



# **AlpLinkBioEco – Intervention Logic**

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Lead Partners: Rudolf Koopmans<sup>\*</sup>, Jacques Bersier<sup>\*</sup>, Michael Keller<sup>\*</sup>

\*University of Applied Sciences and Arts Western Switzerland, School of Engineering and Architecture of Fribourg, Plastics Innovation Competence Center

The AlpLinkBioEco project (start date April 2018) is based on a coherent intervention logic. The intervention logic depicts how a transnational territorial challenge is addressed through objectives and outputs within the project and results in a specific work plan for the project duration. As a first step, the **main causes** for the identified **territorial challenge** are identified. The main **overall objective** of the project is to address the identified causes. Considering the overall objective, the main **project result** is defined, which should reflect a durable improvement of the identified problems. To translate this analysis into a coherent **workplan**, **specific objectives**, **outputs** and **target groups** need to be defined. It is a crucial step in the construction of a convincing intervention logic to ensure the coherence between the specific objectives and the project outputs and to logically organize them into a coherent workplan. Figure 1 summarizes the intervention logic of the AlpLinkBioEco project. A short video on the intervention logic is available on the project's youtube channel.

### Challenges and causes

The AlpLinkBioEco project addresses one of the biggest common challenges of the Alpine Space: the transition from a fossil-based to a circular bio-based economy. This transition is needed to strengthen the regional economic activity and sustain high value-added businesses and jobs in the Alpine Space. The challenges are mainly caused by the traditional way of operating in a linear economy where a product necessarily ends as waste and where alternative, circular end of life solutions remain unexploited. In addition, there is a lack of understanding of the Alpine Space's natural resources as alternative, bio-based inputs. The alpine regions possess huge biomass resources and the necessary knowledge and technology to use them in sectors such as green chemicals, biopolymers or bio-based materials. In a globalized economy interregional opportunities and solutions based on locally available resources often remain untapped. Due to a missing holistic transnational approach the Alpine Space actors in bio-based industries operate in a disconnected mode. Important value chains are not established especially for producing high value applications that address critical societal needs, such as economic durability, local employment and quality of life.

<sup>&</sup>lt;sup>1</sup> AlpLinkBioEco youtube channel: <a href="https://www.youtube.com/channel/UCWOknu-43q4Q4YI1PfRQnEQ">https://www.youtube.com/channel/UCWOknu-43q4Q4YI1PfRQnEQ</a> Video Intervention Logic: <a href="https://www.youtube.com/watch?v=VADurrcuQh0">https://www.youtube.com/watch?v=VADurrcuQh0</a>









Figure 1: AlpLinkBioEco Intervention Logic

#### Territorial challenge

Create a circular bio-based economy in the Alpine Space

#### Challenge caused by:

Traditional operation in a linear economy Poor understanding of natural strengths in the Alpine Space Missing awareness of interregional opportunities

#### Overall objective

Set up a methodology to create new value chains for a circular bio-based economy in the Alpine Space

#### Main result

Demonstrator value chains with identified individual actors in the fields of agronomy, wood, chemicals and packaging

#### Specific objectives

- Facilitate tailor made matching of biobased actors across the Alpine Space
- Facilitate initiation of high added value bio-based applications and products
- Recommendations for a common policy development on circular biobased economy

#### Outputs

- Inventory and mapping of policies, clusters and actors
- Methodology to generate novel value chains
- Demonstrated value chains with high added value applications and products
- Policy recommandations with masterplan for common Alpine Space bio-economy framework

#### Workplan

- WP 1: Analysis of resources, actors and framework
- WP 2: Development of methodology and VC generator
- · WP3: Implementing demonstrators
- WP4: Policy Development

#### Target groups

Businesses (including SMEs), business support organisations, sectoral agencies, higher education and research organisations, interest groups including NGOs, local, regional and national public authorities

Source: Authors' elaboration

## Overall objective

The project aims at tapping into the existing potential by setting up a methodology to connect diverse bio-feed-stock producers with intermediate product developers and end users of high value applications addressing critical societal needs, to create new cross-regional value chains for a bio-based circular economy. Four sectors will be targeted as a basis to create examples of such value chains: The agro- and wood-industry, both related to the feedstock, on the one hand, and chemicals and packaging, related to products that can be made out of these feedstocks, on the other.

