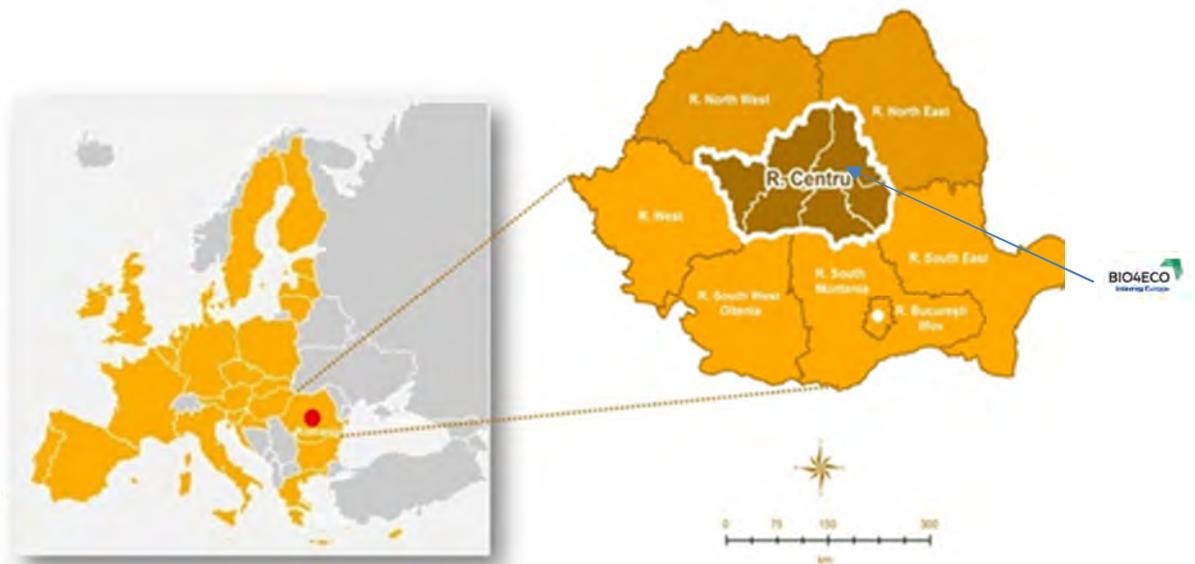


**REVIEW of the
THEMATIC WORKSHOP
„How to increase the social acceptance of
bioenergy policies?”
6 – 7 March 2018, Brasov, Romania**





Introduction

BIO4ECO is an Interreg Europe project running from April 2016 to September 2020 that aims to improve regional and national policy process and implementation by addressing the transition to a low carbon economy in relation with renewable energy use, energy efficiency of building and forest and agricultural biomass.

In order to reach this goal and achieve greater integration among the project partners, BIO4ECO foresees **8 international meetings (thematic workshops and study visits)**. These events are the cornerstone of the learning process and facilitate exchange of experiences among the project partners and regional stakeholders.

Between 6 and 7 March 2018 RDA Centru (the Romanian partner of the BIO4ECO project) hosted the 6th international meeting and a thematic workshop “*How to increase social acceptance of bioenergy policies*”.

The two day meeting started on Tuesday morning with the international thematic workshop and continued in the afternoon with a study visit in Brasov. The programme of the second day included study visits to several biomass energy plants in Covasna County and concluded with a Steering Group Meeting.

This event represented an opportunity to exchange experiences and good practices among project partners and their stakeholders on issues related to social acceptance of the bioenergy policies, the existing policy framework in each region and the involvement of the communities in the implementation of local bioenergy projects.

A. Thematic Workshop Braşov, Romania

No. participants: 62

On 6th March 2018, the Regional Development Agency Centru (RDA Centru), the Romanian BIO4ECO partner organized the 6th International Meeting within the BIO4ECO project - a **thematic workshop on the Social Acceptance of the bioenergy policies**. The workshop was held in Brasov and gathered over 60 bioenergy experts from eight European countries: Spain, Latvia, Slovenia, Italy, Bulgaria, France, Finland and Romania.

The workshop explored challenges and opportunities for increasing the social acceptance of the bioenergy policies.

The local stakeholders (academics working in the bioenergy sectors, clusters, representatives of the regional and local public institutions, energy policy experts etc.), got the possibility to learn from foreign experiences and compare the existing local challenges related to social acceptance of the bioenergy projects and policies.

