



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



Proceedings of the living lab activities in the Veneto region of Italy

Phase II: February – June 2017



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KEY MESSAGES

This document summarises the discussions, outcomes and findings of the second phase of Bio-STEP's living lab activities that took place between February 2017 and June 2017 in the Veneto region of Italy. Participants in the living lab worked on the formulation of concrete policy actions to support further development of the regional bioeconomy. These policy actions reflect a wide spectrum of views from a range of regional stakeholders (e.g. entrepreneurs, representatives from the regional authorities, researchers, CSOs) and can be summarized as follows:

- The key challenge is to establish supply chain diversification, taking into consideration personal experience and the skills of the stakeholders represented in the living lab Working Group. The Veneto region still maintains a strong manufacturing sector, but disconnected production chains have further increased both the dependence on foreign countries and the gap between primary and down-stream sectors (transformation, distribution and sales). The diversification of the supply chain by involving regional stakeholders, in particular regional farmers, should be supported.
- Supply chains need to address differentiated markets (local, national and international) while interconnected supply chains have to pay attention to secondary products, waste and externalities. The specialization of standard industrial chains, with the aim of producing few and specific commodities, leads to a lack of territorial enhancement and benefits. The aim now is to identify how to support the shift from intensive monoculture (which results in land exploitation and soil degradation) to the diversification of supply chains (which can increase the value of the different land types and territories).
- Current land use practices (e.g. use of pesticides, etc.) and the progressive abandonment of land are a pressing problem in the Veneto region. Legislative proposals (e.g. against land speculation) could help to improve the situation.
- The development of networks in Veneto is very difficult, especially when it comes to the involvement of small and medium-sized enterprises. The habit of making decisions and acting autonomously (on the part of the single company) created a certain resistance to working in networks, which hampers the development of the regional bioeconomy. For this reason, there is a need to find new ways of how to link individual players into a network with shared long-term goals.
- It is evident that the main problems are cultural and structural. In the Veneto region, it is difficult to establish networks; the different sectors are unable to develop significant relationships between one another because they are so strongly entrenched within their own trade. The bioeconomy, as well as existing regional bioeconomy networks and brands such as BIO VENETO, should be better promoted.
- Schools play a key role in terms of education for sustainable development and for raising awareness of the bioeconomy; their role should be strengthened. The Regional Government and vocational schools (in cooperation with bioeconomy-related businesses) could introduce new academic subjects to the curriculum, thereby creating new jobs, developing new knowledge and raising interest in the bioeconomy.
- Only by increasing supply and demand for bioeconomy educational resources can a new didactic programme be established and dissemination be performed successfully.

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 an interactive communication amongst actors in order to find innovative solutions to common needs. In this way, living labs can help to connect research and academia, centres for local development, exponents 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, alternative programmes of measures and their socio-economic and environmental impacts have been discussed with relevant stakeholders. The outcomes of the discussions are supposed to support regional governments in formulating appropriate and effective programmes of measures to foster their regional bioeconomies.

The living lab activities in the Veneto region of Italy were split into two phases: the first phase focusing on concept mapping and the second phase focusing on the development and discussion of concrete (policy) measures to support the development of the bioeconomy in the Veneto region (see Table 1).

Table 1: Overview of the Veneto living lab activities

	Phase I			Phase II			
Stage	Brainstorming / Creative Phase	Concept Mapping	Nominal Group Technique	Strategic Community Planning	Pilot Action	Developing drafts of strategies/policies	Developing draft of agriculture policy strategy
Meeting	30.11.2016 Developing bioeconomy in Veneto Definition of objectives, roles and activities to be developed (Part I)	20.01.2017 Developing bioeconomy in Veneto Definition of objectives, roles and activities to be developed (Part II)	01.02.2017 Developing bioeconomy in Veneto Definition of objectives, roles and activities to be developed (Part III)	16.02.2017 Developing bioeconomy in Veneto Development of stakeholders' strategic action plan	10.05.2017 Developing bioeconomy in Veneto Debate among local policy actors and stakeholders	17.05.2017 Developing policy strategies Discussion between Regional Department for Research & Innovation and stakeholders	28.06.2017 Agricultural policy strategies Discussion among representatives of the agricultural sector

The Veneto living lab activities connected technologies, skills, different perspectives from stakeholders and local policy actors and, most of all, collected data to be analyzed and evaluated. The second phase of the living lab was focused on developing a potential programme of measures, considering the main steps performed during the first phase that involved stakeholders in long-term development goals. Members of the Working Group were able to carry out some of the results for developing sustainability within their own interests and activities, involving people at all levels. The Working Group was composed of industry representatives, entrepreneurs, farmers, scientists and policy makers. Overall, 18 bioeconomy stakeholders from the Veneto region participated in the meetings.

