

CIRCULAR ECONOMY HUBS

IMPLEMENTED D.T1.3.1

CIRCULAR ECONOMY HUBS IMPLEMENTED:
Košice, Slovakia

Version 1
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D.T1.3.1: CIRCULAR ECONOMY HUBS IMPLEMENTED: Košice

A.T1.3 Concept for the implementation of a
circular economy hub/accelerator

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Document History

Date	Version	Description of Change
14.08.2020	v. 1.0	Document issued by PP1, PP2
18.09.2020	v. 1.1	New content by PP1, PP2
16.10.2020	v. 1.2	Final version by PP1, PP2
16.10.2020	v. 1.3	Document revised by PP5

1. Introduction

After completing the deliverables related to

- the creation of the working groups (D.T1.1.1 and D.T1.2.1),
- the two strategy workshops (D.T1.2.11)
- the drafting of the joint circular economy strategy (D.T1.2.6)

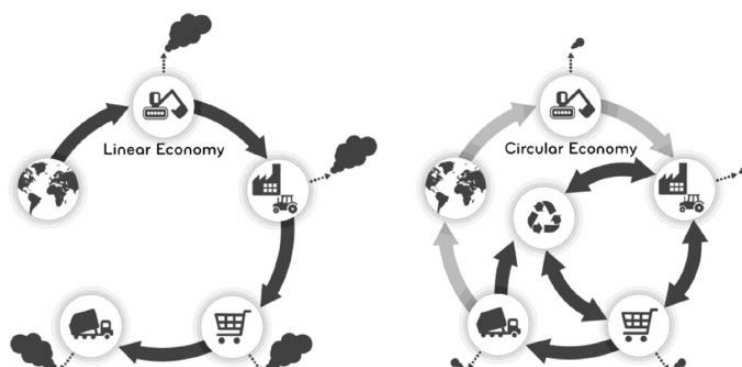
And in compliance with the final objective of the project to favour the transition towards a more sustainable and innovative economy, the deliverable D.T1.3.1 stands as a necessary step for the creation of a HUB for the circular economy in the territory of Košice.

In concrete terms this deliverable offers a first basis for the implementation of this facilitator office.

2. Hub concept

Slovakia's economy is very linear: the original material resources are transformed into products that are used and often landfilled as waste while this principle is applied also in the fields where it creates very ineffective approach, as e.g. agricultural production, food production and consumption.

The transition towards circular economy requires the adoption of a complex institutional, organizational, procedural and material measures leading to the necessary structural changes in individual sectors of the economy based on the awareness of civic and business society. According to our knowledge and experience from abroad, the interdisciplinary centres or the innovation hubs of the circular economy have crucial role in the transition towards circular economy with their education and advisory mission.



Source: Sauv et al. (2016)

The following document describes the concept for the implementation of a circular economy hub/accelerator: **Interdisciplinary Circular Economy Center (CircleHub) in the Košice region** which is based on the developed Deliverable D.T1.2.6 Joint circular economy strategy: Kosice, providing the government authorities at regional and national level the requirements for transition towards circular economy including the development of creation CircleHub with the key roles in the:



- Communication and education activities,
- Consulting and advisory support,
- Analytical studies,
- Contributing to initiation of collaboration among stakeholders,

describing the operational and development requirements consisting of technical infrastructure, staff composed by the skilled experts and finance resources.

CircleHub shall act as an effective regional innovative incentive tool to help seek opportunities and disseminate and exploit the results of applied R&I in circular economy which would help to better understand and support the transition of the business practices, supply chains and market business structures. The hub is the operating unit of the Innovation Network to Support Local Economy in Košice Region, specializing on the development in the field of Circular Economy, as the CITYCIRCLE project is the joint outcome of the Innovation Network members.

2.1 Legal form

The CircleHub will be founded on the base of the CITYCIRCLE project by the key CE stakeholders forming the CITYCIRCLE working group, and confirming the interest by signing of the CE Manifest for Circular Economy in Košice Region Technical University of Kosice, EGTC Via Carpatia, Kosice Self-governing region and Institute of Circular Economy. The next participating institutions will be joining and supporting this cooperation via the signification of manifest following the mission and goals of CircleHub. Regarding the legal structure - it is informal cooperation platform based on joint vision and goals, being the set of institutions, relationships and agreed tools and procedures, not being a legal entity.

2.2 Structure

CircleHub will serve as communication and cooperation platform developed within the CITYCIRCLE project with the main mission to spread the knowledge and provide assistance with transition towards circular economy.

