Interreg
Danube Transnational Programme
DanuBioValNet

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EUROPEAN UNION
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**Cross-clustering partnership for boosting eco-innovation by developing a joint bio-based value-added network for the Danube Region**

**WP4**

# StressTest
# Concept Note

Project co-funded by the European Union fund (ERDF, IPA).

# 1 Introduction

With this document we would like to give you some further information about the StressTest idea and the DanuBioValNet project. The aim of the StressTest and some basic information about the methodology are described in the first section. In the next part the terms we use, like cluster organisation, cluster initiative or clusters are defined precisely. In the end you can find some information about the DanuBioValNet project.

# 2 DanuBioValNet StressTest

StressTesting of regional approaches conducive to the implementation of S3 through clusters is a transnational benchmarking-based learning approach. This approach determines how and where clusters can be effective in supporting industrial transformation, new value chain formations and employment generation in an integrated, coordinated and sustained manner. The overall aim is to find ways of designing and implementing modern cluster-based regional economic development policies. It also serves to draw maximum advantage of the regional cluster portfolio while shaping new industrial value chains and sectors. It is intended for regional implementation organisations, policy makers and business development entities that are interested in drawing comparisons with European frontrunner regions.

StressTesting addresses policymaking and implementation processes. This includes the role of clusters in the design of the S3 along with regional support schemes for cluster initiatives, coordination and alignment of S3 at the regional and national level. StressTesting also highlights the role of clusters in the implementation of S3 with dedicated focus on Bioeconomy. Benchmarking explores the role of a regional cluster portfolio in providing inputs for development and in testing innovation models initiated by cluster organisations.

The overall objective of the StressTest is to better understand the role that cluster initiatives can play in implementing S3 and how to improve the framework conditions for innovation induced by clusters and their SMEs. The underlying problem in the implementation of S3 has been detected at two fundamental levels: a lack of experience among regions on how to use clusters in the implementation of S3 and a lack of alignment between and knowledge about other regions' strategies.

The StressTest will mainly focus on the question of how and when clusters and cluster initiatives are used as a tool in S3. By including questions about the ability of clusters to implement new innovation models, the StressTest will also pave the way for considerations how S3 can contribute to the process of defining new innovation models in further detail. It thus fully considers the two-way interplay between clusters and S3.

The approach provides regions with a unique opportunity to reflect on their past successes from a policy perspective and guide regions in their efforts related to the policy discovery process. It is very practical. In a time of ever-accelerating speed of change, Stress Testing provides policy makers and clusters with the opportunity to build the capabilities needed to support businesses

and move them in the direction where opportunities are opening up. It provides high added value for frontrunner regions (to compare with others) as well as for less advanced regions to learn from more advance regions.

# 3 Key Concepts and Definitions

For the purpose of this report the key concepts and definitions are understood as follow:

- **Clusters:** Clusters are generally described as groups of specialised enterprises, often SMEs, and other supporting actors in a particular location that cooperate closely together.
- **Cluster initiatives:** A cluster initiative is an organised effort aiming at fostering the development of the cluster either by strengthening the potential of cluster actors or shaping relationships between them. They often have a character like a regional network. Cluster initiatives maybe managed by a cluster organisations.
- **Cluster organisations:** Cluster organisations are entities that support the strengthening of collaboration, networking and learning in innovation clusters and act as innovation support providers by providing or channelling specialised and customised business support services to stimulate innovation activities, especially in SMEs. They are usually the actors that facilitate strategic partnering across clusters. Cluster organisations are also called cluster managements.
- **Cluster participants:** Cluster participants companies (user and suppliers), academia or other intermediaries, which are commonly engaged in a cluster initiative. Given the case a cluster initiative has a certain legal form, like associations, cluster participants are often called cluster members.
- **Cluster policy:** Cluster policy is an expression of political commitment, composed of a set of specific government policy interventions that aim to strengthen existing clusters and/or facilitate the emergence of new ones. Cluster policy is to be seen as a framework policy that opens the way for the bottom-up dynamics seen in clusters and cluster initiatives. This differs from the approach taken by traditional industrial policies which try (and most often fail) to create or back winners.
- **Programme:** Programmes are vehicle to implement a policy, e. g. funding programme for R&D in environmental technology. In addition to programmes, policies are also implemented through regulation (= regulatory framework, e. g. law on consumer protection).
- **Smart Specialisation Strategies:** Smart Specialisation is a strategic approach to economic development through targeted support for research and innovation. It involves a process of developing a vision, identifying the place-based areas of greatest strategic potential, developing multi-stakeholder governance mechanisms, setting strategic

priorities and using smart policies to maximize the knowledge-based development potential of a region, regardless of whether it is strong or weak, high-tech or low-tech[1].

We will clearly distinguish between clusters, cluster initiatives and cluster organisation to make it easier for the interviews to understand what is intended with the corresponding question.