In order to define a programme of measures, each living lab meeting focused on:

- Mission, objective, users involved, mode of operation, tools.

- Plan of activities vs. actual program of activities and presentations, discussions, debates, co-creation processes results (analysis and comparison of bioeconomy products, processes, actors, and measures), draft strategies, proofs of involvement/engagement at the political level.
- Expected outputs vs. obtained outputs.

Taking into consideration the “milestones” defined by the Working Group and the need for reconstructing the value chain, the outcomes of the second phase highlighted the additional needs to:

- Define a common glossary.
- Establish a Code of Ethics with confidentiality clauses.
- Possibly define specific disciplinary actions relating to production and tracking of bio-products.
- Implement a bioeconomy marketing and communication strategy.

Stakeholders also understood the need for funding to develop these important actions and that creating and maintaining a bioeconomy specific network is a significant challenge considering the numerous administrative obstacles. Based on the activities carried out in Phase I of the living lab, participants were able to construct a conceptual map of all stakeholders and to develop a list of priorities. After ranking the priorities based on factors such as importance, feasibility, economic/financial burden, etc., a shared strategic action plan was finally developed.

Meeting 1: Strategic community planning – Development of the stakeholders’ strategic action plan

The first meeting of the second phase took place on 16 February 2017 and focused on the development of the stakeholders’ strategic action plan to develop the bioeconomy. The 14 clusters of actions defined by stakeholders through the Nominal Group Technique (NGT) process in Phase I are listed in Table 2 below. During the NGT session, some actions were considered as being the most important and feasible. There were also four clusters of actions with high importance but relatively smaller feasibility taken into consideration.

Table 2: Clusters of actions for implementing the bioeconomy in the Veneto region

Clusters of actions
Implementing network activities with "internal" value, i.e. aimed at consolidating the group
Implementing network activity with "external" value, i.e. aimed at raising awareness of the network to other actors (economic, institutional, communities)
<u>Increase interaction with the world of education and scientific research *</u>
Adoption of the Life Cycle perspective (value chains) within the activities
Definition of a Veneto-related bio brand, through start-up activation *
Enlarge production of bio foods to meet the needs of people with allergies or intolerances
Create a coordinated supply system of raw materials *
Promoting a quality labelling system with associated pricing structure
Build a chain within regional boundaries as much as possible, through the involvement of small and large producers
Adopting sustainable logistics

Clusters of actions

Promote supply-demand coordination by involving, in particular, small producers *

Promote among farmers the inclusion of hemp in the agronomic rotation

Promote awareness raising in local communities (on the institutional and consumers' side)

Implementing social media marketing activities

Note: Clusters in bold are high priority and feasibility; clusters marked with a star (*) are still important but less feasible

In this first meeting of Phase II, the participants were divided into two focus groups: the first on the cluster “Increase interaction with the world of education and scientific research”, the other on “Promote awareness raising in local communities (on the institutional and consumers' side)”. The outcomes and shared wishes, linked to the “milestones” defined during the first phase, of the first group on the cluster **“Increase interaction with the world of education and scientific research”** are as follows:

- Establish a dictionary of bioeconomic words, in a similar manner to the way the Associazione Nazionale Architettura Bioecologica (ANAB) developed a dictionary for green building and biomaterials, but funding would be required.
- Develop an ethical code, but specific judicial knowledge is needed.
- To spread information and knowledge, teachers and professors should attend refresher courses and be informed about the bioeconomy as not so many people are aware of it. Only through training can you spread the bioeconomy philosophy and concepts. As some of the participants are in contact with several schools they will start to promote the concept and will check the availability of schools and their interest in training people and students.
- The group would like to promote learning and working in the bioeconomy field as the lack of information and the lack of networking among the companies and stakeholders that are pioneers in the region is a big problem. At this stage, the bioeconomy could be a new opportunity for employment and the greater regional economy, but the gamble is to make other people aware of it. Promotion of the bioeconomy with no funds will be difficult because of difficulties of putting theory into practice and the current limited knowledge of the topic and the significance of bioeconomy.
- People attending the Working Group would like to take on ambitious challenges but they have no specific skills and there are no funding resources currently available.
- Define an agenda of seminars across the region.
- Create multimedia tools to catch the attention of students: video clips on the bioeconomy and interviews with relevant stakeholders uploaded to the websites of companies, institutions, YouTube, etc.
- The participants understand their role as a small part of a larger picture, but they know they can help contribute to the overall bioeconomy goal in the region.
- The participants are not confident that their activities to promote the bioeconomy will be taken into consideration by their government representatives and policy makers when decision-making.
- Participants from outside the business sector feel that because SMEs might not see immediate profit they will not participate.

