



Promoting stakeholder engagement and public awareness
for a participative governance of the European bioeconomy



Proceedings of the living lab activities in the Stara Zagora region of Bulgaria

Phase I: June – October 2017



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KEY MESSAGES

This document summarises the discussions, outcomes and findings of the first phase of BioSTEP's living lab activities that took place between June and October 2017 in the Stara Zagora region of Bulgaria. During this first phase, the participants in the living lab discussed objectives and concrete ideas for the long-term development of the regional bioeconomy. They exchanged thoughts on the existing advantages and available natural resources that the region has for the development of production of bio-based products. Participants also discussed possible measures to mobilize the existing scientific potential in support of the bioeconomy development, and their ideas for addressing key regional issues, such as public awareness, the need to promote bio-based products, the deserted high altitude lands, unemployment, the expanding the scope of development, the use of ethereal-oil crops, etc. The following key messages emerged from these discussions:

- The region has a well-developed industrial capacity, with a favourable structure for production and processing facilities. These facilities are a very important factor and a stable base for the development of the region's bioeconomy and the introduction of modern innovative technologies in the production and processing of bio-based products of plant and animal origin, as well as the creation of new products.
- The region contains sufficient scientific potential to develop innovative technologies to make full use of natural resources and deploy non-waste technologies for environmental protection.
- Integration between actors is key to creating new opportunities and fully developing the natural resources and local capacities. Associating them horizontally will help reduce market risk and increase market power. One idea that all participants supported was the establishment of clusters with separate production units. Vertical integration between them will contribute to better control of value added, and not just for the actors in the chain.
- The bioeconomy in the area has a stable base for development, given the specific natural conditions for growing essential oil and healing crops, cotton and durum wheat.
- Coordination of activities and combining production with other activities typical for the region, such as (eco)tourism, balneotherapy, aromatherapy, cultural tourism, creation of specific regional branded products and their promotion on the market guarantees a sustainable development of this activity.
- It is necessary to increase the involvement of local authorities and civil society in solving broadly supported strategic objectives related to the development of the region's bioeconomy in order to achieve socio-economic impact.

Introduction: Living labs in the context of BioSTEP

As part of its stakeholder engagement activities, the BioSTEP project aimed to design and implement so-called "living labs" to test good practices at the regional level. A living lab is a kind of public-private (and people) partnership that promotes shared open innovation among stakeholders who work in the same geographical area. The living lab approach is an innovative concept, where citizens and end users take an active role in so-called user-driven processes of innovation that could range from new products/processes or services to concerted regional strategies or policies/legislative proposals. Living labs allow for interactive communication amongst actors in order to find innovative solutions to common needs. In this way, living labs can help connect research and academia, centres for local development, organisations of the manufacturing sector like chambers of commerce, business clusters, trade associations, business incubators and experts as well as municipalities and other (local) government representatives.

Specifically, BioSTEP applied and tested tools for participative governance of the bioeconomy in two regional case studies in Italy (Veneto) and Bulgaria (Stara Zagora). In the context of the living labs, relevant stakeholders discussed alternative programmes of measures and their socio-economic and environmental impacts. The outcomes of the discussions are supposed to support regions in formulating appropriate and effective programmes of measures to foster their regional bioeconomies.

The living lab activities in the Stara Zagora region of Bulgaria were split into two phases: the first phase focused on concept mapping and the second phase focused on the development and discussion of concrete (policy) measures to support the development of the bioeconomy in the Stara Zagora region. The purpose of the first phase meetings was to listen to the views of all relevant stakeholders on the prospects for the development of the bioeconomy, the current problems and to discuss measures and policies that would contribute to encourage producers.

As a prelude to the final October meeting closing the first phase of the living lab activities, our team had regular contacts with a number of stakeholders in the target region. Several meetings got together representatives of local authorities, such as the regional government, non-governmental organisations, such as the local business support organisations, the Thracian University and other scientific institutions. The idea behind these meetings and contacts was to identify the local practices, the existing capacities and natural resources, the potential of development for the bioeconomy and its related processes, with the final aim to develop a strategic vision for the region on how to further work in this new field.

Meeting 1: Brainstorming

On 2 June 2017, morning, a meeting gathered seven representatives of the scientific circles (Thracian University, Institute of Roses and Essential Oil Crops, Agrarian Institute). The purpose of the meeting was to hear the views of the various participants about the region's potential, existing practices, and to find good practices to publicised in order to attract public attention to these products and encourage bioproducers in the region. Attendants also discussed specialties within the university's curricula that can provide future specialists to support the region's bioeconomy development. The discussion outlined several aspects and challenges key to this region, including:

- Ethereal-oil cultures
- Durum wheat
- Lands for re-cultivation (areas in the region close to mining and quarrying facilities)
- Problems of animal breeding in the region

Stakeholders raised these topics because they require the pooling of efforts by all stakeholders, dedicated political will and interest, as well as concrete measures to address them properly. Amongst others, stakeholders discussed the potential of developing a strategy for the deployment of a bioeconomy in the region, with the establishment of specific tasks and their timing that would need to be implemented.