The event also brought interest of the local media and thematic articles were published in the regional media.

The workshop started with a welcoming note from Ms. Adriana Muresan, Director of the Programming Department within RDA Centru, followed by presentation of Mr. Adriano Raddi, the project manager of the BIO4ECO project.



Mr. Raddi's presentation provided an overlook of the project and the context of the meeting. During his presentation, Mr. Adriano Raddi highlighted the importance of the policies in enhancing social acceptance of the bioenergy projects and developing the local communities. He also noted that is important to promote the use of biomass for energy production (including in urban areas) and highlighted that, if the right policies are applied, the biomass use is not dangerous for the environment and the human health and allows to guarantee a regular and constant flow.

After the project presentation, the workshop was divided into 2 sessions:

- Session 1: **Bioenergy in Centru Region, Romania | Policies – Programmes – Projects, dedicated to regional experience in the biomass and bioenergy field.**
- Session 2: **European models of increasing the social acceptance of bioenergy policies**

The speakers of the two sessions, experts in the bioenergy sectors, were encouraged to do the following: (1) Identify and share best practices regarding the existing bioenergy policy framework in each region; (2) Share their experience and provide suggestions for increasing the social acceptance of the bioenergy policies.

Session 1 focussed on the bioenergy policies, programmes and projects from Centru Region, Romania. This session involved discussion regarding the state of the art of biomass resources in Centru Region, the policy framework existing in the field of bioenergy in Romania and in Centru Region and the funding instruments existing in Centru Region for energy efficiency and bioenergy.

Furthermore, the speakers presented and discussed several regional solutions for sustainable production of energy using the local biomass resources. First, Mr. Talagai Nicolae, Ph.D. Student at the University Transilvania of Braşov, Faculty of Silviculture and Forest Engineering, Department of Forest Engineering, Forest Management Planning and Terrestrial Measurements, highlighted the benefits of using dedicated crops for energy production and presented his research work on developing concepts for automated data collection activities related to short rotation cultures focusing on the equipment and the operational procedures. In his presentation, Mr. Talagai described the Romanian operational practices related to small-scale willow holdings and gave an overview on the experiences gained so far in this matter. Based on those experiences, he developed theoretical concepts for the automation of data collection activities for such operations. His research concluded that the integration of GPS-GIS technologies with fleet management systems and low-cost sensor data loggers may have a promising potential in automating the field data collection tasks enabling the use of highly-trained personnel to monitor several concomitant operations or to gather long term data at low costs.

Afterwards, the session included two presentations regarding the local community involvement in the implementation of a bioenergy project in Ghelinta, highlighting the role of the regional cluster within the project and



in promoting bioenergy policies and an example of international cooperation regarding the importance of implementing the concept of "cascading use" in the wood industry.

Participants found these presentations very insightful and thought-provoking as they might help them identify gaps in the existing solutions for increasing the social acceptance in the region and for identifying potential new areas of research in the field of bioenergy policies and social acceptance.

During the second section, the international partners from Slovenia, France and Finland presented their own experiences regarding the social acceptance of the bioenergy projects and policies, mainly: an example of local community involvement from France: "*The assembly of a short circuit supply wood boiler program: the example of the Municipality of Fraisse-sur-Agout in Occitania*", a short overview of the connections between social acceptance and bioeconomy from a Finnish researcher point of view: "*Approaches on social sustainability from the perspective of forest bioeconomy*" and a short presentation of the biomass policy framework in Slovenia: "*Support of the use of biomass as challenging issue of the Slovenian Forest policy*". The speakers were invited to evaluate the differences between their region and Centru Region and to identify possible similarities between each situation presented.

During this international workshop the project partners, regional stakeholders and other attendees discussed about the possible approaches that can be applied to enhance the social acceptance of the bioenergy policies and projects in the regions involved in the BIO4ECO project. Also during these sessions, the attendees discussed the most effective approaches for promoting the bioenergy sector, approaches that must be rooted in local knowledge and which might be led by community members.

This meeting also represented a way to share international experiences with the local stakeholders (public authorities, Clusters, SME Representatives etc.) and was proposed to capitalize on knowledge available at regional and international levels.

Later in the evening the participants were invited to a short guided tour in Brasov. During this tour were presented the most representative buildings of Brasov (the City Hall, the building of the Metropolitan Agency for Sustainable Development of Brasov, Black Church, the facilities of the Transilvania University of Brasov, relevant buildings from Brasov etc.).