The participants desire to undertake the discussed activities, along with the findings of the other focus group. They would also like to elaborate upon all of these concepts and the group's speaker will send a more definite program to share with the other group's members.

The outcomes of the second group discussing the cluster **“Promoting awareness raising in local communities (on the institutional and consumers' side)”** can be synthesised as follows:

- To promote opportunities and collaboration between local communities, stakeholders aim to organize events: a conference based on the development of hemp cultivation and processing was organized by one of the focus group participants in Este (Padua province) on 22 April 2017; another conference on the Bioeconomy will take place in Bassano at the “Parolini” High School in autumn 2017 and Italian Partners of BioSTEP as well as living lab participants will be in attendance together with students of the school and local stakeholders who will be invited by the school.
- Training opportunities proposed by some members of the focus group who represent the Centro Consorzi (Belluno province) were organised for caterers and farmers, an interesting target for spreading this type of culture. One workshop was designed as a kind of permanent laboratory of typical gastronomic products with local chefs and restaurateurs. This “permanent gastronomic workshop” took place in Sedico on 27 June 2017.
- The bioeconomy could be promoted through an ad hoc conference involving nutritionists of the regional sanitary service: the regional government is promoting projects and activities related with preventive medicine, i.e. to explain to children and parents about the importance of healthy diets. Hemp, for example, has a key role in the nutraceutical field.
- Measure 1.2 of the Regional Rural Development Plan regarding the topic “Information” might be interesting for organising agronomic training courses for farmers; it seems that a minimum 30,000 € is available but training topics have to be defined in September 2017.
- Something more could be organised to encourage the natural wool industry to participate in the bioeconomy. There is a willingness to start projects between the wool industry and other local industries (e.g. wool in green building applications, wool in boots).

Meeting 2: Pilot action – Debate among policy actors and stakeholders

The second meeting of Phase II took place on 10 May 2017 and was linked to the BioSTEP exhibition “Bioeconomy in Everyday Life” that took place in Padua at Fenice – Green Energy Park. The objective of the meeting was to trigger a discussion between regional stakeholders and policy makers and to identify a strategy for the further development of the bioeconomy in the Veneto region. The main outputs of the discussion are summarized below:

- Stakeholders agreed that the main problem they are facing is the difficulty of involving the political actors in discussions about very important issues for them, such as the exploitation of resources and bureaucracy.
- Policy makers should cooperate with the cooperatives and associations as these are the first actors who implement policy and they can “push” changes to production methods
- The promotion of the bioeconomy concept must be linked to concrete actions, and the dissemination of its principles and success stories can be achieved through a regional network and through our everyday life locally. Certain issues such as the bioeconomy should be common to all and not just to specific political parties.
- It is really important to involve politicians and administrations because relationships and engagement with citizens (top-down and bottom-up) is crucial. The soil consumption draft bill stipulates against the degradation of agricultural soil, against the degradation of ecologically significant areas and against the increase in impervious urban areas. The bio-based and circular bioeconomy will work if policy is made in such a way that citizens and industry cooperate. The administrative plan must have a strategic nature; the main problem is the lack of consistency and of communication.
- The Veneto region should take greater account of the needs and difficulties of the different areas within the region; at the moment there is no distinction used between the different areas for the rural development plans. If the territory produces extended benefits, it should receive acknowledgment and grants. If it supplies material and energy, it should receive a benefit, resources, and profits for the community.