# 4 About the DanuBioValNet Project

The DanuBioValNet project is aiming at establishing bio-based industry networks across the Danube Region. The emerging transnational cooperation of clusters will foster bio-economy and eco-innovations and lead to a strengthening of the regional economies.

Consequently, with this project the partners pursue a strong strategic orientation beyond the immediate and medium-term economic objective of strengthening the regional economy. It is the strategic goal to establish cross-border strategic partnerships, particularly in developing regions, with the help of powerful cluster organisations. In this way, project results will be sustained beyond an immediate effect and the creation of strategic investments, especially in emerging industries such as the bio industry, will be enabled and facilitated. This will be achieved mainly by newly emerging or transforming value-added chains, which are increasingly being transnationally established and further developed as a result of the increasing internationalisation of value-added processes.

In this way, long-term economic effects are achieved, based on a network of agile clusters, which prepare the investment approaches in a targeted manner and implement them with high efficiency. One example of the present project is the establishment of bio-refineries in the regions, which can form a strategic technological backbone of a successful independent bio-industry.

The partners intend to develop and implement a long-term, industry-driven roadmap for such collaboration along the entire value chain based on cluster partnerships for these processes. With the project, a pilot function of the implementation is taken over and the prerequisite for creating a blueprint for similar and similar cross-national cooperation, also in other industries, is created.

For achieving these tasks, 17 project partners from 10 countries have joined forces. The project will pave the way from an economy based on fossil resources towards an economy using renewable resources. The striving of the partners to minimise greenhouse gases and resource-saving as well as resource-efficient utilisation of available biomasses will result in synergistic effects. These effects will improve the sustainability, regional development through diversification of the local economy and will also positively affect the workforce.

[1] Foray, D. (2015). Smart Specialisation, Opportunities and Challenges for Regional Innovation Policy, Routledge.

The development of new bio-based value chains from primary production to consumer markets needs to be done by connecting enterprises from different regions and industries. However, due to a missing holistic transnational approach, Danube actors in bio-based industry still operate disconnected and cannot properly benefit from the potential. Therefore, the aim of this project is to develop new methods, strategies and tools to connect enterprises transnationally.

Clusters as the strong representatives of a group of industries that are closely linked by common products, markets, technologies and interests are chosen to organise and bear the industry cooperation and creation of new value chains, because they are performant and sustainable partners and guarantee the upgradeability in the dimension industry, sciences and also politics.

One of the planned outputs of this project will be the development of a Joint Bio-based Industry Cluster Policy Strategy (JBCS) to describe the procedure and to make it actionable and reusable.

Furthermore, a bundle of new methods and tools to support clusters for transnational working will be developed and joint into a strategy. They will be tested in three pilot actions where it is planned to create new bio-based value chains in the Danube region.

The main target groups are on the one hand the policy – four Ministries are involved –, on the other hand clusters and their SMEs – nine cluster organisations are involved. The policy level will benefit from the JBCS, which can be used as a political framework.

The clusters and SMEs will benefit from the new innovative tools and methods developed for transnational cross-clustering. Successfully established new bio-based value chains in the pilot actions can motivate other clusters and SMEs to test this newly developed approach in the future.

The following partners commit to the implementation of the cluster partnership and transnational cooperation:

| Role | Official Name in English | Acronym | Country |
|---|---|---|---|
| LP | BIOPRO Baden-Württemberg GmbH | BIOPRO | Germany |
| ERDF PP1 | ClusterAgentur Baden-Württemberg | CA BW | Germany |
| ERDF PP2 | Anteja ECG | ANT | Slovenia |
| ERDF PP3 | PROUNION | PU | Slovakia |
| ERDF PP4 | Romanian Cluster Association | CLUSTERO | Romania |
| ERDF PP5 | Association of Business Clusters | ABC | Bulgaria |
| ERDF PP6 | National Cluster Association – CZ | NCA | Czech Republic |
| ERDF PP7 | Business Upper Austria – OÖ Wirtschaftsagentur GmbH - Upper Austrian Food Cluster | UAFC | Austria |
| ERDF PP8 | Ministry of Economy | ME | Romania |
| ERDF PP9 | Ministry of Economy, Entrepreneurship and Crafts | MEC | Croatia |
| ERDF PP10 | Ministry of Education, Science and Sport | MIZS | Slovenia |
| ERDF PP11 | Croatian Wood Cluster | CWC | Croatia |

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| ERDF PP12 | Institute for Economic Forecasting | IPE | Romania |
| ERDF PP13 | Business Upper Austria – OÖ Wirtschaftsagentur GmbH – Cleantech-Cluster | BizUp | Austria |
| IPA PP1 | Innovation Center of Faculty of Mechanical Engineering | ICME | Serbia |
| ASP1 | Montenegro Vine Cluster | MVC | Montenegro |
| ASP2 | Ministry of Economic Affairs, Labour and Housing Baden-Württemberg | WM | Germany |

LP = Lead Partner, PP = Project Partner, IPA = Instrument for Pre-Accession, ASP = Associated Strategic Partner, ERDF = European Regional Development Fund