The following CircleHub Organisational Structure represents the hierarchical arrangement of lines of authority, communications, rights and duties of the CircleHub, in the arrangement of a structured, but not legally binding form.





2.2.1 Overview of Management Structure and Procedures

CircleHub organizational structure and management plan defines the structure and management of the all services which will be provided to the clients. The management structure and procedure will be defined, ensuring:

- active interaction between the CircleHub members
- clear and shared roles and responsibilities within the CircleHub
- effective management and control of the CircleHub activities
- transparent decision-making and open communication
- coordination of the CircleHub
- ongoing and timely review and measurement of the progress
- identification, capture and timely reporting on outcomes
- timely identification of risks and contingency planning

2.2.2 Organisational Structure

CircleHub Organisational Structure represents the hierarchical arrangement of lines of authority, communications, rights and duties of the hub.

2.2.3 CircleHub Management Board

As the main management body, the CircleHub Management Team will be composed of two main hub founding authorities - Technical University of Kosice - Faculty of Economics, EGTC Via Carpatia and Kosice Self-Governing Region, based on the agreement.

The CircleHub Management Team will be the main authority with the right to decision making and acts as the main arbitration body in case of any disputes, on the base of the democratic voting system - each member of the board has 1 vote and decision is assessed according to the number of votes for the concrete activity.



The board will be coordinated by Technical University of Kosice, while each partner expressed their interest to actively participate on the activities of CircleHub according to their financial, personal and time resources. Participation is based on the founding agreement, but without legally binding form.

The CircleHub Management Team will provide overall direction for the hub and according to their knowledge, including needs and requirements of members, makes all high-level decisions about the role, mission and vision of the hub.

The progress of the hub will be regularly monitored and reported to the management board which will take actions according to the identified needs and requirements. The board will



evaluate all activities of the hub and takes any necessary precautions to ensure that a progress has been made according to the operational plan.

The Management Team will meet (physically or virtually) at least once per year and the communication among the members will be at minimum level at least once in three months, with the aim to inform all partners about the status of current and future activities.

2.2.4 Working staff

The working staff will consist of the representatives of the CircleHub Management Team members, especially Technical University of Kosice and EGTC Via Carpatia, who were trained in the specific topic thanks to the CITYCIRCLE project activities.

The working staff will be responsible for the communication with the clients of the platform CircleHub. Thanks to their expertise they will be able to conduct preliminary analysis of the needs and requirements and propose the next steps in the process according to the specific aspects while they can manage communication and cooperation with internal and external experts.

2.3 How to finance the hub

The costs of the performed activities within short term perspective (project duration period) will be financed from the resources of CITYCIRCLE project budget while these activities are planned within the project as the pilot action planned to be implemented in Slovakia.

Since the project implementation period will be finished, there will be needed to find additional sources of finance and develop self-sufficient sustainable financing system. In the upcoming period, the founding members of the CircleHub - Technical University in Košice, EGTC Via Carpatia and Kosice Self-Governing Region as well as other cooperating institutions, will actively seek for additional sources of funding in order to ensure the long-term sustainability of the CircleHub while there will be three main financial sources:

1.Grants: Regular analysis will be performed with the aim to identify all appropriate funding calls for the operation and development of CircleHub or provision of the services to our potential clients.

2.Donations: In the last period thanks to the knowledge sharing, many companies have started to think about their role not only on the market but also in our society, in the environment where they operate. They have become social-responsible and are willing to support various initiative aiming to the regional development while we believe they can be interested also in the topic of circular economy.

According to experience from other regions inside and outside of Slovakia we believe that also social-responsible companies can provide us financial support so we can perform our activities of CircleHub.

3.Service fees: Several of our services, especially assistance in the transition towards circular economy within the particular private companies, will be provided to the clients according to



the market principle - payed via the prices negotiated for particular customer as all services will be modified according to the needs and requirements of our clients.

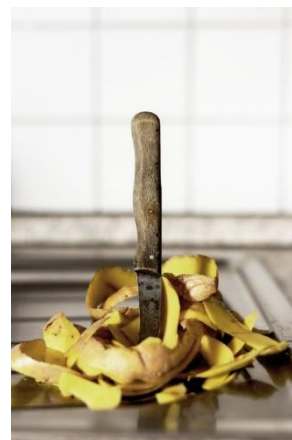
2.4 Services

According to our findings the following services are planned to be provided within the CircleHub.