- The regional government should ensure a certain balance when providing services (e.g. guaranteeing a constant flow of water in rivers and lakes in the context of hydropower generation). Additionally, certain modern urban services should be ensured in zones that remain isolated, like mountain areas.
- The issue of territorial governance is a problem that administrators, citizens and regional governments must address because the national government does not involve itself.
- We need a multilevel network governance to establish an equal playing field and we should compensate gaps with other neighbouring provinces (e.g. the Dolomites “UNESCO heritage” process has been developed in this way and is effective).
- By mapping the existing situation as a whole, one has the chance to analyze problems and projects, to discuss about them and to avoid them. Working together with governance actors provides the opportunity to confront and to avoid mistakes already made by others.
- The brand “Bio Veneto” could be the first bio brand for certified organic products in the region, which could all be catalogued online for marketing and promotion purposes. It would be a bioeconomy trademark and help initiate a “bio-cluster” of typical products found regionally. This brand labelling would improve efforts in commercializing products from the bioeconomy and establish the network further.
- The bioeconomy glossary (list of themes and definition of words related to the bioeconomy) proposed by the Working Group would be crucial for dealing with other countries in terms of improving mutual comprehension and understanding similarities and differences, for example regarding local manufacturing systems
- Thanks to the citizen committees in municipalities, citizens have more say in decisions and can make their own project proposals. There are great examples of short supply chains and research that shows how the economy grows well in small contexts.
- The bioeconomy network should also harmonize efforts among the members. It should not be simply seen as a collection of individuals loosely connected, but as a greater whole with more combined experience and common goals from varied contexts.
- The brand “Bio Veneto” would group a wide range of seemingly unrelated products under one overarching umbrella. It also allows for a continual systematic analysis of the bio-productivity and bioeconomic activities in the region interconnected with schools, research bodies and local communities involved in the chains, and therefore it provides the opportunity to highlight meaningful success stories. The harmonization process and framework simplifies efforts in monitoring and ultimately provides the basis for a disciplinary system to be established regulating use of the brand. However, working in a certified short chain in Italy is not enough, we have to work together creatively to achieve long-term long chain goals.
- The Veneto region and Italy need more economic resources to significantly increase the level of awareness of the bioeconomy, but stakeholders can start investing now in promotion and training activities.
- Schools have the mission of educating youth on sustainability. Fundraising in schools can be successful, especially when a project is reliable and transparent, as it is able to arouse consensus. The school in Bassano, to which a member of the Working Group belongs, produces olive oil and promotes knowledge of sustainability, involving students in the cultivation of olive trees and in the production of oil. However, it is difficult to get biological certification, which is important because it increases reliability.

Meeting 3: Development of policy strategies

The third meeting of the second phase took place at Unioncamere del Veneto – Eurosportello Veneto on 17 May 2017. The objective of the meeting was to trigger an open discussion with representatives from the regional government on the requirements of the Working Group and their targets. The meeting with the Director of the Regional Department for Innovation was also a great opportunity to

address the points developed during the round table consultations organized by the regional government from January to May 2017.

Some members of the Working Group explained the problems they are facing concerning how the regional calls for proposals are not focused on the bioeconomy and how it is difficult to develop a network. Additionally, the lack of ministerial directives concerning the rate of THC (Tetrahydrocannabinol) content of hemp and the lack of a national cluster/network focused on the bioeconomy slow down the development of the sector.

During the meeting, requests and proposals emerging from the Working Group were discussed (e.g. the lack of a database of biomaterials that could help promote and spread them, the problem of using hemp due to THC content that is unregulated at the ministerial level and, the lack of funding for and the difficulty in developing a innovative bioeconomy network). The key outputs of the discussion are summarized below:

- The participants held that more supply chains based on hemp and optimized plantation and production practices should be started. There is the problem of overcoming the initial inertia to this due to the fact that hemp cultivation, for example, is largely unchanged centuries-old practice, which would make drastic innovations unexpected and unlikely.
- One year ago, in view of a deadline to a [call for proposals](#) concerning the regional innovative networks, stakeholders participating in BioSTEP's living lab activities began the efforts to form a network and coordinate actions, but the main problem was that there were few companies involved and available.
- The participants recommended that projects proposed by a regional innovative network should not be approved directly by the Region, but by external technicians registered at the University and Research Ministry to avoid the possibility of bias from evaluators with ties to other regions.

The BioSTEP Working Group was invited by the Director of the Regional Department for Innovation to define innovative ideas in a shared context, perhaps involving another network.

