

Document Title

Local Innovation Action Plans (Project Region: **West-Transdanubia / Hungary**)

Document Type

Project Output

Project Information

Programme: [Danube Transnational Programme](#)

Project Title: FORESDA – ‘Forest-based cross-sectoral value chains fostering innovation and competitiveness in the Danube Region’

Project code: DTP1-383-1.1

Lead partner: CyberForum e.V

Start of the project: 01.01.2017

Duration: 30 months

<http://www.interreg-danube.eu/foresda>

Document Information

Type and number: Project Output 3.2

Lead contractor for the output: Croatian Wood Cluster

Authors: Zala County Foundation for Enterprise Promotion

Submission date: December 2017

Dissemination level: Public.

<i>Version</i>	<i>Date</i>	<i>Content</i>	<i>Elaborated by</i>	<i>Reviewed by</i>
<i>1.1</i>	<i>22.11.2017</i>	<i>1st draft of the template</i>	<i>Croatian Wood Cluster</i>	<i>Ralf Trunko</i>
<i>1.2</i>	<i>08.12.2017</i>	<i>LIAP Hungary Draft</i>	<i>ZMVA</i>	<i>Ana Dijan</i>
<i>1.3</i>	<i>15.12.2017</i>	<i>LIAP Hungary Final</i>	<i>ZMVA</i>	<i>Ana Dijan, Rosana Šimunović, Amir Kubat</i>
<i>Final</i>	<i>22.12.2017</i>	<i>Review of the final version</i>	<i>ZMVA</i>	<i>Dr. Annalisa Zuccotti</i>
<i>Resubmission</i>	<i>28.09.2018</i>	<i>Review of the final version - resubmitted</i>	<i>ZMVA, Ana Dijan</i>	<i>Kerstin Goos, Tamara Högler</i>

Table of Contents

1. List of Abbreviations.....	2
2. Executive Summary	3
3. Methodology.....	4
4. Project region/Country Context.....	5
5. Focus, Objectives and Impacts	6
5.1. Identification of All Priority Needs	6
5.2. Identification of Needs to be Addressed in the Framework of FORESDA	8
5.3. Objectives and Expected Impacts.....	9
5.4. Links with other FORESDA Outcomes	10
6. Actions And Schedule	11
7. Key Implementation Steps	13
8. Responsibilities	14
9. Target Groups and Stakeholders.....	15
10. Resources and Budget.....	17
11. Communication Activities	18
12. Risk Analysis.....	19
13. Appendix I: LIAP Hungary, West-Transdanubia - Table Overview	20

Disclaimer:

The information and perspectives set out in this document are those of the authors and do not necessarily reflect the official opinion of the European Commission. Neither the European Commission institutions and bodies nor any person acting on their behalf may be held responsible for the use that may be made of the information contained therein.



1. LIST OF ABBREVIATIONS

DTP - Danube Transnational Programme

FBI – Forest Based Industry

FORESDA - Project entitled *Forest-based cross-sectoral value chains fostering innovation and competitiveness in the Danube region*

WP – Work Package

LIAP = Project output 3.2 Local Innovation Action Plans

WG – Working Group

WS – Workshop

2. EXECUTIVE SUMMARY

Project FORESDA wants to build up a transsectoral innovation environment.

Transnational Strategy (O.3.1) involves some conditions for forest-based cross-sectoral cooperation. Local Innovation Action Plan has improved for forest-based sector, about cross-sectoral innovation possibilities. On the basis of the adopted Transnational Strategy, and previous documents of workshops of FORESDA, PANFA (wood cluster) has developed a Local Innovation Action Plan (O.3.2) for the subsegment of bio-composite. The main goal of this document is to identify possibilities in the bio-segment subsector and to find proposals of developments in the Hungarian wood industry.

Basic objectives are declared in previous workshops, and these are fixed in this documents. LIAP contains further workshops to discuss the possible ways of developments. SMEs, researcher, education and governmental organizations are participated in the activities of LIAP.

End of these activities the players of Hungarian wood segment will closer than now, they will gain some new ideas about how, and whom can they work together.