2.4.1 Awareness raising and capacity building

The presence of an interdisciplinary circular economy centre with competencies and resources for the promotion and support of potential projects would significantly support greatly the transition towards circular economy and so the use of the resource potential in Eastern Slovakia.

The scope of this activity is to present good practices from the field via targeted marketing campaign, which will help to motivate SMEs and public institutions in Slovakia to implement the principles and tools of circular economy leading to the support of overall goals as well as increasing their competitiveness thanks to the innovative and eco-friendly approach.



There are **two overall goals within this activity:**

- to spread the knowledge about the circular economy as the awareness about this concept in Slovakia is very low,
- to present practical, easy to understand measures which can be implemented within the public and private institutions investing relatively small time and finance resources.

Promotional program will be implemented through a regional media campaign (e.g. radio, television, newspapers, etc.) with the aim to inform about the benefits of circular economy and foundation of new entity (CircleHub) which can help to adapt this concept while the focus will be given at the variety of topics related to transition towards circular economy.

The promotion campaign will be focused on the following actors who play a key role in the development of bio-green projects, which are:

- **Regional and local authorities**
 - Main topic: presentation of the benefits for the regional development
- **Industrialists - entrepreneurs**
 - Main topic: economic benefits of transition towards CE
- **Financial sector**
 - Main topic: clear understanding of the risks and consequences of supporting CE projects
- **The general public**
 - Main topic: potential benefits arising from the use of bio-energy in the region, both in terms of environmental and economic.



This activity will consist of the following steps:

- Identification of good examples how to implement circular economy measures especially within SMEs and small and medium public institutions operating in the Slovak Republic. In case we will not identify the needed range of good practices, the inspiration will be presented from other countries of Central Europe
- Selection of the most relevant case studies - with the goal of presenting a wide range of implementation patterns within various regions of Slovakia, as well as presenting various models of implementation process and financing the phases of planning and implementation of internal process change;
- Identification of the most suitable marketing tools for the purpose of dissemination of information, respecting the target groups characteristics and behaviour, as well as activity budget;
- Creation of presentation materials;
- Implementation of the marketing campaign utilizing the created presentation materials.

The implementation of the marketing campaign will be followed by an analysis of the results achieved and assessment of the strategy and tools adopted, in order to increase effectiveness of similar activities in the future.

All created materials representing the acquired knowledge will be also presented for a longer period through an electronic platform of CircleHub to support the knowledge transfer and implementation of circular economy in private and public entities operating in Slovakia.

Initial campaign will be implemented as the activity of CITYCIRCLE project and will be followed by regular update of good practices and their wide promotion once we will be able to find appropriate financial resources for that purpose.

From the long-term prospective, technological-monitoring service provided by CircleHub will be established to actively monitor new trends and good practices through media channels as peer-review professional magazines and relevant websites while this content will be later used for promotion of circular economy in our region.

2.4.2 Long-term targeted counselling in the form of mentoring

As the raising of awareness activities will be performed we can expect the interest of Slovak entities to implement circular economy tools what will cause the demand for assistance services which would enable to consult the special scenarios of the particular needs.

With this expectation we plan to design the mentoring program of CircleHub providing professional assistance, in traditional personal and digital form, to support the development of existing SMEs transiting towards circular economy through the change of their internal processes and creation of new technological innovations, in the form of high value-added products and services.

Thanks to the active cooperation within this mentoring program the expert team of CircleHub will get exceptional opportunity to analyse the current needs and requirements which will be very helpful for the development of further strategy of supporting the transition towards



circular economy and it will enable us to significantly shorten the transition period thanks to the more effective measures.

According to the current knowledge and previous experience we believe that such supporting programme can significantly encourage Slovak stakeholder to start transition towards circular economy once we will provide them the concrete example and moreover, help them to prepare feasibility study - there will be several levels of support:

- **Technological support for the adaptation of existing technologies**
 - The aim of this activity will be to adapt the specific requirements of circular economy systems, especially in the case of agriculture and rural bioenergy system, to existing available technologies.
- **Technological support for the adaptation of new technologies**
 - The aim of this activity will be to answer any user question related to existing or not yet available technology in order to facilitate the adoption of such new technology.
- **Process support for the implementation of the social CE innovations**
 - The aim of this activity will be to help with the implementation of the new CE business models, changes in the organization of work and interaction, etc. depending on the context.

The activity will consist of performing the following steps:

- Detailed analysis of the required elements of the support program based on the requirements of the identified target group and the experience of authorities from abroad;
- Design of services, in terms of their content, as well as process implementation;
- Pilot testing of the mentoring program within applicants from SMEs and public institution;
- Revision of the program based on experience gained.

