one basis, both via email or virtual meetings (e.g. Skype; Teams; Zoom) to raise their awareness on the objectives and the activities foreseen in the BIOPLAT-EU project and to explore their interest in being part of the WG, as representative of their specific stakeholder category. In this occasion, the CREA staff explored

with the candidate the type of contribution expected from WG members, which were invited to share their knowledge, data and best practices relevant for the scope of the project.

This first approach was followed by an invitation email which included in attachment the official brochure of the project, written in local language, and the agenda of the event. In some cases, such as for the invitation of the regional authorities, an official letter of invitation, signed by the Director of the CREA-PB office in Rome, was sent via the official channel (Certified email – PEC; see figure below).

The general public was informed about the event through a dedicated post via LinkedIN, released by WIP Renewable energy (here is the *link*).

Progetto BIOPLAT-EU e possibili sinergie con il PIANO ENERGETICO AMBIENTALE DELLA REGIONE SARDEGNA : con allegato

tiziana pirelli <tiziana.pirelli@crea.gov.it>
07/09/2020 11:55

A: mnaseddu@regione.sardegna.it Cc: GIUSEPPE PULIGHE;VALENTINA CARTA

Salva tutti gli allegati

bioplat_eu_flyer_Italy_final.pdf 4,8 MB

WG_Cagliari.15.09.2020_Bozza... 50,42 KB

Gentile Marco,

facendo seguito al nostro colloquio via Skype di venerdi scorso (4 Sett), con la presente ti invio maggiori informazioni sul primo "Working Group Meeting" organizzato nell'ambito del progetto BIOPLAT-EU dal Centro di Ricerca per l'Economia Agraria (CREA), in data **15 Settembre 2020 a Cagliari**, dal titolo : **"Il progetto BIOPLAT-EU e il settore bioenergetico in Sardegna"** (in allegato bozza dell'agenda).

Il **progetto H2020** BIOPLAT-EU ha come scopo quello di promuovere lo sviluppo di **filiere bioenergetiche** sostenibili attraverso la coltivazione di **terre Marginali, Sottoutilizzate e Contaminate** (MUC per il loro acronimo in inglese). Il progetto ha individuato l'area del Sulcis in Sardegna, come caso studio in Italia e il CREA, al fine di approfondire la conoscenza del contesto e della realtà locale, ha organizzato, per la mattinata del 15 Settembre a Cagliari, un incontro con alcuni portatori di interesse. Lo scopo di questo primo incontro è di facilitare lo scambio di informazioni e dati su attività (sia in corso che già terminate) relative a filiere bioenergetiche e/o volte alla riqualificazione di terreni marginali e/o contaminati in Sardegna.

Una delle attività del progetto consiste nello sviluppare uno strumento di supporto decisionale web-based (STEN- Sustainability Tool for Europe and Neighboring countries) che permetterà di valutare, sotto vari aspetti (ambientali, economici e sociali), **la sostenibilità di filiere bioenergetiche** realizzate o da realizzarsi a livello locale/regionale. La valutazione della sostenibilità delle varie filiere potenzialmente realizzabili in regione (per es. biogas, bioetanolo, biometano, biodiesel), prenderà in esame tutte le fasi della filiera: 1- la coltivazione delle biomasse; 2- la trasformazione industriale dei prodotti agricoli e/o dei residui organici e la produzione di energia; 3- la distribuzione e l'utilizzo dell'energia a livello locale. Per questo motivo, sarebbe gradita la presenza di un rappresentante della Regione Autonoma Sardegna, per ognuno delle 3 componenti della filiera: Agricoltura, Industria, Energia. In particolare, sarebbe gradita da parte del Servizio Energia ed Economia Verde dell'Assessorato dell'Industria **una breve presentazione sul recente PIANO ENERGETICO AMBIENTALE DELLA REGIONE SARDEGNA.** Il Piano, infatti, fa ampio riferimento alle potenzialità delle biomasse per la produzione di bioenergie ai fini del raggiungimento degli obiettivi climatici e ambientali e descrive, in generale, la situazione attuale e le potenzialità di sviluppo future. Per esempio, il Piano indica che attualmente sono presenti in regione circa 2,400 ettari impegnati nella produzione di biomasse per fini bioenergetici e il nostro progetto vuole proprio valutare la possibilità di estendere queste aree di produzione di biomasse attraverso la coltivazione di aree MUC.

Le informazioni raccolte durante l'incontro del 15 Settembre verranno elaborate nell'ambito del progetto, al fine di popolare lo strumento STEN e valutare le reali possibilità di sviluppo (e.g. finanziabilità) delle varie filiere bioenergetiche in Regione.

L'incontro è stato organizzato in un hotel in città che dispone di una sala adeguata al fine di ottemperare alla normativa per la prevenzione del COVID-19.

In attesa di un tuo gentile riscontro a riguardo del coinvolgimento di tuoi colleghi dell'amministrazione regionale, resto a disposizione per fornirti ogni eventuale ulteriori informazione/ chiarimento in merito al progetto e/o all'incontro. Tutti i miei contatti sono elencati in calce.

Ti auguro un buon inizio settimana!

Un caro saluto,

Tiziana

Dr. Tiziana Pirelli, PhD
CREA - Consiglio per la Ricerca in agricoltura e l'analisi dell'Economia Agraria
Centro di ricerca Politiche e Bioeconomia
Via Po, 14 - 00198 Roma
Cell. 347 6086101
Skype: tiziana.pirelli

Sample email used to invite the members of the Working Group to the 1st WG meeting in Sardinia. The email follows a virtual meeting, held on a one-to-one basis, with the aim to explain the objective of the project and the role of the WG members.

CREA - REGISTRO UFFICIALE N. 0065380 del 09/09/2020 - U

crea
Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria

SEDE LEGALE
Via Po, 14 - 00198 Roma (Italy)
T +39 06 47836.1
C.F. 97231970589 ∫ **P.I.** 08183101008

Centro regionale di programmazione
Regione Autonoma Sardegna
Via Cesare Battisti s.n.c.
09123 Cagliari- Italy
crp@pec.regione.sardegna.it

e per conoscenza al

Vice Direttore Avv. Francesca Lissia
flissia@regione.sardegna.it

Gentilissimi,

facendo seguito ai contatti informali intercorsi, mi è gradito invitare il Responsabile dell'Asse 4 del POR FESR 2014-2020 per la Regione Autonoma Sardegna, nella persona del Dr. Marco Naseddu, a partecipare, in qualità di relatore, al primo "Working Group Meeting" organizzato nell'ambito del progetto "BIOPLAT-EU: promuovere l'utilizzo sostenibile di aree Marginali, Sottoutilizzate e Contaminate per la produzione di bioenergia, attraverso una piattaforma telematica per l'Europa".

L'incontro si terrà a Cagliari il prossimo 15 Settembre, presso i locali dell'Hotel Panorama, in viale Diaz 231, con inizio alle ore 9:00, e verterà sui seguenti temi:

- La presenza di aree Marginali, Sottoutilizzate e Contaminate in Sardegna per la coltivazione di colture da biomassa da non destinarsi alla produzione di prodotti alimentari;
- Lo stato attuale e le potenzialità di sviluppo per il settore bioenergetico in Sardegna: nuovi scenari emersi dalla ricerca.
- I fondi strutturali a sostegno dello sviluppo del settore bioenergetico, tenuto conto delle diverse fasi che compongono i vari tipi di filiera: produzione di biomassa; trasformazione industriale della biomassa e produzione di energia, distribuzione e utilizzo della bioenergia prodotta. In questo contesto verranno analizzati i fondi messi a disposizione del settore dal PSR e dal FESR nel periodo 2014/2020 e le prospettive della nuova programmazione per il periodo 2021/2027.
- Le misure di sostegno alla bioenergia nel "Piano Energetico Ambientale Regionale della Sardegna"

In attesa di un Vs gentile riscontro, restiamo a disposizione per fornire ulteriori informazioni in merito all'evento.

Cordiali saluti.

Il Direttore
Roberto Henke

CREA - Centro di ricerca Politiche e Bio-economia
CREA - Research Centre for Agricultural Policies and Bioeconomy

Via Po, 14 - 00198 Roma *Sede amministrativa*
c/o Centro Direzionale Isola E/5, sc. C, P.1, int. 5 - V.le della Costituzione - 80143 Napoli
c/o Regione Abruzzo, "MOF"- C.da Bucceri - 65012 Cepagatti (PE)
c/o Università degli Studi di Perugia - Dipartimento di scienze agrarie, alimentari ed ambientali – dsa3 – Unità di Ricerca Economia Applicata - Borgo XX Giugno, 74 - 06121 Perugia

@ pb@crea.gov.it ∫ pb@pec.crea.gov.it
W www.crea.gov.it

T +39 06 47856.1
T +39 081 6063110
T +39 085 6922833
T +39 075 34051

Sample of official invitation letter sent to regional authorities to participate as WG member in the 1st WGM of the BIOPLAT-EU project in Sardinia

8.1.3 Agenda

The agenda of the event included two key sessions (see figure below). The first session was dedicated to the exchange of knowledge: the BIOPLAT-EU project was introduced, participants were informed about the opportunity and benefits of using MUC lands for bioenergy production in their region, and then invited to share information about the current status of the bioenergy sector at regional level. The second session, built upon the outcomes of the first one, was organized as a round table discussion, to stimulate the dialogue and to foster networking and collaborations among the various stakeholders in a way to overcome existing barriers that currently prevent the development of short, locally based, bioenergy value chains. The round table was also useful to identify the most promising bioenergy value chains in the region, on the basis of the local conditions. The event was closed by Mr. Guido Bonati, who showed to the WG members the functions of the Help Desk available on the website. Ultimately Mr. Bonati explained the next steps foreseen in the project, with a focus on the contents of the next WG meeting to be held in the spring of 2021.

crea

BIOPLAT-EU

Primo Working Group

Il progetto BIOPLAT-EU e il settore bioenergetico in Sardegna

Cagliari– Hotel Panorama, Viale Diaz 231, 15 settembre 2020

Martedì, 15 Settembre 2020

09:00	Registrazione dei partecipanti
	Sessione introduttiva e apertura dei lavori Moderatore: **Dr. Tiziana Pirelli** - CREA PB- Roma
09:30	**Il progetto BIOPLAT-EU. Promuovere l'utilizzo sostenibile di aree Marginali, Sottoutilizzate e Contaminate (MUC) per la produzione di bioenergia, attraverso una piattaforma telematica per l'Europa** **Dr.ssa Tiziana Pirelli** - CREA PB - Roma
10:00	**Individuazione di aree MUC potenzialmente utilizzabili per lo Sviluppo di filiere bioenergetiche in Sardegna: criteri, metodologie e risultati preliminari** **Dr. Giuseppe Pulighe** - CREA PB - Cagliari
10:15	Domande e discussione aperta
10:30	**I fondi strutturali e di investimento europei a sostegno dello sviluppo della filiera bioenergetica: analisi dei fondi messi a disposizione del PSR e del FESR nel periodo 2014/2020 e prospettive della nuova PAC e del FESR 2021/2027** **Dr.ssa Valentina Carta** - CREA PB - e **Dr. Marco Naseddu** (Regione Autonoma della Sardegna – Centro Regionale di Programmazione)
10:50	Domande e discussione aperta

This Project (Contract No. 818083) is Co-funded by the Horizon 2020 Framework Programme of the European Union

crea

11:00	Pausa caffè/the
11:15	**La filiera bioenergetica in Sardegna: nuovi scenari di sviluppo emersi dalla ricerca** **Prof. Pier Paolo Roggero** e **Dr. Laura Mula** – Dip. di Agraria - Università degli Studi di Sassari
11:35	**Tipologie degli impianti a bioenergie in Sardegna** **Dr.ssa Carla Asquer** – Sardegna Richerche
12:00	Domande e discussione aperta
12:10	**Discussione aperta** - **Dr.ssa Carla Asquer** e **Dr.ssa Emanuela Melis** – Sardegna Richerche - **Dr. Giorgio Culazzu** – ARPAS Dipartimento Sulcis - **Prof. Pier Paolo Roggero** e **Dr.ssa Laura Mula** – Dip. di Agraria - Università degli Studi di Sassari - **Dr. Marco Naseddu** – Regione Sardegna, Centro Regionale di Programmazione - **Dr.ssa Marina Rita Monagheddu** - Direttore del Servizio competitività delle aziende agricole presso la Direzione generale dell'Agricoltura e riforma agropastorale – Regione Autonoma Sardegna - **Dr.ssa Tiziana Pirelli, Dr.ssa Valentina Carta, Dr.ssa Federica Floris, Dr. Giuseppe Pulighe, Dr. Guido Bonati** – CREA
13:30	Pranzo
14:00	**Passi successivi e chiusura dei lavori.** Il secondo Working Group Meeting per la dimostrazione di STEN (Sustainability Tool for Europe and Neighboring countries) lo strumento online per la valutazione preliminare della sostenibilità delle filiere bioenergetiche in regione. **Dr. Guido Bonati** - CREA PB- Roma
15:30	Chiusura dei lavori

This Project (Contract No. 818083) is Co-funded by the Horizon 2020 Framework Programme of the European Union

Agenda of the 1st WGM of the BIOPLAT-EU project held in Sardinia on 15 September 2020.

8.1.4 Summary of presentations and discussions

Dr. Tiziana Pirelli opened the meeting by giving a general overview of the BIOPLAT-EU project objectives and activities. She explained the various phases of which a bioenergy value chain is composed and highlighted the most critical sustainability issues affecting the sector, among which the food vs fuel issue. She introduced the various existing bioenergy pathways, the advantages of establishing locally based short bioenergy value chains and the key factors to be considered as basic conditions in order to put in place a long-lasting and sustainable bioenergy sector, such as the type and amount of raw material available on-site. Ultimately, Dr. Pirelli explained the reasons which brought to the selection of Sulcis in Sardinia, as one of the case study area for the project.

Dr. Giuseppe Pulighe explained that the food vs fuel debate assumes high relevance in Italy, due to the scarce availability of agricultural land and to its strong fragmentation. Dr. Pulighe explained that a possible option to overcome this ethical issue, could derive from the production of dedicated bioenergy crops in MUC lands. He highlighted the multiple social, economic and environmental benefits that this choice could bring at local level, by fostering the sustainable development of short and efficient bioenergy value chains. Ultimately, Dr. Pulighe showed the outcomes of the study performed within the BIOPLAT-EU project to assess the availability of MUC lands in the Sardinia region and gave an overview on their distribution and composition.

Dr. Valentina Carta participated virtually in the WG meeting. She gave an overview of the supporting measures (M) foreseen so far in the EU Common Agricultural Policy (CAP) (M#4; M#6.4; M#8 and M#16.6) to foster the development of the bioenergy sector. Then, she focused on how these measures were transposed in the Rural Development Plan (PSR for its acronym in Italian) of the Sardinia region, valid for the period 2014-2020. Ultimately Dr. Carta explained that new opportunities to boost the development of local bioenergy value chains in Sardinia by adding value to the MUC lands identified within the BIOPLAT-EU project, could come from the new EU policies, such as the Green New Deal and the Farm to Fork strategy. In this context, the forthcoming Common Agricultural Policies for the period 2021-2027, should be transposed into regional policies and measures to support the sustainable production of biomass into MUC lands and the circular economy, such as the use of agricultural, forestry, and agro-industrial waste and residues to produce bio-economy products, e.g. bioenergy. CAP measures need to be harmonized with other EU structural funds (such as the EU Funds for Regional Development - FESR) aiming at fostering the local industrial and economic development, thus creating synergies and accelerating the achievement of common development and climate goals.

Mr. Naseddu gave an overview of how the structural EU FESR, which are specifically addressed to regions with serious and permanent natural or demographic disadvantages, such as islands like Sardinia, could be used to foster the local development of the bioenergy sector. The region is currently under the definition of the new program for the use of these funds for the period 2021-2027 and, in this context, it is extremely important to coordinate this activity with the planning for the use of funds dedicated to agriculture and forestry, like the CAP. The creation of opportunities for dialogue among the various stakeholders along the bioenergy value chain, such as the one offered by this WG meeting, is key to avoid acting in silos and will allow to

program more effective and coordinated policies and measures which can be brought to high relevant economic, environmental and social benefits for the local population.

Dr. Carla Asquer gave an overview of the current bioenergy sector in Sardinia, by focusing on the type, numbers, geographical distribution and production capacity of existing and operational bioenergy plants. She explained the key role that biogas covers in EU as a primary source of electric power among the various existing bioenergy options and the limited role that it currently has in providing fuels for vehicles, compared to other bioenergy pathways in EU. She explained that the upgrading of biogas for the production of biomethane to be used as fuel for vehicles or as input in the existing regional pipeline for the distribution of natural gas, can substantially contribute to the transition towards a low-carbon energy scenario.

Prof. Pierpaolo Roggero gave an overview of the experimental activities conducted so far, or still on-going, by the faculty of Agronomy at the University of Sassari in Sardinia, to test the productivity and the suitability of various non-staple crops (i.e. *Arundo donax* L.; *Cynara cardunculus* var. *altilis* DC) cultivated on MUC land, with a twofold aim: to add value and to contribute to their recovery through phytoremediation. In particular, he explained that it is not possible to identify bioenergy crops which work successfully in different contexts. Their suitability depends on various context specific conditions. As an example, he shared some data and information about the cultivation of drought-resistant crops for the production of oil seeds in Sardinia, a region characterized by a very low water availability. Although these alternative crops (i.e. *Cartamo*; *Eruca sativa* sel. *Nemat*; *Camelina sativa*) can provide a certain amount of seed production (1.5 t/ha; 0.8 t/ha and 0.3 t/ha, respectively), this amount is still too low to meet the requirements of a sustainable bioenergy value chain and it can't compete with the yield obtained from more "traditional" oil seeds crops (e.g. Brassica napus var. Oleifera – up to 2.9 t/ha). He also shared the results of experimental activities conducted to test the phytoremediation potential of biomass crops cultivated in contaminated sites in Sardinia. He concluded by highlighting the need to evaluate different end-uses for crops cultivated on MUC lands: they could be addressed to the production of products other than bioenergy, e.g. animal feed.

Mr. Guido Bonati participated virtually in the WG meeting. He closed the work of the day by giving a presentation on how BIOPLAT-EU can support stakeholders in identifying the most sustainable bioenergy value chains that can be established at local level by taking advantage of the presence of MUC lands within a radius of 100 km from already existing bioenergy plants or by foreseeing the settlement of new bioenergy infrastructures, on the basis of available feedstock and energy requirements in the region. To this end the project will provide a web tool, named Sustainability Tool for Europe and Neighbouring countries (STEN), which will be made accessible on-line for all interested users. WG members will be invited to a further WG meeting, to be held in person or online, on dependence of the COVID-19 situation, during which the functionalities of the STEN tool will be demonstrated and WG members trained for their use. Mr. Bonati introduced also the Help Desk function, already available on the project website, and invited stakeholders to use it and to spread this information also with other, interested stakeholders. Ultimately, Mr. Bonati explained that the project will be also able to provide private entrepreneurs with the support of financial experts, with the aim to assess the

sustainability and the bankability of specific bioenergy value chains based on the cultivation of MUC lands for the production of dedicated bioenergy crops at local level.

1st WG meeting of the BIOPLAT-EU project in Cagliari (Sardinia)

The WG meeting was recognized as a valuable and effective opportunity for dialogue among various stakeholders in the bioenergy value chain, which usually work in separated silos, with no interactions and synergies among them. WG members awareness was raised on the benefits that could derive from the cultivation of MUC lands for the production of biomass for bioenergy purposes. In particular, the key role that the biogas value chain, including the production of biomethane both from the upgrading and from methanation, could have in the energy transition was largely recognized compared to other type of bioenergy pathways in Sardinia. Sardinia has recently completed its pipeline for the distribution of natural gas that, nevertheless, has never been used so far due to the lack of connection with the national distribution network. The production of biomethane could provide the first gas to be input in this pipeline, while reducing the need to import fossil fuel from outside. New opportunities to support the cultivation of MUC land for the production of bioenergy dedicated crops and to foster the development of the bioenergy sector in Sardinia could come from the recent EU strategies (i.e. Green New Deal; F2F) and from the "Recovery fund" linked due to the COVID-19 pandemic. The adoption of a holistic approach in the definition of the future regional PSR transposing the EU-CAP 2021-2027 and of the programme for the use of the FESR for the same period, was strongly recommended and recognized by all WG members, as the key strategy towards the achievement of a sustainable, low carbon, regional economy. Regional authorities expressed their interest in continuing this dialogue and to be kept informed on future outcomes of the BIOPLAT-EU project, in particular on the results of possible dedicated feasibility and financial studies.

8.1.5 Conclusions

The meeting has strongly contributed to raise the awareness of local authorities on the various socio-economic and environmental benefits that a sustainable bioenergy sector could bring at local level. Furthermore, it allowed for the exchange of experiences, data and information on research activities currently on-going on topics strictly related to the ones considered in the BIOPLAT-EU project.

The biogas value chain was recognized as of primary importance in the current regional bioenergy framework. Its wider adoption could serve as a mean to foster the energy transition favouring, at the same time, the energy self-sufficiency and independency of the island. The traditional anaerobic digestion systems, which is already valuable in its current form, could further strengthen its role in the energy transition, by being upgraded for the production of biomethane, and/or through the adoption of most recent technologies for the production of hydrogen. Future bioenergy policies shall, therefore, support the use of by-products and residues of a first energy production step (i.e. the anaerobic digestion) as raw material for a further step in the value chain (CO_2 from biogas upgrading used as raw material for hydrogen production), according to a cascading use principle. Nevertheless, due to the still very high costs of these innovative technologies, they have currently a limited presence in the island.

The huge potential of marginal and underutilized land present in the Island shall be unlocked by promoting the cultivation of dedicated bioenergy species or by introducing the latest in well balanced crop rotations and/or intercropping system, thus providing farmers with an additional opportunity to increase their income.

The working group agreed on the need to join forces among different stakeholders in a way to promote a coordinated action among the various realms involved in the bioenergy value chain: agriculture, forestry, energy, socio-economic development, environmental management.

8.2 Second working group meeting

8.2.1 Introduction

The second Working Group (WG) meeting of the BIOPLAT-EU project in Sardinia was held back-to-back with the workshops for public and private landowners, which was carried out online on 9 September 2021. The objectives of this second WG meeting were to demonstrate and test the web-GIS tool together with the local stakeholders in a way to gather their feedback which could be helpful to fine-tune the web-GIS tool and to demonstrate to WG members the main outcomes of the feasibility study developed within the project.

8.2.2 Summary of presentations and discussions

After having had the demonstration of the STEN tool which involved also the private and public landowners, as well as bioenergy companies and local authorities, the WG members were informed about the outcomes of the feasibility study developed on a potential biogas short value chain in Sardinia. Mr. Bonati explained to WG members that according to the feasibility study developed in the project, the biogas short value chain hypothesized after the first

consultation of the local WG, which included an electricity production facility from feedstock produced across 6,000 hectares of MUC-land in the region, seems not to be financially feasible. In fact, the study revealed that the project's cash flow is only sufficient to support a social investment if also 60% grant is assumed. Key weaknesses which brought to this conclusions within the study, have been, among others, the huge amount of feedstock needed, the high price of the feedstock as well as logistical (including pre-treatment) and transport expenses.

8.2.3 Conclusions

WG members suggested to further improve the current version of the STEN tool with data coming from direct observation in the field. As an example, the position of the biogas plants present in the island according to the web-GIS tool, frequently do not correspond to the actual position of the plant, but only to the legal office of the company. This issue shall be adjusted to come out with valuable sustainability assessment data. A further objective of improvement can be the inclusion in the STEN tool of rural infrastructure, mainly streets to transfer biomass from production fields to the processing plant. The inclusion of rural streets can provide the STEN tool with info which can be helpful to further refine the outcomes of the sustainability tool.

In light of the results of the feasibility study conducted within the project, and of the outcomes of the demonstration of the web-GIS tool, participants in the meeting suggested to further improve the web-GIS tool by adding more detailed information from the field, before declaring the short biogas value chain as not feasible in Sardinia. On the other hand, they also suggested to run again the web-GIS tool and to implement a new feasibility study both with a focus on other types of bio-based value chains, e.g. bioplastic, as alternative uses to MUC lands in Sardinia.

9 Working group in Basilicata, Italy

9.1 First working group meeting

9.1.1 Introduction

The first WG meeting of the BIOPLAT-EU project in the Basento Valley was held at the Hotel Nazionale, in Matera, on 14 October 2020. Due to COVID-19 constraints, some invited stakeholders (Mr. Donato Del Corso and Ms. Vera Corbelli) participated in the meeting remotely. The full list of participants in the first WG meeting held in Basilicata is reported in the table below

Member name	Organisation	Stakeholder category
Giacobbe Braccio	ENEA	Researcher
Vera Corbelli	Autorità di Bacino Distrettuale dell'Appennino Meridionale. Segretario generale	Inter-regional authority
Giuseppina Costantini	CREA-Policy and Bioeconomy – Regional Office of Basilicata	Researcher
Mario Cozzi	University of Basilicata (UNIBAS)	Researcher
Aniello Crescenzi	Agenzia Lucana di Sviluppo di Innovazione in Agricoltura (ALSIA). Director	Public-Private Partnership
Donato Del Corso	Department for Agricultural and Forestry Policies of the Basilicata region	Regional authority
Rocco Fuina	Consortium for the Industrial Development of the province of Matera (CSI Matera)	Industrial Producers Consortium
Antonio Lanorte	Legambiente	Environmentalist Association
Domenico Lazazzera	Cluster Lucano di Bioeconomia. Presidente	Public Private Partnership
Teresa Lettieri	CREA-Policy and Bioeconomy – Regional Office of Basilicata	Research institute
Giuseppe Lorusso	Daken S.P.A. - Bioeconomy producers	Industry
Giuseppina Lovecchio	Regione Basilicata	Regional authority
Vincenzo Malfa	Consortium for the Industrial Development of the province of Matera (CSI Matera)	Industrial Producers Consortium
Luigi Emanuele Marsico	Cluster Energia Basilicata ETS – Associazione tra imprese ed Enti di ricerca. Presidente	Public Private Partnership
Alessandro Martemucci	Officinae – Agency for Lean e Digital Marketing	Private entrepreneur
Aldo Mattia	Coldiretti	Farm Producers Association

Rocco Vittorio Restaino	Basilicata region. Department of Agricultural and Forestry Policies	Regional authority
Antonella Russo	Greenswitch S.r.L.	Bio-industry
Salvatore Zito	Consortium for the Industrial Development of the province of Matera (CSI Matera)	Industrial Producers Consortium
Angelo Zizzamia	Municipality of Ferrandina (province of Matera)	Local authority

9.1.2 Invitation

The selection of the candidate members of the Stakeholders Working Group was performed in a joint effort with the regional focal point, Ms. Giuseppina Costantini, staff member of the regional CREA office in Basilicata involved in the project starting from the implementation of WG4. This approach allowed the organizers to count on a deep knowledge of the local context, and brought to a smoother selection of the stakeholders invited to participate as members in the WG.

Candidate members of the WG were contacted on a one-to-one basis, both via email or virtual meetings (e.g. Skype; Teams; Zoom) to raise their awareness on the objectives and the activities of the BIOPLAT-EU project and to explore their interest in being part of the WG, as representative of their specific stakeholder category. In this occasion, the CREA staff explored with the candidate the type of contribution expected from WG members, which were invited to share their knowledge, data and best practices relevant for the scope of the project.

This first approach was followed by an invitation email which included in attachment the official brochure of the project, written in local language, and the agenda of the event. In some cases, such as for regional authorities, an official communication on the official letterhead of CREA was also sent (see figure below).

A dedicated press release was prepared and circulated, thus that the event was announced through various communication channels, some of which is listed below:

- CREA website and its official social channels (e.g. twitter);
- Official website of the Basilicata region;
- official website of the Consortium for the Industrial Development of the province of Matera
- local media (e.g. Sassi live; oltrefreepress).