3. METHODOLOGY

The following LIAP for improved technology transfer and innovation processes in SMEs of the forest-based sector is defined specifically for the project region Hungary, West-Transdanubia, as one of the main outputs of the FORESDA project ([Interreg Danube Transnational Programme](#)). All LIAPs should be developed in coherence with the set Transnational Strategy, which aims to improve the framework conditions for forest-based cross-sectoral value chains and describes how the project will address identified needs with respect to the regional innovation systems (RIS), and with a focus on cross-sectoral aspects. The LIAPs on the other hand, should specify the concrete implementation – activities, timeline, responsibilities, and measurable objectives – of the Transnational Strategy elaborated at the project level in each region. Accordingly, a validation workshop has been organized in each region, and the participants - relevant stakeholders from FBI and RIS environment - had the opportunity to discuss and contribute to the proposed actions and measures. Their comments and suggestions are integrated in the document and therefore the LIAP reflects the real market needs on the local level.

4. PROJECT REGION/COUNTRY CONTEXT

We have to see, that Hungarian FBI sector is looking for its place in Hungarian industrial policy. Roleplayers of this segment make huge effort to put FBI into Irinyi Plan (general industrial develop program 2030). First of all, they have to see it will be successful effort or not. Irinyi plan will be able to determinate many subactivities in FBI, for example R&D. We do not have existing overall policies. Of course we want to change this situation. The key can be Irinyi plan. We have also send several data about HR situation in Hungary. Many Hungarian people are working in west part of EU. Hungarian economy suffers from lack of employees. Unemployment rate is lower than 4%, which is the lowest in EU.

Cross sectoral topic is quite new idea in the EU as we know. This is a good idea, but we are not sure, that Hungarian FBI is ready for this. We have already sent what kind of companies are working in this sector, please read it again.

There are no any funds for cross-sectoral projects and activities. We have some initiatives supporting intersectoral cooperation.

Hungarian government wants to incite R&D activities generally. It operates some state funds. The concept should be improved. Because these funds focused on companies, and do not incite common work with each other or research institutes, universities, etc. Unfortunately many resources of EU tenders are being late.

FBI has weak R&D activities and potentials in Hungary, because of companies profiles (we have already sent some of them). But our project region there is a quite new research institute, which is called NRRC (it has already been mentioned in previous documents). University of Sopron, and its wood- and forest faculty also are in our region.

5. FOCUS, OBJECTIVES AND IMPACTS

The pilot focuses on field of bio-composites. A study is prepared about these materials. This study will be discussed in several meetings, with different participants. After these meetings our pilot will have two- or three possible ways of development.

Our main object to transfer this knowledge to the SMEs.

Objectives:

- WG members will try to achieve higher governmental support (legislative, tax, funds, etc.) for the R&D possibilities, and further researches in the field of bio-composites. (FBI became the part of Irinyi plan, which is a long term economy development plan of Hungary).
- Participants will looking for potential market possibilities based on the created bio-composite study (automotive industry, healthcare, etc.).
- We will try to make a smart map of SMEs, which can use these R&D results.
- According to the results of the workshops of study, we will define campaign suggestions for Clusters, educational, governmental institutes to disseminate the results.

5.1. IDENTIFICATION OF ALL PRIORITY NEEDS

General recommendations according to previous workshops:

1. Image & Lobbying

Initiate some promotional campaign on rebranding of the FBI sectors (on national and/or regional levels).

Make campaigns of best practices within FBI sectors.

Create a smart map.

Make a new market research.

2. Policy & Legislative Support

Be stronger FBI clustrers.

Clusters, Associations, etc. have to achive closer partnership with governmental roleplayers.

Work out FBI policies, and its possible ways in the future (sharing economy, industry 4.0, etc.)

Declare some suggestions of industrial laws. These have to be the part of the new FBI strategy.

3. Funding & Business Environment

If we reach inter-sectoral cooperation, we will initiate the establishment of formal and/or informal bodies/groups which will bring together employers from diverse industries and regions and be in charge for:

- promotion of cross-sectoral topics
- education related to cross-sectoral collaboration

To set up and operate a cross-sectoral innovation map including a matchmaking platform for innovation actors

To create a database on consultants for cross-sectoral projects - a pool of “experts” and experienced people (not only consultants but also co-ordinators of projects)

We have to do these steps inter-sectoral. Just after them can we go higher level.

To develop and propose the possible funding schemes for cross-sectoral activities especially for FBI sectors.

4. Education & Human Resources

To initiate the modification of the educational programmes, via Clusters or common meetings, workshops.

