



Boosting European Citizens' Knowledge and Awareness
of Bio-Economy Research and Innovation

D 5.1

Evaluation Strategy

Report



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Executive Summary

This deliverable contains the BLOOM Evaluation Strategy. It gives insight in BLOOM's goals and objectives which are the basis of the developed evaluation strategy. The **Evaluation Strategy (D5.1)** at hand aims at providing a basis for project and outcome evaluation and forms together with **Monitoring instruments (D5.2)** – which provides a collection of all evaluation instruments used in BLOOM, such as questionnaires and surveys – the foundation of reflection and evaluation throughout the BLOOM project.

This document first describes the objectives of the evaluation (2) and the evaluation concept (3). The structure and steps of the evaluation strategy are listed in the table in section 4. The table provides an overview of the project objectives and links respective evaluation questions, relevant indicators, involved target groups and evaluation instruments to them. Furthermore, this deliverable provides a summary of expected results (5) and describes shortly how we will feed back findings (6) according to the identified objectives, and targets ethical considerations (7).

1. Introduction

An economy based on biomass promises to foster a circular economy and to enhance climate change mitigation, while reducing dependence on fossil fuels. The Horizon 2020 project BLOOM aims at bringing together partners from across Europe to learn and debate on the potential of bioeconomy and to engage the civil society.

WP5 measures to which extend BLOOM is succeeding in bridging the gap between academic knowledge and the civil society. This means that we will develop a clear picture on the number of CSOs and the general public which have been reached by the activities of the BLOOM platform (WP2), the regional hubs (WP3), the school network (WP4) and the dissemination activities (WP6). The ways which lead to success in reaching people will be further elaborated and operationalized. We will measure the number of people who participated on meetings and co-creation sessions, the visitors of websites and exhibitions; we will describe which new CSO groups of people were attracted, with whom the BLOOM partners interacted. Also we will measure reactions on questionnaires to get an indication that we succeed in bringing the perspectives of a bioeconomy forward. Furthermore the internal evaluation of the project process will be covered within WP5.

The Evaluation Strategy (D5.1) at hand is the first deliverable of WP5 of the project BLOOM which deals with monitoring and evaluation, supporting the internal learning process among consortium partners, to improve the approaches and procedures in order to achieve optimized results and measuring the effectiveness of the BLOOM actions and the impact on the civil society within the regional hubs, the school network and the virtual platform. Monitoring and evaluation is needed to support processes of common understanding regarding bioeconomy, and to ensure the integration of the potentials and perspectives of sustainability and innovation. The monitoring activities and surveys will be conducted via quantitative and qualitative data collection methods. It will comprise group discussions,

feedback surveys, interviews as well as observations, focussing on the various activities and directions of the work packages. Project evaluation activities will also validate the implementation of concepts, content and activities in the regional hubs as well as in the partner institutes and their connected organisations. Most important, WP5 provides assessment results for further learning and improvement.

The objectives of BLOOM targeting outreach need to develop new ways of communication and interaction. BLOOM foresees the involvement of external partners in the development of outreach materials and activities. Through that the success depends also on available capacities and capabilities of our partners and the specific context in certain regions (triple helix organizations and teachers).

2. Evaluation concept

The monitoring and evaluation aims at understanding the progress of the ongoing project BLOOM and at reflecting approaches and effects and through that optimise both the internal procedure and the external outreach activities and outcomes. Therefore BLOOM follows both, a formative and summative evaluation approach. The formative evaluation will take place during the project's implementation with the aim of improving the project's design and performance. But BLOOM conducts also a summative evaluation when it comes to evaluating the engagement and outreach activities as well as the project's outcomes or impact.

The formative evaluation complements the summative evaluation and is essential for trying to understand why a program succeeds or does not, and what factors (internal and external) influence the process and achievements. Formative evaluation is being applied to improve the project's design (continual improvement) as it is rolled out and to ensure that the project activities are being delivered efficiently and effectively.¹

The formative evaluation is supposed to support the outreach processes, with a focus on setting the goals and objectives commonly among project partners. For the achievement of some objectives triple helix partners and teachers will actively be involved. The formative evaluation will also be applied to discuss the working process in order to improve the project performance.

The outreach activities will be a key element of BLOOM. The summative evaluation will be conducted to evaluate the engagement and outreach activities as well as the project's outcomes or impact. The evaluation will analyse the methods used, what worked well and which problems and obstacles arose. The evaluation will give detailed information on which outreach activities should be improved and which ones are useful and beneficial for our needs. Streamlined reporting templates, feedback questionnaires for target groups and qualitative feedback methods will be applied within this summative evaluation. The results

¹ Source: <http://evaluationtoolbox.net.au>

will be shared among the hub leaders with the aim to learn and to improve implementations.

