

TEMPLATE

Output factsheet: Strategies and action plans

Version 1

Project index number and acronym	CE1125 - CIRCE2020
Lead partner	ARPA VENETO - Agenzia Regionale per la Prevenzione e Protezione Ambientale del Veneto
Output number and title	OT4.4 - Follow-up joint operative proposal to integrate circular economy model in transboundary-value chains
Responsible partner (PP name and number)	2 - ETRA spa
Project website	https://www.interreg-central.eu/Content.Node/CIRCE2020.html
Delivery date	07.2020

Summary description of the strategy/action plan (developed and/or implemented)

The goal of the DT4.4.1 “Operative proposal to extend the industrial symbiosis concept at transboundary scale” is to develop one concept focused on innovative actions to facilitate the cross-border circulation of secondary raw materials to ensure easier trade of End-of -Waste products across EU. The ultimate purpose of the present document is to stimulate and inspire future cross-border projects supported by the INTERREG / European territorial cooperation in the frame of the CBC financial instruments of the EU Multiannual Financial Framework 2021-2027.

This document is organized like a project short concept note, where the main key-elements (although presented in a general way) are expressed.

- **Goal & scope** - boost contacts and cooperation between local and regional institutions, waste utilities and companies to facilitate - by a certain number of pilot actions - the cross-border circulation of secondary raw materials (by-products) as well as the set-up of stable secondary raw materials supply chains.
- **Standardized work-plan** - WP Background analysis (comparative of legislation ruling by-products / EoW recycling in the bordering Countries // identification of areas with certain industries, companies and waste streams that fit well into the purpose of set-up of a cross-

border and stable secondary raw materials supply chains). WP pilot actions (create a certain number of Industrial Symbiosis Cross-Border partnerships representing different supply chains // technical and managerial facilities & tools to experience some protocols for cross-border circulation of secondary raw materials). WP transferability and replication (increase the knowledge over benefits and potential of a well-functioning cross-border market for secondary raw materials // development of one ATLAS to spot the most relevant regional industrial clusters with the suitable characteristics to create value to achieve circularity across cross-border networks).

- **Optimal partnership:** Public Authorities and Environmental / Economic agencies; pool of companies concerned in cross-border pilot actions (also as external stakeholders); R&D innovation centres to introduce innovative elements that let the regeneration process more convenient for all stakeholders; National Authorities and certification bodies)

NUTS region(s) concerned by the strategy/action plan (relevant NUTS level)

HU10, Közép-Magyarország. ITH3, Veneto, PL02 Wielkopolska; HR035; Dalmatia County; AT33 Tyrol.

Expected impact and benefits of the strategy/action plan for the concerned territories and target groups

1. Bordering regions and communities could benefit of the creation of industrial symbiosis partnerships as a way of fostering local economic development and enhancing environmental benefits for local businesses. The presence of industrial districts located across the borders let widen the number of potential by-products donors and recipients as - of course - the typology of secondary raw materials, while different technological specializations on the other side of the border could facilitate suitable by-products treatment solutions to give the secondary raw material a new life, otherwise not available in the waste-origin Country.
2. Promote Circular Economy and enable stakeholders (local and regional institutions, waste utilities and companies) to get benefited from it, replicate the application of pilot tools that will enable Circular Economy / industrial symbiosis experiences in the area, inform, train, mentor and network relevant stakeholders, introduce local entrepreneurs and enterprises to the concept of Circular Economy, raise awareness and create a sustainable and replicable outcome enhancing in the long-term entrepreneurship.

Sustainability of the developed or implemented strategy/action plan and its transferability to other territories and stakeholders

As pointed out by the European Commission, the major obstacles towards the creation of a well-functioning EU market for secondary raw materials are the legal and regulatory barriers that differently govern the transport and processing of by-products and the End of Waste products. For this reason, the present concept note is focused on the creation of practices, pilots and tools to facilitate the cross-border circulation of by-products, since at this scale innovative solutions can be investigated.

About **replication**, the concept note proposes an “ideal work-plan” that shall be customized and transferred in any cross-border territory in Europe, inside and outside Central Europe. Starting from the main concepts proposed by this document, the “ideal work-plan” could be replicated by any waste-management authorities and generate new bilateral projects, aggregate new partners and concretely pave the way towards collaboration between waste-utilities, agencies and companies located across a single border to facilitate the cross-border circulation of secondary raw materials as well as the set-up of stable secondary raw materials supply chains.

About **sustainability**, the draft programme priorities and specific objectives of the Interreg CENTRAL EUROPE funding strategy in 2021-27 shall support a possible project follow-up: indeed, the SO 2.3. Taking circular economy forward in central Europe points out that this socio-economic transformation happens across the entire territory of central Europe (and does not concentrate on only a few regions). To be noticed that the potential fields to be addressed in transnational actions are indeed □ Waste prevention and management, recycling and recovery of resources and raw materials □ Repair and re-use □ Circular economy value chains □ Clean production processes and closed loop systems □ Sustainable product design (e.g. eco-design) and product development processes □ Behavioural changes of producers, consumers, public buyers etc.

Lessons learned from the development/implementation process of the strategy/action plan and added value of transnational cooperation

1. Need of integration of appropriate ICT tools (advanced modelling to design and establish novel
2. symbiotic interactions; data sharing and preservation of data confidentiality) and operational technology; (e.g. aggregation technologies) for multi-criteria decision making to foster and support secondary raw materials markets across borders,
3. start from CIRCE2020 KPI to settle down to measure the performance of symbiosis, including environmental, economic and social impacts in secondary raw materials markets across borders. Enhance Life cycle assessment and life cycle cost analysis based on CIRCE2020 should

be taken into account to size existing sustainability standards (e.g. ISO 10410) and existing best practices;

4. Creation of an inventory of successful symbiotic relations and solutions, as well as best practices of transboundary by-products businesses as well as new business models.
5. Clustering and cooperation with other selected projects under this cross-cutting call and other relevant projects is strongly encouraged.

References to relevant deliverables and web-links If applicable, pictures or images to be provided as annex

Reference to the deliverable: D.T4.4.1 “Operative joint proposal to extend the industrial symbiosis concept at transboundary scale”

<https://www.interreg-central.eu/Content.Node/CIRCE2020.html>