

TEMPLATE

Output factsheet: Strategies and action plans

Version 1

Project index number and acronym	CE 1125 CIRCE2020
Lead partner	ARPAV - Regional Agency for Environmental Protection & Prevention
Output number and title	O.T1.3 Local plans for the prioritization of interventions
Responsible partner (PP name and number)	1-ARPAV
Project website	https://www.interreg-central.eu/Content.Node/CIRCE2020.html
Delivery date	09/2018

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

In this document is summarized the process that leads to pilot cases identification, from the recognition of waste production & destination to the physical flows maps. The present process to prioritize the interventions is also supported by a permanent consultation with the local stakeholders (administrations located in the pilot regions, trade and industrial associations, environmental authorities, universities etc.) to come to a shared hierarchy of waste flows to optimize and/or to close (in DT1.1.3 and DT1.4.1).

The waste flows identification starts from the analysis of waste production and the waste destination in the pilot area. The data, provided by ARPAV, duly treated and elaborated by ETRA, are the basis for the MFA analysis. In MFA analysis a multi-criteria approach was implemented, taking into account the results of the data elaborations and the feedbacks from stakeholders consultation. On this basis, the most promising flows are identified and listed below:

- Mulching sheet
- Landfill leachate
- Green Public Procurement - GPP
- Baby diapers, hygienic pads and incontinence products from non-domestic users
- Packaging waste from non-domestic users
- Salty (chlorine enriched) sludge from leather treatment
- Biogas from AD (upgrading to biomethane)
- Promotion of recycling aggregates
- Optimization of water management in a plant producing pharmaceutical products

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

Country (NUTS 0) : IT

Region (NUTS 2) : ITH3, Veneto

Sub-region (NUTS 3) : ITH36, Padova

The pilot area is located in Veneto Region, across the provinces of Padua and Vicenza. It's possible to distinguish 3 main areas: Asiago plateau, Bassanese area and Paduan area, in which are about 600.000 inhabitants and about 20.000 small and medium enterprises.

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

At the general level, the CIRCE2020 project aim is to generate a shift in the economical model of area involved in the project. Then, a concrete implementation of Circular Economy strategy is needed, to share the benefits and increase the awareness in this topic. In this output, the basis of pilot actions are implemented, as concrete realization of circular economy model.

In specific, the pilot case "Landfill leachate" aims to recovery from a waste (the leachate) to a secondary raw material (ammonium sulphate): in this way, the leachate is more easy to treat in wastewater plants, and we can use a fertilizer, the ammonium sulphate, not derived from non renewable sources.

Finally, the pilot case "Biogas from AD - upgrading to methane" aims to better refine the biogas from anaerobic digestion to obtain the biomethane, to fuel the trucks dedicated to the urban collections waste. In this case also, the safe of non renewable resources (the methane from gas field) is evident.

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

The sustainability of strategy is related to the aim of pilot actions: to evolve from a business as usual model to a circular model. The process of analysis and choice of waste flows lead by an MFA methodology, the implementation & analysis of pilot cases lead by LCA/LCC analysis will collected in a unique & standardized framework, that will be replicable for other companies and it will possible to transfer to them for replication of circular economy model.

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

- Increased knowledge of economic fabric of project area.
- Meetings with local stakeholders allow knowing specific issues about regulatory and economic constraints, but data from single enterprises are difficult to obtain because of the cultural scare of the authority and the preference to solve within the industry gate possible problems, instead of discuss with external entities.
- The interaction with the stakeholders was crucial to identify the most promising flows and the related pilot actions which are going to be implemented within CIRCE2020 project. In fact the willingness to

collaborate from the single companies and the endorsement received from Universities and the S3 manager could lead to a balanced choice of the relevant flow to be considered with the aim of improve their circularity

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

- DT1.3.2: Report of the quantity of industrial waste in the CIRCE2020 industrial areas - Area ETRA
- DT1.3.3: Report of the present destinations of industrial waste - Area ETRA
- DT1.3.4: M-scale analysis of the physical flows at local industrial system level - Area ETRA)
- DT1.4.2: Local plans to prioritize interventions - Area ETRA

Annex: Most promising flows compliance with regional S3 priorities

Promotion of biodegradable and compostable mulching sheet	<i>Smart Agrifood</i>
Ammonium sulphate production from landfill leachate	
Salty (chlorine enriched) sludge treatment for recovery from a leather treatment plant	<i>Smart Manufacturing</i>
Biogas upgrading to biomethane in a AD plant	
Optimization of water management in a plant producing pharmaceutical glassware	
Promotion of recycled aggregates	
Promotion of GPP	<i>Sustainable Living</i>
Upgrade of packaging waste management from non-domestic users	