The table of evaluation criteria and instruments in section **Fehler! Verweisquelle konnte nicht gefunden werden.** further outlines BLOOM's evaluation objectives and the indicators assessing the achievement of the objectives. A detailed outline of the methodologies and instruments will be given in D5.2. Based on this formative and summative approach basically each activity (meeting, workshop, walking gallery, etc.) conducted within the project will be evaluated. Regular internal online survey and interactive reflection sessions will support the management of the project.

It is to be expected that the evaluation will raise questions and discussions among the consortium partners. In the beginning of the project it is to be expected that the internal objectives will be subject to discussions.

The external objectives will become more relevant when the project team is ready to start communicating with external partners and stakeholders and when specific tools are applied and outreach activities are being complemented.

All partners will follow a clear evaluation guideline and all data will be collected centrally by ZSI.

The results of the internal evaluations will be discussed with all consortium partners. The results of the external evaluations will be discussed with the partners who are responsible for a specific objective. The consortium will also discuss the results of the evaluations, which may lead to adaptations in the project design and chosen approaches.

Discussions on project consortium level to assess working processes internally and externally will be documented. Monthly calls support this process. Moreover, the reporting templates will map the networks and count interactions of BLOOM partners.

The results of the evaluation, especially targeting the outreach activities and the outcomes of the project, will feed into the policy recommendations published under task 5.4.

3. Objectives with corresponding evaluation instruments

The evaluation strategy is organised along objectives of the BLOOM project listed in the table below. The first two objectives focus on the internal process while the others are external; focusing on the outreach and the impact in society and economy. In the project BLOOM we developed a set of quantitative and qualitative monitoring criteria, which are structured along the main objectives of the BLOOM project. This means that to each of the eight objectives corresponding evaluation questions, target groups, indicators and evaluation instruments were assigned. The corresponding instruments which are listed in the right-hand column are elaborated and collected in D5.2 (Monitoring Instruments).

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QUESTIONS	INVOLVED TARGET GROUP	INDICATORS	EVALUATION INSTRUMENT
Internal: process			
<p>Objective 1: Enabling an smooth internal BLOOM work process</p> <p>The BLOOM project consists of a project consortium of 12 partners with different expertise from 8 different European countries. Well-functioning internal communication and cooperation is essential for a successful outcome and needs therefor reflection throughout the project.</p>			
<p>Do the communication structures provide sufficient room for exchange?</p> <p>Does each partner clearly know and understand their tasks and act on them?</p> <p>Are the activities in the different WPs sufficiently interconnected?</p> <p>Do the work of the different team members lead to synergies?</p> <p>Do the consortium meetings support team and work process?</p>	<p>Consortium partners</p>	<p>Communication structure/tools</p> <p>Exchange and collaboration between partners</p> <p>Meeting milestones and deadlines</p>	<p>Internal online survey for WP leaders (every 6 months starting summer 2018)</p> <p>Oral feedback in monthly calls</p> <p>Feedback questionnaire consortium meetings</p>
<p>Objective 2: Learning evaluation: BLOOM consortium as community of practice</p> <p>The BLOOM consortium covers a lot of different competences; science communication, education, bioeconomy and sustainability. The Bloom partners need to build up a common understanding and share the goal to communicate potentials bioeconomy might offer.</p>			
<p>Did the Bloom partners gain a common understanding of bioeconomy?</p>	<p>Consortium partners</p>	<p>Ongoing internal learning and discussion about bioeconomy</p> <p>Exchange of meaning and practices</p> <p>Active participation and involvement of Bloom partners</p>	<ul style="list-style-type: none"> • Learning questionnaire at the consortium meetings • Online Questionnaire every 6 months • Dynamic learning agenda • telco in between the meetings
External: Outreach and impact			
<p>Objective 3: Make bioeconomy knowledge and research available for education</p> <p>European Schoolnet is co-creating lesson plans with teachers, which integrate bioeconomy topics and resources, on various STEM school subjects. These teachers play a crucial role in spreading the concept of bioeconomy, by developing teaching materials and reaching out to other teachers in their countries and to their students who learn about bioeconomy. However, also the hubs will involve teachers and other representatives of education in their co-creation</p>			