SEDE LEGALE
Via Po, 14 - 00198 Roma (Italy)
T +39 06 47836.1
C.F. 97231970589 -**P.I.** 08183101008

Dr. Gianni Rosa – Assessore Ambiente ed Energia
gianni.rosa@regione.basilicata.it

Avv. Francesco Fanelli – Assessore alle Politiche Agricole e Forestali
francesco.fanelli@regione.basilicata.it

Dr. Francesco Cupparo – Assessore alle Attività Produttive -
francesco.cupparo@regione.basilicata.it

c/o Regione Basilicata
Via Vincenzo Verrastro 8, 85100
Potenza (PZ)- Italy

Gentile Assessore,

a nome del Dr. Guido Bonati, coordinatore nazionale del progetto europeo H2020 "BIOPLAT-EU: promuovere l'utilizzo sostenibile di aree Marginali, Sottoutilizzate e Contaminate per la produzione di bioenergia, attraverso una piattaforma telematica per l'Europa", mi è gradito invitarla a partecipare, in qualità di relatore, al primo "Working Group Meeting" del progetto in Basilicata.

L'incontro si terrà a Matera il prossimo 14 ottobre, presso i locali dell'Hotel Nazionale, in Via Nazionale 158/A, con inizio alle ore 9:00, e verterà sui seguenti temi:

- La presenza di aree Marginali, Sottoutilizzate e Contaminate in Basilicata per la coltivazione di colture da biomassa da non destinarsi alla produzione di prodotti alimentari;
- Lo stato attuale e le potenzialità di sviluppo per il settore bioenergetico in Basilicata: nuovi scenari emersi dalla ricerca.
- I fondi strutturali e di investimento europei a sostegno dello sviluppo del settore bioenergetico, tenuto conto delle diverse fasi che compongono i vari tipi di filiera: produzione di biomassa; trasformazione industriale della biomassa e produzione di energia, distribuzione e utilizzo della bioenergia prodotta. In questo contesto verranno analizzati i fondi messi a disposizione del settore dal PSR e dal FESR nel periodo 2014/2020 e le prospettive della nuova programmazione per il periodo 2021/2027.
- Le misure di sostegno alla bioenergia nel "Piano di Indirizzo Energetico Ambientale Regionale della Basilicata 2010-2020" e prospettive per la nuova programmazione.

In attesa di un Suo gentile riscontro, resto a disposizione per fornire ulteriori informazioni in merito all'evento.

Cordiali saluti.

Giuseppina Costantini

CREA - Centro di ricerca Politiche e Bio-economia
CREA - Research Centre for Agricultural Policies and Bioeconomy

Via Po, 14 - 00198 Roma *Sede amministrativa*
c/o Centro Direzionale Isola E/5, sc. C, P.1, int. 5 - V.le della Costituzione - 80143 Napoli
c/o Regione Abruzzo, "MOF"- C.da Bucceri - 65012 Cepagatti (PE)
c/o Università degli Studi di Perugia - Dipartimento di scienze agrarie, alimentari ed ambientali – dsa3 – Unità di Ricerca Economia Applicata - Borgo XX Giugno, 74 - 06121 Perugia

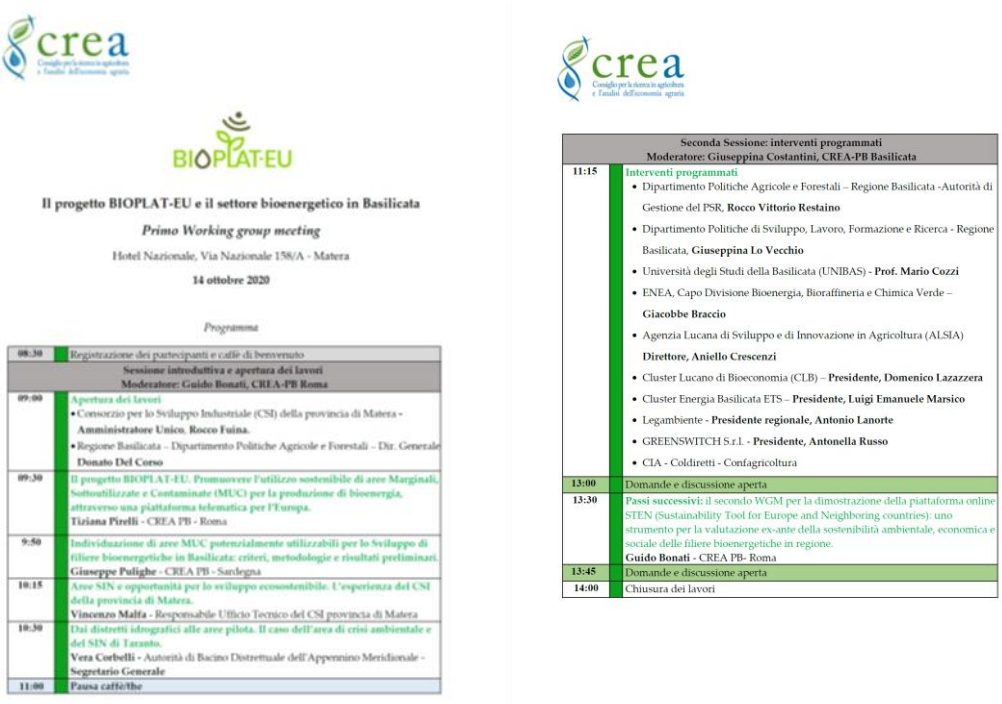
@ pb@crea.gov.it ∫ pb@pec.crea.gov.it
W www.crea.gov.it

T +39 06 47856.1
T +39 081 6063110
T +39 085 6922833
T +39 075 34051

Sample of invitation letter sent to local authorities invited to participate in the 1st WG meeting held in Basilicata on October 2020.

9.1.3 Agenda

The agenda of the event included two key sessions. The first session was dedicated to the exchange of knowledge: the BIOPLAT-EU project was introduced, participants were informed about the opportunity of using MUC lands for bioenergy production in their region, and then invited to share information about the current status of the bioenergy sector at regional level, by highlighting its strengths, weaknesses, opportunities and threats. The second session, built upon the outcomes of the first one, was organized as a round table discussion, to stimulate the dialogue and to foster networking and collaborations among the various stakeholders participating in the meeting, in a way to overcome existing barriers that currently prevent the development of short, locally based, bioenergy value chains. The round table was also useful to identify the most relevant bioenergy value chains currently established in the region, with the aim to explore opportunities for their further scaling up or replication.



BIOPLAT-EU

Il progetto BIOPLAT-EU e il settore bioenergetico in Basilicata

Primo Working group meeting

Hotel Nazionale, Via Nazionale 158/A - Matera

14 ottobre 2020

Programma

08:30	Registrazione dei partecipanti e caffè di benvenuto
	Sessione introduttiva e apertura dei lavori **Moderatore: Guido Bonati, CREA-PB Roma**
09:00	Apertura dei lavori • Consorzio per lo Sviluppo Industriale (CSI) della provincia di Matera - **Amministratore Unico**, **Rocco Fuina**. • Regione Basilicata – Dipartimento Politiche Agricole e Forestali – Dir. Generale **Donato Del Corso**
09:30	Il progetto BIOPLAT-EU. Promuovere l'utilizzo sostenibile di aree Marginali, Sottoutilizzate e Contaminate (MUC) per la produzione di bioenergia, attraverso una piattaforma telematica per l'Europa. **Tiziana Pirelli** - CREA PB - Roma
9:50	Individuazione di aree MUC potenzialmente utilizzabili per lo Sviluppo di filiere bioenergetiche in Basilicata: criteri, metodologie e risultati preliminari. **Giuseppe Pulighe** - CREA PB - Sardegna
10:15	Aree SIN e opportunità per lo sviluppo ecosostenibile. L'esperienza del CSI della provincia di Matera. **Vincenzo Malfa** - Responsabile Ufficio Tecnico del CSI provincia di Matera
10:30	Dai distretti idrografici alle aree pilota. Il caso dell'area di crisi ambientale e del SIN di Taranto. **Vera Corbelli** - Autorità di Bacino Distrettuale dell'Appennino Meridionale - **Segretario Generale**
11:00	Pausa caffè/the

	Seconda Sessione: interventi programmati **Moderatore: Giuseppina Costantini, CREA-PB Basilicata**
11:15	Interventi programmati • Dipartimento Politiche Agricole e Forestali – Regione Basilicata -Autorità di Gestione del PSR, **Rocco Vittorio Restaino** • Dipartimento Politiche di Sviluppo, Lavoro, Formazione e Ricerca - Regione Basilicata, **Giuseppina Lo Vecchio** • Università degli Studi della Basilicata (UNIBAS) - **Prof. Mario Cozzi** • ENEA, Capo Divisione Bioenergia, Bioraffineria e Chimica Verde – **Giacobbe Braccio** • Agenzia Lucana di Sviluppo e di Innovazione in Agricoltura (ALSIA) **Direttore, Aniello Crescenzi** • Cluster Lucano di Bioeconomia (CLB) – **Presidente, Domenico Lazazzera** • Cluster Energia Basilicata ETS – **Presidente, Luigi Emanuele Marsico** • Legambiente - **Presidente regionale, Antonio Lanorte** • GREENSWITCH S.r.l. - **Presidente, Antonella Russo** • CIA - Coldiretti - Confagricoltura
13:00	Domande e discussione aperta
13:30	**Passi successivi:** il secondo WGM per la dimostrazione della piattaforma online STEN (Sustainability Tool for Europe and Neighboring countries): uno strumento per la valutazione ex-ante della sostenibilità ambientale, economica e sociale delle filiere bioenergetiche in regione. **Guido Bonati** - CREA PB- Roma
13:45	Domande e discussione aperta
14:00	Chiusura dei lavori

Agenda of the first WG meeting held in Matera on 14 October 2020.

9.1.4 Summary of presentations and discussions

1st BIOPLAT-EU Working Group Meeting held in Basilicata on 14 October 2020.

The first session of the WG meeting was moderated by Guido Bonati, national coordinator of the BIOPLAT-EU project.

Mr. Bonati introduced Donato Del Corso, general director of the Department for Agricultural and Forestry Policies of the Basilicata region, who participated in the meeting remotely via Skype.

Mr. Del Corso expressed his strong interest for the activities implemented in the BIOPLAT-EU project and highlighted the presence of ample MUC areas in Basilicata. In particular, he reminded that there are areas in the region characterized for their marginal productivity, which so far have been targeted by CAP supporting measures to be kept in set-aside. These areas, once that the current CAP 2014-2020 measures will end, could be converted to biomass cultivation. Furthermore, it would be possible and ideal, at this point, if the opportunity to establish local bioenergy value chains is concrete, to foresee incentives and supporting measures to foster this type of land allocation. Further considerations in this sense need to be done and, to this end, a strong collaboration among the various regional departments interested in the sector, farmers organizations, industrial consortia, bioeconomy and bioenergy hubs present in the region, is desirable.

Rocco Fuina, unique administrator of the Consortium for the Industrial Development of the province of Matera, welcomed WG participants and gave an overview of the national legal framework concerning the possible pathways towards the achievement of the climate objectives, with a focus on the national energy policies. He explained that the current Climate and Energy Integrated National Plan set the basis to realize an ample transformation of the economy, in which decarbonisation, the circular economy principle, the efficiency and the rational and equitable use of natural resources are together objectives and instruments for a

more sustainable economy. In this context, he said, bioenergy could cover a key role, not only to ensure energy access and security of supply, but also to act as a leverage for the social and economic development of rural and remote areas, such as the one present in Basilicata, also through the creation of new job opportunities.

Dr. Tiziana Pirelli opened the meeting by giving a general overview of the BIOPLAT-EU project objectives and activities. She explained the various phases of which a bioenergy value chain is composed and highlighted the most critical sustainability issues affecting the sector, among which the food vs fuel. She introduced the various existing bioenergy pathways, the advantages of establishing locally based short bioenergy value chains and the key aspects to be considered to put in place a long-lasting and sustainable bioenergy sector, by taking into account the type and amount of raw material available on-site. Ultimately, Dr. Pirelli explained the reasons which brought to the selection of Val Basento in Basilicata as one of the case study area for the project.

Giuseppe Pulighe explained that the food vs fuel debate assumes high relevance in Italy, due to the scarce availability of agricultural land and to its strong fragmentation. Dr. Pulighe explained that a possible option to overcome this ethical issue, could derive from the production of dedicated bioenergy crops in MUC lands. He explained the multiple social, economic and environmental benefits that this choice could bring at local level, by fostering the sustainable development of short and efficient bioenergy value chains. Ultimately, Dr. Pulighe showed the outcomes of the study performed within the BIOPLAT-EU project to assess the availability of MUC lands in the Sardinia region and gave an overview on their distribution and composition.

Vincenzo Malfa, representative of the Consortium for industrial development, gave an overview on the contaminated lands present in the province of Matera and recognized as Sites of National Interest (SIN): Basento Valley (3,393 ha) and Tito Scalo (315 ha). In these areas, it is possible to identify arable lands (≈1,500 ha), that could be addressed both to the cultivation of bioenergy dedicated crops and/or to host extended solar panel system; and fluvial areas (≈1,000 ha), that could be addressed only to the cultivation of biomass dedicated crops. Other ≈1,000 ha are available for building new industrial infrastructures for bioenergy or other production purposes.

Vera Corbelli presented the peculiarities and the environmental criticisms of the inter-regional river-basin district of the Southern Appenine, including seven regions among which Basilicata. She explained the top-down and multidisciplinary approach used for the restoration of the contaminated area around the city of Taranto, a SIN at less than 100 km far from Matera. She said that the development of bioenergy value chains, which take advantage of the presence of MUC lands, could give a strong contribution to the restoration of these types of lands and of their related ecosystems, if implemented together with other actions and activities.

Prof. Mario Cozzi showed the outcomes of various research projects, recently implemented by the University of Basilicata, with the aim to map the availability and price of biomass supply (with a focus on woody biomass), the distribution and suitability of existing infrastructure (e.g. biomass processing plants; communication route) to be used for bioenergy production

purposes at local level. These data were used to assess the potential of development of decentralized bioenergy value chains in Basilicata (PROBIO); to model and evaluate the impacts of specific bioenergy pathways in rural areas and to identify the most convenient pathway (both in terms of costs and GHG emissions) for the transport of the biomass from the harvested area to the processing plant (RAMSES). Prof. Cozzi presented a Decision Supporting System (SSD) defined by the University of Basilicata to implement the Ecological, Technical and Economic sustainability assessment of bioenergy value chains established at local level. Ultimately, he shared various peer-review papers published on these topics that could be used as data source for BIOPLAT-EU, thus avoiding the need of reiterating the same measures.

The WG meeting saw the intervention of three important hubs established in Basilicata with the aim to facilitate the interactions among various actors along existing agro-industrial value chains with the final aim to promote their sustainable development. These three hubs are: the Regional Agency for Agricultural Development and Innovation (ALSIA); the Cluster for Bioeconomy; the regional Cluster for Energy- ETS. These three hubs represent associations among private enterprises and Research Centers and are the ones in charge of facilitating the dialogue among their partners and with the local and regional authorities. The representatives of these three hubs intervened in the WG meeting by presenting the great effort they have been doing to ensure the adoption of a holistic approach, which considers all the various phases and actors involved along the value chains, while fostering the development of the bioenergy sector in Basilicata. These three hubs constitute an added value in the socio-economic regional framework and could guide, in collaboration with local authorities, the settlement of a strong regional bioenergy strategy, which considers MUC lands as an opportunity towards the development of a sustainable and long-lasting bioenergy sector in the region.

Giacobbe Braccio, researcher at ENEA, gave a general overview of the energy sector in Basilicata with a focus on the production and consumption of electric power at local level. He explained that the Basilicata region achieved the electric power self-sufficiency in 2017 and that, in that year, it had the second highest percentage among the Italian regions (87,9%) of electric power produced from *Renewable Energy Sources* (RESs). The most important RES in Basilicata is wind (61,2%) which contribution has constantly increased from 2012 to 2017, whilst the contribution of bioenergy (5.5%) remained almost stable and is not expected to significantly grow in the next decade. On the other hand, when it comes to biofuel production, the potential of bioenergy is relevant and expected to considerably increase in the next 20 years, thus contributing to achieve the targets set within the Renewable Energy Directive 2018/2001 (REDII). A key contribution to this is expected from the production of bio-methane via biogas upgrading. So far Italy hosts 8 biomethane plants. But this is not the only available pathway for biomethane production. ENEA is exploring alternative technologies in this sense, such as the Power to Gas (P2G), which convert the CO_2 remaining from the biogas upgrading in an additional amount of biomethane, via catalytic or biologic process, to be input in the public methane pipeline.

Antonella Russo, President of Greenswitch, explained to the audience that Greenswitch represents one of the local industries that would benefit from the cultivation and pre-treatment of oilseed crops in the MUC areas identified through the BIOPLAT-EU analysis.

Greenswitch is a local bioeconomy industry that produce biodiesel as one of its main products. Ms. Russo explained that one of the main barriers that prevent the further development of the market for her company is represented by the high and fluctuant costs of the raw material (mainly palm oil) which is normally imported. The industrial plant, which was recently revamped, represents a strength point of the Basilicata region in the pathway toward the establishment of a short, locally based, bioenergy value chain. The huge potential of this giant infrastructure needs to be complimented through the development of other steps of the value chain at local level, e.g. the agricultural production of raw material (oil seeds) and its pre-treatment into oil, in order to be fully unlocked. If a holistic approach will be adopted and incentives for the development of the other steps of the value chain will be provided, important social, economic and environmental benefits will be generated not only for Greenswitch, but also for other industrial and agricultural production realities at local level. At the end of her speech, Ms. Russo agreed to liaise with the CREA staff for the production of a video interview with the aim to communicate the peculiarities of the Greenswitch company as a sample beneficiary of the activities conducted within the BIOPLAT-EU project.

Guido Bonati closed the work of the day by further explaining how BIOPLAT-EU can support stakeholders in identifying the most sustainable bioenergy value chains to be established at local level by taking advantage of the presence of MUC areas within a radius of 100 km from already existing bioenergy plants or by foreseeing the settlement of new bioenergy infrastructures, on the basis of available feedstock in the region. To this end the project will provide a web tool, named STEN, which will be made accessible on-line for all interested users. WG members will be invited to a further WG meeting, to be held in person or online, on dependence of the development of the COVID-19 pandemic, during which the functionalities of the STEN tool will be presented and a training will be given for its practical use. Mr. Bonati showed to participants the Help Desk function available on the project website and invited them to use it to inquire at project experts with the aim to solve their bioenergy related doubts. Ultimately, Mr. Bonati explained that the project will be able to provide private entrepreneurs willing to assess the economic sustainability and bankability of a specific bioenergy value chain based on the cultivation of MUC lands for the production of dedicated bioenergy crops at local level, with the support of financial experts.

9.1.5 Conclusions

The WG meeting has offered a concrete opportunity to exchange knowledge among the various stakeholders in the bioenergy sector and to set the basis for future collaborations and coordinated actions in view of the forthcoming definitions of regional plans and strategies, both in the rural and industrial realms, for the period 2021-2027.

The Basilicata region represents a positive example in the energy transition pathway as, already in 2016, it counted on 86% of electric power produced from RES. Furthermore, dedicated producers' associations and hubs (e.g. ALSIA; Cluster for Energy; Cluster for Bioeconomy) have been established to facilitate the interaction among private entrepreneurs, scientists, farmers, local and regional authorities with the final aim to ensure a coordinated effort towards a sustainable local development according to the principles of circular and low carbon economy.

The region offers multiple opportunities for a sound development of the bioenergy sector. For instance, it can already count on the presence of important infrastructures, such as the Greenswitch biorefinery plants. Furthermore, also for biogas and biomethane there is a large potential for development, although some uncertainties and stigma of the local population prevent the market uptake of these bioenergy pathways. On the other hand, the establishment of a complete local short oil-based bioeconomy pathway (e.g. biodiesel) is prevented by the lack of some of the production steps in the value chain, i.e. the local cultivation of oil seeds crops and the presence of dedicated oil extraction mills. To overcome these barriers, dedicated incentives and/or supporting measures shall be foreseen for the farmers in the PAC and, for the industries, in the programme for the use of the EU structural funds (e.g. FESR) or in other regional development plans (e.g. Regional Energy and the Environmental Plan), which are currently under definition for the period 2021-2027.

The stakeholders recognize the key role that MUC lands could have in being cultivated for the production of oil seeds crops or of biomass to be used as feedstock for anaerobic digesters. In fact, as per the last regional rural development plan (PSR 2014-2020) marginal lands received incentives for being kept in set-aside, while in the next planning (2021-2027) new incentives can be included for boosting their actual cultivation.

9.2 Second working group meeting

9.2.1 Introduction

The second Working Group (WG) meeting of the BIOPLAT-EU project in Basilicata was held back-to-back with the workshops for public and private landowners, which was carried out online on 7 September 2021. The objectives of this second WG meeting were to demonstrate and test the web-GIS tool together with the local stakeholders in a way to gather their feedback which could be helpful to fine-tune the web-GIS tool and to demonstrate to WG members the main outcomes of the feasibility study developed within the project.

9.2.2 Summary of presentations and discussions

After having had the demonstration of the STEN tool which involved also the private and public landowners, as well as bioenergy companies and local authorities, the SWG members were informed about the outcomes of the feasibility study developed on a potential biodiesel short value chain in Basilicata. Mr. Bonati explained to the WG members that according to the feasibility study developed in the project, the short biodiesel value chain hypothesized after the first consultation of the local WG, which comprises a biodiesel production facility of 5,000,000 liters / year, based on feedstock from 14,000 hectares of MUC lands, was proven to be highly financially feasible. Nevertheless, for a full feasibility analysis, the project partner who finalized the study suggested to better define and monitor changes of, among other factors, the amount of feedstock needed, the price of the feedstock and logistical (including pre-treatment) and transport expenses (to be checked against STEN-output).

9.2.3 Conclusions

In light of the results of the feasibility study and after the demonstration of the web-GIS tool, the WG members suggested to further improve the current version of the tool by allowing it to retrieve actual and updated financial data coming from online available datasets related to market prices of both biomass and biofuels (e.g. https://www.neste.com/investors/market-data/biodiesel-prices-sme-fame#4afca1bd). This existing dataset report market prices for both biomass and biofuels, updated on a 6 months basis.

In light of the outcomes of the demonstration of the web-GIS tool and of the results of the feasibility study conducted within the project, the members of the WG suggested to continue to explore with both local authorities and ENI, opportunities to support the development of a short-biodiesel value chain in Basilicata, taking advantage of the biorefinery already in place in the municipality of Ferrandina (Greenswitch s.r.l.), in a way to bring social and economic benefits for the local population and environmental and economic benefits at national level, thanks to the replacement of fossil fuels with biofuel, and in particular with biodiesel.

9.3 Site visit

A study tour was organised by CREA on the occasion of the final project meeting. The consortium visited the Greenswitch industry, and its president Antonella Russo explained about the history of the plant and its main production lines. Then a tour was done to see all the different elements of the plant. Ms Russo believes that local value chains are needed for the plant to continue functioning and these can be established on contaminated land in the region. The next step would be to mobilise farmers into producing oil crops suitable for bioenergy production.


REDMI NOTE 8T
AI QUAD CAMERA


BIODIESEL
TK-700.02
REDMI NOTE 8T
AI QUAD CAMERA

10 Working group in Bacau County, Romania

10.1 First working group meeting

10.1.1 Introduction

The Working Group meeting took place in the city of Buhusi, Bacau County, on the 8th of June, at Culture House, between 9:30-15:00. The event was organized in physical format, with one presentation performed virtually by Zoom platform. The table below shows the list of working group members.

Member name	Organisation	Stakeholder category
OLTEANU Cezar	Chamber of Commerce and Industry Bacau	Other - Association of County Industries
NECHIFOR Mihaela	Agricultural Directorate Bacau	Agricultural Expert
MARCU Costica	County Council Bacau	Public Authority
LITOI Carmen	Local Action Group (GAL)1 Valea Trotusului	Other - Association of local public and private organizations in rural areas
CIOBANU Elena	Local Action Group (GAL) Valea Trotusului	Other - Association of local public and private organizations in rural areas
SAULEA Claudiu Ionut	Office of Pedological and Agrochemical Studies Bacau	Local authorities/ agricultural expert
MITREA Elena	Municipality of Buhusi	Local Authority
LEONTE Ioan	Agricultural Directorate Bacau	Agricultural Expert
ISAILA Nadia	Local Action Group (GAL) ULMUS Montana	Other - Association of local public and private organizations in rural areas
BARAGA Constantin Perino	/Private investor	Investor
ZAHARIA Vasile	Mayor – Municipality of BUHUSI	Public Authority
COSTRAS Iordache	Mayor	Public Authority
Hamad Talal	Vice-mayor – Municipality of Magura	Public Authority
DRAGHICESCU Manuela	Technology Transfer Center PETAL/ APSNE SUNE - New Energy Industry Association.	Other-Industries Association
PADURARU Adrian	Municipality of BUHUSI	Public Authority

[1] A Local Action Group is a form of partnership established in a rural area that brings together representatives of the public, private and civil society sectors in that territory, created in order to implement LEADER methods of rural development- Wikipedia

Local Action Group *ULMUS Montana* covers the interests of the following municipalities: Buhusi city and 11 communes (Ardeoani, Balcani, Beresti-Tazlau, Blagesti, Magiresti, Parjol, Sanduleni, Scorteni, Solont, Strugari, Zemes. Local Action Group Valea Trotusului covers the interests of other 16 communes in the Bacau County.

10.1.2 Invitation

After identifying institutions/organisations of interest to be part of the Working Group, we invited them to join us and to participate to the meeting. We present below the original invitation that was sent.

BIOPLAT-EU

ENERO

Primăria Buhuși

INVITAȚIE

MASA ROTUNDĂ "UTILIZAREA TERENURILOR MINIERE DEGRADATE LA PRODUCEREA DE MATERIE PRIMA PENTRU PROIECTE DE BIOENERGIE"

Comisia Europeană a prezentat recent **Pactul Verde (Green Deal)** care afirmă obiectivul Europei de a de deveni, până în 2050, neutră din punct de vedere climatic. Acest Pact impune obligații, printre care **decarbonizarea sectorului energetic**, dar există și oportunități aduse de sprijinul financiar care însoțește Pactul.

O contribuție pentru a face cunoscute aceste oportunități aduce și proiectul

"Promovarea utilizării sustenabile a terenurilor neutilizate pentru producerea de bioenergie, prin intermediului unei platforme web pentru Europa". Acronim: BIOPLAT-EU (www.bioplat.eu)

derulat in cadrul Programului european de studii și cercetări **ORIZONT2020.**

Partenerii proiectului BIOPLAT au realizat până acum o hartă pan-europeana, pe baza informațiilor satelitare, care a evidențiat, - inclusiv la nivelul județului Bacău-, existența a numeroase terenuri marginale, neutilizate. De asemenea a fost creat un instrument informatic corelat cu aceste hărți pentru a estima pentru cei interesați fezabilitatea agronomică și sustenabilitatea unor astfel de proiecte.

In acest context, **vă invitam să vă alăturați unui Grup de Lucru**, format din factori de decizie și specialiști din diverse sectoare (autorități publice locale, producerea de energie, agricultură, mediu de afaceri, cultivatori și proprietari de terenuri etc), care sunt **informați** despre proiect și vor fi **consultați** in cursul proiectului privind modul în care pot fi valorificate rezultatele proiectului în județul Bacău.

O primă întâlnire a acestui Grup de Lucru, va avea loc în data de 8 iunie 2021 și va fi găzduită de Primăria orașului Buhuși. Vom discuta despre oportunități de valorificare a terenurilor neutilizate prin cultivarea de biomasa pentru energie, tehnologiile potrivite, ce terenuri concrete pot fi găsite în județ, cum se evaluează tehnico-economic folosirea lor ca un prim pas pentru atragerea în continuare a surselor de finanțare.

Întâlnirea este organizată de către partenerul român în proiectul BIOPLAT-EU, Centrul pentru Promovarea Energiei Curate și Eficiente în România – **ENERO, cu sprijinul Primariei Orașului Buhuși**. Având în vedere evoluția situației pandemice și reglementările în vigoare la aces moment, planificăm să ne întâlnim cu prezență fizică și **cu respectarea regulilor de protecție sanitară.**

Am fi bucuroși să răspundeți afirmativ invitației noastre și în timp util vom reveni cu informații despre data și locul întâlnirii.