Meeting 4: Agriculture policy strategies – Discussion among representatives from the agriculture sector

The final meeting took place on 28 June 2017 at Cà Foscari Challenge School and was focused on agriculture as it is the primary sector that provides resources to the bioeconomy. The goal was to understand how the agricultural sector could develop multi-functional and integrated supply chains that are economically, socially and environmentally sustainable. The discussion was held between actors belonging to the agricultural sector and was intended to produce points of action at different administrative levels (regional, national, EU). The main outcomes of the discussion are divided into three categories and are summarized below:

Supply chain

- Only a small part of Veneto's agricultural produce is consumed in the region, and we need a strategy to better utilize them. There is actually no need for any produce from other regions thanks to the quality of the products that are made in Veneto.
- The Veneto region produces great wines with the Italian Denominazione di Origine Controllata (DOC) label, but poor policies have encouraged wine producers to be very competitive and not consider the common good. The value chain should provide advantages for all and disincentivise businesses from making damaging decisions out of self-interest.
- The Veneto region's economy used to be a balanced economy, and the fact that we are now basing ourselves on a monoculture like Prosecco is devastating for the territory. Local people should support local producers and it is important that periods of excess production are managed so that economic instabilities and imbalances are avoided.
- A balanced economy should be applied to the area of the Piave River. Pebbles are carried out resulting in a lack of local materials for coastal building restorations. If the territory is

productive, people want to receive recognition by the regional government; if a territory supplies material and energy, according to people, it should receive a benefit, resources, and profits for the communities. Certain balances should also be ensured: guaranteeing a constant flow of water in the rivers and in the lakes while reducing power plants in the Piave River which supplies water and energy and it is exploited excessively, subtracting water and energy to the surrounding area.

- Instead of building new greenhouses on farmland, warehouses could be built elsewhere and use hydroponic technologies, and therefore reduce demand on agricultural lands.
- In Italy, the supply chains focused on wood disappeared when the national government regionalized the forests. In the Veneto region, there is a willingness to revive forest management such that a new public-private chain focused on forestry is established. Currently, Austrian businesses have bought forests in the Veneto region, process the wood materials immediately beyond Italian borders and sell the timber under the Austrian brand.

Culture as critical capacity

- There is a cultural and regulatory system in place that makes innovative solutions difficult to develop. There are external constraints that promote the setup of agricultural land and norms that allow for the extensive use of pesticides in a contradictory way and allow for land exploitation without rotation (for example the cultivation of Prosecco vineyards). Monoculture is indeed an impressive part of the bioeconomy, but at the same time it is a risk because of its fragile equilibrium.
- Internal constraints, however, are inherent to the conditions of the region and therefore the de facto competitive way of doing business in Veneto prevents the establishment of networks. Prosecco producers had no desire to be part of a consortium initially, but this changed when they became aware of the competition from Austrian producers. Now, possibly as a result of improved coordination, non-alcoholic wine is also produced for new consumer groups.
- Some schools are now promoting a "garden in the pipeline" philosophy and children are taught how difficult it is to produce quality food, the importance of healthy eating, and the problems of food waste. Additionally, formal agricultural education has greatly increased, resulting in a surplus of graduates in the sector.
- The common theme, which links all these conversations, is the that of ethics and responsibility. It is necessary to learn how to move from a speculative vision linked to the commodities market to a vision of responsibility and true protection of landscapes and ecosystems.

Networking

- So far, there seems to be a lack of collaboration and networking among relevant actors in the Veneto region. People have to understand that if they want to save their land they have to cooperate with other stakeholders. It is necessary to change the relationship between consumers and producers. Even public administration must take some responsibility for territorial marketing to reduce venture risk for those who make investments in their own company.
- In short, there is the potential to develop a network and a networking culture to promote bio-industries, and producers are willing to participate.
- The main problem is the existing policy and regulatory framework stakeholders have to face.
- Moreover, as long as the policies and the default culture against networking do not change, the supply chains will have no opportunity to propagate.
- Participants feel that they need to intervene to make the decision-makers aware of the situation, but it is also the responsibility of both profit and non-profit bodies, of private and public businesses and of the general public as well.
- The best example of a network is the one among trade associations in the agreement between Coldiretti and Federalimentare to counter "traffic light" labels. Both of them are against the EU-Canada Comprehensive Economic and Trade Agreement (CETA).