workshops. All experiences will be captured within WP5.			
Do teachers perceive the elaborated BLOOM resources as valuable? Do teachers use these resources beside the project	Teachers of EUN schoolnet Educational partners in regional hubs MOOC participants	Teacher feedback Number of teachers trained to use the Bloom Schoolbox Learning materials produced Estimation of number of students reached	Surveys and feedback, questionnaires on Teacher training and on educational activities in the Regional Hubs MOOC feedback questionnaire
<p>Objective 4: Create a virtual bioeconomy platform and repository</p> <p>The Internet platform is supposed to disseminate knowledge on bioeconomy, it should succeed to inform as many people as possible about the concepts, the opportunities and benefits of the bioeconomy.</p>			
How is the platform used? Is it used by diversity of visitors? Is the Platform meeting expectations?	Platform target groups (industry, policy maker, education, research and CSO) Visitors of different EU countries	User feedback Number of people reached Number of countries Number of documents downloaded	Feedback questionnaire Web statistics
<p>Objective 5: Develop innovative co-creation workshops to involve all perspectives</p> <p>BLOOM will develop workshop designs in which all different aspects of the biobased economy will be discussed among different stakeholders and partners in the regional hubs. BLOOM will put the workshops on the agenda of the Regional Hubs and will prepare the workshops in interaction with the Hub management or representatives.</p>			
Are the participants of the co-creation diverse? Are all voices heard? Are participants satisfied with the co-creation workshops?	Workshop participants (teachers, CSOs, industry, research, government, ...) Consortium	Variation of participants (at least triple helix and 3 CSO's) Number of continuous participants (more than one) Workshop design gives room to all participants, bring their perspectives to the front. Workshop design lead to co-creation, exchange and communality	Methodology assessment Feedback questionnaires Qualitative feedback sessions
<p>Objective 6: Stimulating activities via regional hubs</p> <p>Another route of knowledge spread is provided by the five regional hubs, in which cooperation with existing triple helix organizations is fostered, working at regional innovation strategies on bio-based economy. The BLOOM project partners will set up activities to bring the bioeconomy perspectives forward in these networks and end up in successfully addressing the problem of the lack of connection with CSO and general public. BLOOM needs active involvement of the triple helix partners, who should play an important role in connecting with CSO. Bloom will also contribute to the mobilization of CSO and getting common activities started.</p>			
Does BLOOM align with regional Hub practices? Start Bloom activities in Regional Hubs?	Bloom Hub coordinators and regional Hub managers and network	Bloom is adopted by Regional Hubs Number of Bloom activities conducted in Regional Hubs	List of activities, growing document Reporting on hub activities

Active involvement, who is participating and who is reached by the activities?		(minimum of 5) Number of people reached; iversity of stakeholders	Questionnaire for regional hub coordinators and managers.
Objective 7: Implement innovative outreach activities			
BLOOM will apply methods and tools from social learning and co-creation, and develop activities that contribute to communicate, explain and discuss biobased economy concepts and practices.			
Do the outreach activities stimulate general public interest on bioeconomy? Do the outreach activities support the general public understanding of bioeconomy?	General Public	Raised interest in bioeconomy Raised understanding of bioeconomy Number of webinar participants	Feedback questionnaires Activity reporting
Objective 8: Build up and strengthen a bioeconomy community			
BLOOM will not only reach people but will also engage and connect people within a community. BLOOM will contribute to enlarge the bioeconomy community, as well virtual as in the real world, either on EU level or in the regional hubs. BLOOM will connect to other H2o2o projects, and promote and present the BLOOM approach and results at different events.			
Do the regional innovation networks extend with partners from schools, CSO and general public? Do the EU bioeconomy community extend with Bloom representatives, Schoolnet, CSO and general public?	Regional Hub network EU network of H2o2o projects, platforms etc. CSO General public Schools Teachers Students	Number of visitors on platform, webpages Number of people reached by co-creation workshops Number of people reached by outreach activities	Website, media, and social media monitoring List of Bloom activities and participants in the regional Hubs List of Bloom activities at the level of EU networks and participants

4. Feedback of results

After the analysis of each evaluation instrument implemented the results will be fed back to the relevant audience:

- Results on both, the internal process but also regarding activities in the five hubs, within the school network and in outreach to a broad public will be provided to the whole consortium at the consortium meetings
- All results of the evaluation will be provided in deliverable D5.3, which is available on public level

5. Ethical issues

In order to achieve the goals defined within the task in WP5, the project partners of BLOOM have to collect personal data from the participants, like basic demographic data and responses to questionnaires as well as group discussions. This data is essential to reach the objectives set by the project. During the data collection the data protection issues involved with handling of personal data will be addressed by the following strategies:

Volunteers to be enrolled in the qualitative data collection of the participatory workshops will be exhaustively informed, so that they are able to autonomously decide whether they consent to participate or not. In an informed consent (see D8.1), the purposes of the research, the procedures, potential discomforts or benefits as well as the handling of their data (protection, save storage) will be explained.