Pentru confirmarea participării și informații suplimentare, vă rugăm să o contactați pe pe dna. Nicoleta Ion (email: nicoleta.ion@enero.ro, tel: 0724294616) sau dna Manuela Drăghicescu (email: manuela.draghicescu@gmail.com, tel: 0723215532).

Cu aleasa consideratie,

Mihai Cristian Țînțăreanu,

Director executiv ENERO

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

10.1.3 Agenda

The agenda of the event was structured in two main parts: the first one was dedicated to presentations of the BIOPLAT-EU project, plus an external presentation related to technology transfer methodology, because it appeared from the events in Gorj county (1st Romanian case study area) that there is a lack of knowledge regarding the implementation of biomass for energy projects.

The second part was dedicated to discussions, to acquiring opinions from the stakeholders. We present below the original agenda in Romanian and in English translation.

AGENDA

MASA ROTUNDĂ "UTILIZAREA TERENURILOR MARGINALE, NEUTILIZATE SAU CONTAMINATE LA PRODUCEREA DE MATERIE PRIMA PENTRU PROIECTE DE BIOENERGIE"

Data: 08 Iunie 2021

Locul: Primăria Buhuși, JUD BACĂU

09:30	**9:45**	**Primirea participanților**
9:45	**10:00**	*Cuvânt introductiv* Mihai Cristian Țânțăreanu, ENERO
10:00	***11:30***	***Prezentări***
		Prezentarea proiectului BIOPLAT-EU: • *Obiective și rezultate așteptate* • *Harta terenurilor neutilizate la nivelul Europei, României și a județului Bacău.* • *Instrumentul informatic de evaluare a sustenabilității proiectelor de utilizare a biomasei cultivate pe terenuri mrginale, neutilizate sau contaminate.* Nicoleta ION, ENERO (30') *Variante pentru producerea de bioenergie pe terenuri marginale, neutilizate sau contaminate* Mihai Cristian Țânțăreanu, ENERO (20')
		Oportunități de finanțare Nicoleta ION, ENERO Reprezentant ADR NE *(20')*
		Utilizarea biomasei - Transfer tehnologic Manuela Drăghicescu, ASPE SUNE / CTT Petal (20')
11:30	***11:45***	***Pauza de cafea***

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

11:45	***13:45***	***DISCUȚII:*** *Oportunități și provocări aduse de utilizarea terenurilor marginale, neutilizate sau contaminate pentru cultivarea de biomasă pentru energie*
		Terenuri disponibile în prezent și în viitorul apropiat în zona Nord Est-Jud Bacău și limitrof *Exemple*
		Tipuri de culturi energetice pretabile
		Utilizarea biomasei: *Ce tip de produse energetice (biogaz, bioetanol, biomasa solida, biodiesel) pot fi produse din culturile propuse.* *In ce tipuri de instalații se pot valorifica produsele energetice din biomasă?* *Bariere: Ce dificultăți pot să impiedice implementarea unor astfel de proiecte?* *Proprietarii terenurilor ar fi dispuși să valorifice ei înșiși aceste terenuri sau le-ar oferi spre folosință/inchiriere (în ce condiții)*
		Studii și experiențe anterioare.
13:45	***14:00***	*Concluzii și discuții finale despre proiecte posibil de implementat în regiunea Nord Est – jud Bacău și limitrof și definirea datelor de intrare pentru studiul de oportunitate* *Mihai Cristian Țânțăreanu, ENERO*
14:00	***15:00***	***Bufet și discuții informale între participanți***

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

AGENDA

ROUND TABLE

"USE OF MARGINAL, UNUSED OR CONTAMINATED LAND FOR THE PRODUCTION OF FEEDSTOCK FOR BIOENERGY PROJECTS"

08 JUNE 2021, 9:30-15:00

Culture House "Elisabeta Bostan" 1 N Bălcescu str, BUHUȘI, Jud Bacău

09:30	**9:45**	**Registration of Participants**
9:45	**10:00**	*Welcome speeches* Vasile ZAHARIA – Mayor of Buhusi City Mihai Cristian ȚÎNȚĂREANU, Director ENERO
10:00	***11:30***	***Presentations***
		BIOPLAT-EU Project Presentation: • *Objectives and expected Results* • *Map of underutilised land in Europe, Romania and Bacau County.* • *IT tool for assessing the sustainability of projects for the use of biomass grown on marginal, underutilised or contaminated land.* Nicoleta ION, ENERO (30') *Options for the production of bioenergy on marginal, underutilised or contaminated lands* Mihai Cristian ȚÎNȚĂREANU, ENERO (20')
		Opportunities for funding Nicoleta ION, ENERO Lucian SANDU, ADR NE *(20')*
		Use of Biomas – Technology Transfer Manuela DRĂGHICESCU, APSNE SUNE / CTT "Digital&Smart Hub" Petal (20')
11:30	***11:45***	***Coffee Break***

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

11:45	***13:45***	***DISCUSSIONS:*** *Opportunities and challenges posed by the use of marginal, undeutilised or contaminated land for the cultivation of biomass for energy*
		Land available in the North East area - Jud Bacău and the surrounding area *Examples*
		Types of suitable energy crops
		Biomass use: *What type of energy products (biogas, bioethanol, solid biomass, biodiesel) can be produced from the proposed crops.* *In which types of installations can be used biomass for energy production?* *Barriers: What difficulties can prevent the implementation of such projects?* *Landowners would be willing to capitalize these lands themselves or would offer them for use / rent (under what conditions)*
		Previous studies and experiences.
13:45	***14:00***	*Conclusions and final discussions on possible projects to be implemented in the North East – Bacau County region and definition of input data for the feasibility study* *Mihai Cristian ȚÎNȚĂREANU, ENERO*
14:00	***15:00***	***Buffet and informal discussions among participants***

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

10.1.4 Summary of presentations and discussions

Mrs. Nicoleta Ion presented the BIOPLAT-EU project. Emphasis was put on the underutilized map in the area of the Bacau County, and around Buhusi municipality. Even if the STEN tool was not public at the time of the event, information about its characteristics were presented.

Mr Mihai Cristian Tintareanu had his presentation online using the Zoom platform. He has spoken about various value chains suitable in the area, given the local conditions. The benefits for the case study area and the support which could be offered by the BIOPLAT-EU were also presented.
Some financing opportunities have been brought to the audience attention as well, in the context of the new Recovery and Resilience Plan and other programmes of the new financing period.

The representative of the Regional Development Agency North-East was not present at the event, but he sent some information that was presented by Mrs. N. Ion.

Mrs Manuela Draghicescu, representing Technology Transfer Center PETAL and APSNE SUNE - New Energy Industry Association (SUNE is one of the stakeholders of BIOPLAT-EU projects) held a presentation that intended to make clearer the issue of technologies for bioenergy production from biomass and the stages of technology evolution.

After the coffee break, the working group was invited to discussions. The main issues approached were

- the definition as exactly as possible of the available land identified by the BIOPLAT-EU project. Aspects related to the legal situation, cadaster and the real usage of these plots were discussed.
- types of energy crops that can be cultivated on these land
- technologies for energy production from feedstock cultivated on these land
- problems that prevent the development of such projects
- relevance of the Racova parcel, 92 ha, identified between Buhusi and Blagesti, to be used for the Bacau case study.

Among main ideas exposed we mention the following:

- Representative of the Office of Pedological and Agrochemical Studies Bacau:
    - Only a few parcels are registered into the national cadastre
    - It is possible that some parcels, identified as underutilised to be pastures, so there might be problems with land use change

    - He mentioned some financing opportunities under the Single Area Payment Scheme and the National Rural Development Program
- The representative of Municipality of Buhusi:
    - The plot of the former lake Racova is one of the largest plots identified as MUC land in Bacau County. It is suitable for a bioenergy project, but the present owner is the State-owned *Hidroelectrica*, the biggest electricity producer in Romania. It should be checked if the company has other plans for it.
    - for larger projects other neighbouring lands can be aggregated
- The representative of the GAL ULMUS Montana draw the attention of the fact that this organisation could finance projects with a maximum of 200.000 EUR, and the area Strugari-Blagesti-Buhusi might be of interest. She asked for more specific details, in order to present them to the mayor of Strugari (who did not participate in the meeting)

10.1.5 Conclusions

- the "Racova" land is of interest for a pilot project, if the present owner is interested. Enero will contact *HIDROELECTRICA* on this issue
- the case study will be developed for the 92 ha Racova parcel. The technology chain will be *bioenergy crop- biogas production- CHP plant.*
- other parcels from area Strugari-Blagesti-Buhusi will be checked. If positive results obtained, a project proposal to be financed by GAL Ulmus Montana could be prepared
- lack of land cadastre for large areas could be a barrier

10.2 Second working group meeting

The second working group meeting for the case study in Bacau County (Romania) took place in a hotel near Bacau city on the 21st of September 2021, after the workshop dedicated mainly to landowners. The working group members was asked to stay for an hour after the workshop, in order to discuss about the developments within the BIOPLAT-EU project, with an impact on the case study in Bacau.

Compared to the initial composition of the working group, the following changes appeared:

- Missing institutions: Chamber of Commerce and Industry Bacau and Local Action Group (GAL) "Valea Trotusului"

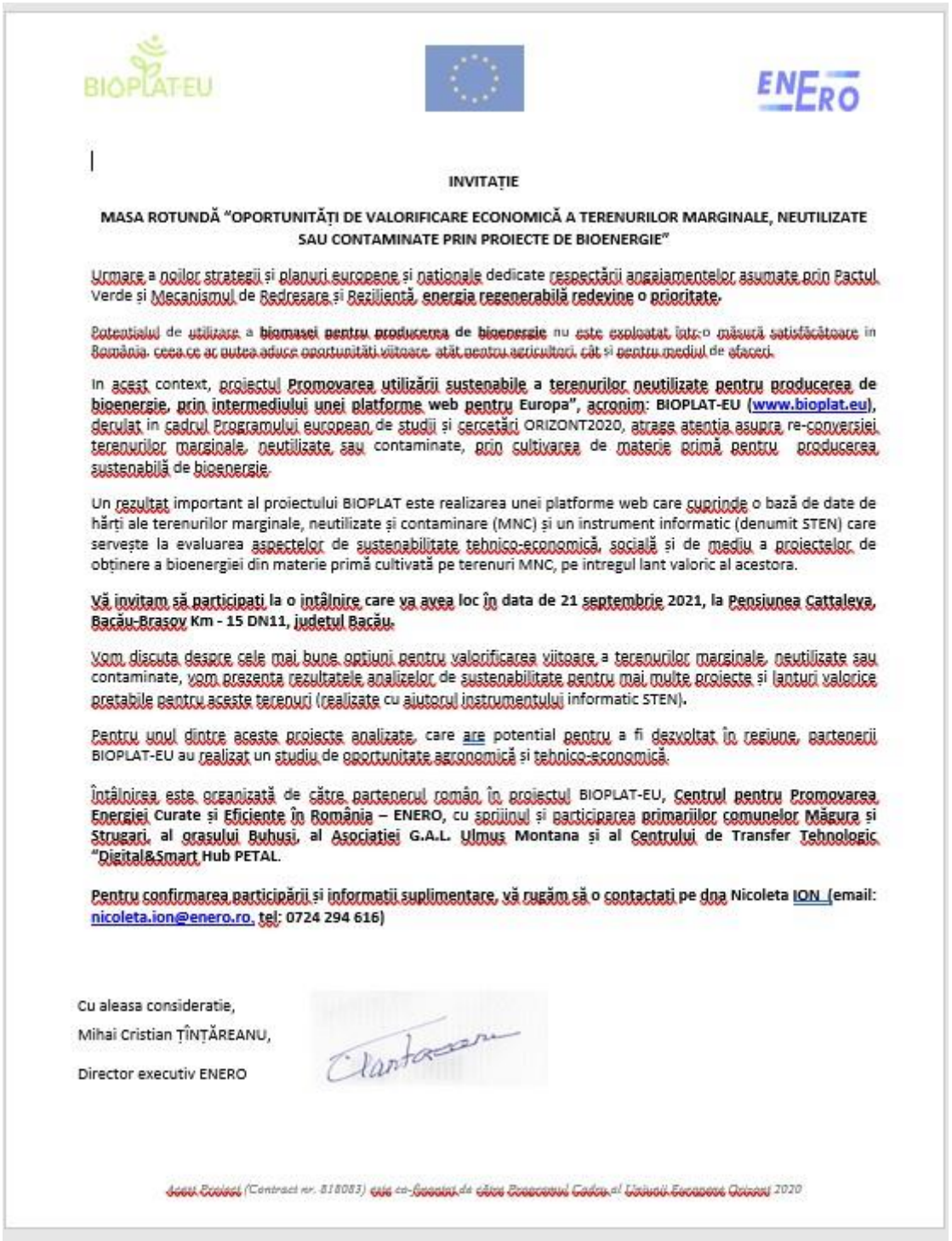
- A representative of HIDROELECTRICA SA was invited to join the WG meeting, as Hidroelectrica is the owner of the land of former lake Racova (the place where a feasibility study was developed). The involvement of the HIDROELECTRICA representative in the WG was suggested during the first WG meeting.

The list of working group members that participated:

Member name	Organisation	Stakeholder category
PISLARU Gica	Agricultural Directorate Gorj	Agricultural experts
MAGDALIN Catalin	HIDROELECTRICA SA	Public landowner
ISAILA Nadia	Local Action Group (GAL) ULMUS Montana	Other - Association of local public and private organizations in rural areas
BARAGA Constantin Perino	Private landowner/Private investor	Landowner/Investor
COSTRAS Iordache	Mayor Municipality of Magura	Public Authority
HAMAD Talal	Vice-mayor – Municipality of Magura	Public Authority
DRAGHICESCU Manuela	Technology Transfer Center PETAL/ APSNE SUNE - New Energy Industry Association.	Other-Industries Association
PADURARU Adrian	Municipality of BUHUSI	Public Authority
ROTARIU Vasile	Mayor of Strugari	Landowner
SAULEA Claudiu Ionut	Office of Pedological and Agrochemical Studies Bacau	Local authorities/ agricultural expert

10.2.1 Invitation

The invitation used was common with the invitation to the workshop, see below in national language, and we informed the Working Group members about the meeting after the workshop:



INVITAȚIE

MASA ROTUNDĂ "OPORTUNITĂȚI DE VALORIFICARE ECONOMICĂ A TERENURILOR MARGINALE, NEUTILIZATE SAU CONTAMINATE PRIN PROIECTE DE BIOENERGIE"

Urmare a noilor strategii și planuri europene și naționale dedicate respectării angajamentelor asumate prin Pactul Verde și Mecanismul de Redresare și Reziliență, energia regenerabilă redevine o prioritate.

Potențialul de utilizare a biomasei pentru producerea de bioenergie nu este exploatat într-o măsură satisfăcătoare în România, ceea ce ar putea aduce oportunități viitoare, atât pentru agricultori, cât și pentru mediul de afaceri.

In acest context, proiectul Promovarea utilizării sustenabile a terenurilor neutilizate pentru producerea de bioenergie, prin intermediului unei platforme web pentru Europa", acronim: BIOPLAT-EU (www.bioplat.eu), derulat in cadrul Programului european de studii și cercetări ORIZONT2020, atrage atentia asupra re-conversiei terenurilor marginale, neutilizate sau contaminate, prin cultivarea de materie primă pentru producerea sustenabilă de bioenergie.

Un rezultat important al proiectului BIOPLAT este realizarea unei platforme web care cuprinde o bază de date de hărți ale terenurilor marginale, neutilizate și contaminare (MNC) și un instrument informatic (denumit STEN) care servește la evaluarea aspectelor de sustenabilitate tehnico-economică, socială și de mediu a proiectelor de obținere a bioenergiei din materie primă cultivată pe terenuri MNC, pe intregul lant valoric al acestora.

Vă invitam să participați la o întâlnire care va avea loc în data de 21 septembrie 2021, la Pensiunea Cattaleya, Bacău-Brașov Km - 15 DN11, județul Bacău.

Vom discuta despre cele mai bune optiuni pentru valorificarea viitoare a terenurilor marginale, neutilizate sau contaminate, vom prezenta rezultatele analizelor de sustenabilitate pentru mai multe proiecte și lanțuri valorice pretabile pentru aceste terenuri (realizate cu ajutorul instrumentului informatic STEN).

Pentru unul dintre aceste proiecte analizate, care are potential pentru a fi dezvoltat în regiune, partenerii BIOPLAT-EU au realizat un studiu de oportunitate agronomică și tehnico-economică.

Întâlnirea este organizată de către partenerul român în proiectul BIOPLAT-EU, Centrul pentru Promovarea Energiei Curate și Eficiente în România – ENERO, cu sprijinul și participarea primariilor comunelor Măgura și Strugari, al orașului Buhuși, al Asociației G.A.L. Ulmus Montana și al Centrului de Transfer Tehnologic "Digital&Smart Hub PETAL.

Pentru confirmarea participării și informații suplimentare, vă rugăm să o contactați pe dna Nicoleta ION (email: nicoleta.ion@enero.ro, tel: 0724 294 616)

Cu aleasa consideratie,

Mihai Cristian ȚÎNȚĂREANU,

Director executiv ENERO

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

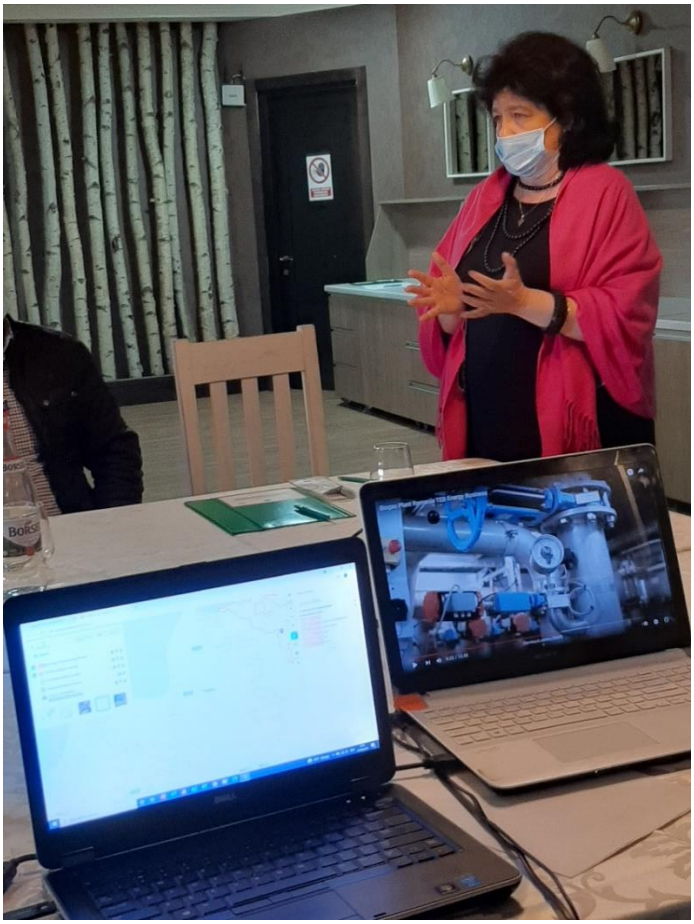
10.2.2 Agenda

The working group meeting took place after the workshop for public and private landowners. The discussions approached the following issues:

- Project results until now, with emphasis on the STEN tool.
- Conclusions after the workshop
- Future activities within the BIOPLAT-EU project

10.2.3 Summary of presentations and discussions

The WG meeting was not foreseen to have PPT presentations, as before the meeting, the workshop for public and private landowners took place.



The WG members discussed about the STEN tool that was developed within the BIOPLAT-EU project. More exercises were performed, with various value chains, taking as examples some underutilized lands from the areas were the WG members came.

Regarding the Racova lake terrain, other value chains were taken into consideration and simulations were performed using the STEN tool.

The conclusions drawn by the participants were the following:

- The Romanian translation is useful, even if some terms could have been better translated
- The idea of using underutilized land for bioenergy projects is worth to be taken into account. Especially Mr. Baraga, who is both a landowner and investor seemed to be interested in this kind of projects
- Productivity of the crops is to be checked and modified by advanced users.
- The reports issued by the tool, without any intervention from the user could be a useful instrument, when thinking of development of a biomass for energy project.
- Cogeneration unit projects need to be designed as a bigger level. This means collecting energy crops from several plots in a defined area and cooperation between more public and/or private landowners.
- The representative of HIDROELECTRICA stated that the company owns more plots spread around Romania that are not used for now, and the company should analyze various options to give them value. Besides PV parks and following the information received on the BIOPLAT-EU results, the idea of using larger surfaces to grow biomass for energy is an option that will be considered in detail at the company level.

10.3 Follow-up actions

1. GAL ULMUS MONTANA asked for a synthetic presentation of the underutilised land in the area of Strugari commune, to be forwarded to and discussed with the mayor.

This document was sent by email on the 5th of July.

2. ENERO contacted HIDROELECTRICA with a letter asking for the legal status of the Racova terrain and if the company has some plans to use it.

HIDROELECTRICA answered formally on the 6th of July stating that the company is interested in having a feasibility analysis for this land, as this is not in use anymore, for any economic purpose. Further discussions on this issue will be established in the future. The Hidroelectrica answer is below:

HIDROELECTRICA

S.P.E.E.H. HIDROELECTRICA S.A. CABINET DIRECTOR GENERAL Nr. 16933/06.07.11

S.P.E.E.H. Hidroelectrica S.A.
Societate administrată în sistem dualist
J40/7426/2000
RO 13267213
Capital social: 4.484.474.670 lei
Certificat ISO 9001/14001/OHSAS 18001
SRAC Nr. 325. Nr. 95. Nr. 250

Către: ENERO – Center for the Promotion of Clean and Efficient Energy in Romania
Splaiul Independenței nr. 202E, sector 6, București,

În atenția: Domnului Mihai Cristian ȚÂNȚĂREANU, Director Executiv

Referitor: Teren aferent lacului de acumulare Racova

Stimate Domnule ȚÂNȚĂREANU,

Având în vedere solicitarea dumneavoastră cu privire la terenul aferent lacului de acumulare Racova, vă comunicăm faptul că figurează în domeniul public al Statului Roman si sunt mentionate ca atare in Anexa nr.7 - „inventarul bunurilor din domeniul public al statului" la HGR nr. 1705/2006, modificata prin H.G.R. nr. 336/2911, urmatoarele bunuri:

- Baraj Racova – nr. MF 62231;
- Lac de acumulare Racova, NNR 210mdM, suprafata de 265ha – nr. MF;
- Dig mal stang Racova – nr. MF 99408;
- Dig mal drept Racova – nr. MF 99407.

Bunurile sus mentionate au fost concesiunate de catre Hidroelectrica in baza Contractului de concesiune nr. 171/2004.

Menționăm faptul că, terenul aferent lacului de acumulare Racova nu este folosit în prezent în cadrul sistemului de amenajare al AHE Racova, transformată din amenajare hidroenergetică cu lac de acumulare, în amenajare cu canal de aducțiune.

Având în vedere propunerea dumneavoastră privind elaborarea unui studiu de prefezabilitate a utilizării terenului în vederea dezvoltării unui proiect axat pe cultivarea de biomasă, vă comunicăm acordul nostru de principiu pentru efectuarea si primirea studiului, fara nicio obligatie din partea societatii noastre, urmand ca oportunitatea proiectului sa fie analizata ulterior.

Pentru mai multe informatii privind initierea unor demersuri în sensul celor anterior menționate, urmează sa fiți contactați de către reprezentanții noștri din cadrul Departamentului Dezvoltare la numarul de telefon si adresa de e-mail indicate în adresa de solicitare.

Cu stimă,

Bogdan BADEA
Președinte Directorat

Răzvan Ionuț PAȚALIU
Membru Directorat

Emil CRIȘAN
Manager Departament Dezvoltare

Mihai-Radu ȘAPTEFRAȚI
Manager Departament Juridic

Elena BRUMĂ
Responsabil Sucursală

Vicentiu FLORESCU
Consilier Juridic

Titiana GAFTON
Șef Serviciu Dezvoltare - SH Bistrița

Bd. Ion Mihalache nr. 15-17, etajele 10-15, sector 1, București, Telefon: +4 021 3032500, Fax: +4 021 3032564

The representative of the project partner ENERO will stay in contact with anyone interested in the idea promoted by the BIOPLAT-EU project. It was recommended that further questions should be asked to project partners through the HELPDESK.

11 Working group in Gorj county, Romania

11.1 First working group meeting

11.1.1 Introduction

The first working group meeting in Romania concerned the case study no1, the use of former mining surfaces in lignite area Oltenia, more precisely Gorj County.

The meeting took place in Targu Jiu (the main city of Gorj County), on the 30th of July 2020, between 9:30-15:00 in physical format. The table below shows the list of working group members.

Member name	Organisation	Stakeholder category
HIREAN Florin	Agricultural Directorate Gorj	Agricultural experts
FOTA Octavian	Office of Pedological and Agrochemical Studies Gorj	Local authorities
VULPE Ion	Romanian Mining Employers Association (PATROMIN)	Patronate
VASILE Mihai	Mayor – Farcasesti Village	Landowner, local authorities
TATOMIR Andreea	Oltenia Energy Complex	Landowner
LAZAROIU Cristina	Oltenia Energy Complex	Landowner
FOMETESCU Gheorghe	Environmental Protection Agency Gorj	Local authorities
CALOTA Mihai	Mayor Urdari Village	Landowner, local authorities
OITA Tudor	Mayor Negomir Village	Landowner, local authorities
CIOLEA Daniela	Petrosani University	Academic

11.1.2 Invitation

The first step was to identify the relevant stakeholders in connection with the case study. The case study regards the use of closed spoil heaps in the Oltenia lignite mining area, available for ecological restoration. The former user of the lands is the Energy Complex Oltenia (Complexul Energetic Oltenia -CEO), a company undergoing a deep restructuring process. In many cases the lands ownership situation is not clarified between CEO, local communes and local private farmers.

Once a list of the working group members was established, an invitation was elaborated and sent, asking them to be part of the working group (WG) and to take part in the first meeting of the WG.

A part of the strategy to have a successful organisation of the WG was to collaborate with a known local expert, Dr. Gh. Fometescu form the local Environmental Protection Agency.

A copy of the invitation, in national language, is presented below.

INVITATIE

MASA ROTUNDĂ "UTILIZAREA TERENURILOR MINIERE DEGRADATE LA PRODUCEREA DE MATERIE PRIMA PENTRU PROIECTE DE BIOENERGIE"

În decembrie 2019, Comisia Europeană a prezentat **Pactul Verde (Green Deal)** care afirmă obiectivul Europei de a de deveni, până în 2050, neutră din punct de vedere climatic. Acest Pact impune obligații, printre care **decarbonizarea sectorului energetic**, dar există și oportunități aduse de sprijinul financiar care însoțește Pactul.

In acest context, o contribuție poate avea proiectul

"Promovarea utilizării sustenabile a terenurilor neutilizate pentru producerea de bioenergie, prin intermediului unei platforme web pentru Europa". Acronim: BIOPLAT-EU (www.bioplat.eu)

derulat in cadrul Programului european de studii și cercetări **ORIZONT2020.**

Obiectivul general al proiectului este de a promova pătrunderea pe piața europeană a bioenergiei produse în mod sustenabil din materie primă cultivată pe terenuri marginale, neutilizate și contaminate (MNC).

Vă invitam să vă alaturați unui Grup de Lucru, format din specialiști din diverse domenii (minerit, producerea de energie, agricultură, autorități publice locale și de mediu, mediu de afaceri etc), care vor aduce expertiza si informații și vor fi consultați periodic in cursul proiectului privind condițiile locale de valorificare a proiectului.

Vă rugăm **să participați la prima întalnire a acestui Grup de Lucru, in ziua de 30 iulie 2020, orele 9:30-14:00, la terasa Anna** (Bd. Ecaterina Teodoroiu nr. 17, Targu Jiu).

Vom discuta despre **oportunități de utilizare a terenurilor degradate de industria mineritului și de producere a energiei curate în zona Oltenia, prin cultivarea de biomasa pentru energie.**

Principalul scop al întâlnirii este identificarea terenurilor MNC pretabile pentru dezvoltarea unor proiecte de producere a bioenergiei și analizarea tehnologiilor fezabile pentru aceste proiecte. Aceste terenuri, concret identificate, vor face obiectul unui studiu de fezabilitate elaborat în cadrul proiectului, pe baza căruia se pot atrage în continuare surse de finantare.