Organize workshops and meeting between FBI sectors companies and educational, governmental organizations.

Have to declare which organizations will responsible for implementation.

Collect their needs in connection with implementation.

As in Hungary is not experience for this, it could be good idea of study tours for delegations consisting of representative of industry, as well as policy-makers (all linked to FBI sectors) in order to get familiar with the best practices of similar international projects

Starting to create the framework of cross-sectoral cooperation, have to be organized cross-sectoral conference of clusters (for example, FBI and construction, plastics, ICT etc.)

5. Other issue Hungarian LIAP focuses on bio-composites. First step we make a study. (We have already taken this step). Next step is analyzing this study between different roleplayers. After this, some possible direction will be detected from raw material side. We will investigate market side as well. If we know wider information about consumer's trends we can generate further workshops within SMEs. In these workshops, we will present experiences and best practices in connection with these activities. Projectpartners will share their final conclusions about these. They will decide which experiences will be forwarded to governmental side, and which will be suggested to build in Irinyi Plan. After the final workshop of SMEs they will present an article in a professional newspaper or webpages of professional organizations.

5.2. IDENTIFICATION OF NEEDS TO BE ADDRESSED IN THE FRAMEWORK OF FORESDA

General recommendations according to previous workshops:

1. Image & Lobbying

Initiate some promotional campaign on rebranding of the FBI sectors (on national and/or regional levels). There is no any wood sector campaign. Each stakeholders try to promote their own products or company. During the realization of LIAP we have to make emphasize to communicate this problem, and ensure cooperation in this field as well.

2. Policy & Legislative Support

Clusters, Associations, etc. have to achieve closer partnership with governmental roleplayers. PANFA, Hungarian wood cluster is one of the main WG participant. It can make better connection with governmental role-players in the next workshops of LIAP.

3. Funding & Business Environment

First step to reach inter-sectoral communication. LIAP activities will be good surface to initiate the establishment of formal and/or informal bodies/groups which will bring together employers from diverse industries and regions.

4. Education & Human Resources

To initiate the modification of the educational programmes, via Clusters or common meetings, workshops. University of Sopron is a member of WG of FORESDA project. The representatives of the University can collect direct feedbacks from business side (SMEs) and other organizations (Clusters) about their and the segment's needs.

5.3. OBJECTIVES AND EXPECTED IMPACTS

In this section you should list the expected results and include information on expected impacts of the LIAP.

Example of the text in this section:

The following section describes the objectives and expected impacts related to the needs described in previous section. Do it as in the table below:

OBJECTIVES	EXPECTED IMPACTS
<i>To improve the image of FBI sector with the help of the dissemination of the information on the benefits of cross-sectoral collaboration</i>	<i>Raised current quantity and quality of the collaboration between FBI and other sectors (Based on the improve image).</i>
<i>WG members will try to achieve higher governmental support</i>	<i>FBI will be involved Irinyi Plan (Hungarian Industrial development program until 2030).</i>
<i>Participants will looking for potential market possibilities based on the created</i>	<i>They will be able to find new partners in different sectors and countries.</i>

bio-composite study (automotive industry, healthcare, etc.).	<i>They will be able to detect development directions, or ideas of new product or product range.</i>
We will try to make a smart map of SMEs, which can use these R&D results	<i>To show FBI role-players how can cooperate whom, and how</i>
According to the results of the workshops of study, we will define campaign suggestions for Clusters, educational, governmental institutes to disseminate the results.	<i>Via these ideas participants will be able to create campaigning to gain new students, employees and/or bigger emphasize in domestic segment.</i>

5.4. LINKS WITH OTHER FORESDA OUTCOMES

The created LIAP within package WP3 will be connected in a way to other WP packages within the FORESDA project. The LIAP is a very important document created in this project and it is necessary to implement its promotion in order to create an image of the necessary changes in the FBI sector. The WP2 which deals with the promotional campaign will promote recommendations and proposed measures from the LIAP through activities such as workshops, social networks, publishing articles in professional journals, publishing information on the results of the project on the website of the faculty, etc. One of the measures of the LIAP is the participation of companies and better cooperation with R&D institutions on projects in order to improve technologies and business. LIAP and the objectives of the FORESDA project should increase the cooperation between R&D institutes, SMEs, educational and governmental organizations as well as promotion of cross-sectoral innovation. The aim of the pilot environment is to collaborate with various SMEs for increasing their innovative potential.