Meeting 2: SMEs and the bioeconomy

On 2 June 2017, an afternoon meeting was held with seven representatives of the civil society - the chamber of commerce and industry, the Stara Zagora Industrial association, and the Regional Development Agency. During this meeting, participants examined opportunities for creating small and medium-sized enterprises producing bio-based products, the need to associate individual actors along the chain to preserve the value added in the region and to enhance the competitiveness and sustainable development. Among other topics discussed were the difficulties encountered by small and medium-sized enterprises in placing their products on the market, the lack of opportunities for direct sales despite the quality of the products, and measures that can be undertaken at regional level to create more favourable conditions for development of companies producing bio-based products.

Meeting 3: Local authorities and the bioeconomy

On 20 July 2017, a meeting convened in the Regional Government of the Stara Zagora region with the participation of the Regional Governor and experts from the Municipality and the Regional Government. After presenting the objectives and activities of the BioSTEP project, the discussion focused on the region's capabilities, such as natural resources, industrial capacity and skilled labour force. Participants also discussed the possibilities for re-cultivation of polluted soils from thermoelectric power stations, utilisation of waste, and the construction of biogas plants. Participants expressed their willingness to join in further discussions and to assist in the preparation of a specific work programme.

Fourteen people, representatives of local authorities, academics and civil society, took part in the first phase of the living lab.

Meeting 4: Joint stakeholder meeting on 13 October

Dedicated to the organic cultivation of essential oil crops and the production of essential oils, the final living lab meeting of Phase I was organised as a public event and brought together representatives of the Regional government, the Municipality, the State fund "Agriculture", the Chamber of Commerce and the Industrial Association of Stara Zagora, the Agency for Regional Development, the Bulgarian bio-association, Thracian University, Varna University of economics, the Institute of Roses and Essential Oil Cultures, and representatives of companies.

At the beginning of the meeting, Prof. Pavlov from the Thracian University briefly presented the main elements of the drafted strategic document for development of the bioeconomy in the Stara Zagora region. The presentation described the mission and objectives of the development of the bioeconomy in the region and the main tasks that arise from it. The document reviews the state of the region, the processes and products of the bioeconomy, as well as the existing legal requirements for bio-based products. The main directions for development of the bioeconomy in the region and the specific priority objectives, tasks and activities were presented, too. It was explicitly pointed out that the document is an open draft and it is to be distributed among companies, local authority experts and civil society in order to be discussed and refined within the next month.

The following presentations and discussions focused mainly on the biologically grown ethereal-oil crops and the production of essential oils, and data of experts from the scientific institutes about the state of the sector were mentioned together with the most common problems. The presentations showed that recent years have seen a displacement of the cultivation of these crops in other regions, which do not have the specific natural features of the Stara Zagora region and thus do not achieve the same quality of essential oils. This stimulated a discussion on the causes of the problem and appropriate measures to be taken. It was also emphasised that yields per single area are increasing, which speaks of the experience gained and the scientific developments for growing these crops in the area.

A special place in the region was devoted to the processing of waste, which is currently only used as compost for soil fertilisation. Therefore, participants highlighted the need to close the chain for full crop utilisation, as these wastes are extremely rich in minerals that are currently not being used. Stakeholders highlighted that these ingredients also occur in the seeds of different industrially processed vegetables in the region. All participants agreed on the need to seek appropriate developments and technologies for their utilisation, and to disseminate information among all stakeholders.

Summarising the need to combine production with other activities, an innovative company in the region provided good examples regarding the cultivation of essential oil crops, the production of biopharmaceuticals and the development of tourism. All participants were invited to visit this company, learn from their experience and expand their respective businesses. The rich basis for the development of biopharmaceuticals in the region has been highlighted and the inadequate use of it so far.

Many participants supported the idea of public discussions of the strategy for development of the bioeconomy in the Stara Zagora region, creating a working group to summarise and elaborate on the remarks and supplements made. It was unanimously decided that Phase II of the living lab would be devoted to the bioeconomy strategy development in the region, with the document being distributed in advance among the participants and examined by the experts in the relevant administrations (where necessary). Brainstorming will help to refine the document as a pilot for Bulgaria and its broad discussion.

Particular emphasis was placed on the need to explore the interests and opinion of the public, the need for information and publicity about the future bioeconomy development policies in the area. Furthermore, participants mentioned a lack of objective information about organic products and their traceability (e.g., ingredients, origin of the ingredients, etc.). This affects consumer acceptance and should be considered and properly addressed by policy makers.

In this final meeting of the first phase, 34 people participated. Combining the living lab with the BioSTEP exhibition of products of the bioeconomy provoked serious public interest, which was reflected in local and national press.