



TEMPLATE

Output factsheet: Strategies and action plans - AMTP PL

Version 1

Project index number and acronym	CE 1125 CIRCE2020
Lead partner	ARPAV Venetto: Regional Agency for Environmental Prevention and Protection
Output number and title	Output O.T2.4; Business Plan
Responsible partner (PP name and number)	AM Trans Progres sp. z o.o., AMTP - 3
Project website	https://www.interreg-central.eu/Content.Node/CIRCE2020.html
Delivery date	30.12.2019

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

EMABO case - In the identified CE solution multipolymer waste become the input to the conversion process. Physical treatment allows to use a different combination of multipolymer waste to produce plastic plates. The main technological processes include regrinding, shredding, mixing and thermic processing. As an output polymer board is generated, that may be treated as a finished product.

In particular, the aims are to:

- a. quantify the environmental benefits resulting from reducing the amount of landfilled plastic and the raw materials recovery (comparative analysis BaU_1 vel. CE solution)
- b. quantify the environmental benefits resulting from the raw materials recovery instead of energy recovery due to the use of RDF (comparative analysis BaU_2 vel. CE solution)
- c. identify the hotspots of the CE solution

What makes recovered products particularly valuable is the potential possibility of many applications, e.g. as a building material or a cargo-transport unit. For example, it is an excellent substitute for the origin board protected top layer of ground in a pigsty. To the most important features belong, among anothers, possibility of constructing in any size or further processing (if





necessary).

DTJ case - The system expansion covers the production of conventional terrace boards. In particular, the aims are to:

(1) quantify the environmental benefits resulting from reducing the amount of landfilled plastic waste and the raw materials recovery (comparative analysis BaU_1 vel. CE solution)

(2) quantify the environmental benefits resulting from raw materials recovery instead of energy recovery (comparative analysis BaU_2 vel. CE solution)

(3) identify the hotspots of the CE solution

(4) assess what technology for processing waste plastics is better form environmental point of view (comparative analysis CE solution_CASE study n°1 vel. CE solution_CASE study n°2)

Final treatments of unpure plastic waste are currently landfilling or RDF production. In the identified CE solution plastic waste becomes the input to the extrusion process, which allows to use a different combination of plastic waste. It is concluded that also multi-layered waste may be processed with the use of designed technology.

Realized processes are categorized into two groups: preparatory processes (regrinding, cleaning, drying) and basic processes (homogenizing, extrusion, cooling). As an output also board is generated that consists of HDPE (30%), LDPE (20%), PP (20%), PS (15%), ABS (10%) and sludge (5%). When assuming that the outgoing secondary material can be applied for terraces covering, it needs to be further processed by polishing, brushing and painting with a protective UV varnish.

The capacity of design installation is yet not estimated occur in the stage of terrace board production from unpure, homogeneous plastic waste. Realized processes are categorized into two groups:

- Preparatory processes - regrinding, cleaning, drying

- Basic processes - homogenizing, extrusion, cooling

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

The pilot actions is conducted in the Wielkopolska region in Poland Below we present information according to the NUTS classification

NUTS 1 – PL 4; NUTS 2 – PL 41; NUTS 3 – PL 418

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





Project-related activities and pilot actions were widely presented in the discussion forum and meetings with S3 Managers. We took an active part in the "Smart Specialization Forum", which was a platform for preparing the region for RIS3. CE has become an important element in the planned regional development strategy. Plastic recycling is an important production branch in the Wielkopolska region. In addition, entrepreneurs processing plastics in the Wielkopolska region and in other regions of Poland have shown great interest in the use and possibility of using the tools developed by CIRCE2020 in development planning and investments. In the face of the EU strategy, which aims to significantly reduce plastic waste in the environment, pilot actions carried out in the Wielkopolska region are a very important factor affecting success.

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

The results of implemented strategy, qualitative research and project activities are available on websites. Entrepreneurs and authorities participate in training and presentations with great interest. We were able to invite many participants to the discussion forum. They have the opportunity to exchange information, expand knowledge and exchange experiences. The effects of pilot actions are permanent. Emabo implement solutions, prepare production, develop marketing strategies. Stakeholders can see the results of specific solutions undertaken by pilot actions.

We successfully managed to transfer interest in the solutions proposed in pilot actions to other regions. We have reached various regions in Poland and the region in Latvia. Everywhere we were able to widely present the project results and encourage entrepreneurs to use tools.

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

The main conclusion is that entrepreneurs badly need access to such projects. These are activities that promote innovation and bring ready-made solutions for business development. In the face of climate change, CE is becoming a very important brand and business building factor. Thanks to the ability to reach project results, entrepreneurs noticed that new platforms for exchanging information and gaining knowledge about changing business conditions were created.

Entrepreneurs began to notice the great opportunities arising from participation in international projects. It opens them a chance for innovation and creativity.

In the context of trainings and meetings, we met with curiosity that international programs that support innovation and development, focused on CE issues, raise. Entrepreneurs were





interested in the H2020, Interreg Baltic Sea and other programs

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

For pictures, further info and images, please refer to the websites: https://www.circe2020-wiki.eu/ https://www.circe2020-wiki.eu/

Emabo case