Întâlnirea este organizată de **către partenerul român in proiectul BIOPLAT-EU, Centrul pentru Promovarea Energiei Curate și Eficiente în România – ENERO.**

Pentru confirmarea participării și informații suplimentare, vă rugăm să o contactați pe dna Nicoleta ION (email: nicoleta.ion@enero.ro, tel: 0724294616) sau pe dl. Gheorghe FOMETESCU (email: gheorghe_fometescu@yahoo.com, tel: 0720544011).

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

11.1.3 Agenda

The Agenda was set up in two main parts:

- The first part was dedicated to the presentation of the project and its objectives and activities and
- The second one, the most important, was dedicated to discussions.

Below we present the original Agenda, in national language and its English translations.

AGENDA

"UTILIZAREA TERENURILOR MINIERE DEGRADATE LA PRODUCEREA DE MATERIE PRIMA PENTRU PROIECTE DE BIOENERGIE"

Intalnirea Grupului de Lucru

Data: 30 iulie 2020

Locul: Terasa ANNA, Bd. Ecaterina Teodoroiu nr. 17, Targu Jiu

09:30	**9:45**	**Primirea participanţilor**
9:45	**10:00**	*Cuvânt introductiv* Dr. ing. Gheorghe FOMETESCU Mihai Cristian Ţânţăreanu, ENERO
10:00	***11:45***	***Prezentări***
		Prezentarea obiectivelor şi activităţilor proiectului BIOPLAT-EU. Sprijinul oferit de proiectul BIOPLAT părţilor interesate Nicoleta ION, ENERO (15') *Variante pentru producerea de bioenergie pe terenuri marginale, neutilizate sau contaminate* Mihai Cristian Ţânţăreanu, ENERO (20')
		Oportunităţi de finanţare Nicoleta ION, ENERO Reprezentant ADR Oltenia *(20')*
		Proiect „Sprijinirea tranziţiei în domeniul energiei verzi a regiunilor din UE care exploatează cărbune" Reprezentant ADR Oltenia *(15')*
11:45	***12:00***	***Pauza de cafea***

12:00	*14:00*	***DISCUȚII:*** *Oportunități și provocări aduse de utilizarea terenurilor degradate din industria minieră și cea energetică din zona Oltenia, pentru cultivarea de biomasă pentru energie*
		Terenuri disponibile în prezent și în viitorul apropiat în zona Olteniei
		Tipuri de culturi energetice pretabile
		Utilizarea biomasei: *Ce tip de produse energetice (biogaz, bioetanol, biomasa solida, biodiesel) pot fi produse din culturile propuse.* *Există deja in zona și pot fi utilizate instalatii de valorificare a biomasei in scop energetic? (la o distanța de max. 100 km)* *Dacă nu, există posibilitatea de a construi astfel de instalatii? Dacă nu, de ce?* *Bariere: Ce dificultăți pot să impiedice implementarea unor astfel de proiecte?* *Proprietarii terenurilor ar fi dispuși să valorifice ei înșiși aceste terenuri sau le-ar oferi spre folosință/închiriere (în ce condiții)*
		Studii și experiențe anterioare.
14:00	*14:15*	*Concluzii și discuții finale despre proiecte posibil de implementat în regiunea Oltenia și definirea datelor de intrare pentru studiul de fezabilitate* *Mihai Cristian Țânțăreanu, ENERO*
14:15	*15:00*	***Bufet și discuții informale între participanți***

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

AGENDA

"THE USE OF DEGRADED MINING LAND FOR THE PRODUCTION OF FEEDSTOCK FOR BIOENERGY PROJECTS"

Working Group Meeting

Date: 30 July2020

Location: Terasa ANNA, Bd. Ecaterina Teodoroiu nr. 17, Targu Jiu

09:30	9:45	Registration of participants
9:45	10:00	*Welcome speech* Dr. eng. Gheorghe FOMETESCU Mihai Cristian Ţânţăreanu, ENERO
10:00	*11:45*	*Presentation*
		BIOPLAT-EU objectives and activities. Project support for stakeholders Nicoleta ION, ENERO (15') *Options for the production of bioenergy on marginal, underutilized or contaminated lands* Mihai Cristian Ţânţăreanu, ENERO (20') *Financing Opportunities* Nicoleta ION, ENERO (10')
11:45	*12:00*	*Coffee Break*
12:00	*14:00*	*DISCUSSIONS:* *Opportunities and challenges of the use of lands degraded by the mining and energy industry in the Oltenia area for the cultivation of biomass for energy* *Land available now and in the near future in Oltenia Region* *Types of suitable energy crops* *The use of biomass :* *What type of energy products (biogas, bioethanol, solid biomass, biodiesel) can be produced from the proposed crops?* *In what types of installations can be used the energy products from biomass?* *Barriers: What difficulties can prevent the implementation of such projects?* *Landowners would be willing to capitalize these lands themselves or would offer them for use / rent (under what conditions)* *Previous studies and experiences.*

14:00	*14:15*	*Conclusions and final discussions on possible projects to be implemented in the Oltenia region and definition of input data for the feasibility study* *Mihai Cristian Țânțăreanu, ENERO*
14:15	***15:00***	***Buffet and informal discussions***
12:00	*14:00*	*DISCUSSIONS:* *Opportunities and challenges of the use of lands degraded by the mining and energy industry in the Oltenia area for the cultivation of biomass for energy*
		Land available now and in the near future in Oltenia Region
		Types of suitable energy crops
		The use of biomass: *What type of energy products (biogas, bioethanol, solid biomass, biodiesel) can be produced from the proposed crops?* *In what types of installations can be used the energy products from biomass?* *Barriers: What difficulties can prevent the implementation of such projects?* *Landowners would be willing to capitalize these lands themselves or would offer them for use / rent (under what conditions)*
		Previous studies and experiences.
14:00	*14:15*	*Conclusions and final discussions on possible projects to be implemented in the Oltenia region and definition of input data for the feasibility study* *Mihai Cristian Țânțăreanu, ENERO*
14:15	***15:00***	***Buffet and informal discussions***

11.1.4 Summary of presentations and discussions

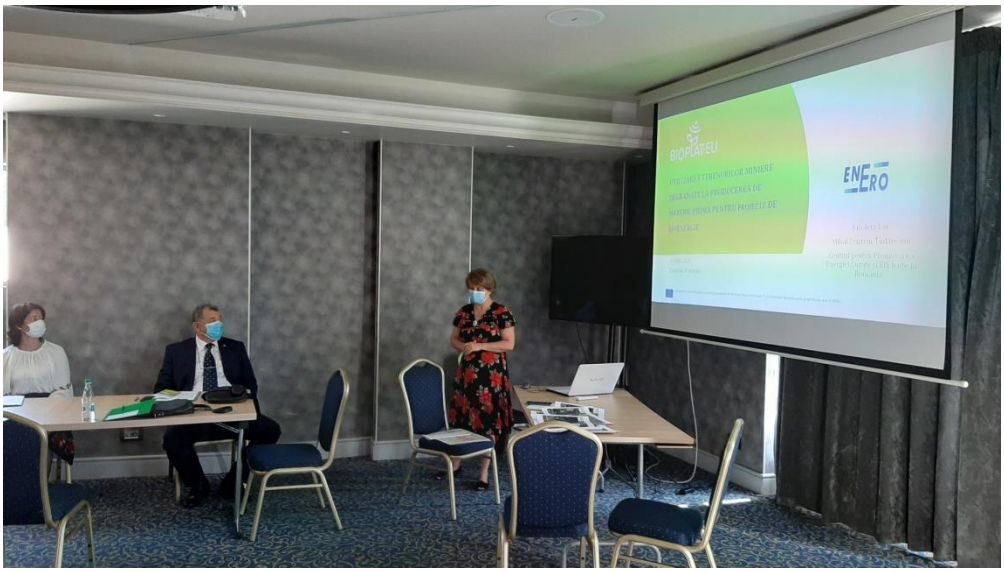
Mrs. Nicoleta Ion and Mr Mihai Cristian Tintareanu presented to the WG members the objectives and main activities of the BIOPLAT-EU, with an emphasis on creation of database of maps of MUC in Europe and the STEN tool. Special attention was paid to the map of the Gorj County, developed within the project and to the expected results of applying the STEN tool in the case study area of Gorj. A few possible value chains were proposed, and it was underlined that for one of these, which will prove to be more sustainable, a feasibility analysis will be developed.

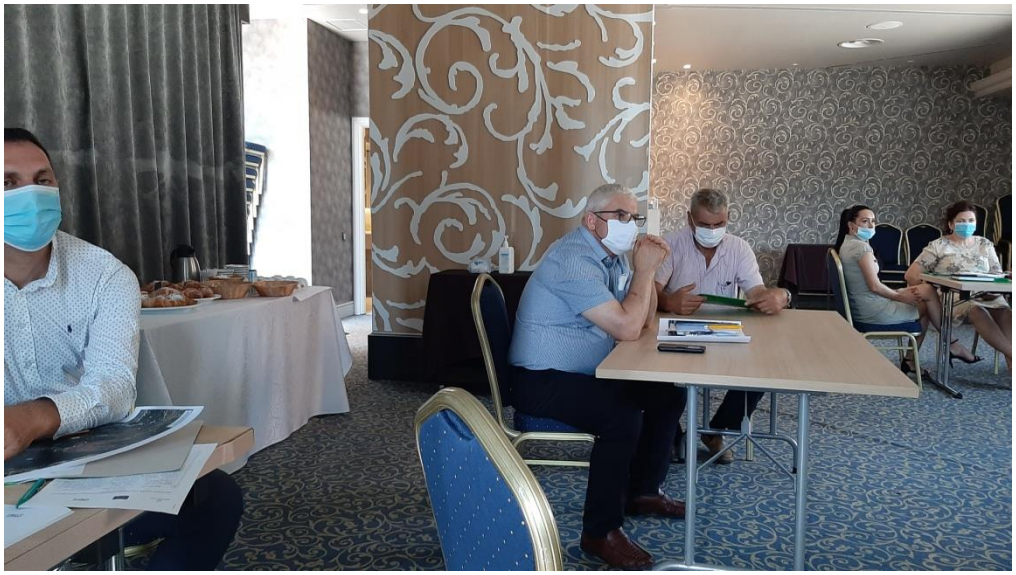
The benefits for the case study area and the support which could be offered by the BIOPLAT-EU were also presented. The preliminary analysis developed by ENERO within the FORBIO project for the same region was mentioned and detailed.

Some financing opportunities have been brought to the audience attention as well, in the context of the European Green Deal. The lignite area Oltenia is one of the most affected regions in Europe by the obligation to reduce the carbon power generation.

After a short break, the working group was invited to discussions. The main issues approached were:

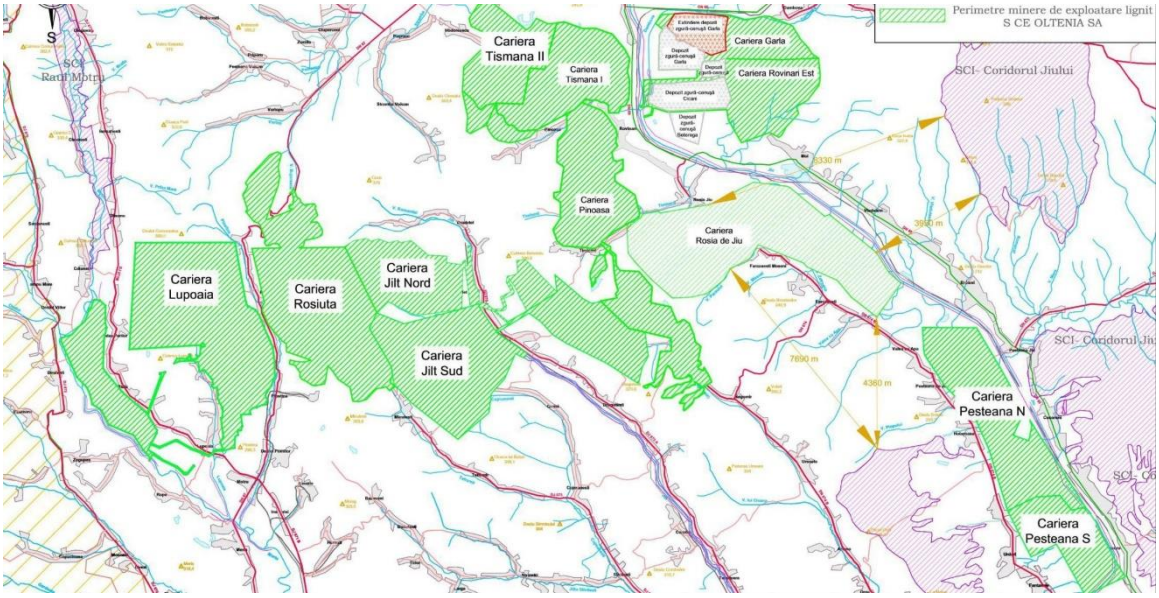
- the definition as exactly as possible of the available land from former lignite queries (area, current state, contour on the map, owner, etc.) The main areas identified on the TIER-2 MUC map were analysed from the point of view of availability and suitability for energy crops.
- types of energy crops that can be cultivated on these land
- technologies for energy production from feedstock cultivated on these land
- problems that prevent the development of such projects





11.1.5 Conclusions

- All large area polygons identified by the TER-2 map in Gorj are confirmed to be within former mining areas as resulted from overlaying the mining areas map (see figure below) over the TIER 2 results map



Mining areas (green) map within the granule 34TFQ. Source CE Oltenia.

- Therefore, it resulted that the option to focus on the former mining lands for the case study is correct.
- The favorable timing for bioenergy projects was highlighted, as Energy Complex OLTENIA (ECO) was in the process of defining its restructuring strategy. Also, the challenges of deep transformations that will be brought by the Green Deal actions could be turned into opportunities.
- ECO plans to install PV plants on the majority of the available affected land, up to 700 MW total rated capacity. Nevertheless, there are still remaining areas that could be used for cultivating biomass for energy. These kinds of projects could bring more workplaces for unemployed people that are going to appear during the transformations suffered by the region.
- Several sites, totaling several hundred hectares were considered to be promising for energy crops: Pesteana North, Pesteana South, Garla. Further investigations are needed to confirm their availability.
- The main barriers are related to the property of the land, some of the plots having an uncertain situation from this point of view. Sometimes it is not known who owns the land, in many cases the cadaster was not carried out, so the plots cannot be transferred to the communes.
- The suitable crops seem to be miscanthus, lucerne and sorghum, as several experiments were previously developed on these types of lands.

- Regarding other types of MUC land available in the GORJ County, the WG stated that the county is a mono-industry region. The soil in Gorj is of poor quality for agricultural use, and the big majority of the plots were used for mining activities.

11.2 Second working group meeting

11.2.1 Introduction

The second working group meeting for the case study, in Gorj County (Romania) took place in Turceni city, on the 24th of June 2021, after the workshop dedicated mainly to landowners. The working group members was asked to stay for an hour after the workshop, in order to discuss about the developments within the BIOPLAT-EU project, with an impact on the case study in Gorj (use of former mining surfaces in lignite areas for bioenergy projects).

It is to be mentioned that compared to the initial composition of the working group, the following changes appeared:

- another representative of Energy Complex Oltenia, with a higher position
- Mr. Gheorghe Fometescu does not represent the Environmental Agency Gorj, as he is recently retired, but his experience is recognised as independent expert
- Mr. Vulpe Ion does not work with the PATROMIN and he did not take part to the meeting
- The representative of the Petrosani Univresity did not participate
- A new relevant WG member was attracted instead: the mayor of Turceni city. In Turceni a large lignite power plant operates.
- Other persons that are not WG members, but their participation in the meeting was considered important were the deputy prefect of the Gorj County and representatives of the Regional Development Agency South-West Oltenia and the Local Action Group (GAL) "South of Gorj"[2]

The table below shows the list of participants

Member name	Organisation	Stakeholder category
HIREAN Florin	Agricultural Directorate Gorj	Agricultural experts
FOTA Octavian	Office of Pedological and Agrochemical Studies Gorj	Local authorities
CILIBIU Cristina	Mayor – Turceni city	Landowner
VASILE Mihai	Mayor – Farcasesti Village	Landowner, local authorities
BERCA Marius	Oltenia Energy Complex	Landowner

[2] A Local Action Group is a form of partnership established in a rural area that brings together representatives of the public, private and civil society sectors in that territory, created in order to implement LEADER methods of rural development- Wikipedia

FOMETESCU Gheorghe	Independent	Environmental expert
CALOTA Mihai	Mayor Urdari Village	Land owner, local authorities
OITA Tudor	Mayor Negomir Village	Land owner, local authorities
DRAGUSIN VIRGIL	Deputy Prefect	
PREDESCU Diana	GAL Sudul Gorjului	Other – association
BURADA Gabriel	Regional Development Agency South West Oltenia	Local authorities

11.2.2 Invitation

The invitation used was common with the invitation to the workshop, see below in national language, and we informed the Working Group members about the meeting after the workshop:

BIOPLAT-EU

ENERO

Primăria Orașului Turceni
Județul Gorj

INVITAȚIE

WORKSHOP "OPORTUNITĂȚI DE VALORIFICARE ECONOMICĂ A TERENURILOR DEGRADATE PRIN PROIECTE DE BIOENERGIE"

Urmare a noilor strategii și planuri europene și naționale dedicate respectării angajamentelor asumate prin **Pactul Verde și Mecanismul de Redresare și Reziliență, regiuni ca județul Gorj devin vulnerabile dar, în același timp, pot fi beneficiarele unor oportunități pentru transformări și evoluții viitoare.**

Odată cu încheierea activității miniere, suprafețe importante de teren se vor reîntoarce la menirea lor inițială, dar mare parte din ele nu vor mai fi propice pentru culturi agricole convenționale, dedicate obținerii hranei sau furajelor.

In acest context, proiectul **Promovarea utilizării sustenabile a terenurilor neutilizate pentru producerea de bioenergie, prin intermediului unei platforme web pentru Europa", acronim: BIOPLAT-EU (www.bioplat.eu),** derulat in cadrul Programului european de studii și cercetări ORIZONT2020, atrage atenția asupra re-conversiei terenurilor afectate de exploatarea minieră, prin cultivarea de materie primă pentru producerea sustenabilă de bioenergie.

Un rezultat important al proiectului BIOPLAT este realizarea unei platforme web care cuprinde o bază de date de hărți ale terenurilor marginale, neutilizate și contaminare (MNC) și a unui instrument informatic (denumit STEN) care servește la evaluarea aspectelor de sustenabilitate economică, socială și tehnico-economică a proiectelor de obținere a bioenergiei din materie primă cultivată pe terenuri MNC, pe intregul lant valoric al acestora.

Vă invitam să participați workshopul dedicate acestei tematici care va avea loc în data de 24 iunie 2021, la Turceni, Pensiunea Yda.

Vom discuta despre cele mai bune opțiuni pentru valorificarea viitoare a terenurilor degradate și a celor afectate de exploatarea minieră, vom prezenta rezultatele analizelor de sustenabilitate pentru mai multe proiecte și lanțuri valorice pretabile pentru aceste terenuri (realizate cu ajutorul STEN).

Dintre mai multe proiecte analizate, vom selecta unul pentru partenerii proiectului vor realiza un studiu de oportunitate agronomică și tehnico-economică, care poate sta la baza unui proiect real dezvoltat în regiune.

Întâlnirea este organizată de **către partenerul român în proiectul BIOPLAT-EU, Centrul pentru Promovarea Energiei Curate și Eficiente în România – ENERO, cu sprijinul primăriei orașului Turceni**.

Pentru confirmarea participării și informații suplimentare, vă rugăm să o contactați pe dna Nicoleta ION (email: nicoleta.ion@enero.ro, tel: 0724294616) sau pe dl. Gheorghe FOMETESCU (email: gheorghe_fometescu@yahoo.com, tel: 0720544011).

Cu aleasa consideratie,

Mihai Cristian ȚÎNȚĂREANU,

Director executiv ENE

Acest Proiect (Contract nr. 818083) este co-finanțat de către Programul Cadru al Uniunii Europene Orizont 2020

11.2.3 Agenda

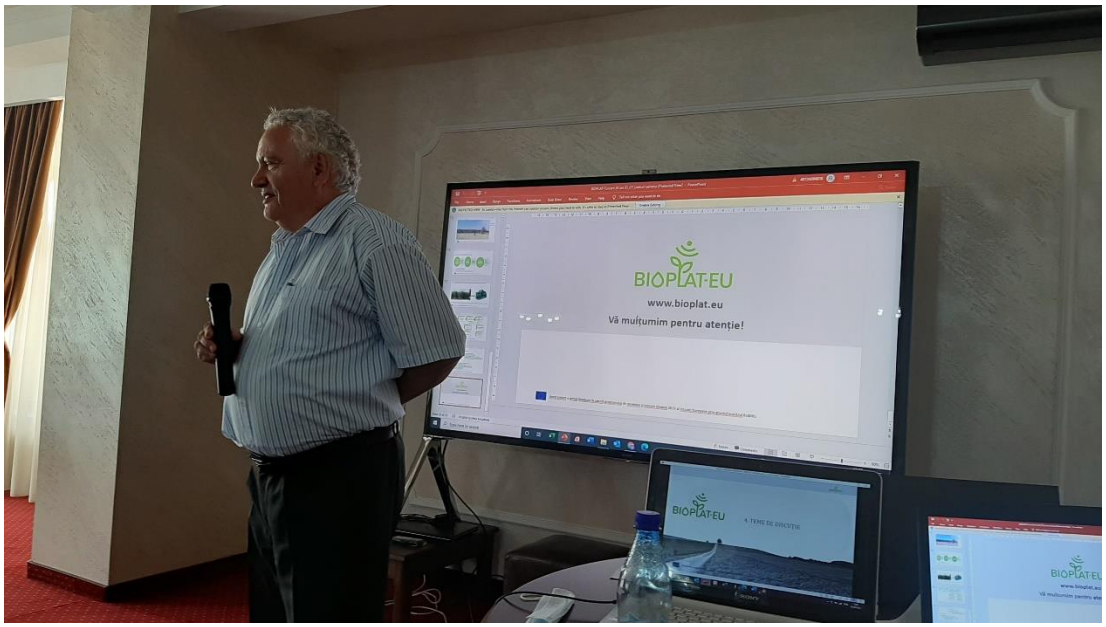
The working group meeting took place after the workshop for public and private landowners. The discussions approached the following issues:

- Project results until now, with emphasis on the STEN tool.
- Conclusions after the workshop
- Future activities within the BIOPLAT-EU project

11.2.4 Summary of presentations and discussions

The WG meeting was not foreseen to have PPT presentations, as before the meeting, the workshop for public and private landowners took place.

The WG members discussed about the STEN tool that was developed within the BIOPLAT-EU project. The WG considered that the previous workshop was a success. It was noted the large presence of private landowners. Also, the participation of the deputy county Prefect, who basically is an agricultural expert, may have an impact on the local governmental policy on using the MUC lands.



Environmental expert Gheorghe Fometescu with concluding remarks on the WG meeting

As the presentation during the workshop comprises only one example of crop on a selected land (Pesteana dump) and single value chain (miscanthus-solid-CHP), during the WG meeting we simulated various value chains on different underutilized land plots in Gorj County. The conclusions drawn by the participants were the following:

- The Romanian translation is very welcome
- The land available should be confirmed by local knowledge
- Productivity of the crop should be checked by local knowledge
- Also, the default STEN crop costs seem not to meet the real local conditions
- STEN could be very useful as a first assessment of a bioenergy project on underutilized land. Especially the mapping of the MUC lands is of great value. For an investment decision more specialized analysis should be performed.
- A feasibility analysis on Pesteana dump should be developed within the BIOPLAT project, as an example of a sustainable project on land affected by the mining activity. The Pesteana location is just a generic example as similar projects may be applied also to other available lands after the closure of the mining activity in the area.

11.3 Follow-up actions

It was agreed that a future short meeting to the Gorj county Council with relevant representatives would be beneficial to disseminate the BIOPLAT-EU results.

12 Working group in Spain

In Spain, the 2 case study areas selected were in the regions of Cuenca and Albacete. Since these two regions have similar land types and the value chains selected were also similar and as the working group meetings were planned online, it was agreed to conduct them together.

12.1 First working group meeting

In a different manner than the WG orginased in the other countries, in Spain, UCLM conducted personal meetings with the WG members as a substitute of the first WG meeting and in the second meeting, all members were present together. The table below shows the list of the interviewed members.

Member name	Organisation	Stakeholder category
Vicente Bodas	AgriSat	SME
Anibal Capuano	Camelina Spain	SME
Horacio López	ITAP	Researcher
Jesus Rodriguez	ALVINESA	Industry
Juan Antonio López	ALTOSA	Industry
Manuel Valiente	UCLM	Researcher
Gabriel Lodares	AGROPECUARIA ALBACETE, S.L.	Private landowner
Julián Illan	DEHESA DE LOS LLANOS S.L.	Private landowner
Magín Lapuerta	Universidad de Castilla-La Mancha	Researcher
Joaquín Rodriguez Chaparro	Ministry of Agriculture	National authority/Politician
Margarita Ruiz Sáiz-Aja	Ministry of Environment	National authority/Politician
Jose Gonzalez Piqueras	ERTA	Industry

12.1.1 Invitation

The contact has been done by phone given the general restrictions to the people mobility in the last 15 months due to COVID19.

12.1.2 Agenda

The conversation was about:

- A general overview of the project objectives and activities
- A short introduction which shows the different elements of a biomass value chain for energy production on MUC lands
- A panel of questions about the barriers for biomass production for bioenergy

12.1.3 Conclusions

The main results of the questions posed were about the difficulties in producing biomass for bioenergy because there are no Bioenergy Processing Plants for biofuels in the area. There is only one BPP for the generation of electricity by burning agricultural wood residues, mainly from vine shoots. In addition, there is a crushing facility for the extraction of camelina oil about 200 km away.

Other interrelated barriers may be the low productivity of biomass, due to the scarcity of water in the regional semi-arid climate, with only 350 mm of average annual rainfall and frequent droughts. To this is added the reduced surface of the Marginal and Underutilized areas available, because most of the arable lands receive subsidies from the CAP and are dedicated to food production. An option to overcome these barriers could be the case of the cultivation of camelina, because this crop integrates into the usual crop rotation.

12.2 Second working group meeting

12.2.1 Introduction

The second working group meeting was held online on the 16th of September 2021. The participants are listed in the table below.

First Name	Last name	Organisation	Stakeholder category	Observations
Vicente	Bodas	La LOSA	Private Landowner	Farm Technical Director, where camelina cultivates for breeding. Province of Cuenca
Anibal	Capuano	Camelina Spain	SME	Head of Camelina Spain operations. Province of Cuenca, Albacete and others, in Spain
Horacio	López	ITAP	Researcher	Senior expert in biofuel crop. Former responsible of previous bioenergy projects.
Manuel	Valiente	UCLM	Researcher	Expert in energy from waste residues.
Julián	Illan	DEHESA DE LOS LLANOS S.L.	Private landowner	Farm Technical Director. Albacete. Province of Albacete
Magín	Lapuerta	UCLM	Researcher	Senior expert on energy production from biomass
Andrés	Cuesta	Agecam	Industry	Former responsible of renewable energy regional agency.
Jose	Gonzalez	ERTA	Industry	Pellet factory and production of electrical energy by burning waste residues from forestry and agricultural areas.

Additional guests (internal to the project):

Marco Colangeli, FAO

Lorenzo Traverso, FAO,

Cosette Khavaja, WIP

David Cifuentes, UCLM

Alfonso Calera, UCLM

Raúl Moreno, UCLM

12.2.2 Invitation

The meeting was held online, via Teams. The invitation e-mail was the following:

"Queridos amigos:
El objeto de este email es aportar información complementaria, como el video, la dirección web del proyecto, y la agenda, para la reunión de presentación de BIOPLAT, a celebrar el próximo Jueves, 16, a las 12:00, online vía plataforma Teams.