6. ACTIONS AND SCHEDULE

Please use the following table to show the timeline:

ACTIONS & SCHEDULE → Timeline ↓ Action Description	Project Period 3 (1-6/2018)		Project Period 4 (7-12/2018)		Project Period 5 (1-6/2018)	
	1-3	4-6	7-9	10-12	1-3	4-6
1. Bio-composite study						
2. Meetings of evaluation of the study between University and Research Institutes						
3. Evaluation meeting between governmental and research sector, about the possible ways of cooperation						
4. Workshops; SMEs, market research companies and research institutes create common ideas, about possible directions						
5. Communicate results of different phase and final conclusions						

1. Invitation for scientists, students and researchers. Object: Research and study of bio-composites. - Done

2. Call for participation of first workshops of discussions from professional side. The target group of these workshops are researcher, universities. – February 2018. ZMVA will promote these workshops, and will create calls for participation. These will be also done in the network of the University of Sopron and the events and programmes of the Uni.

3. University and NRRC roadshows and open-gate days for students. – February 2018 University of Sopron regularly make open-gate days beginning of the year. These events will be good occasion to promote main goals of FORESDA project, and the field of biocomposites.

4. Communicate first results of meetings and study to wood sector operators. – May 2018

Professional organizations will send final version of discussed study to SMEs segment in FBI. These roleplayers will put this study on their webpages as well.

5. Call for participation of meetings of SMEs. Groups of these meetings will discuss the potential sub-segments of bio-composites, based on the study. – May 2018

Professional organizations and associations with governmental operators will send call for participation for SMEs. These meetings will provide forums for discussions and networking opportunities among teaching staff, researchers and producers and governmental side.

6. Workshops for SMEs. The goal of these meetings to select two or three bio-composite materials. If we know these types of bio-composites, we will make a big step to reach our objectives. – from June 2018

ZMVA will generate these workshops. Participants will investigate the possibilities within the subsegments of biocomposites from the side of producers. SMEs can discuss and recognize each other potentials and technical barriers. They will be able to start cooperation to solve capacity or technical problems.

7. Communicate meetings and workshops results to governmental institutes. This will be important to show them chances in FBI, and try to gain bigger attention. – from Jun 2018

8. We will communicate the best practices of the project within Cluster. – from June 2018

9. We will summarize final conclusions of the project, and communicate as well. – June 2019

Objective: To disseminate and improve cooperation, and potential points of R&D within the FBI sector.

Expected impacts: Companies and research institutes of FBI sector will have better image. Companies and other operators will be able to get more attraction from other sectors for collaborations. Usability of bio-composites are interested in concerned not just FBI sector. Bio-composite based products will need cross-sectoral collaboration. As lack of well educated employees is a problem in this segment the positive image of the FBI sector is also important to gain welleducated workers to the SMEs of the FBI sector.

Expected date of achievement of the activities: June 2019

7. KEY IMPLEMENTATION STEPS

This chapter highlight the key implementation steps and phases of the LIAP.
Activities in connection with bio-composite segment (e.g. study, workshops, etc.)

Key implementation steps / Deadline:

1. Preparation
 - to create bio-composite study / January – February 2018
2. Dissemination
 - meetings (education, government) / March – August 2018
3. Realization
 - workshops with business fied / June 2018 – May 2019
4. Capitalisation
 - dissemination of results and conclusions on the workshops / June 2019



8. RESPONSIBILITIES

ZMVA as project partner of the FORESDA project is the main responsible partner for the implementation of the LIAP. However LIAP will be supported by the two WG participants: Közbeszéd Bt. and PANFA Cluster. PANFA Cluster play an important role in the field of innovations and collaboration activities in the our region. Közbeszéd Bt. via PANFA Cluster will organize the activities, they work together and contribute to this implementation with their own resources as well as the resources available from the FORESDA project.

9. TARGET GROUPS AND STAKEHOLDERS

Target groups

FBI SMEs that have interest in the cross-sectoral collaboration and innovation.

Clusters, professional organizations.

Research institutes.

