Output Factsheet

Output title: **O1.1 : Co-creative design thinking workshops to Transform plastics industry towards circularity**
Summary of the output (max. 2500 characters)

The output of this activity is the Design Thinking Workshops (DTW in the next) implemented in the individual participating countries of the partners - these DTWs were attended not only by the project partners themselves, but also by companies from the plastics processing sector, universities, relevant authorities and other partners. The individual reports clearly showed the different level of solving the situation in the area of circularity of plastics and products made from them. While some partner countries are already solving individual projects focused on certain groups of plastic products, on the other hand, other partner countries are currently engaged in discussions that are to establish future rules for handling, design and processing in the plastics industry. The essential and positive fact is that all partner countries reflect the requirements that are already given in the form of European Union regulations and directives - or rather, all approaches in the participating partner countries are familiar with the new requirements and rules and have incorporated them into their concepts of transition to a circular economy in the plastics sector. The concept of the Plan-C project and the structure of partners in the next stages will enable a beneficial and desirable connection of regions (countries) with a higher level of transition to circular principles to regions (countries) that are just working on defining and incorporating these principles into the industrial environment.

The implementation of DTWs in individual countries also enabled a relatively detailed mapping of the plastics environment in the regions, with the required connection of R&D, industry and key authorities for this area being achieved. In the following stages of the Plan-C project, these outputs will be further worked on and uniform key parameters of circular approaches and solutions will be defined, with the understanding that these should already comply with legislation and, most importantly, should bring uniformity in solutions and connection of partners from individual regions on a continuous level. The basis for further work will be D1.2.2 (DTW summary report), which will be further discussed at a joint meeting of partners in February 2025.

Contribution to the programme and project objectives, output and result indicator, as well as to the targets set for the Priority Area concerned (max. 2000 characters)

This output O1.1 concludes the stage of mapping the status of "application of circular principles in the plastics processing industry" and provides a comprehensive overview of the situation in individual regions. This partial objective, which is defined in the Plan-C project, is therefore achieved and at the same time respects the requirements of the EUSDR program. Thanks to the involvement of SMEs and other partners, the necessary knowledge and information were obtained that will enable and facilitate the application of the proposed circular principles in the next stages of the project. Thanks to the involvement of universities as members of the consortium, it was also possible to define technical, material and technological opportunities to further design not only uniform and common principles, but also to ensure that these principles are at a sufficiently

high TRL and thus enable companies (as final recipients of the outputs) to implement innovative solutions within a competitive environment.

How can the output be used and by whom (target group), what is the benefit and the impact for these target groups and the target area / Danube Region? (max. 1500 characters)

Target groups

1-PlanC partners : Thanks to the completed mapping, the project partners have gained a mutual overview of the current state of implementation of circular principles. They therefore have a comparative basis and a database of real problem areas in individual countries. In the next steps, they will use this mapping to create uniform manuals to support circular solutions with high added value.

2-Academic sector : Thanks to the involvement of multiple university departments, individual research capacities and departments can subsequently be interconnected. The research agenda will be better coordinated and the outputs will be used more effectively so that they can be applied within specific applications, companies, and industrial sectors.

3-Industry : Thanks to this, the participating companies gain relatively simple and direct access to specific solutions and can therefore apply them more effectively and quickly within their circular and decarbonization strategic plans. Among other things, some companies are also connected within the framework of future cooperation, subcontracting, cooperation on investments, etc.

4-EUSDR region including BSO and sectoral agencies : In the sense and context of the EUSDR region, this output will serve as a potential future guide on how to approach similar mapping for other sectors, what to avoid and which aspects to place greater emphasis on. Plastics processing is a relatively incriminated industrial sector from the perspective of circularity and objectives, but it is not the only or the last one that needs to be analyzed in this way.

How can the sustainability of the output be ensured and where and to whom is it going to be transferred? (max. 1500 characters)

The output will be elaborated and specified in more detail in the next stages of the Plan-C project for the purposes of formal application in the form of a transnational action plan, which is an integral part of the project. The output serves as a clear map (analysis) of the environment in individual regions, specifying specific problem areas and their potential solutions. The output will be transferred in the form of a transnational road-map. This document will be further transferred to associated partners, state institutions and associations of industrial companies. However, the mapping also includes individual and very specific technical solutions - these will be

further collaborated on by associated companies, involved universities and also partner associations. A project database will be created to support, develop and further modify such specific solutions, which will be available to all project partners and their partners.