#### Main result

The project is expected to result in four demonstrator value chains with identified individual actors. These demonstrators are examples of how a circular bio-based economy can work in the Alpine Space by connecting real actors across the participating regions into functioning new value chains. At policy level, the examples will contribute to the development of a cross-regional and coherent circular bio-based economy strategy.







## **Specific objectives**

Three specific objectives have been defined:

- Facilitate tailor made matching of bio-based actors across the Alpine Space
- Facilitate initiation of high added value bio-based applications and products
- Recommendations for a common policy development on circular bio-based economy

## **Outputs**

The project directly addresses these specific objectives through the following outputs. To facilitate the tailor-made matching of bio-based actors across the Alpine Space the project produces an inventory of present and future actors in the circular bio-based economy. A methodology is then developed to link the identified actors into novel value chains. The methodology is used to create demonstrator value chains with identified actors in the agro-, wood-, chemical- and packaging-industry, aiming at the initiation of high added value bio-based applications and products. Finally, the project provides an overview of policies in place and recommendations for a common Alpine Space bio-economy framework.

## **Target groups**

The target groups of the project are the stakeholders of the novel bio-based circular value chains. Value is created by the companies in the targeted sectors. The target groups also include related and supporting actors such as higher education and research organizations, business support organization or sectoral agencies. The demonstrator value chains serve as examples for policy makers at the local, regional and national levels.

### Workplan

The project is managed by the Plastics Innovation Competence Center (PICC) of the School of Engineering and Architecture of Fribourg and organized in four work packages. The first work package, led by Poly4EmI Ljubljana and the Lombardy Green Chemistry Association, is dedicated to the identification of existing actors in the bio-based circular economy, the analysis of their activities and the description of their connections. The second work package, led by PICC Fribourg and Hub Innovazione Trentino, is concerned with developing a methodology to match actors into novel value chains based on mutual benefits. Based on this, the third work package, led by Business Upper Austria, BIOPRO Baden-Württemberg and CSALP Pieve Tesino, puts the methodology into practice and develops demonstrator value chains capturing new business opportunities across the alpine regions. The fourth work package, led by and ClusterAgentur Baden-Württemberg Poly4EmI, aims at formulating recommendations and documenting new insights on how to stimulate and facilitate novel value







chains to create a bio-based circular economy in the Alpine Space. Dedicated communication activities under the lead of Confindustria Lombardia ensure the involvement of the target groups and the dissemination of the insights and tools during and beyond the lifespan of the project (end date: April 2021).

## **Project partners**

Plastics Innovation Competence Center (CH), Business Upper Austria (AT), ClusterAgentur Baden-Württemberg (DE), Poly4EmI (SI), Centro Studi Alpino di Pieve Tesino (IT), Confindustria Lombardia (IT), BIOPRO Baden-Württemberg (DE), Hub Innovazione Trentino (IT), Technologiezentrum Horb (DE), Lombardy Green Chemistry Association (IT), Plastipolis (FR), France Clusters (FR), Ministry of Education, Science and Sport (SI), Chemie Cluster Bayern (DE).

### **Further information**

Project website: <a href="http://www.alpine-space.eu/projects/alplinkbioeco/en/home">http://www.alpine-space.eu/projects/alplinkbioeco/en/home</a>

Youtube channel: https://www.youtube.com/channel/UCWOknu-43q4Q4YI1PfRQnEQ

LinkedIn: https://it.linkedin.com/company/alplinkbioeco

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