El enlace directo para acceder a la reunión vía Teams, que seguramente habéis recibido en un correo anterior, es:
https://teams.microsoft.com/l/meetup-join/19:meeting_ZjYxZGEwNzEtYTVlZS00MTZkLTg1MWMtMDFhZDRiOGI0MmIw@thread.v2/0?context=%7B%22Tid%22:%22c42cbae6-61f4-498c-9107-6a8cf5f01e56%22,%22Oid%22:%2205f56487-6f7e-4e2e-966f-3feef679ebce%22%7D

Información complementaria para la reunión
URL proyecto europeo BIOPLAT-EU, https://bioplat.eu/
Video : https://www.youtube.com/watch?v=lx4BcteB4hs"

12.2.3 Agenda

"Agenda:
16 de Septiembre de 2021

12:00 Presentación BIOPLAT-EU y herramienta BIOPLAT-EU webGIS, **Marco Colangeli. FAO. Roma**
12:30 Panel, moderador **Alfonso Calera, UCLM***:*

- Discusión sobre los diferentes elementos de las cadenas de valor de los biocombustibles y barreras para la implementación,
- Cómo BIOPLAT-EU puede apoyar a las partes interesadas hasta la fase de implementación"

12.2.4 Summary of presentations and discussions

Marco Colangeli introduced to the audience the projects achievements and the webGIS tool. After this presentation, a live debate happened, raising several questions about the project goals and the tool. The presentation was in English, but the debate enabled us to use Spanish and English.

In the region of the study case, in marginal areas a low –marginal- yield per unit area is expected due to both low rainfall and poor soil quality. In addition, in these marginal areas some shrubs, lesser trees, and other herbaceous plants can grow, which present environmental values, what advises against transforming into crop fields. Abandoned agricultural areas could be suitable for cropping biofuel, although these areas are very fragmented, with difficult accessibility and receive subsidies from CAP; at the end they are very close to the marginal ones.

Crops like camelina, suitable for biofuel, can be cultivated as a part of a typical three years crop rotation, but transformation of camelina seeds into biodiesel is not economically viable, due to the low revenues for the current low price of biodiesel, as the bankability study indicates (see deliverable D6.4). Increasing the biodiesel price could play in favor of the cultivation of this oil crop, and so, the investment required for a processing plant.

In the study area, at the beginning of the 21st century, around the 2005-2008 years, biofuel crops raised a great interest, but restrictions on the accessibility to the electric energy network for selling the energy, jointly with pressures for competing with food crops, stopped the development of biofuel crops. No changes till now have occurred. Only limited plants, that burning waste residues from forestry and agricultural areas for generating electric energy, are currently working. In consequence, there are not biomass processing plants in the area.

12.2.5 Conclusions

As a short summary, the main identified barriers for cropping biofuels are:

- Low profitability of the crop for biofuel. Marginal and underutilized areas suitable for cropping biofuel are scarce and exhibit very low yield, raising some environmental issues.
- Biofuel crops like camelina can be cultivated inside crop rotation, but currently biodiesel from the camelina oil is not profitable.
- There aren´t biomass processing plants
- Legal restrictions for accessing to the electric energy network.

13 Working group in in Khmelnytsky and Ternopil, Ukraine

13.1 First working group meeting

13.1.1 Introduction

The Working Group 1 for Khmelnytskyi and Ternopil regions was held on October 8, 2020 virtually due to restrictions related to the COVID-19 pandemic. The meeting was attended by representatives of central and local authorities, agricultural companies, farmers, private landowners, investors, financial institutions, development companies, small and medium-sized businesses, scientists and consultants working, or intend to work in the region.

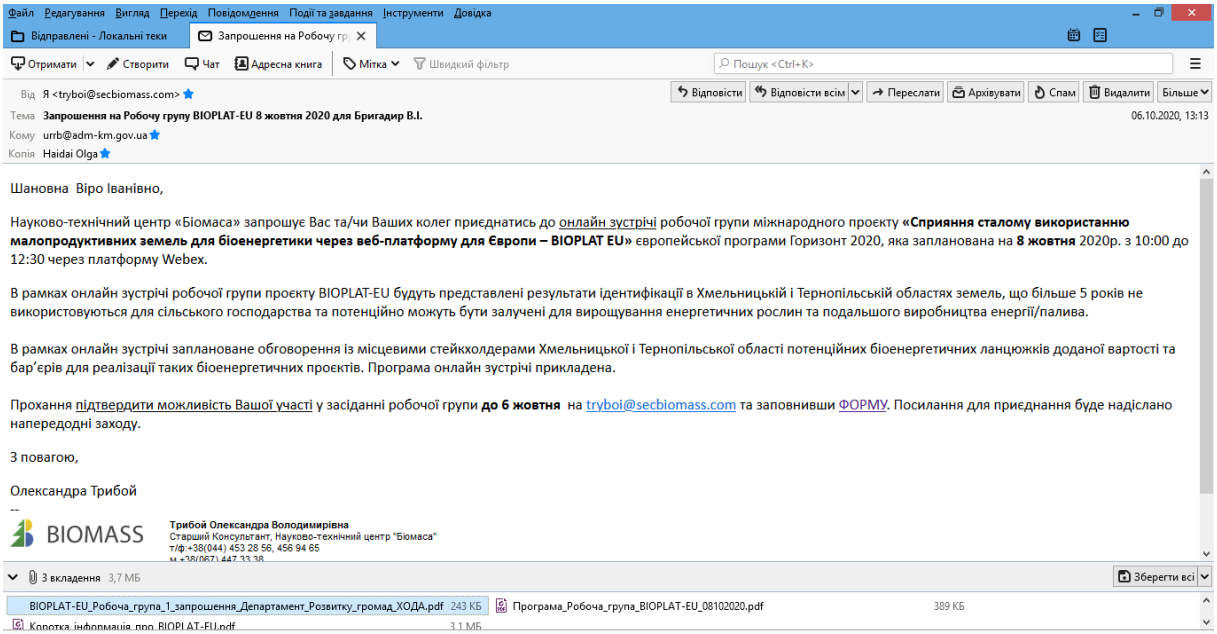
The purpose of the meeting was to present the BIOPLAT-EU project to local stakeholders, to tell about the project objectives and planned activities, as well as to check the availability of data and information useful for determining the current state of the bioenergy sector in the region; collect information on the legal basis, as well as the economic and social condition of the region; identify the interest of local authorities and investors in cooperation to promote the development of the bioenergy sector in the region, as well as priority bioenergy chains and the necessary incentives for development. The table below shows the list of participants.

Member name	Organisation	Stakeholder category
Savchuk Katerina	Khmelnytsky Region Regional Development Agency	Consultant
Rutkovska Olena	Khmelnytsky Region Regional Development Agency	Consultant
Krivsha Julia	State Agency on Energy Efficiency and Energy Saving of Ukraine	Central executive body
Lebedev Max	Khmelnytsky Biomass Power Plant (KBPP)	Investor
Mykhalsky Mykola	Ternopil Region State Administration	Local executive body
Gumentik Mikhail	STC Bioenergy	Scientist, Consultant
Kushnir Stepan	Khmelnytsky energy cluster	Consultant, Public organization
Shafarenko Yuri	State Agency on Energy Efficiency and Energy Saving of Ukraine	Central executive body
Kucheruk Alexander	Energo-Agrar	Consultant, Development Company, Agricultural Company, supplier of Miscanthus planting material of the Giant Varum variety

Gnap Iryna Vasylivna	Salix Energy LLC	Biomass Supplier, Consultant, Establishment of energy willow plantations
Tomlyak Kirilo	EBRD Sustainable Innovation in Value Chains in Bioenergy Program	Financing institution
Geletukha George	CU "Bioenergy Association of Ukraine"	Association
Luchka Olga	Ltd. Krona	Agricultural company
Lenska Olena	State Agency on Energy Efficiency and Energy Saving of Ukraine	Central executive body
Zherebna Maria	Ltd. Zodchyi	Politician, Small and Medium Business
Prinus Igor	Ltd. Indian Solar	Development company
Zolotareva Tatiana	Ltd. Indian Solar	Development company
Vasilina Alina	OTG	Local executive body
Romashin Mykola	EURO SMART POWER LLC	Agricultural company
Ivanova Tatiana	State Institution "Institute of Food Biotechnology and Genomics of the National Academy of Sciences of Ukraine"	Scientist
Kudinov Andrew	TASKOMBANK	Financing institution
Bodnar Olga	NaUKMA	Private landowner, Scientist
Dragnev Semyon	Private Enterpreneur Dragnev	Private landowner
Lelyakov Gennady	Vognyk Energy Production Cooperative	Small and medium business
Voitovych Ivan	National Forestry University of Ukraine	Scientist
Sysoiev Maksym	Dentons	Consultant
Kubai Mykola	KYPERPLAST	Small and medium business
Kulichkova Anna	Institute of Food Biotechnology and Genomics NAS of Ukraine	Scientist
Demchenkova Lolita	Calypso	Farmer
Vyshnevska Oksana	Institute of Agriculture of Polissya NAAS of Ukraine	Scientist
Orphan Anna	Lviv National Agrarian University	Scientist
Martsyuha Nataliia	InBase	Consultant
Solyanyk Konstantin	Ecosolum LLC	Biomass Supplier, Industry, Investor, Small & Medium Business, Consultant
Melnychuk Maksym	Agronomika	Agricultural company
Sakal Oksana	Public Institution «Institute of Environmental Economics and Sustainable Development of the	Scientist

	National Academy of Sciences of Ukraine»	
Yeremenko Alexander	National University of Life and Environmental Sciences of Ukraine	Scientist, education
Evstafieva Julia	Podillia State Agrarian Technical University	Scientist
Matveev Nikolay	Farmer enterprise 'Yadvina'	Farmer, Investor
Kotzar Olena	UNILOS-UKRAINE LLC	Scientist
Ostrovsky Mykola	Dunaevtsi city amalgamated territorial community	Local executive body
Lagutina Natalia	State Agency on Energy Efficiency and Energy Saving of Ukraine	Central executive body
Lapchuk Love	Pluzhne village council	Local executive body
Chubarev Dmitry	LLC "EcoEnergoProject"	Consultant, Development Company
Lazarenko Alexey	Entrepreneur	Scientist
Vasilevsky Vladimir	Regional Development Agency in Ternopil region	Small and medium business
Kirichenko Valentin	Ministry of Energy of Ukraine	institution of regional development
Shainoga Vyacheslav	Executive Committee of Globino City Council	Central executive body
Volvach Oksana	Odessa State Ecological University	Scientist
Antonenko Viacheslav	RSJ	Local executive body

13.1.2 Invitation



Файл Редагування Вигляд Перехід Повідомлення Події та завдання Інструменти Довідка

Відправлені - Локальні теки | Запрошення на Робочу гр

Отримати | Створити | Чат | Адресна книга | Мітка | Швидкий фільтр | Пошук <Ctrl+K>

Від Я <tryboi@secbiomass.com>

Відповісти | Відповісти всім | Переслати | Архівувати | Спам | Видалити | Більше

Тема **Запрошення на Робочу групу BIOPLAT-EU 8 жовтня 2020 для Бригадир В.І.** 06.10.2020, 13:13

Кому urrb@adm-km.gov.ua

Копія Haidai Olga

Шановна Віро Іванівно,

Науково-технічний центр «Біомаса» запрошує Вас та/чи Ваших колег приєднатись до онлайн зустрічі робочої групи міжнародного проєкту **«Сприяння сталому використанню малопродуктивних земель для біоенергетики через веб-платформу для Європи – BIOPLAT EU»** європейської програми Горизонт 2020, яка запланована на **8 жовтня** 2020р. з 10:00 до 12:30 через платформу Webex.

В рамках онлайн зустрічі робочої групи проекту BIOPLAT-EU будуть представлені результати ідентифікації в Хмельницькій і Тернопільській областях земель, що більше 5 років не використовуються для сільського господарства та потенційно можуть бути залучені для вирощування енергетичних рослин та подальшого виробництва енергії/палива.

В рамках онлайн зустрічі заплановане обговорення із місцевими стейкхолдерами Хмельницької і Тернопільської області потенційних біоенергетичних ланцюжків доданої вартості та бар'єрів для реалізації таких біоенергетичних проєктів. Програма онлайн зустрічі прикладена.

Прохання підтвердити можливість Вашої участі у засіданні робочої групи **до 6 жовтня** на tryboi@secbiomass.com та заповнивши ФОРМУ. Посилання для приєднання буде надіслано напередодні заходу.

З повагою,

Олександра Трибой

--

BIOMASS **Трибой Олександра Володимирівна**

Старший Консультант, Науково-технічний центр "Біомаса"

т/ф: +38(044) 453 28 56, 456 94 65

м.+38(067) 447 33 38

3 вкладення 3,7 МБ | Зберегти всі

BIOPLAT-EU_Робоча_група_1_запрошення_Департамент_Розвитку_громад_ХОДА.pdf 243 КБ | Програма_Робоча_група_BIOPLAT-EU_08102020.pdf 389 КБ

Коротка_інформація_про_BIOPLAT-EU.pdf 3,1 МБ

13.1.3 Agenda

BIOPLAT-EU

Онлайн зустріч зацікавлених сторін

«Енергетичні культури для біоенергетичних проєктів: перспективи для Хмельниччини та Тернопільщини»

8 жовтня 2020 р.

Організатори: Науково-технічний центр «Біомаса» та проєкт BIOPLAT-EU "Сприяння сталому використанню малопродуктивних земель для біоенергетики через веб-платформу для Європи".

Мета онлайн зустрічі: Проінформувати про перспективи для проєктів з вирощування енергетичних культур та біоенергетичних проєктів в Хмельницькій та Тернопільській областях, почути думки зацікавлених сторін.

Цільова аудиторія: постачальники біомаси, представники органів влади, політики, виробники обладнання, науковці, фінансові установи, інвестори, підприємці та ін.

ПРОГРАМА

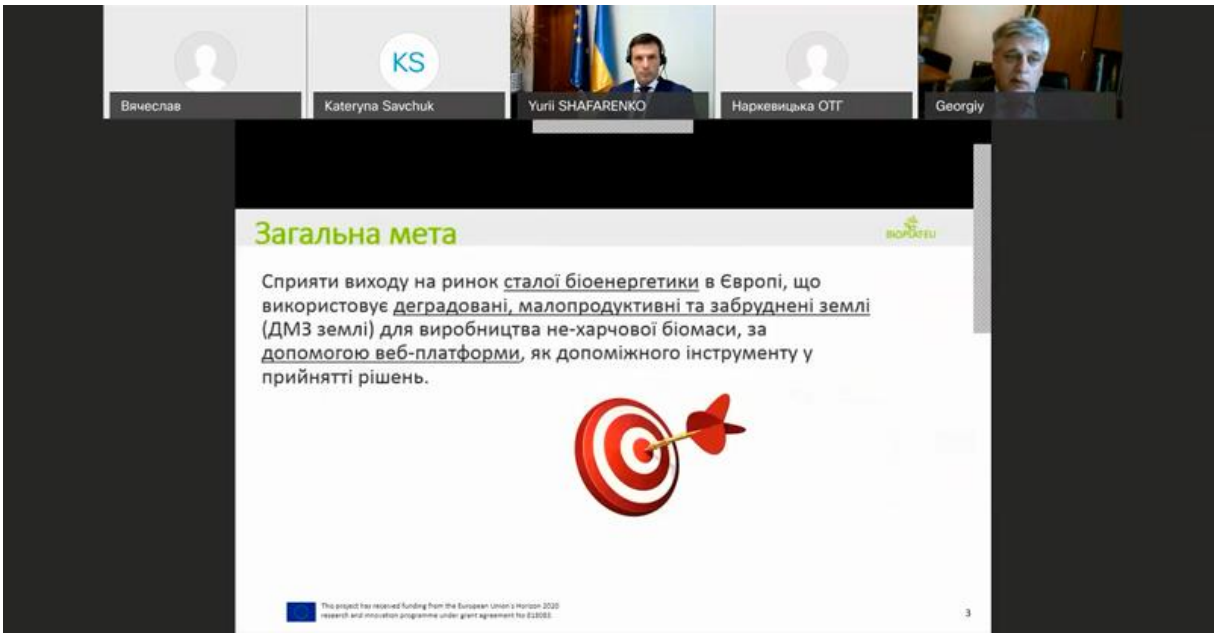
Час	Назва виступу	Спікер
10:00 – 10:10	Відкриття семінару. Представлення спікерів.	**Модератор** Георгій Гелетуха, БАУ
Привітання учасників		
10:10 – 10:20	**Юрій Шафаренко,** заступник Голови Держенергоефективності «Законодавча політика щодо підтримки вирощування енергетичних культур»	
10:20 – 10:30	**Кирило Томляк**, менеджер Програми ЄБРР «Україна: Сталі інновації у ланцюжку створення вартості в біоенергетиці»	
Основна програма онлайн зустрічі		
10:30 – 10:50	Енергетичні культури для біоенергетичних проєктів: бар'єри та перспективи в Україні. Основні економічні показники	**Георгій Гелетуха,** Голова Правління Біоенергетичної асоціації України
10:50 – 11:10	Вирощування енергетичних культур в Україні. Досвід Salix Energy	**Ірина Гнап**, директор Salix Energy

BIOPLAT-EU

11:10 – 11:30	Вирощування міскантусу в Хмельницькій області. Досвід ЕнергоАграр	**Олександр Кучерук**, директор «ЕнергоАграр»
11:30 – 11:50	Проєкт BIOPLAT-EU: результати моделювання щодо наявності земель, доступних для вирощування енергетичних культур в Хмельницькій та Тернопільській областях.	**Олександра Трибой**, НТЦ «Біомаса»
11:50 – 12:00	Як користуватися онлайн платформою проєкту BIOPLAT-EU	**Ольга Гайдай,** НТЦ «Біомаса»
Обговорення зі стейкхолдерами перспектив вирощування енергетичних культур та реалізації біоенергетичних проєктів в Хмельницькій і Тернопільській областях		
12:00 – 12:25	**Стейкхолдери, запрошені до обговорення:** ✓ Держенергоефективності України ✓ Програма ЄБРР «Україна: Сталі інновації у ланцюжку створення вартості в біоенергетиці» ✓ Агенція регіонального розвитку Хмельницької області ✓ Агенція регіонального розвитку Тернопільської області ✓ Хмельницька біоТЕС ✓ НТЦ «Біоенергія» ✓ Хмельницький енергетичний кластер ✓ ОТГ Хмельницької і Тернопільської областей	**Модератор** Олександра Трибой, НТЦ «Біомаса»
12:25 – 12:30	**Закриття онлайн зустрічі**	

13.1.4 Summary of presentations and discussions

The 1st meeting of the working group was opened by Georgii Geletukha, director of SECB and Head of the Board of the Bioenergy Association of Ukraine, who welcomed the participants and presented the BIOPLAT-EU project, including its aim, consortium partners and funding under EU Horizon2020 programme, as well as the aim of the meeting.

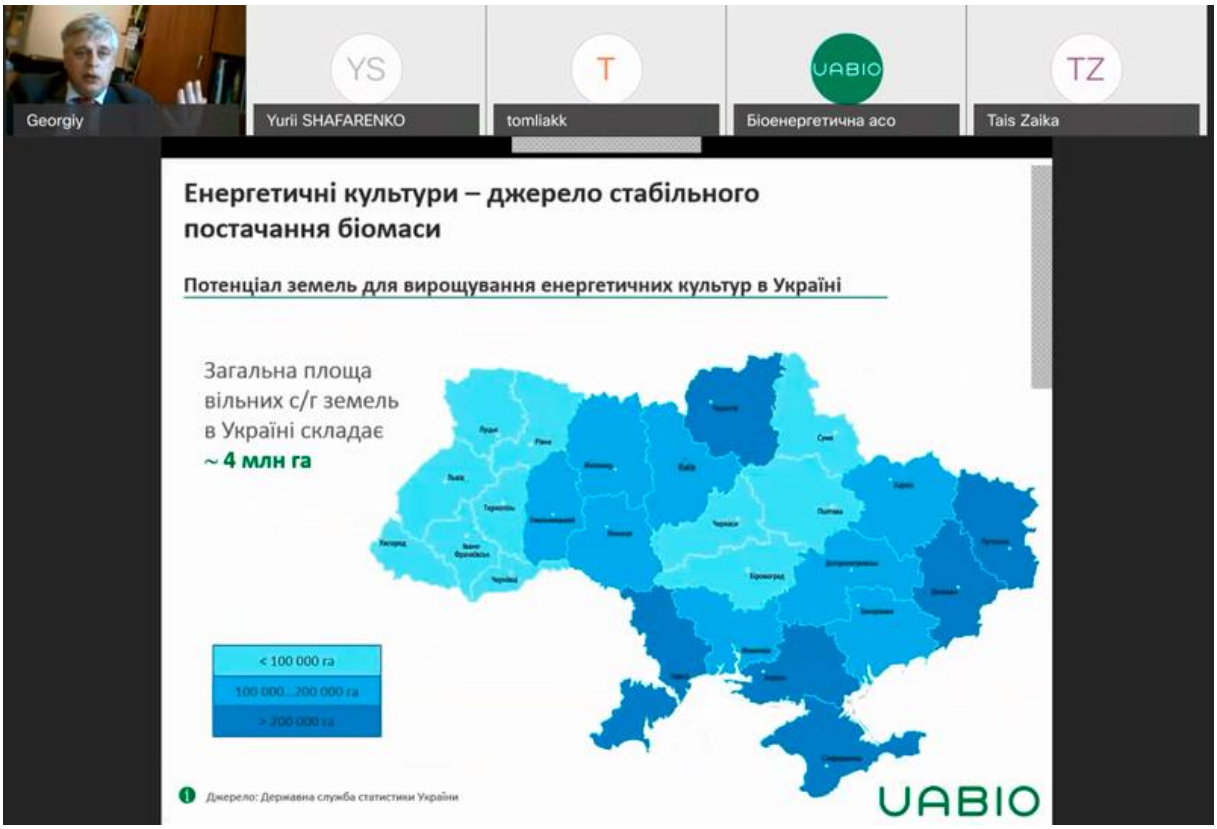


Legislative policy to support the cultivation of energy crops was presented by Yurii Shafarenko – Deputy Head of the State Agency for Energy Efficiency of Ukraine. Mr Shafarenko told about advantages of spreading the practice of growing energy crops, which are substitution of natural gas and its import, decarbonisation, reducing the cost of heating, restoration of land fertility, attraction of investments and creation of new jobs.

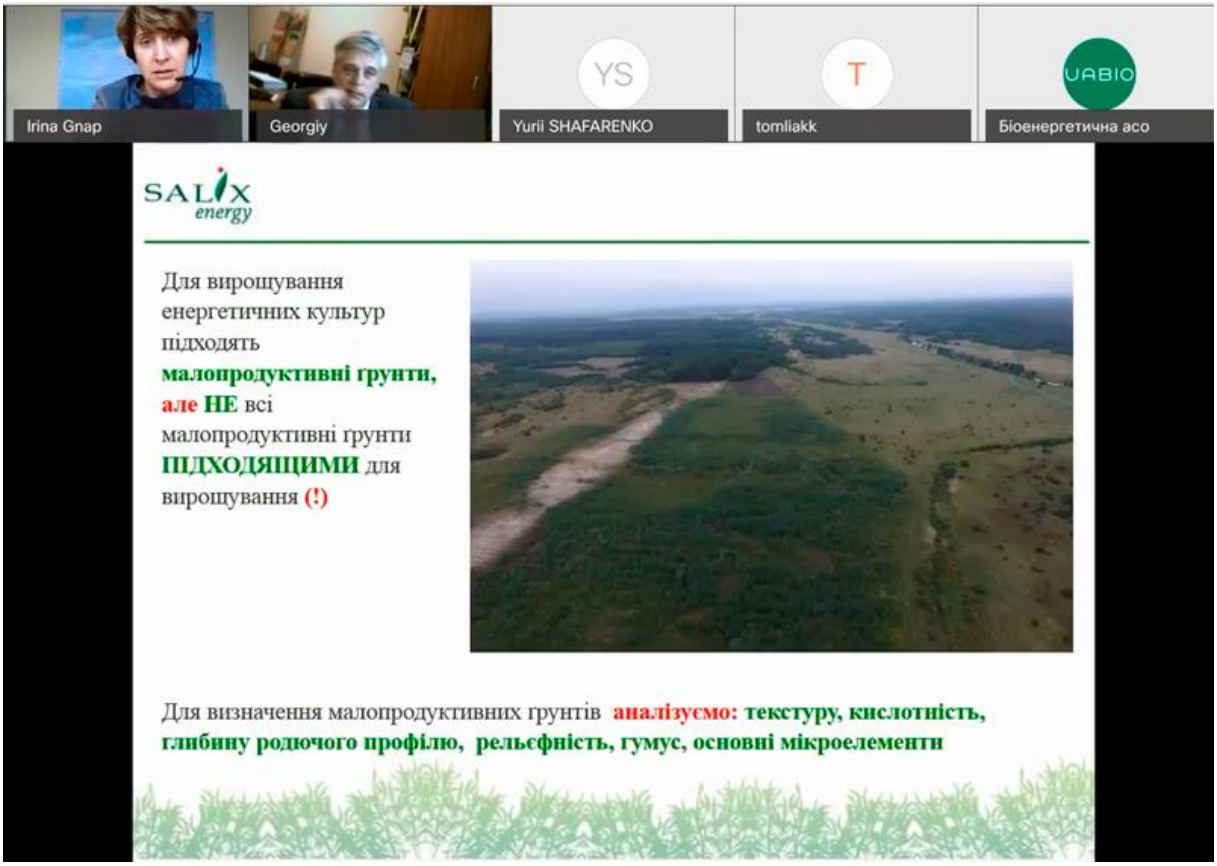
EBRD Program Manager Kyrylo Tomliak told in his presentation about the programme of the European Bank for Reconstruction and Development "Sustainable innovations in the bioenergy

value chain" aimed at credit support of big bioenergy projects on agricultural biomass that can include energy crops growing on marginal lands.

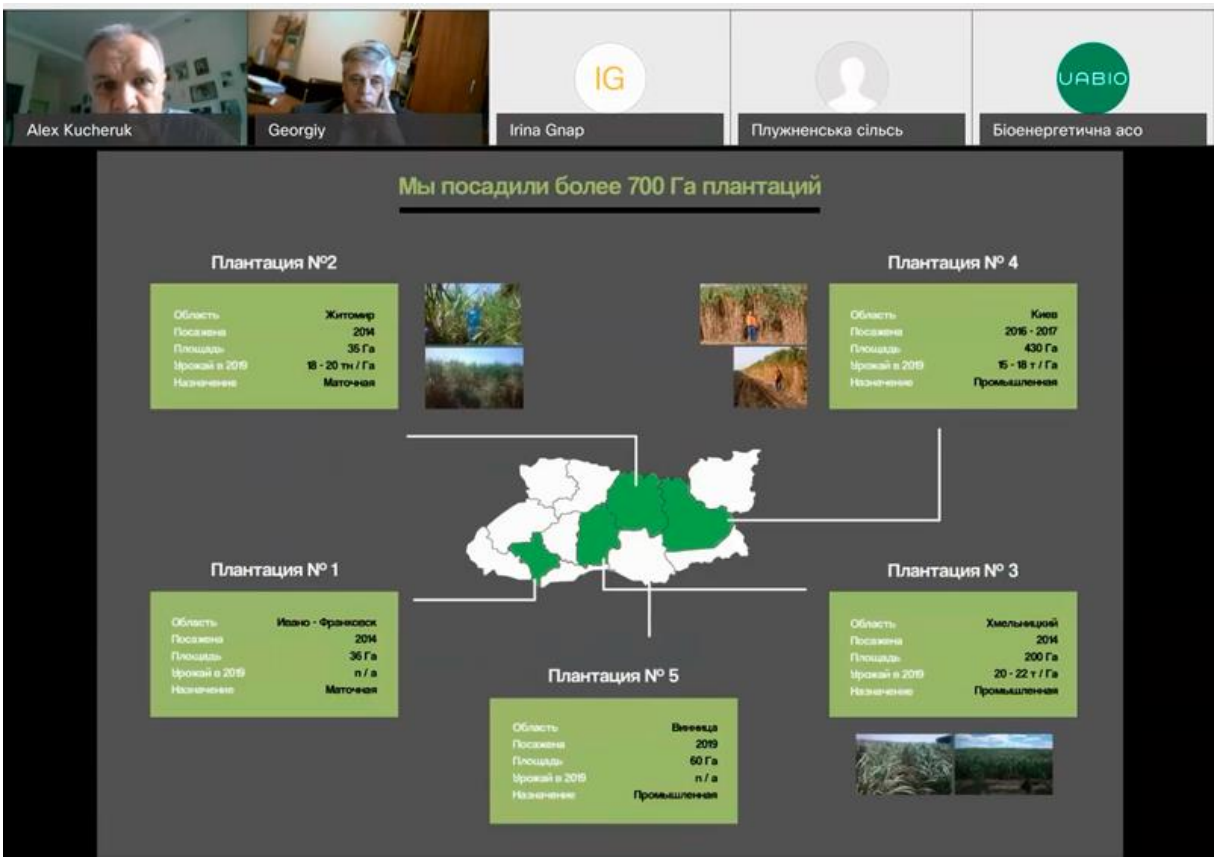
Georgii Geletukha, Director of SECB and Head of the Board of the Bioenergy Association of Ukraine informed about bioenergy development in Ukraine and also mentioned the assessed potential for growing energy crops in the regions of Ukraine in his presentation “Energy plants for bioenergy projects: barriers and prospects in Ukraine”.