The data exploitation will be in line with the respective national data protection acts. Since data privacy is under threat when data are traced back to individuals – they may become identifiable and the data may be abused – we will anonymise all data.

The data gathered through logging, questionnaires and participatory workshops during this work package will be anonymised and therefore the data cannot be traced back to the individual. Data will be stored only in anonymous form so the identities of the participants will only be known by the partners involved and will not even be communicated to the whole consortium. Reports based on the participatory workshops will be based on aggregated information and comprise anonymous quotations respectively.

6. Summary of expected results

Monitoring activities, carried out in WP 5 are specifically intended for (1) internal project evaluation and (2) the evaluation of engagement, outreach activities and outcomes. The monitoring and evaluation activities will provide insights on the main objectives set up for the project:

Internal process

Objective 1: Enabling an smooth internal BLOOM work process

A smooth and effective internal work process is the basis for a successful project. Therefore the communication structures will be evaluated questioning the efficiency and room for exchange provided. This objective strongly addresses communication to ensure that all partners clearly know and understand the work process, their tasks and act on them. Additionally all internal meetings will be evaluated to improve them according to supporting the BLOOM team and its work process best.

Objective 2: Learning evaluation: BLOOM consortium as community of practice

This objective addresses the internal team as the starting community of practice. Here the internal learning will be evaluated understanding the team as bioeconomy of practice experiment. Additionally the communities built by the hubs and the teachers network will be monitored. This will give an overview on the different approaches in building up the hubs and enable a cross-cutting learning between the different hub leaders.

External Outreach and impact**Objective 3: Make bioeconomy knowledge and research available for education**

The school network activities will provide with insights on how to involve the dialogue about bioeconomy in today's teaching and will show what the apparent benefits and barriers for educational institutes from these dialogue activities are. The elaborated teaching materials together with the feedback from teachers will feed policy recommendations on future potential and need for bioeconomy education.

Objective 4: Create a virtual bioeconomy platform and repository

The virtual platform and repository is highly relevant for the project. Monitoring the web statistics will help to see BLOOMs outreach. It will also help to see which resources are liked most or considered to be most helpful and which materials need to be improved. It will also help to assess the development of regional communities of practice.

Objective 5: Develop innovative co-creation workshops to involve all perspectives

For starting and enabling a bottom up approach a variety of perspectives is highly important. Therefore BLOOM aims at having diverse participants in its co-creation workshops. The evaluation will help to support this approach and make sure that all voices are heard. To constantly improve the methodological approach and also the group composition should support the project in coming out with innovative new formats of outreach materials and activities.

Objective 6: Stimulate activities via regional hubs

Regional hubs will conduct all different kinds of activities. They take care to address different target groups and to enlarge their regional innovation network by bringing in new people and perspectives. The evaluation of activities will ensure that all hubs will actively stimulate activities and use their networks to most possible reach out.

Objective 7: Implement innovative outreach activities

The evaluation will provide the lessons learned on how to engage and actively involve the public in a bioeconomy dialogue. It will report about the problems and obstacles encountered and how they can they be addressed. Finally it will also come up with the benefits from the outreach activities with regard to changes in perception, knowledge and understanding. Monitoring instruments are also meant to give insight on the following questions: How many participants could be reached? How many participated in project

activities, online but also in live events? These findings will feed policy recommendations for future outreach and communication methodologies and tools for sustainable dialogue.

Benefit /Outcome

Objective 8: Build up and strengthen a bioeconomy community

Throughout the whole project the community of practice will be monitored. To enable this outcome the monitoring process will make sure that all different target groups (CSOs, general public, schools, teachers, students, policy, etc.) are addressed and involved. All numbers per hub network and across will be collected to be able to assess the final outcome of BLOOM. Furthermore, BLOOM will monitor its activity within EU project networks by continuous documentation.

7. References

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Links:

<http://evaluationtoolbox.net.au>

http://evaluationtoolbox.net.au/index.php?option=com_content&view=article&id=24&Itemid=125

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