Most of the stakeholders come from the segment of target group. Our niche segment is bio-composite. University of Sopron and NRRC institute have competency within this field. University can be a kind of umbrella organization over its wood faculty. They are the basement of our activities. They will make R&D and have several results in FBI, which can be communicated for companies. The field of bio-composite is a very exciting area, with good possibilities. But first of all, we need further research. University continuously is communicating for young people. It will make better relationship, and develop its network between them. Wood faculty can give good scientists, and student base.

NRRC has well equipped laboratories. Here there will be many examination of bio-composite's R&D.

PANFA Cluster responsible for communication as a moderator, and looking for possibilities to promote Hungarian wood sector, and develop knowledge of R&D. PANFA cluster has wide connections in FBI. Cluster can help marketing, and transfers of R&D results. It can help to introduce new products or new (star-up) companies in different fairs.

Companies and institutes can exchange their opinions and remarks within this organization. They looking for new members, new information, best practices via these processes.

Our project focus on raw-material research. We want to incite these actions. The results of the project will not a new product, or a full built up innovation environment. We want to make a stable background for these. Companies can be involved these activities,

and they gain new information. Advantages of SMEs are depends on which niche markets will be chosen finally.

Woodsience Foundation try to support scientist and researcher in R&D works.

Chamber of Industry and Commercial create business possibilities and help to find business partner in national, and transnational field. Good practices are forwarded to higher level of governmental policy makers. It can support better strategy making in wood sector, and in EU tenders.

10. RESOURCES AND BUDGET

ZMVA needs have to be fulfilled/secured in order that you are able to conduct the LIAP. The following resources need ZMVA which will be supported by Foresda project. The PPs will use their own budget.

- Human resources from project partners and the strategic target groups to achieve to goals, make communications and disseminations. (1000 EURO)
- Facilities of the PPs will be used to do the events
- Financial issues to the support of the events (4000 Euro)

Furthermore, within this chapter you should give information on what is your estimation of the budget needed to perform the actions within the action plan. Link the actions with resources.

11. COMMUNICATION ACTIVITIES

1. Invitation for scientists, students and researchers. Off-line invitation, in the the potential channels of University of Sopron. Közbeszéd Bt. go to meetings, and preapare docments to push more and more information about LIAP, FORESDA and research possibilities of bio-composites.
2. Call for participation of first workshops of discussions from professional side. The target group of these workshops are researcher, universities. This call go out via e-mails and off-line tools. Közbeszéd Bt. will cooperate University of Sopron and PANFA. These two organisations have lists the best professionals of wood sector.
3. University and NRRC roadshows and open-gate days for students. This period of the year is basically the season of open-gate days for students. These days will be used to show more information about our project, plan and possibilities in wood sector and FORESDA.
4. Communicate first results of meetings and study to wood sector operators. Results will be shared via e-mails and newsletters. PANFA will spread these information wider range.
5. Call for participation of meetings of SMEs.
This will be generated via e-mail. This e-mail will be sent out for the members of PANFA.
6. Communicate meetings and workshops results to governmental institutes. Projectpartner of ZMVA, Közbeszéd Bt. will invite these players directly.
7. Communication of the best practices of the project and final conclusions of the project will be represented in professional and local on-line and off-line media.



12. RISK ANALYSIS

Describe the possible risks and group them according the following types:

DESCRIPTION OF POSSIBLE RISK	PROBABILITY OF OCCURRENCE	IMPACT	REMEDIAL ACTIONS
1. To be unsuccessful in the attraction of SMEs, other target groups and stakeholders	0.4	0.8	To organize an initial presentation of the LIAP among SMEs and other target groups and stakeholders
Election in Hungary	0,3	0,15	Quick agreement with governmental organization
EU investigations	0,15	0,15	Find local funds

13. APPENDIX I:

LIAP HUNGARY, WEST-TRANS DANUBIA - TABLE OVERVIEW

LOCAL ACTION PLAN DETAILS	TIMELINE		OBJECTIVES	TARGET GROUPS	ESTIMATED BUDGET (EUR)
ACTION & KEY IMPLEMENTATION STEPS	PP 3 (1-6/18) 01-03	PP 4 (7-12/18) 07-09	PP 5 (1-6/18) 01-03		
1. Bio-composite study	04-06	10-12	04-06	SMEs, cluster, researchers, governmental organizations	not estimated
Preparation					not estimated
Dissemination					not estimated
Realization					not estimated
Capitalization					not estimated