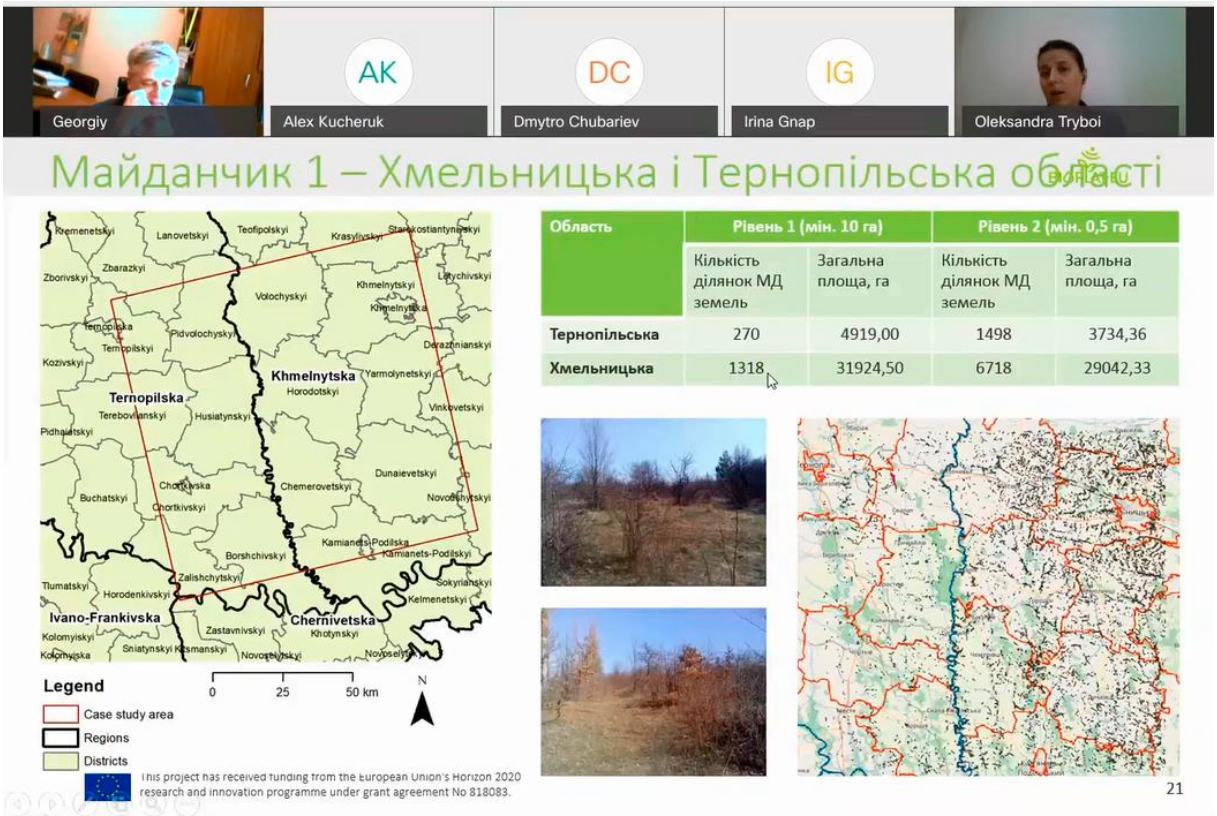
About the features of cultivation of energy willow on marginal lands spoke the director of the company with the biggest plantations of energy willow in Eastern Europe Iryna Gnap in her presentation "Growing energy crops in Ukraine. SALIX ENERGY experience".



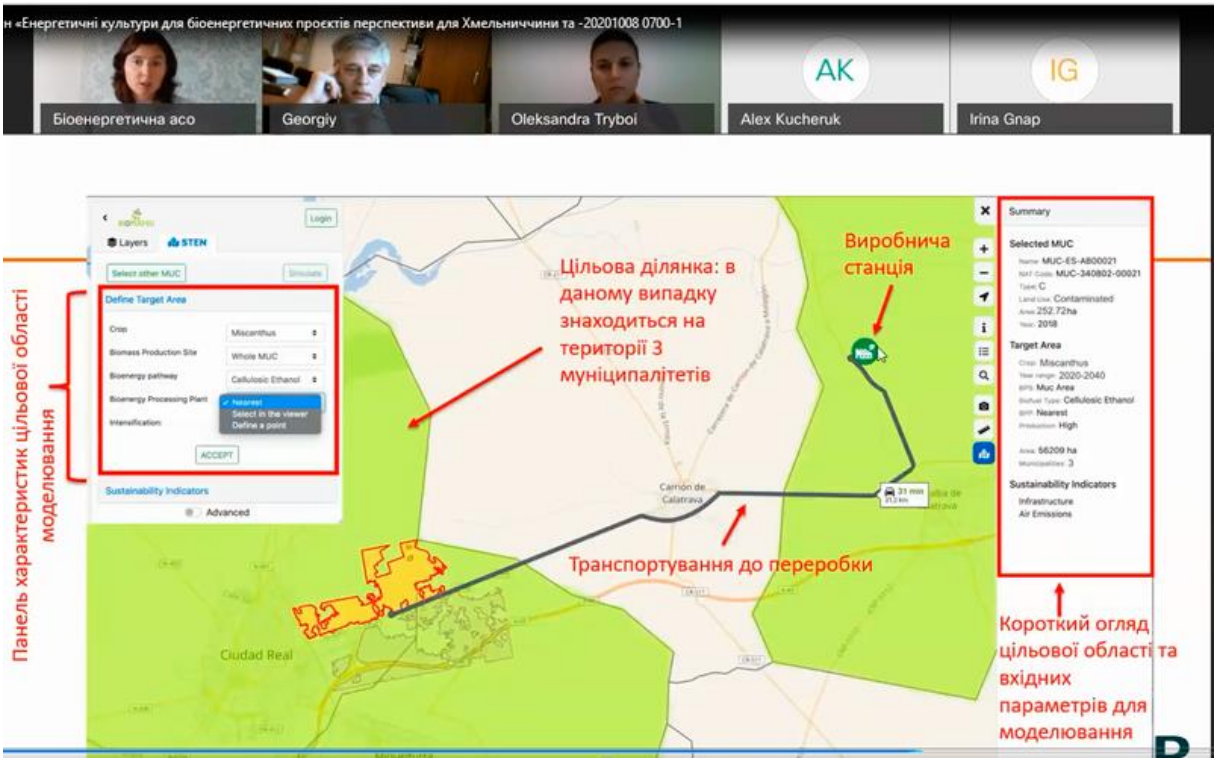
Alexander Kucheruk told about experience of Energo-Agrar Company in cultivation of Miscanthus Giganteus.



Simulation results on the availability of land suitable for energy crops in Khmelnytsky and Ternopil regions, received within the BIOPLAT-EU project were presented by Oleksandra Tryboi, Senior Consultant of SEC Biomass.

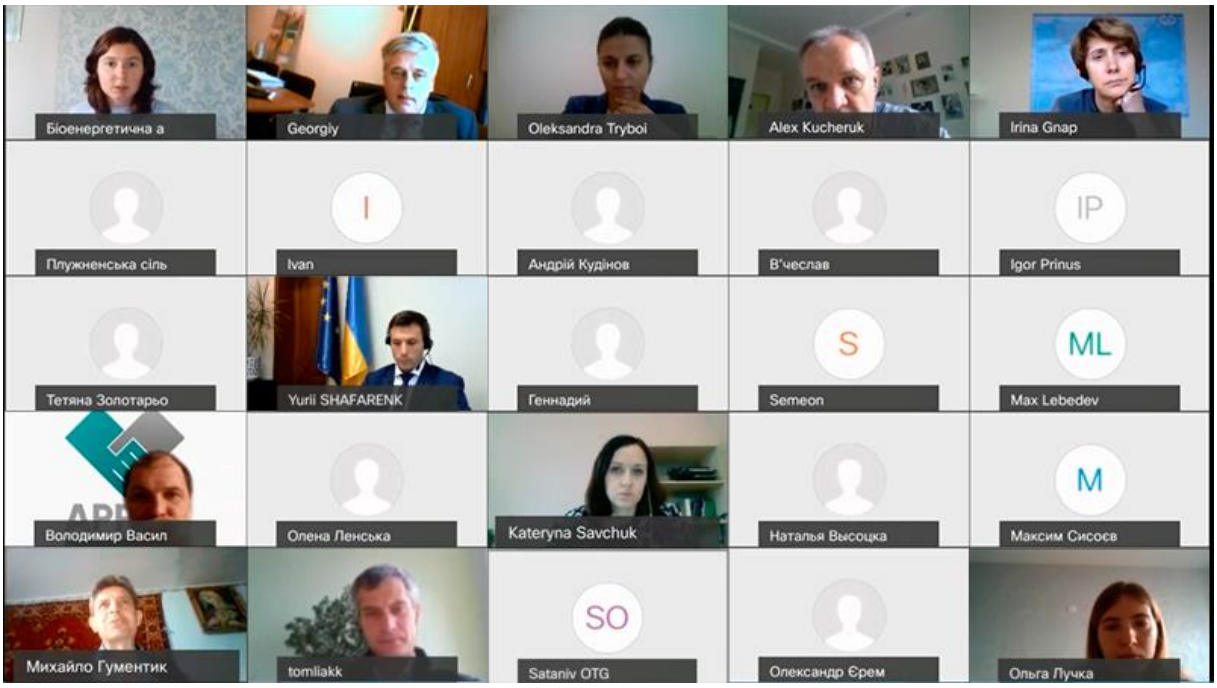


Olha Haidai, senior consultant at SEC Biomass, spoke about the possibilities of the future BIOPLAT-EU web-platform.



Within a discussion, the following questions were raised:

- Is there an interest of the authorities to implement bioenergy projects that use biomass grown on unproductive and degraded lands?
- Which bioenergy chains are a priority for implementation in your region?
- Is there an interest of local authorities in leasing unproductive and degraded land at a reduced rental rate?
- Is there planting material in the region?
- Are agricultural enterprises interested in growing energy plants on unproductive and degraded lands owned by them?
- Are agricultural enterprises interested in leasing their equipment for planting energy plantations?
- Are small and medium-sized businesses interested in growing energy plants?
- What barriers do you think are critical for the implementation of bioenergy chains, including the cultivation of energy crops?
- Are banks interested in providing cheap loans for bioenergy projects that include the biomass cultivation stage?



13.1.5 Conclusions

Within the discussion, stakeholders asked about machinery and costs for growing such energy crops as willow and Miscanthus. It was answered that for harvesting willow special header for the harvester is used for big plantations and tractor attachments for smaller plantations. Concerning investments to Miscanthus plantations representative of Energo Agrar answered that this amounts roughly 2100 EUR/ha these capital investments will be spent in the first two years of plantation establishment. The representative of the Agency of Regional Development of Ternopil State administration Volodymyr Vasylevskyi emphasized that state subsidies and more advocacy is needed to convince farmers and potential investors on the prospects and

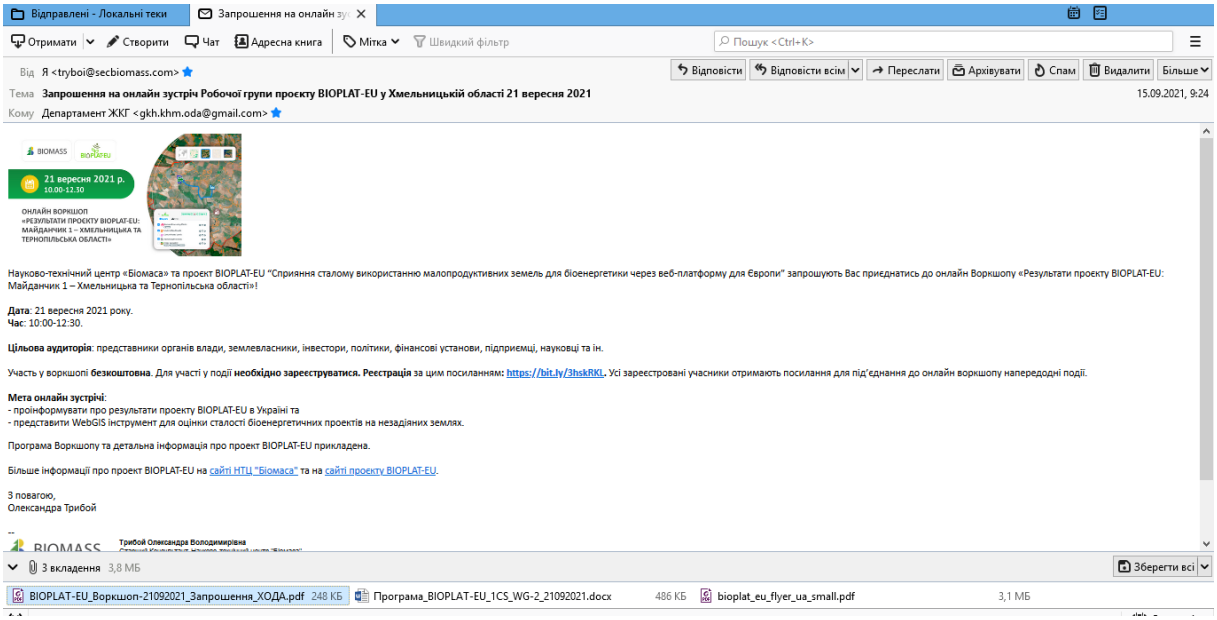
benefits of growing biomass crops on underutilized lands as payback period longer than 5 years is not very attractive to investors in their region. The Head of Bioenergy Association of Ukraine Georgii Geletukha mentioned that in general long-term forecasts on gas prices tell about their increase that will positively influence the bioenergy development in Ukraine as alternative to natural gas. Another positive issue is that despite "green" tariff decrease for certain RES, for biomass and biogas "green" tariff was not changed. Also, Green Deal of EU and Carbon tax on the boarder which EU plans to introduce can positively influence bioenergy development in Ukraine. He summarized that projects on growing energy crops as an integral part of secure biomass supply will have their place in bioenergy development in Ukraine.

13.2 Second working group meeting

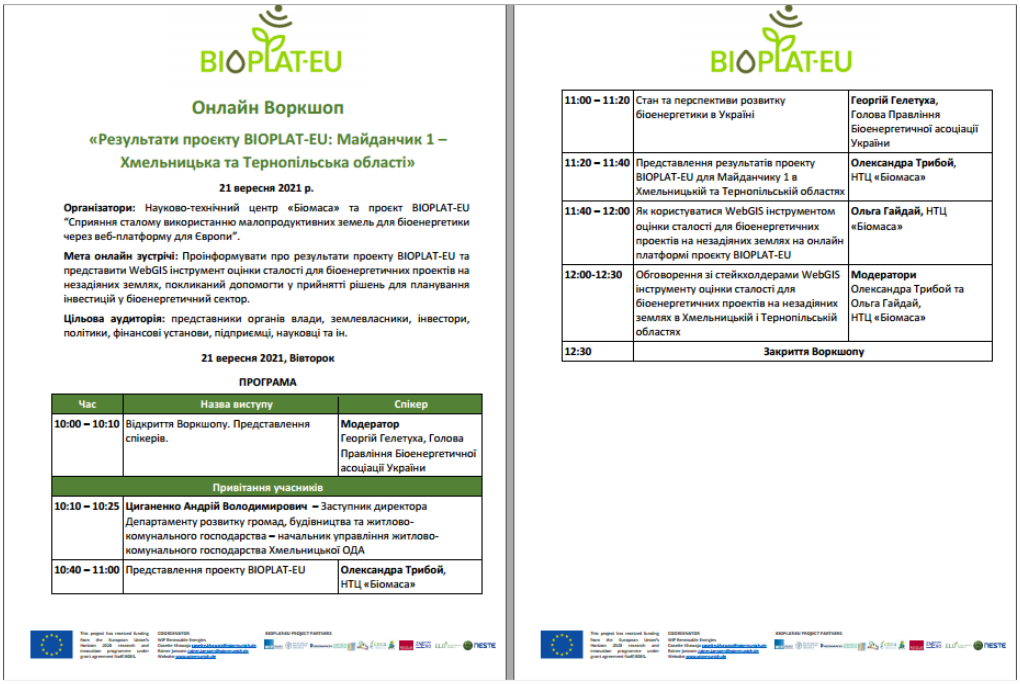
The 2nd meeting of the working Group for Khmelnytskyi and Ternopil regions was held within a workshop held on September 21, 2021, virtually due to restrictions related to the COVID-19 pandemic. The meeting was attended by representatives of local authorities (OTG, city, village and settlement councils) of Khmelnytsky and Ternopil regions. The meeting was also attended by representatives of the Khmelnytsky Regional State Administration, the State Agency for Energy Efficiency, private landowners, development companies, small and medium-sized businesses, scientists and consultants who work or intend to work in the region.

The purpose of the meeting was to present the results of the BIOPLAT-EU project to local stakeholders and to present a WebGIS tool for assessing the sustainability of bioenergy projects on underutilized lands.

13.2.1 Invitation



13.2.2 Agenda



BIOPLAT-EU

Онлайн Воркшоп

«Результати проєкту BIOPLAT-EU: Майданчик 1 – Хмельницька та Тернопільська області»

21 вересня 2021 р.

Організатори: Науково-технічний центр «Біомаса» та проєкт BIOPLAT-EU "Сприяння сталому використанню малопродуктивних земель для біоенергетики через веб-платформу для Європи".

Мета онлайн зустрічі: Проінформувати про результати проекту BIOPLAT-EU та представити WebGIS інструмент оцінки сталості для біоенергетичних проектів на незадіяних землях, покликаний допомогти у прийнятті рішень для планування інвестицій у біоенергетичний сектор.

Цільова аудиторія: представники органів влади, землевласники, інвестори, політики, фінансові установи, підприємці, науковці та ін.

21 вересня 2021, Вівторок

ПРОГРАМА

Час	Назва виступу	Спікер
10:00 – 10:10	Відкриття Воркшопу. Представлення спікерів.	**Модератор** Георгій Гелетуха, Голова Правління Біоенергетичної асоціації України
Привітання учасників		
10:10 – 10:25	**Циганенко Андрій Володимирович** – Заступник директора Департаменту розвитку громад, будівництва та житлово-комунального господарства – начальник управління житлово-комунального господарства Хмельницької ОДА	
10:40 – 11:00	Представлення проекту BIOPLAT-EU	**Олександра Трибой**, НТЦ «Біомаса»

BIOPLAT-EU

11:00 – 11:20	Стан та перспективи розвитку біоенергетики в Україні	**Георгій Гелетуха**, Голова Правління Біоенергетичної асоціації України
11:20 – 11:40	Представлення результатів проекту BIOPLAT-EU для Майданчику 1 в Хмельницькій та Тернопільській областях	**Олександра Трибой**, НТЦ «Біомаса»
11:40 – 12:00	Як користуватися WebGIS інструментом оцінки сталості для біоенергетичних проектів на незадіяних землях на онлайн платформі проекту BIOPLAT-EU	**Ольга Гайдай**, НТЦ «Біомаса»
12:00-12:30	Обговорення зі стейкхолдерами WebGIS інструменту оцінки сталості для біоенергетичних проектів на незадіяних землях в Хмельницькій і Тернопільській областях	**Модератори** Олександра Трибой та Ольга Гайдай, НТЦ «Біомаса»
12:30	**Закриття Воркшопу**	

13.2.3 Summary of presentations and discussions

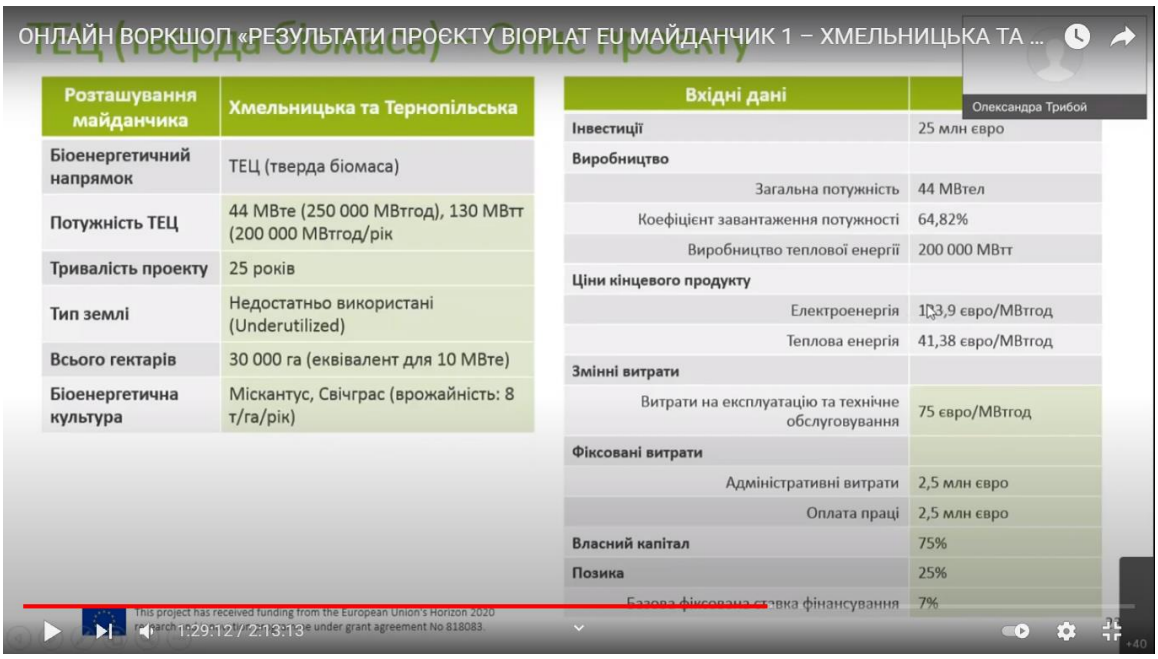
At the meeting, the status and prospects of bioenergy development in Ukraine were presented by Georgii Geletukha, director of SECB and Head of the Board of the UABIO. Oleksandra Tryboi, a senior consultant of the SECB, talked about the overall results of the BIOPLAT-EU project and presented results of the Case Study 1 for Khmelnytsky and Ternopil regions, for which a detailed identification of unused lands that could potentially be involved in the cultivation of energy crops was conducted. She also talked about the results of the feasibility study prepared by partner 1to3 Capital for a potential CHP project on solid biomass, which also uses as a feedstock biomass of Miscanthus and switchgrass, grown on unused lands of Khmelnytsky region. Olha Haidai, senior consultant at SEC Biomass, presented to participants the example of how to assess sustainability of a potential bioenergy project using webGIS tool of the BIOPLAT-EU web-platform.

Within the discussion, there was a question on the payback period when switching from natural gas to biomass for heat production and on the cost of 1 kW of heat energy produced from biomass. Georgii Geletukha answered that boiler houses are the cheapest option for gas substitution. The cost of the installed heat capacity of the modern turnkey boiler house on biomass with foreign equipment is about 200 EUR/kW and for boiler-house on biomass of 1 MW installed costs roughly 200 thousand EUR. Using cheaper equipment, it is possible to reduce the cost to about 100 EUR/kW. The payback period will depend on the price of natural gas, which is planned to be substituted. For example, if the gas price is about 320 EUR/1000 m3, the payback of a boiler house can be roughly 4 years, of a bioCHP – roughly 6 years, and bioTPP for electricity production under “green” tariff - roughly 7 years. The cost of 1 MW installed electrical capacity on biomass is about 2.5 million EUR. For local communities that

need to substitute expensive natural gas to heat their budgetary buildings (schools, hospitals, kindergartens) the option of a boiler-house on biomass could be of interest.

Another question was on the cost of establishment of 1 ha plantation of energy crops. The answer was that the cost is about 1000 EUR/ha and the significant part of this investment belongs to the planting material, and the payback can be after the third harvest (on the 7th years).

Georgii Geletukha also mentioned about prepared proposals for amendments to the legislation concerning support to energy crops cultivation. One of these proposals include changes to the Land Code in order to increase the period of rent for growing energy crops from standard 7 years up to 20 years to eliminate the risk of no-prolongation of the rent period for the land under plantation of energy crops.



13.2.4 Conclusions

At the end of the meeting, it was mentioned to the participants that the STEN manual will be translated to Ukrainian to make the work with the BIOPLAT-EU webGIS tool more convenient to Ukrainian users.

14 Working group in Kyiv and Chernihiv, Ukraine

14.1 First working group meeting

14.1.1 Introduction

On December 11, 2020, the 1st meeting of the Working Group of the BIOPLAT-EU project "Energy Crops for Bioenergy Projects: Prospects for Chernihiv Region" took place. Participants were representatives of local authorities (regional administrations, united territorial communities, city, village and settlement councils) of Chernihiv region. The meeting was also attended by representatives of energy companies that are or plan to be consumers of biomass and consider energy crops as an additional source of supply. Participants also included agricultural companies, farmers, private landowners, investors, financial institutions, development companies, small and medium-sized businesses, scientists and consultants who work or intend to work in the region.

The purpose of the meeting was to present the BIOPLAT-EU project to local stakeholders, to discuss the project objectives and planned activities, and to identify the interest of local authorities and investors in cooperation to promote the bioenergy sector in the region, including energy crops. The table below includes the list of participants.