Energy efficiency is a priority for the municipality. For example, Braşov Metropolitan Agency (AMB), monitors all public institutions in this respect, and for some of these institutions we have come up with concrete action plans.

Later the participants had dinner at the Sergiana Restaurant, which also encouraged further networking.



STUDY VISITS

On the second day of the workshop, the participants had the opportunity to find more about the bioenergy projects developed in Centru Region. RDA Centru, with the support of Green Energy Innovative Biomass Cluster, organised four study visits in Covasna County, Romania:

Study Visit 1: Count Mikes Estate, Zabala, Covasna County (<http://www.zabola.com>)

A good practice of heating a 500 ha private domain using local biomass and locally manufactured boilers.

The Zabola Estate - Transylvania is a guesthouse set on a 500 hectares private domain, including a meadow and forests. It features 2 lakes, 4 fishing ponds, hiking and horse riding facilities, as well as a sauna.

Environmental protection and involvement of the local community are important issues on the Estate: the heating systems (a locally manufactured biomass boiler) use local resources (woodchips) and the employees use electric tricycles. The estate is committed to forest management and forest harvesting practices based on the internationally accepted principles of sustainable forest management. In terms of leisure activities, hunting is replaced with walks in the forests, bear and bird watching sessions and hiking tours.

During this study visit, the participants had the opportunity to see the 400 kW biomass system that produces heat for the existing facilities on the domain. The boiler uses 900 cubic meters biomass (woodchips) to produce 900 MWh/year.



Study Visit 2: Ghelintă - the bioenergy village (<http://www.biovill.eu/>)

This study visit focused on the involvement of the local business sector from Ghelintă, Covasna County in producing energy using local biomass resources.

Ghelintă is a small village located in Covasna County, Romania. The vision of the Ghelintă is to produce and consume its energy locally. The framework conditions to make this vision true are: Ghelintă municipality has **sufficient solid biomass resources** and a **strong local entrepreneurship in wood working**. There are more than 28 sawmills and several logging groups working at local and regional level. The SMEs in the sawmill industry process the round wood mainly to timber for the national market. Available wood residues should be the basis to



become a bioenergy village. Also, due to the **active participation of the mayor, the local council, several SMEs and decision makers**, the bioenergy value chain development is possible.

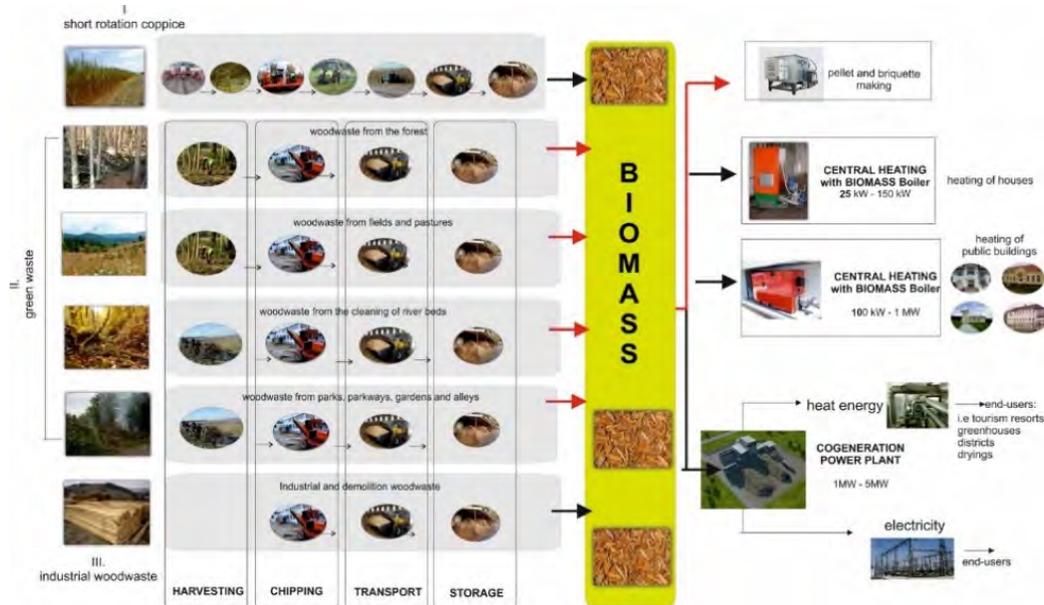


Figure 1. "1 Village 1 MW" Concept Ghelinița, Covasna

Beside the public buildings, biomass is also used to produce energy within the local business sector. For example, **biomass is used to produce energy within the local bakery**. Currently, this bakery is heated using a biomass based oven, which is operational from September 2017. The oven has a production capacity of 150 kg bread/h and was installed with the assistance provided by experts from Green Energy Association team and Erpek IND.