Within this mentoring programme, qualified experts will provide information and innovative and technological advice to companies and public entities on technology transfer for internal process improvement as well as new product and service development, as well as opportunities to participate in international networks and organizations thanks to the circular economy implementation leading to the opportunities for joint project and funding for future activities.

2.4.3 Digital communication and cooperation platform

To support cooperation and development following the principles of circular economy new communication and cooperation platform will be developed with the aim to bring together local stakeholders, citizens and institutions to create trust, new links and more efficient exchanges assessing and planning the concrete steps of the transition towards circular economy.

The new platform will enable relevant entities to easily and quickly present their knowledge and experience as the inspiration and practical example of circular economy measures implementation which will solve the current problem of quick and easy identification of helpful information and potential partners for creating new, both business and especially R&D



relationships and cooperation, thanks to published profiles of individual partner organizations suitable for the specific purpose of cooperation, supporting inter- and cross-sectoral cooperation at the national and international level.

Thanks to the introduction of the platform, we will also be able to obtain valuable information that helps to better target the support for transition to the circular economy, as there will be possible to:

- identify the most promising areas of transition to circular economy that need to be reflected in the future the strategic goals of public funding;
- analyze areas of possible links between the needs of practice and the focus of public research and development organizations to create practical innovative solution following circular economy principles;
- analyze and evaluate the needs of actors in the field of infrastructure needed for the creation and implementation of innovations based on the circular economy principles, including in particular the identification of barriers to the implementation.

Due to the existing need to provide an effective and simple tool for communication and presentation of good practice examples as well as educational activities, this platform will also serve as a knowledge database, providing its users with educational materials and information resources in electronic form, with access regardless of the time and place of their physical presence.

2.4.4 Physical office of information and advisory centre

A permanent information centre will be founded body to serve to the entrepreneurs as well as private institutions or local communities and provide them all the requested information or advice regarding the transition towards circular economy.

This information and counselling centre will devote mainly following activities

- Information activities presenting
 - o General knowledge about the circular economy,
 - o Practical patterns for implementation of circular economy in the form of case studies,
 - o specific funding opportunities for the purpose of transition to the circular economy provided under the ESI Funds and other support instruments provided at national and transnational level,
- Targeted counselling services helping the subjects to support the transition to the circular:
 - o identify appropriate support tools for a specific project plan,
 - o to develop a successful project plan, in terms of the design of its content in accordance with the methodology of innovation creation and applying modern elements of the innovation process,
- Activities supporting cross-sectoral cooperation and internationalization in transition to the circular economy.



3.Short term perspective

Following the goals proposed within the CITYCIRCLE project, especially the objective of WPT1 Circular economy strategy and hubs, our aim for the period of project duration is to establish our regional CircleHub with the aim to support spreading the knowledge and implementation of the circular economy in our area leading to the transformation of the local economy towards circular economy.

Before the pilot project implementation which will include also the assistance of founded CircleHub, we plan to prepare the clear and ease-to-understand operational structure defining roles and responsibilities of all participating stakeholders.

The operation will start by the signification of the partnership agreement as the main starting point. Since that to proposed structure of services will be tested within the pilot action activities of CITYCIRCLE project. According to the experience the operation of the CircleHub and the specific aspect will be modified to fully cover the needs and requirements of the target groups.

4.Mid-term perspective

The circular economy strategy in each region participating in CITYCIRCLE project, including also Slovakia, were committed for a period of 5 years and include objectives which shall be achieved during the project duration but also beyond as they are designed to be integrated into the innovation strategies of the stakeholders involved, making circular economy a key enabler for innovation.

Within the period of following 5 years we believe that CircleHub will be respected and distinguished authority on the regional and national level thanks to the all members and stakeholders composing the innovation system who will support the wide acceptance and support the circular economy implementation.

Until the end of the mid-term period there shall be developed the good reputation of this entity thanks to the active approach of its staff and the sustainable concept of its financing shall be stated.

Based on the provided feedback by all of our target groups we will be able to set the long-term vision and mission which will be focused more or less on the various aspects of circular economy implementation including the general education about this concept, providing knowledge to the public government or supporting SMEs when implementing the methodologies of circular economy. Based on the developed use cases we will be able to assess the needs and requirements of the target groups and according to the findings composed the particular details of the services including their aspects like channels, regularity or source of finance.