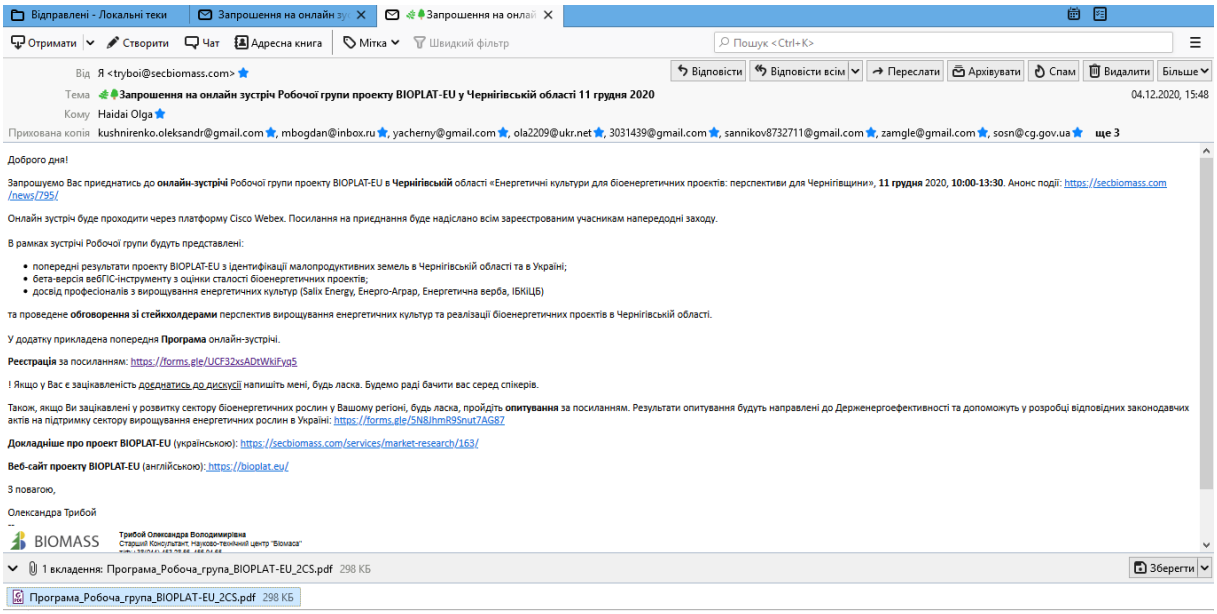
Member name	Organisation	Stakeholder category
Yuri Shafarenko	SAEE	National authority
Olena Lenska	SAEE	National authority
Yulia Kryvsha	SAEE	National authority
Oleksandr Shumskyi	State Tax Service of Ukraine	National authority
Olga Sokolova	Kyiv Region State Administration	Regional authority
Yulia Fedosenko	Chernihiv Region State Administration	Regional authority
Oleg Krapyvnyi	Chernihiv Region State Administration	Regional authority
Oleksandr Shcherbatyi	Chernihiv Region State Administration	Regional authority
Riabov Oleg	Agroholding Gals Agro	Agricultural company
Shved Roman	Siverska TPP LLC	Energy company, a large consumer of biomass
Butenko Vitaly	Biogazenergo	Energy company

Kolomiets Valery	NGO Committee of Public Self-Government in Kyiv Region	Consultant
Pronko Tatiana	Kulykiv District State Administration	Consultant
Gennady Shcherbakov	Concern "Sunrise"	Small and medium business
Sokolova Olga	Kyiv Regional State Administration	Local authority
Saloon Vita	Novgorod-Siversky City Council	Local authority
Shainoga Vyacheslav	Executive Committee of Globino City Council	Local authority
Loichenko Natalia	Mena City Council	Local authority
Yakub Elena	Kherson Regional State Administration	Local authority
Tishchenko Olena	Varva District State Administration	Local authority
Shibika Alexander	Borzna City Council	Local authority
Gordienko Tamara	Borzna District State Administration	Local authority
Klimenko Alexander	Sosnytsia village council	Local authority
Nosenko Maria	Nizhyn District State Administration	Local authority
Ptukha Zhanna	Kozelets District State Administration	Local authority
Gordienko Tamara	Borzna District State Administration	Local authority
Yaroshenko Andrew	Borzna District State Administration	Local authority
Butenok Liudmyla	Novgorod-Siversky District State Administration of Chernihiv Region	Local authority
Rudenok Mykola	Ivanivska OTG	Local authority
Duda Andrew	Gorodnia District State Administration	Local authority
Boloban Anna	Mryn village council	Local authority
Vorona Denis	Executive Committee of the Nizhyn City Council	Local authority
Mukvych Yuriy	Sribnyansk District State Administration of Chernihiv Region	Local authority
Sivenko Alexander	Pryluky City Council	Local authority
Dovbach Vitaly	Ivanivka village council of Chernihiv district of Chernihiv region	Local authority

Chetyrina Natalia	Sosnytsia District State Administration	Local authority
Litoshko Valentina	Novobasanska OTG	Local authority
Borisenko Alla	Korop District State Administration	Local authority
Scherbaty Alexander	Department of Economic Development and Agriculture of Chernihiv Regional State Administration	Regional authority
Kurash Alexander	PE "Servic Parytet LP"	Local executive body, Industry, Agrarian company
Sakal Oksana	SI IEPSR NAS of Ukraine	Scientist
Ganzhenko Alexander	Institute of Bioenergy Crops and Sugar Beets NAAS	Scientist
Grigorieva Christina	National University "Odessa Law Academy"	Scientist
Minaeva Julia	V.I. Vernadsky Taurida National University	Scientist
Tokarchuk Dina	Vinnytsia National Agrarian University	Scientist
Kuzmenko Vladimir	NSC "IMESG"	Scientist
Syrotiuk Hanna	Lviv National Agrarian University	Scientist
Vyshnevska Oksana	Polissya Institute of Agriculture	Scientist
Kulichkova Anna	Food Institute. biotechnology and genomics	Scientist
Gutovska Anna	NUBIP of Ukraine	Scientist
Penkova Svetlana	Institute of Bioenergy Crops and Sugar Beets NAAS	Scientist
Kvak Vladimir	Institute of Bioenergy Crops and Sugar Beets NAAS	Scientist, Consultant
Bobrovnyi Eugene	FOP Bobrovnyi	Scientist, Small and Medium Business
Korzh Vitaly	Kulykiv village council	Local authority
Ivanyuk Oleg	Khmelnytskenergozbut LLC	Electricity and gas supply
Melnyk Serhiy	Ltd. Free Energy If	Industry, Scientist
Vorontsov Vitaly	SDS SOC "AgroCear"	Farmer, Investor, Small and Medium Business, Consultant
Katelevsky Valery	FOP Katelevsky	Farmer, Private Landowner, Consultant
Krivsha Julia	SAEE	Central executive body
Lenska Olena	SAEE	Central executive body

Shumsky Alexander	State Tax Service of Ukraine	Central executive body
Adamyak Alla	Talalaiv District State Administration	Local authority

14.1.2 Invitation



Відправлені - Локальні теки | Запрошення на онлайн зу | Запрошення на онлай

Отримати | Створити | Чат | Адресна книга | Мітка | Швидкий фільтр | Пошук <Ctrl+K>

Від: Я <tryboi@secbiomass.com>

Тема: **Запрошення на онлайн зустріч Робочої групи проекту BIOPLAT-EU у Чернігівській області 11 грудня 2020** 04.12.2020, 15:48

Кому: Haidai Olga

Прихована копія: kushnirenko.oleksandr@gmail.com, mbogdan@inbox.ru, yacherny@gmail.com, ola2209@ukr.net, 3031439@gmail.com, sannikov8732711@gmail.com, zamgle@gmail.com, sosn@cg.gov.ua **ще 3**

Відповісти | Відповісти всім | Переслати | Архівувати | Спам | Видалити | Більше

Доброго дня!

Запрошуємо Вас приєднатись до **онлайн-зустрічі** Робочої групи проекту BIOPLAT-EU в **Чернігівській** області «Енергетичні культури для біоенергетичних проектів: перспективи для Чернігівщини», **11 грудня** 2020, **10:00-13:30**. Анонс події: https://secbiomass.com/news/795/

Онлайн зустріч буде проходити через платформу Cisco Webex. Посилання на приєднання буде надіслано всім зареєстрованим учасникам напередодні заходу.

В рамках зустрічі Робочої групи будуть представлені:

- попередні результати проекту BIOPLAT-EU з ідентифікації малопродуктивних земель в Чернігівській області та в Україні;
- бета-версія вебГІС-інструменту з оцінки сталості біоенергетичних проектів;
- досвід професіоналів з вирощування енергетичних культур (Salix Energy, Енерго-Аграр, Енергетична верба, ІБКІЦБ)

та проведене **обговорення зі стейкхолдерами** перспектив вирощування енергетичних культур та реалізації біоенергетичних проектів в Чернігівській області.

У додатку прикладена попередня **Програма** онлайн-зустрічі.

Реєстрація за посиланням: https://forms.gle/UCF32xsADtWkiFyq5

! Якщо у Вас є зацікавленість доєднатись до дискусії напишіть мені, будь ласка. Будемо раді бачити вас серед спікерів.

Також, якщо Ви зацікавлені у розвитку сектору біоенергетичних рослин у Вашому регіоні, будь ласка, пройдіть **опитування** за посиланням. Результати опитування будуть направлені до Держенергоефективності та допоможуть у розробці відповідних законодавчих актів на підтримку сектору вирощування енергетичних рослин в Україні: https://forms.gle/5N8JhmR9Snut7AG87

Докладніше про проект BIOPLAT-EU (українською): https://secbiomass.com/services/market-research/163/

Веб-сайт проекту BIOPLAT-EU (англійською): https://bioplat.eu/

З повагою,

Олександра Трибой

BIOMASS Трибой Олександра Володимирівна Старший Консультант, Науково-технічний центр "Біомаса"

1 вкладення: Програма_Робоча_група_BIOPLAT-EU_2CS.pdf 298 КБ | Зберегти

Програма_Робоча_група_BIOPLAT-EU_2CS.pdf 298 КБ

14.1.3 Agenda

BIOPLAT-EU

Онлайн зустріч зацікавлених сторін

«Енергетичні культури для біоенергетичних проєктів: перспективи для Чернігівщини»

11 грудня 2020 р.

Організатори: Науково-технічний центр «Біомаса» та проєкт BIOPLAT-EU "Сприяння сталому використанню малопродуктивних земель для біоенергетики через веб-платформу для Європи".

Мета онлайн зустрічі: Проінформувати про перспективи для проєктів з вирощування енергетичних культур та біоенергетичних проектів в Чернігівській області, почути думки зацікавлених сторін.

Цільова аудиторія: постачальники біомаси, представники органів влади, політики, виробники обладнання, науковці, фінансові установи, інвестори, підприємці та ін.

ПРОГРАМА

Час	Назва виступу	Спікер
10:00 – 10:15	Відкриття семінару. Представлення проекту BIOPLAT-EU.	**Модератор** Георгій Гелетуха, БАУ
Привітання учасників		
10:15 – 10:35	**Юрій Шафаренко,** заступник голови Держенергоефективності «Законодавча політика щодо підтримки вирощування енергетичних культур»	
10:35– 10:40	**Олег Крапивний,** заступник директора Департаменту агропромислового розвитку Чернігівської ОДА	
Основна програма онлайн зустрічі		
10:40 – 11:05	Дорожня карта розвитку біоенергетики в Україні	**Георгій Гелетуха,** голова правління Біоенергетичної асоціації України, директор ГО «АВЕ»

BIOPLAT-EU

11:05 – 11:25	Вирощування енергетичної верби в Україні. Досвід ТОВ «Salix Energy»	**Ірина Гнап,** директор ТОВ «Salix Energy»
11:25 – 11:50	Вирощування енергетичної верби в Україні. Досвід ТОВ «Енергетична верба»	**Леонід Мележик,** директор ТОВ «Енергетична верба»
11:50 – 12:00	«Україна: Сталі інновації у ланцюжку створення вартості в біоенергетиці»	**Кирило Томляк,** менеджер Програми ЄБРР
12:00 – 12:20	Вирощування міскантусу в Україні. Досвід фермера	**Валерій Кателевський,** фермер, аспірант ІБКІЦБ
12:20 – 12:50	Проєкт BIOPLAT-EU: результати моделювання щодо наявності земель, доступних для вирощування енергетичних культур в Чернігівській області.	**Олександра Трибой,** НТЦ «Біомаса»
12:50 – 13:00	Як користуватися онлайн платформою проєкту BIOPLAT-EU	**Ольга Гайдай,** НТЦ «Біомаса»
Обговорення зі стейкхолдерами перспектив вирощування енергетичних культур та реалізації біоенергетичних проєктів в Чернігівській області		
13:00 – 13:25	**Стейкхолдери, запрошені до обговорення:** ✓ Держенергоефективності України ✓ Програма ЄБРР «Україна: Сталі інновації у ланцюжку створення вартості в біоенергетиці» ✓ Агенція регіонального розвитку Чернігівської області ✓ Сіверська біоТЕС ✓ ОТГ Чернігівської області	**Модератор** Олександра Трибой, НТЦ «Біомаса»
13:25 – 13:30	**Закриття онлайн зустрічі**	

14.1.4 Summary of presentations and discussions

The online meeting of the Working Group was opened by Deputy Head of the State Agency for Energy Efficiency Yuriy Shafarenko, who spoke about current legislative initiatives to support the development of the bioenergy sector and in particular the direction of growing energy crops.

Participants were also welcomed by Deputy Director of the Agricultural Department of Chernihiv Regional State Administration Oleg Krapyvnyi, who noted that in the region there are about 80 thousand hectares of unproductive arable land, located mostly in the Polissya area (60%). Such lands, due to their natural fertility, can yield up to 14 kg/ha of ear crops, so it is more efficient to use these lands for growing energy crops, such as willow and miscanthus.

In the main part of the event, the participants heard Georgii Geletukha (Bioenergy Association of Ukraine), Iryna Gnap (Salix Energy LLC), Leonid Melezhik (Energy Willow LLC), Valerii Katelevskyi (Institute of energy crops and sugar beets), as well as Oleksandra Tryboi and Olha Haidai (SEC Biomass), who spoke about the results of the BIOPLAT-EU identification of unproductive and degraded lands in Chernihiv region, as well as about WebGIS tool for assessing the sustainability of bioenergy projects using energy plants from MUC lands, which is under development in the frame of the BIOPLAT-EU project.

Serhiy Khobotnya, Director of the Agency for Sustainable Development of Chernihiv Region, spoke at the discussion. He noted that the prospects of growing energy crops in the region depend on the profitability of such projects, as well as whether it will be possible to attract public funds to such projects and if there are consumers for the cultivated biomass.

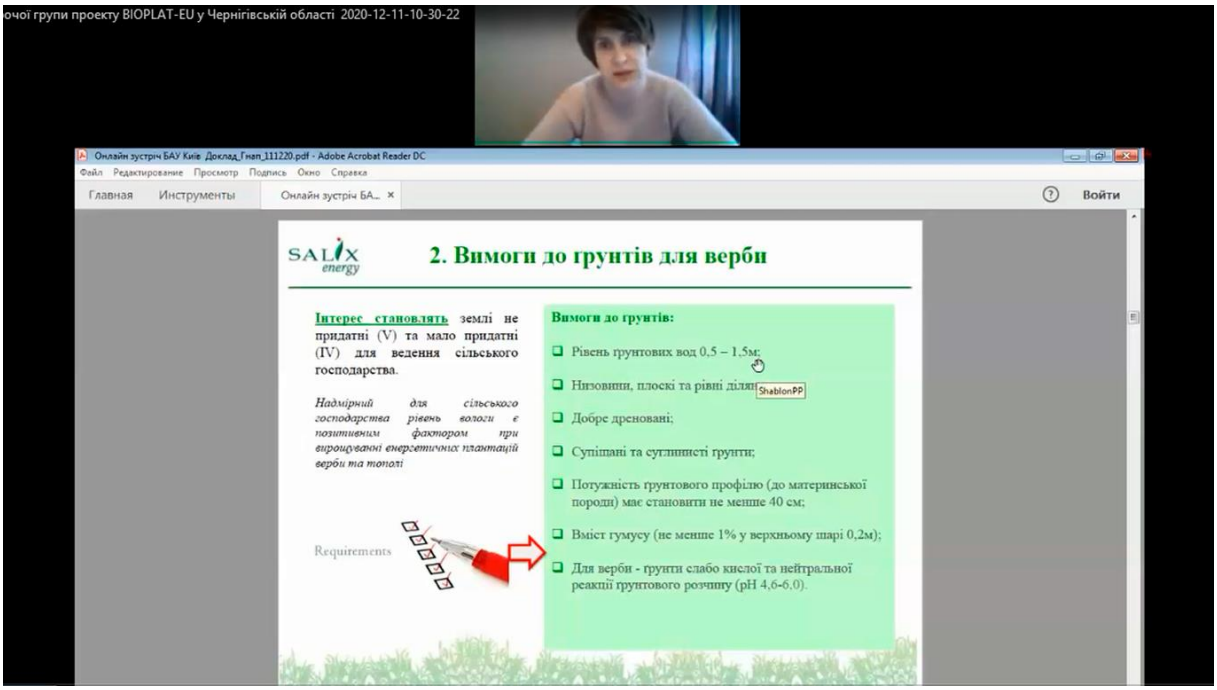
Roman Shved, Executive Director of Ukrteplo, who also spoke during the discussion, said that the Severska Bio TPP, which is being built near Slavutych, is scheduled to be launched in early 2022. The station will consume about 100 thousand tons of wood chips per year. Siverska BioTPP is ready to consume wood chips from energy crops and is interested in suppliers of such biomass.

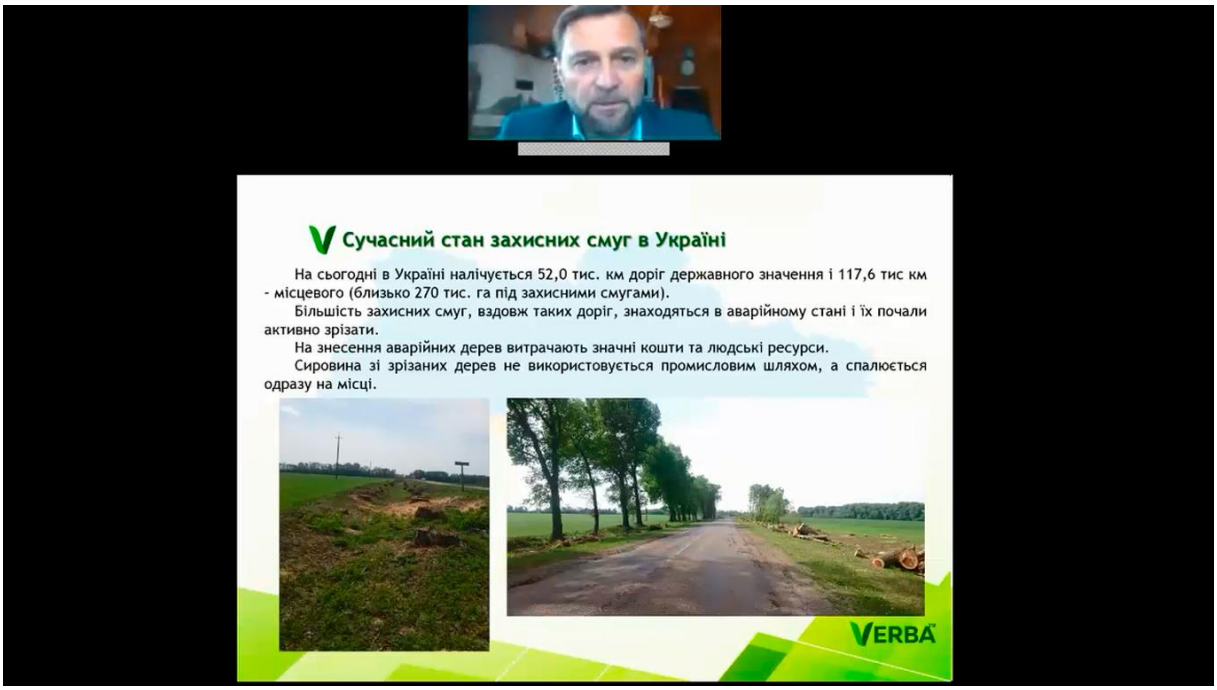

у BIOPLAT-EU у Чернігівській області 2020-12-11-09-47-34
BIOPLAT-EU
Проект «Сприяння сталому використанню малопродуктивних земель для біоенергетики через веб-платформу для Європи»
1-а Зустріч Робочої групи в Чернігівській області, 11 грудня 2020 р.


Онлайн зустріч Робочої групи проекту BIOPLAT-EU у Чернігівській області 2020-12-11-09-47-34
Yurii SHAFARENKO
ДЕРЖЕНЕРГОЕФЕКТИВНОСТІ
Законопроєкт щодо сприяння вирощуванню енергетичних рослин
Проєктом передбачено:
Наслідки прийняття:
Визначення терміну «енергетичні рослини»
Оренда маргінальних земель – без аукціону
Строк договору оренди – не менше 20 років
Орендна плата – до 5% нормативної грошової оцінки
Передбачення державної підтримки
Виконання міжнародних зобов'язань
Економічний розвиток регіонів
Створення робочих місць, зменшення вартості тепла
Відновлення родючості, декарбонізація CO2
Заміщення імпорту газу, економія до 1,8 млрд $
Потенціал заміщення газу ≈ 20 млрд м³

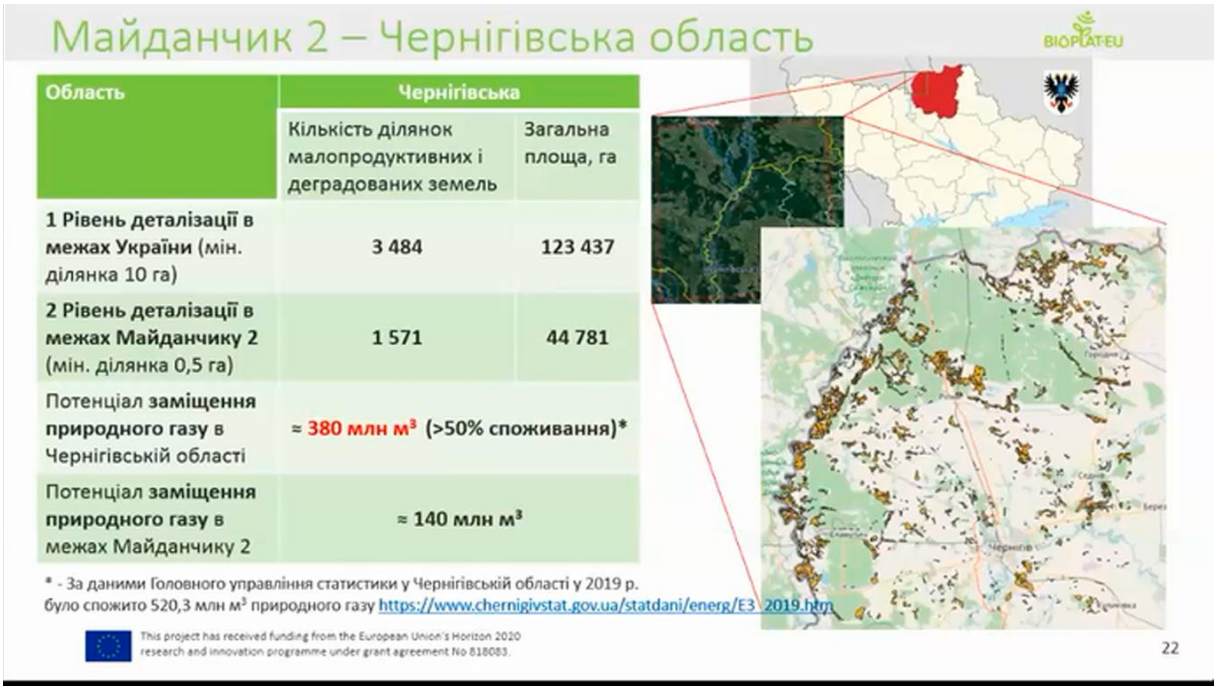

стріч Робочої групи проекту BIOPLAT-EU у Чернігівській області 2020-12-11-09-47-34
Зростання біоенергетики в Україні
30%
на рік
Виробництво біопалив
Постачання енергії з біопалив
Експорт біопалив
тис. т н.е./рік
4 000
3 500
3 000
2 500
2 000
1 500
1 000
500
0
899
917
1 580
1 563
1 565
1 522
1 923
1 875
2 399
1 934
2 606
2 102
3 348
2 832
3 618
3 046
3 726
3 208
3 786
3 362
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
Джерело: Державна служба статистики України

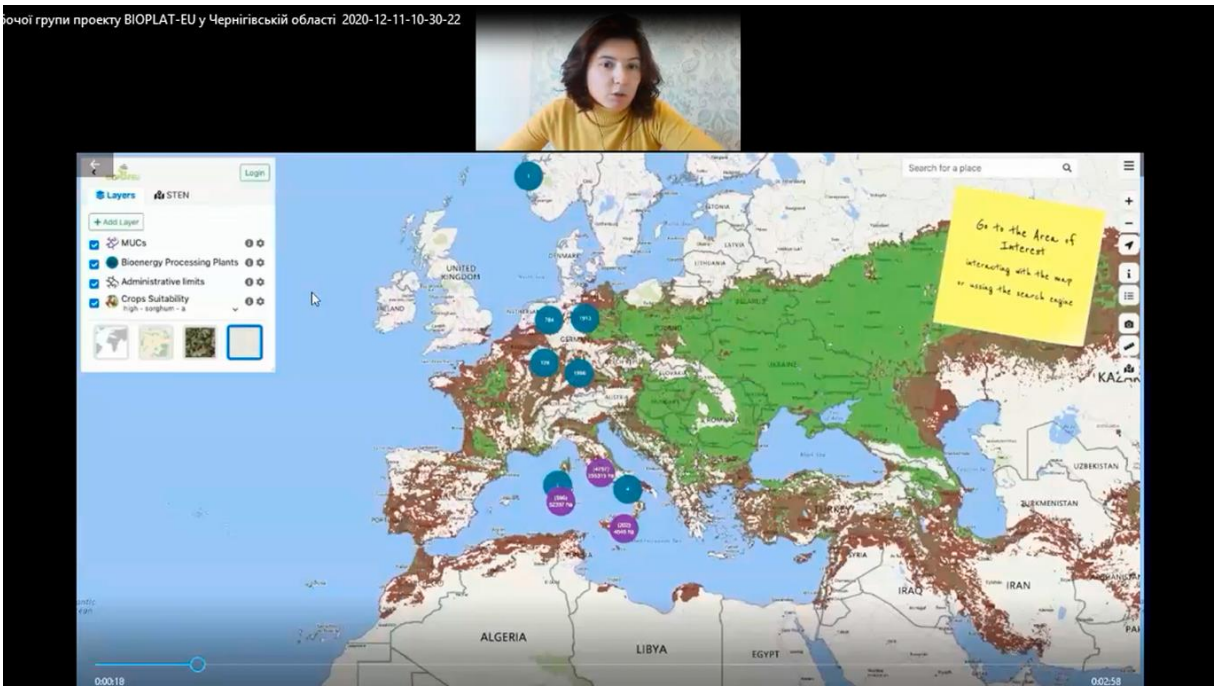

Сталі інновації у ланцюжках створення вартості в біоенергетиці
Кирило Томляк, менеджер програми
European Bank

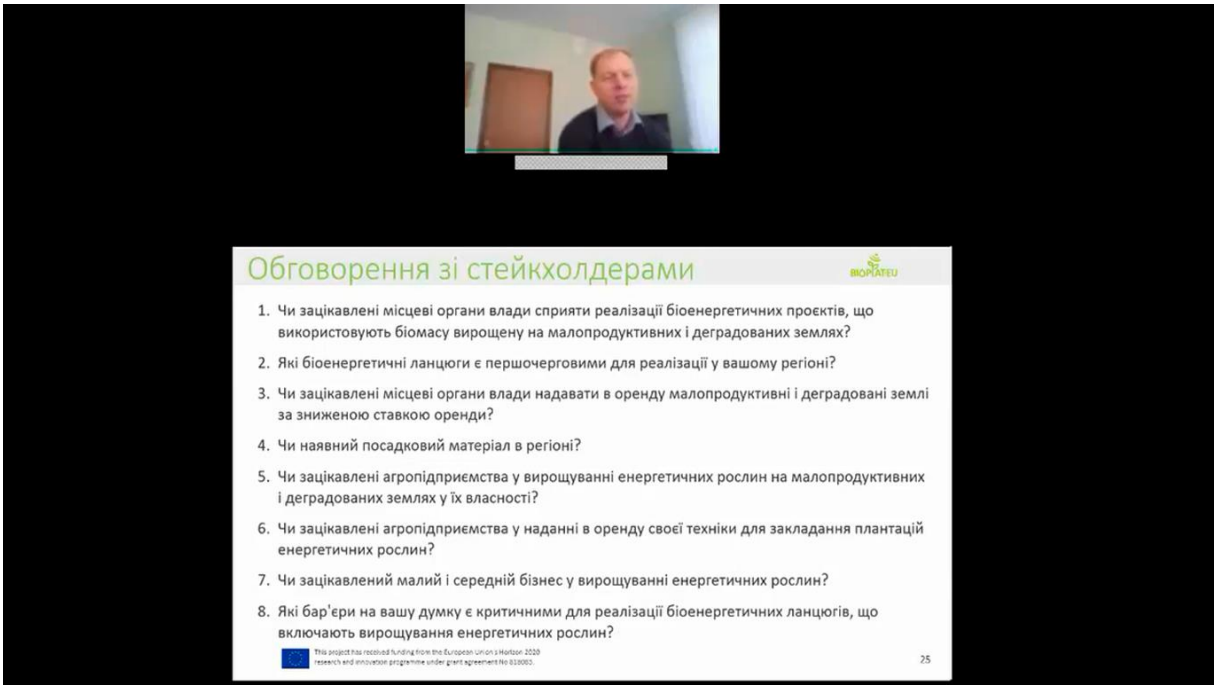

очої групи проекту BIOPLAT-EU у Чернігівській області 2020-12-11-10-30-22
Онлайн зустріч БАУ Київ_Доклад_Гнап_111220.pdf - Adobe Acrobat Reader DC
Файл Редактирование Просмотр Подпись Окно Справка
Главная Инструменты
Онлайн зустріч БА...
Войти
SALIX energy
2. Вимоги до ґрунтів для верби
Інтерес становлять землі не придатні (V) та мало придатні (IV) для ведення сільського господарства.
Надмірний для сільського господарства рівень вологи є позитивним фактором при вирощуванні енергетичних плантацій верби та тополі
Requirements
Вимоги до ґрунтів:
Рівень ґрунтових вод 0,5 – 1,5м;
Низовини, плоскі та рівні ділян
ShablonPP
Добре дреновані;
Супіщані та суглинисті ґрунти;
Потужність ґрунтового профілю (до материнської породи) має становити не менше 40 см;
Вміст гумусу (не менше 1% у верхньому шарі 0,2м);
Для верби - ґрунти слабо кислої та нейтральної реакції ґрунтового розчину (pH 4,6-6,0).