The biomass-based oven produces the necessary heat for the production process (heat demand of 480 MWh/a). The preheater has a capacity of 120 kW installed power, with 3000-4000 working hours/a it will produce 0.45 GWh/a heat power. The system is supplied with feedstock produced from local sources (primarily wood waste from local sawmills).



The bioenergy system installed at the local bakery from Ghelinița, Covasna is just one piece of the "1 Village 1 MW Concept", a bigger project which aim to create an energy sustainable lifestyle of the inhabitants of this small Romanian village.



European Union
European Regional
Development Fund



On the way to Sfântu Gheorghe the experts stopped to an 8 ha **energy willow plantation** located in Moacșa, Covasna County. Here are harvested annually 50 to 60 wet tons of materials. The plantation from Moacșa is one of the existing dedicated crops plantation from Covasna County. These energy crops represent an alternative to forest biomass and are used to meet consumer energy demand from nearby rural areas.



Study Visit 3: ASIMCOV (Association of Small and Medium Enterprises of Covasna County)

Locally produced biomass for heating the facilities of a business incubator – the Hq. of 46 SMEs

Located in the heart of Sfântu Gheorghe, the business incubator of ASIMCOV provides office space and business assistance for 46 start-ups and local SMEs. The building was refurbished in 2010 and due to an increased price of the natural gas, the existing heating system was replaced, being installed a containerised biomass boiler producing 135 kW. The boiler is operational only in the winter (1,800 hours at maximum heat load). The boiler uses 300 cubic meters of wooden biomass (sawdust and wood chips) and produces 300 MWh/year.



Also, during this visit the participants had the opportunity to learn about the business incubator and its activities.





Study Visit 4: VALEA CRISULUI GREENHOUSES

Promoting the benefits of using locally produced biomass for heating an agriculture consumer.



SC PRODUCTIE SI COMERT DALIA SRL (DALIA) is a floricultural producer located in Valea Crisului Village in Covasna County. Dalia Company was set up in 1993 and has continuously developed. The company has more than 1 ha of greenhouses.

Initially the greenhouse heat demand was produced by inbuilt energy sources equipped with wood stoves using sawdust and firewood. The wood stoves were obsolete and not energy efficient. Therefore, in order to decrease the energy costs, the company decided to install new biomass boilers.

Currently, the greenhouses are heated using biomass boilers: four boilers of 750 kW capacity and two boilers of 500 KW capacity. For producing 10000 MWh/year the boilers use 10.000 cubic meters of raw materials (sawdust, woodchips).



The needed biomass quantity (forest and agricultural residues) is supplied from local producers.



CONCLUSIONS:

- Biomass guarantees a constant flow of energy and if the right policies are applied, biomass use doesn't have any risks to people and health => the biomass policies must be disseminated to the public;
- Each region involved in the project has its own policy framework aimed at supporting the social acceptance of bioenergy and biomass use;
- During the meeting, it was demonstrated that context has a very important role in the acceptance of bioenergy, and some contextual elements like cultural, social, historical and, political situations of each context should be considered in order to better understand the social acceptance of bioenergy systems.
- Open information about the benefits of the biomass use and the techniques applied, are key factors that can increase the social acceptance of bioenergy projects;
- Local social acceptance can be achieved by ensuring clear benefits to local communities, engaging them in the process and by raising awareness regarding the existing technologies, systems and energy resources used in producing bioenergy;
- The workshop participants agreed that collaboration in the early stages of a project is key to ensure satisfaction among multiple stakeholders; this includes public engagement and information dissemination prior to initiating the official permitting procedure and thus, before any decision concerning the project has been taken;
- Multi-stakeholder collaboration in disseminating information can add special credibility and weight to a project (i.e. project promotion via clusters and public institutions);

The discussions focused on bioenergy policies and strategies will be continued at the next meeting in Finland in June, 2018.