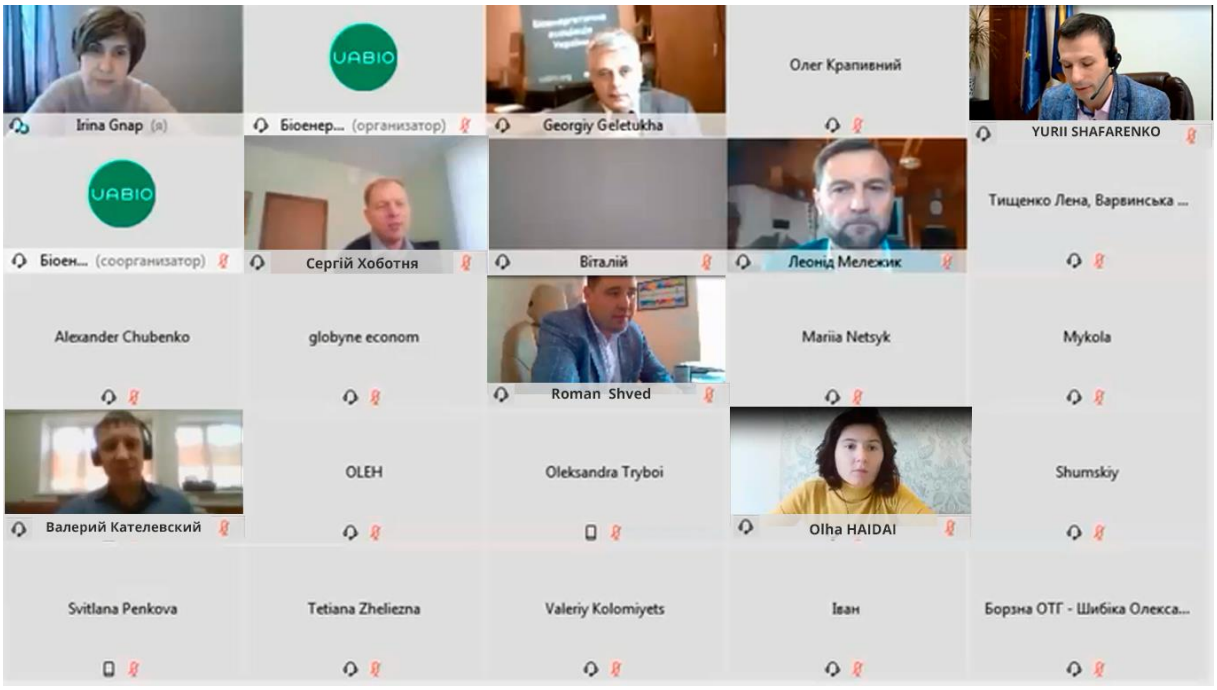

Сучасний стан захисних смуг в Україні
На сьогодні в Україні налічується 52,0 тис. км доріг державного значення і 117,6 тис км - місцевого (близько 270 тис. га під захисними смугами).
Більшість захисних смуг, вздовж таких доріг, знаходяться в аварійному стані і їх почали активно зрізати.
На знесення аварійних дерев витрачають значні кошти та людські ресурси.
Сировина зі зрізаних дерев не використовується промисловим шляхом, а спалюється одразу на місці.
VERBA


Економічні розрахунки окупності на 1-му гектарі у грн.
20 000
10 000
-
-10 000
-20 000
-30 000
-40 000
-50 000
-60 000
3 400
5 000
10 000
15 000
20 000
-57 311
-2 168
-2 191
-811
-811
1 - й рік
2 - й рік
3 - й рік
4 - й рік
5 - й рік
Вкладені кошти грн.
Дохід грн.
20


Майданчик 2 – Чернігівська область
BIOPLAT-EU
Область
Чернігівська
Кількість ділянок малопродуктивних і деградованих земель
Загальна площа, га
1 Рівень деталізації в межах України (мін. ділянка 10 га)
3 484
123 437
2 Рівень деталізації в межах Майданчику 2 (мін. ділянка 0,5 га)
1 571
44 781
Потенціал заміщення природного газу в Чернігівській області
≈ 380 млн м³ (>50% споживання)*
Потенціал заміщення природного газу в межах Майданчику 2
≈ 140 млн м³
* - За даними Головного управління статистики у Чернігівській області у 2019 р. було спожито 520,3 млн м³ природного газу https://www.chernigivstat.gov.ua/statdani/energ/E3_2019.htm
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 818083.
22


очої групи проекту BIOPLAT-EU у Чернігівській області 2020-12-11-10-30-22
Layers
STEN
Add Layer
MUCs
Bioenergy Processing Plants
Administrative limits
Crops Suitability
Search for a place
Go to the Area of Interest
interacting with the map
or using the search engine
UNITED KINGDOM
GERMANY
UKRAINE
KAZAKHSTAN
UZBEKISTAN
TURKMENISTAN
SYRIA
IRAQ
IRAN
ALGERIA
LIBYA
EGYPT
0:00:18
0:02:58


Обговорення зі стейкхолдерами
1. Чи зацікавлені місцеві органи влади сприяти реалізації біоенергетичних проєктів, що використовують біомасу вирощену на малопродуктивних і деградованих землях?
2. Які біоенергетичні ланцюги є першочерговими для реалізації у вашому регіоні?
3. Чи зацікавлені місцеві органи влади надавати в оренду малопродуктивні і деградовані землі за зниженою ставкою оренди?
4. Чи наявний посадковий матеріал в регіоні?
5. Чи зацікавлені агропідприємства у вирощуванні енергетичних рослин на малопродуктивних і деградованих землях у їх власності?
6. Чи зацікавлені агропідприємства у наданні в оренду своєї техніки для закладання плантацій енергетичних рослин?
7. Чи зацікавлений малий і середній бізнес у вирощуванні енергетичних рослин?
8. Які бар'єри на вашу думку є критичними для реалізації біоенергетичних ланцюгів, що включають вирощування енергетичних рослин?
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 818003.
25



14.1.5 Conclusions

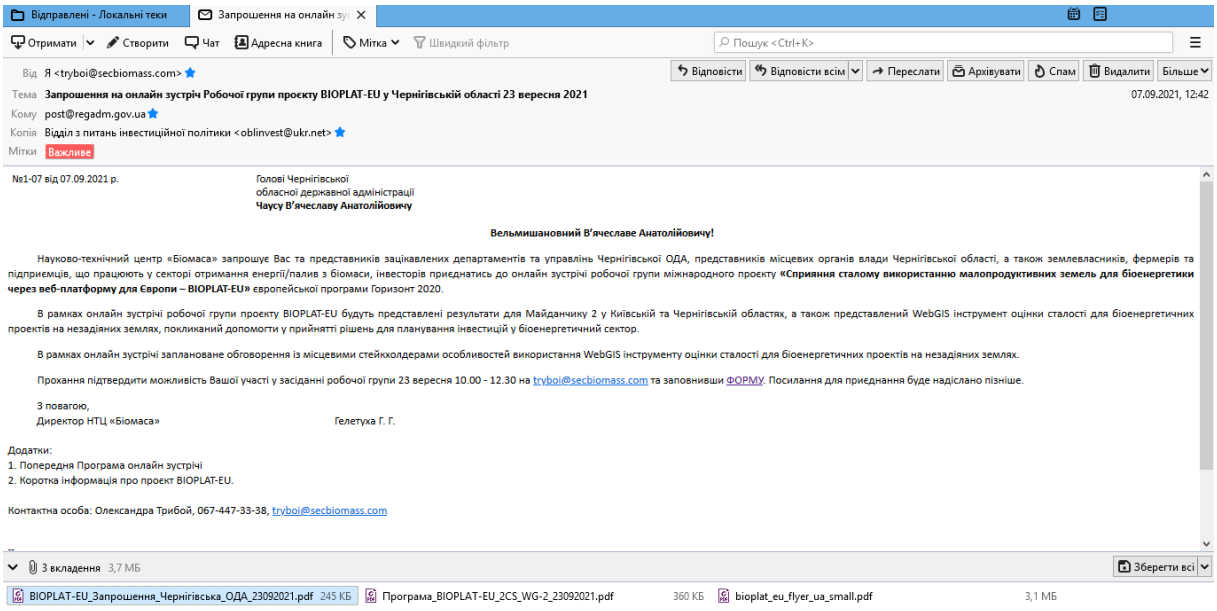
In the conclusion, it was mentioned that there are many underutilized lands in Chernihiv region and the BioTPP that is under construction near Slavutych City (of Kyiv region) is interested in biomass supply, including from energy crops. Representatives of the companies that have plantations and registered species are ready to support growing energy crops in the region within joint pilot projects together with local authorities.

14.2 Second working group meeting

The 2nd Working Group meeting was held on September 24, 2021, in the frame of the online workshop "Results of the BIOPLAT-EU project: Case Study 2 - Chernihiv and Kyiv regions". The majority of the participants were representatives of local authorities (OTG, city, village and settlement councils) of Chernihiv and Kyiv regions, as well as private landowners, small and medium business, scientists and consultants who work or intend to work in the region.

The meeting was aimed at presenting the results of the BIOPLAT-EU project for the Case Study 2, including identification of underutilized lands within these regions, presenting the feasibility study of the potential 2-G ethanol plant on willow biomass, as well as showing and discussing the webGIS tool to local stakeholders.

14.2.1 Invitation



Відправлені - Локальні теки | Запрошення на онлайн зу

Отримати | Створити | Чат | Адресна книга | Мітка | Швидкий фільтр | Пошук <Ctrl+K>

Відповісти | Відповісти всім | Переслати | Архівувати | Спам | Видалити | Більше

Від Я <tryboi@secbiomass.com>

Тема **Запрошення на онлайн зустріч Робочої групи проєкту BIOPLAT-EU у Чернігівській області 23 вересня 2021** 07.09.2021, 12:42

Кому post@regadm.gov.ua

Копія Відділ з питань інвестиційної політики <oblinvest@ukr.net>

Мітки Важливе

№1-07 від 07.09.2021 р.

Голові Чернігівської
обласної державної адміністрації
Чаусу В'ячеславу Анатолійовичу

Вельмишановний В'ячеславе Анатолійовичу!

Науково-технічний центр «Біомаса» запрошує Вас та представників зацікавлених департаментів та управлінь Чернігівської ОДА, представників місцевих органів влади Чернігівської області, а також землевласників, фермерів та підприємців, що працюють у секторі отримання енергії/палив з біомаси, інвесторів приєднатись до онлайн зустрічі робочої групи міжнародного проекту **«Сприяння сталому використанню малопродуктивних земель для біоенергетики через веб-платформу для Європи – BIOPLAT-EU»** європейської програми Горизонт 2020.

В рамках онлайн зустрічі робочої групи проекту BIOPLAT-EU будуть представлені результати для Майданчику 2 у Київській та Чернігівській областях, а також представлений WebGIS інструмент оцінки сталості для біоенергетичних проектів на незадіяних землях, покликаний допомогти у прийнятті рішень для планування інвестицій у біоенергетичний сектор.

В рамках онлайн зустрічі заплановане обговорення із місцевими стейкхолдерами особливостей використання WebGIS інструменту оцінки сталості для біоенергетичних проектів на незадіяних землях.

Прохання підтвердити можливість Вашої участі у засіданні робочої групи 23 вересня 10.00 - 12.30 на tryboi@secbiomass.com та заповнивши ФОРМУ. Посилання для приєднання буде надіслано пізніше.

З повагою,
Директор НТЦ «Біомаса» Гелетуха Г. Г.

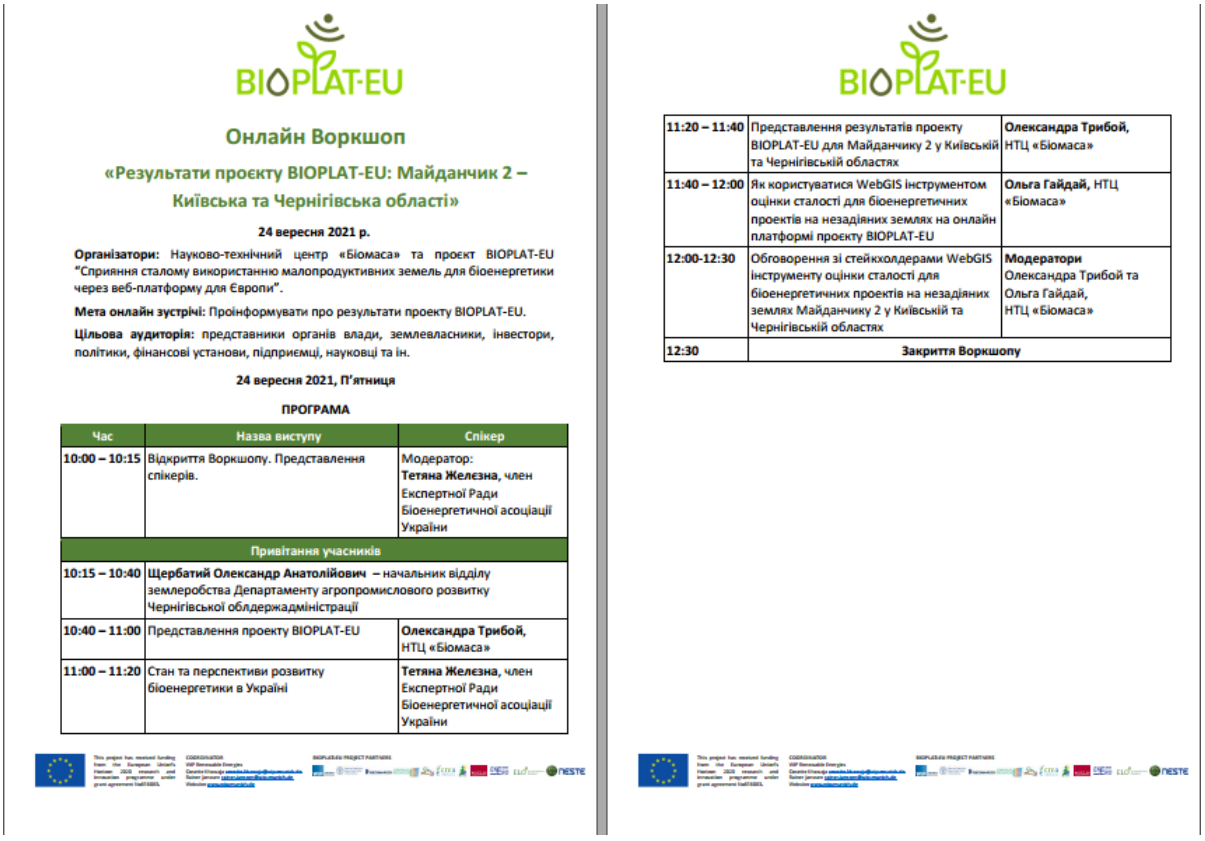
Додатки:
1. Попередня Програма онлайн зустрічі
2. Коротка інформація про проект BIOPLAT-EU.

Контактна особа: Олександра Трибой, 067-447-33-38, tryboi@secbiomass.com

3 вкладення 3,7 МБ | Зберегти всі

BIOPLAT-EU_Запрошення_Чернігівська_ОДА_23092021.pdf 245 КБ | Програма_BIOPLAT-EU_2CS_WG-2_23092021.pdf 360 КБ | bioplat_eu_flyer_ua_small.pdf 3,1 МБ

14.2.2 Agenda



BIOPLAT-EU

Онлайн Воркшоп

«Результати проєкту BIOPLAT-EU: Майданчик 2 – Київська та Чернігівська області»

24 вересня 2021 р.

Організатори: Науково-технічний центр «Біомаса» та проект BIOPLAT-EU "Сприяння сталому використанню малопродуктивних земель для біоенергетики через веб-платформу для Європи".

Мета онлайн зустрічі: Проінформувати про результати проекту BIOPLAT-EU.

Цільова аудиторія: представники органів влади, землевласники, інвестори, політики, фінансові установи, підприємці, науковці та ін.

24 вересня 2021, П'ятниця

ПРОГРАМА

Час	Назва виступу	Спікер
10:00 – 10:15	Відкриття Воркшопу. Представлення спікерів.	Модератор: **Тетяна Железна**, член Експертної Ради Біоенергетичної асоціації України
Привітання учасників		
10:15 – 10:40	**Щербатий Олександр Анатолійович** – начальник відділу землеробства Департаменту агропромислового розвитку Чернігівської облдержадміністрації	
10:40 – 11:00	Представлення проекту BIOPLAT-EU	**Олександра Трибой**, НТЦ «Біомаса»
11:00 – 11:20	Стан та перспективи розвитку біоенергетики в Україні	**Тетяна Железна**, член Експертної Ради Біоенергетичної асоціації України

BIOPLAT-EU

11:20 – 11:40	Представлення результатів проекту BIOPLAT-EU для Майданчику 2 у Київській та Чернігівській областях	**Олександра Трибой**, НТЦ «Біомаса»
11:40 – 12:00	Як користуватися WebGIS інструментом оцінки сталості для біоенергетичних проектів на незадіяних землях на онлайн платформі проекту BIOPLAT-EU	**Ольга Гайдай**, НТЦ «Біомаса»
12:00-12:30	Обговорення зі стейкхолдерами WebGIS інструменту оцінки сталості для біоенергетичних проектів на незадіяних землях Майданчику 2 у Київській та Чернігівській областях	**Модератори** Олександра Трибой та Ольга Гайдай, НТЦ «Біомаса»
12:30	**Закриття Воркшопу**	

14.2.3 Summary of presentations and discussions

As the meeting was held within the Workshop it included also a general presentation on bioenergy development in Ukraine, which was presented by Tetiana Zheliezna, Head of Division at SECB and a member of the Expert Council of the Bioenergy Association of Ukraine (UABIO). Oleksandra Tryboi, a senior consultant at SECB, spoke about the overall results of the BIOPLAT-

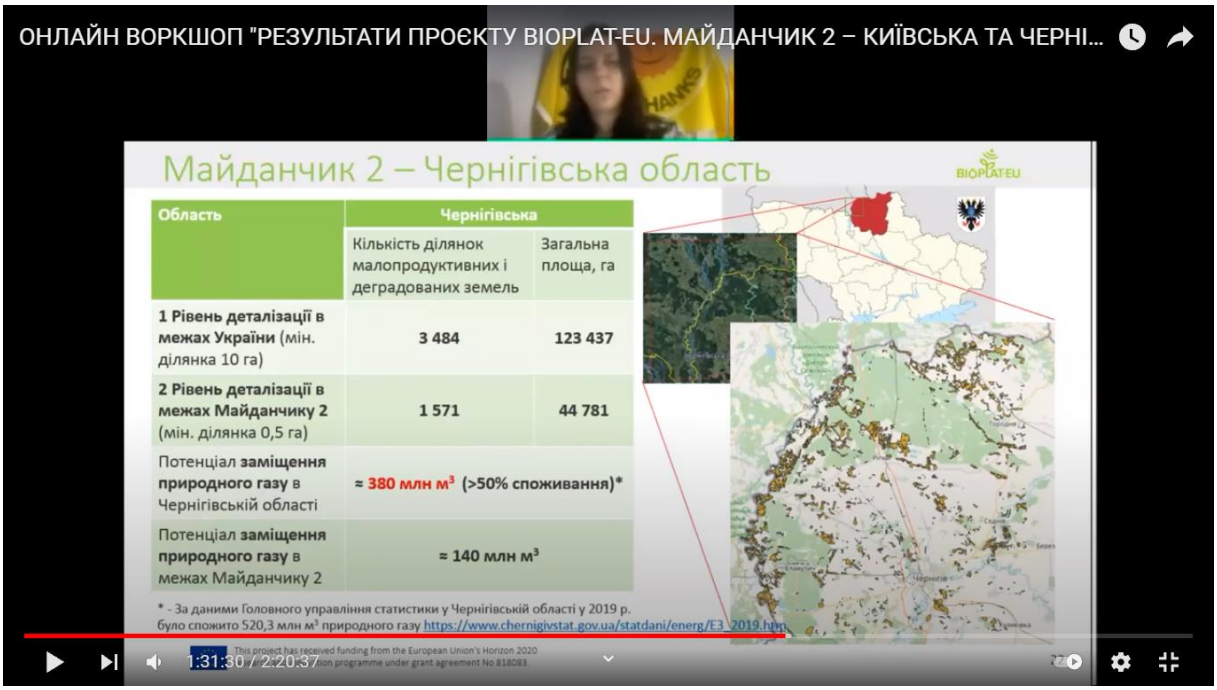
EU project, as well as the results for Case Study 2 - Chernihiv and Kyiv oblasts. Olga Haidai, senior consultant of SECB, presented to the participants the WebGIS tool for assessing the sustainability of bioenergy projects and talked about the peculiarities of working with it.

Within the discussion, there was a question on why for a CHP the sustainability indicator 'Air Quality' is compared with petroleum, as in Ukraine usually natural gas is substituted. Another question was whether the underutilized lands on the map contain cadastre number and information on the status of land, including ownership and land use type.

A UNIDO expert on liquid biofuels Mykola Kobets within a discussion asked why the shape of the land plots are so irregular. Olha Haidai explained that this shape was received after analysis of satellite data on unused land taking into account all limitations (like natural reserves, forests, steep slopes, etc). He also mentioned that BIOPLAT-EU platform is a good example of cooperation and information presented for Ukraine is highly valuable.

Tetiana Zheliezna, Head of Division at SECB and a member of the Expert Council of the Bioenergy Association of Ukraine (UABIO), who noted that bioenergy is a key element in achieving the climate goals of the European Union and the goals of sustainable development. The question is how to ensure sustainable biomass production and the solution to this issue can be the use of marginal, unproductive and contaminated land, as they do not compete with the production of food and feed but can be used to produce biomass for energy needs.

On behalf of the Chernihiv Region Administration, Oleksandr Shcherbatyi, Head of the Department of Agriculture of the Department of Agro-Industrial Development, greeted the participants of the workshop and noted that the use of low-productive and degraded lands will increase well-being of both the population and communities.

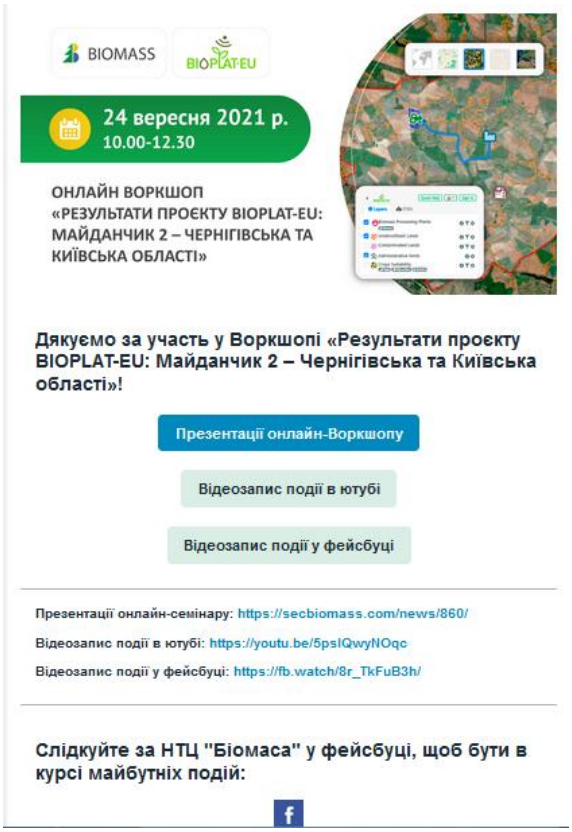


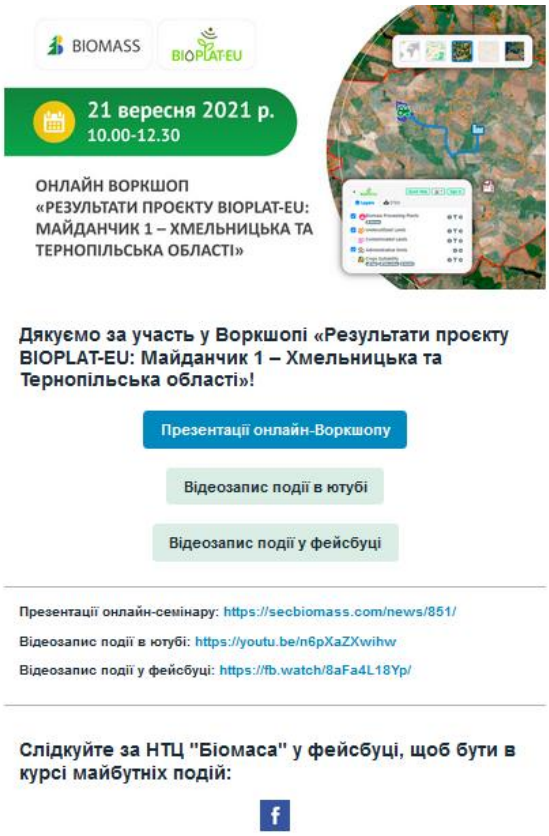
14.2.4 Conclusions

In the conclusion, it was mentioned that presentations of the speakers and video of this meeting will be sent to participants, as well as published on the SECB website. It was mentioned to the participants that STEN manual would be translated to Ukrainian to make work with the BIOPLAT-EU webGIS tool more convenient to Ukrainian users.

14.3 Follow-up actions

After the meetings, all presentations and video were published on the SECB website (https://secbiomass.com/news/851/, https://secbiomass.com/news/860/) and sent to participants per e-mail.


BIOMASS
BIOPLAT-EU
24 вересня 2021 р.
10.00-12.30
ОНЛАЙН ВОРКШОП
«РЕЗУЛЬТАТИ ПРОЄКТУ BIOPLAT-EU:
МАЙДАНЧИК 2 – ЧЕРНІГІВСЬКА ТА
КИЇВСЬКА ОБЛАСТІ»
Дякуємо за участь у Воркшопі «Результати проєкту BIOPLAT-EU: Майданчик 2 – Чернігівська та Київська області»!
Презентації онлайн-Воркшопу
Відеозапис події в ютубі
Відеозапис події у фейсбуці
Презентації онлайн-семінару: https://secbiomass.com/news/860/
Відеозапис події в ютубі: https://youtu.be/5psIQwyNOqc
Відеозапис події у фейсбуці: https://fb.watch/8r_TkFuB3h/
Слідкуйте за НТЦ "Біомаса" у фейсбуці, щоб бути в курсі майбутніх подій:


BIOMASS
BIOPLAT-EU
21 вересня 2021 р.
10.00-12.30
ОНЛАЙН ВОРКШОП
«РЕЗУЛЬТАТИ ПРОЄКТУ BIOPLAT-EU:
МАЙДАНЧИК 1 – ХМЕЛЬНИЦЬКА ТА
ТЕРНОПІЛЬСЬКА ОБЛАСТІ»
Дякуємо за участь у Воркшопі «Результати проєкту BIOPLAT-EU: Майданчик 1 – Хмельницька та Тернопільська області»!
Презентації онлайн-Воркшопу
Відеозапис події в ютубі
Відеозапис події у фейсбуці
Презентації онлайн-семінару: https://secbiomass.com/news/851/
Відеозапис події в ютубі: https://youtu.be/n6pXaZXwihw
Відеозапис події у фейсбуці: https://fb.watch/8aFa4L18Yp/
Слідкуйте за НТЦ "Біомаса" у фейсбуці, щоб бути в курсі майбутніх подій: