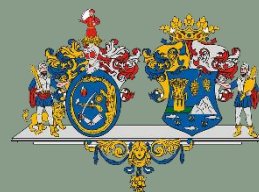




SINCE-AFC PROJECT



Enhancing the Entrepreneurship of SMEs in Circular Economy of the Agri-Food Chain





GENERAL INFORMATION

<i>Project:</i>	SinCE-AFC - Enhancing the Entrepreneurship of SMEs in Circular Economy of the Agri-Food Chain
<i>Partner organisation:</i>	HBCG – Hajdú-Bihar County Government
<i>Country:</i>	Hungary
<i>NUTS2 region:</i>	Észak-Alföld
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POLICY CONTEXT

The Action Plan aims to impact:

Investment for Growth and Jobs programme
European Territorial Cooperation programme
Other regional development policy instrument

POLICY INSTRUMENT ADDRESSED:

Regional Development Programme of Hajdú-Bihar County 2021-2027

The originally targeted Regional Development Programme of Hajdú-Bihar County for 2014-2020 integrated the strategic goals of the county at both sectoral and territorial levels. The objectives of the programme included 8 priorities; within this project we planned to address Priority 1: Sustainable environment focusing on Measure 1.3: Complex waste management. Due to the significant shortcomings in reducing waste generation and at a larger scale, waste quantity, there is a strong need to find new, innovative applicable solutions for waste streams considering circular economy issues. The policy instrument encouraged the further development of up-to-date waste management through the creation of new cooperations, common investments and other enhancement. There was a specific focus on reusing, recycling or energetic/other utilization of waste. It is also an essential objective to ensure an attracting and safe livelihood for citizens.

Hajdú-Bihar County Government addressed its Regional Development Programme focusing on the link between Sustainable Environment, Sustainable Agriculture and Development of SMEs working in agri-food sector. The main aim was to improve sustainable and resource efficient plant production, crop management and animal husbandry. New and innovative technologies are required; there is a strong emphasis on working with the Innovative Food Cluster so reaching agri-food SMEs in Hajdú-Bihar county can strongly support their competitiveness, efficiency and success.

The Policy was valid for the period 2014-2020. This policy served and serves as the underlying regional strategic document for the definition of the national Territorial and Settlement Development Operational Programme (TSDOP) that provides the necessary funding for the implementation of strategic directions and measures defined in the Policy.

The Policy's content is officially ended in 2020. In order to ensure the smooth continuation of the development directions started in 2014-2020, no new regional development programme is defined but the current one has been **modified and amended for the period 2021-2027**. The process was completed in 2021.

HBCG plans to improve this new **Regional Development Programme of Hajdú-Bihar County 2021-2027** policy instrument through **improved governance** (as type 2 suggested by Interreg Europe).



As one of the main results of the SinCE-AFC cooperation, circular economy as a key theme for regional development has been identified and integrated in the Regional Development Programme of Hajdú-Bihar County 2021-2027 (Policy instrument addressed).

Within Priority 1 – Sustainable environment, a separate measure is dedicated to circular economy as “Measure 1.8 – Strengthening the transition towards circular economy, reducing material use”.

There is a special focus on agriculture – within Priority 3 – Complex development of the county’s economy, Measure 3.8 is defined as “Competitive, innovative and sustainable agriculture”. For this purpose, it has been clearly defined that “in terms of sustainability, the use of raw materials, the optimisation of production processes and the recovery of agricultural by-products are important elements, and actions to support these activities should be a priority for development”.

Built on and thanks to the 3-year fruitful cooperation of the SinCE-AFC partnership so far, Hajdú-Bihar County Government succeeded in integrating circular economy into its policy formulation process and finally including relevant measures.

This action plan intends to create and provide an applicable baseline solution package to efficiently support the implementation of the above measures, filling the gap between policy and practice in Hajdú-Bihar County.



DETAILS OF THE ACTIONS ENVISAGED

GENERAL BACKGROUND

Hajdú-Bihar county is one of the leading agricultural producers in Hungary, providing the second largest contribution to the gross added value from agriculture; from another point of view, more than 10% of the county's economic performance comes from agriculture. Focusing on processing industry, food processing industry gives more than 20% of total production, having a long tradition in the region. These facts define a really strong necessity to apply innovative solutions to reduce waste and materials used, and in general to learn new approaches of circular economy for a more sustainable but efficient performance of SMEs in the agri-food sector.

Waste disposal for about 60% of municipal solid and industrial waste means landfilling. To preserve citizens' health and life quality it is essential to reduce the amount of waste generated and to apply new innovative solutions serving not only human but economic and environmental purposes as well; to increase the rate of waste recycled or reused is a must have. Less regulated contaminations originating from agricultural production mean also an important problem – finding new innovative ways to reduce waste production or to replace current solutions by optimised material flows has been put on the agenda in the county. Beyond this issue, the county struggles to enhance its energy efficiency and is committed towards sustainable energy use.

We plan to improve the selected policy instrument **through improved governance**. Based on new aspects, fresh ideas and solutions originating from lessons learnt at/from other partners, we try to find applicable and long-term sustainable methods in the management/governance of circular economy issues in agri-food processes when creating and enhance a supportive governmental/policy environment. We also plan to develop/gain an appropriate methodology to monitor and evaluate the efficiency and sustainability of the above-mentioned solutions within the county.

Implementing the action in Hajdú-Bihar County will have a potential impact on different sectors; the proper design and interpretation of respective potential brought by the application of circular economy approach in the whole value chain of agri-food themes enable to achieve and generate added value in the form of strengthened and enhanced institutional and territorial capacity.

OVERALL INTRODUCTION OF ACTION

Action has been defined to give appropriate methods and proper solutions for the county to support the business actors of agri-food industry to achieve the strategic objectives of the policy instruments. The improved governance strongly based upon the action will be ready and able to efficiently contribute to the formulation of a more supportive ecosystem in the county. Through the implementation of action, not only an improved toolbox but a more reliable professional support and a solid network of experts, practitioners and other stakeholders can join their forces to reduce the materials used and waste produced in the county's agri-food sector.

The development of the action plan is built on the utilization of good practices identified in the SinCE-AFC project, the good practices and policy briefs studied within the Good Practice and publication



section of the Interreg Europe Policy Learning Platform, the results of the interregional workshops as well as the studies and deliverables provided by the partnership.

The implementation of action is expected to result in a more responsible agri-food business community strengthened by supportive policies in Hajdú-Bihar County and an increasing number of agri-food actors adopting circular economy actions to eliminate both material use and waste generated.



ACTION 1 - Formulation of a Policy Guide establishing a new county database of agri-food by-products and integrating E-Guideline

Action 1 is dedicated to create and establish a totally new Policy Guide that will be directly integrated in the Policy Instrument. This freshly developed new guidance will affect the Policy Instrument providing practical information, professional framework and applicable tools and solutions for the preparation and implementation of the measures of the relevant PI priorities in order to achieve its objectives.

The Policy Guide will include completely new indicators as well to significantly enhance the currently existing indicators in order to support the formulation of better decisions not only in short but in a long term.

The Policy Guide is planned to be officially approved by the General Assembly of Hajdú-Bihar County until 30 April 2023 as an integrated part of the PI so it can provide guidance and tool at the same time for each actors working together in the implementation of the measures of the PI in 2021-2027. This process will result in a clearly improved governance of the PI strongly contributing to the framing of agri-food circular economy ecosystem in Hajdú-Bihar County.

The Policy Guide includes two main sections:

Section 1 – County database of agri-food by-products

Section 2 – E-Guideline strengthened by Focus Group

SECTION 1 - FORMULATION OF A COUNTY DATABASE OF AGRI-FOOD BY-PRODUCTS

Reflecting on the identified gaps in Hajdú-Bihar County concerning circular value chains of the agri-food sector, it was clearly stated that there is a serious lack of information about the material use and by-product volume generated by business actors.

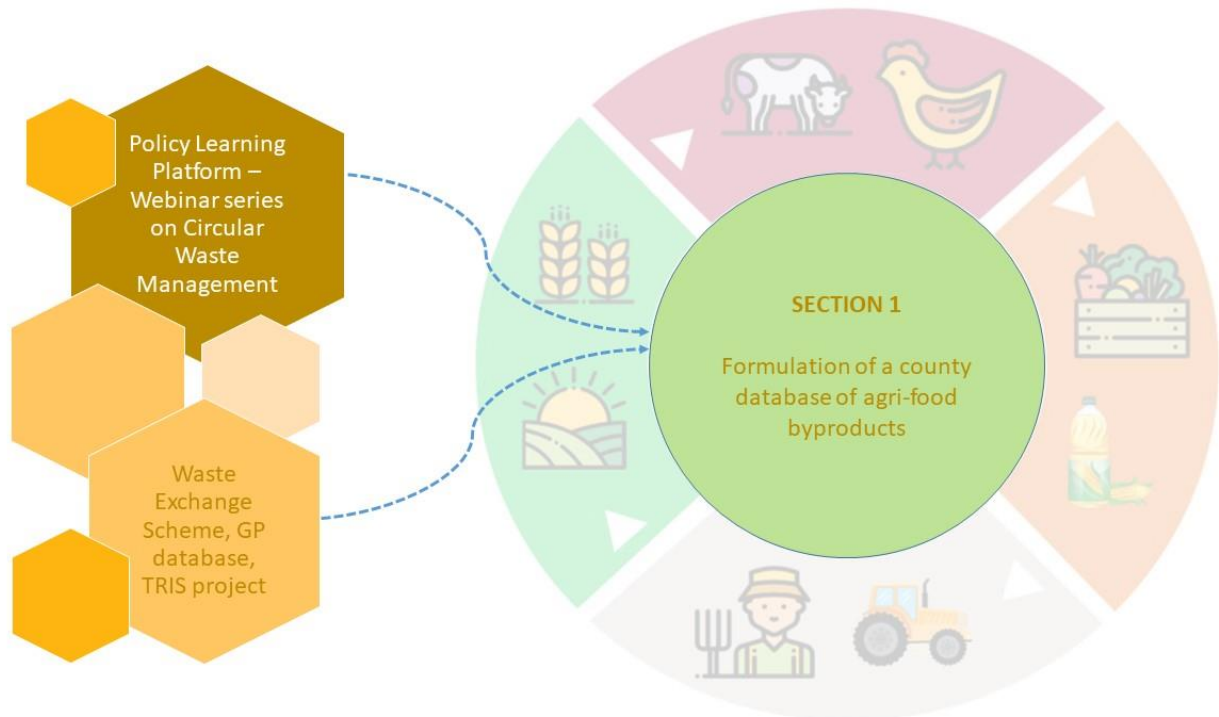
Discussing this issue with a wider group of stakeholders, it has been decided to support the improvement of this segment with a valuable database on what type of material input is available at county level with special regard to agri-food SMEs and entrepreneurs.

This pool of information will serve the future enhancement of the value chain as well.

Relevance to the project

This section has been generated on the basis of the inspiration found in a Webinar series on Circular Waste Management published by the Policy Learning Platform of the Interreg Europe programme and 1 good practice identified and presented outside SinCE-AFC partnership, within the Good Practice database of TRIS project via the platform of the Interreg Europe programme:

- Webinar series on Circular Waste Management published by the Policy Learning Platform
- Waste Exchange Scheme, TRIS project



Webinar series on Circular Waste Management, Policy Learning Platform - The webinar series helped HBCG to identify and recognize possible suitable solutions to be used in order *to support local businesses in creating circular value chains*. Special attention was paid to Circular Waste Management Series I: Biowaste challenge where the necessity for improved collection programmes as well as *strengthened information and motivation* were presented.

Waste Exchange Scheme, TRIS project - The Spanish Chambers of Commerce have set up a regional waste exchange scheme (Bolsa de residuos) that allows companies *to easily exchange waste as by-products*.

The Regional Chambers of Commerce of Spain created an instrument called “Bolsa de subproductos” or waste exchange scheme where *companies can offer their wastes as by-products for other companies*. The market was recently extended to other unwanted products such as used machinery and excess of raw material.

Any offer/demand of a waste from a company (being a “provider” or “user”) of waste/by-products is privately coded and has to be identified by:

- Waste description
- Quantity produced



- Composition
- Availability
- Geographical area
- Transport
- Etc.

The Bolsa is considered as a “passive instrument”: it only provides information about the company that generates the waste, without analysing the wastes or playing a role in the exchange. Offers and demands are promoted by the Chambers of Commerce amongst its associates and the rest of the companies, having no responsibility in the advertised by-product. The exchange service is offered free of charge through the platforms set up. This exchange service is acknowledged and accepted by the Ministry of Environment and the different regional ministries as an exchange of by-products and not residuals.

Hence, benefits include:

- Easier circulation of waste, with less administrative burden.
- Lower management costs and cheaper "raw" materials.
- Implication of authorised transporters and waste managers (both treatment and transport are usually needed).
- Exchange of information between companies in a regional level.

SECTION 2 – DEVELOPMENT OF AN E-GUIDELINE STRENGTHENED BY FOCUS GROUP

Considering the outcomes of several stakeholder discussions, informal meetings with the representatives of companies, chambers and university faculties, we agreed that there is a strong need to provide agri-food sector with some clear, well-based and simple guidance on the necessity and methods of circular solutions that are easy to understand.

Taking the advantage of the lessons learnt in the SinCE-AFC collaboration with special focus on food related waste, taking into account the great pool of solutions within the frames of the Policy Learning Platform, there is a good chance to formulate such supporting elements contributing to the green transition of agri-food businesses.

The guideline in Hungarian will be published with free accessibility online including the main deliverables of the SinCE-AFC project structured in a thematic way as well as supporting materials and thematic documents based upon the resources provided by the Interreg Europe Policy Learning Platform.

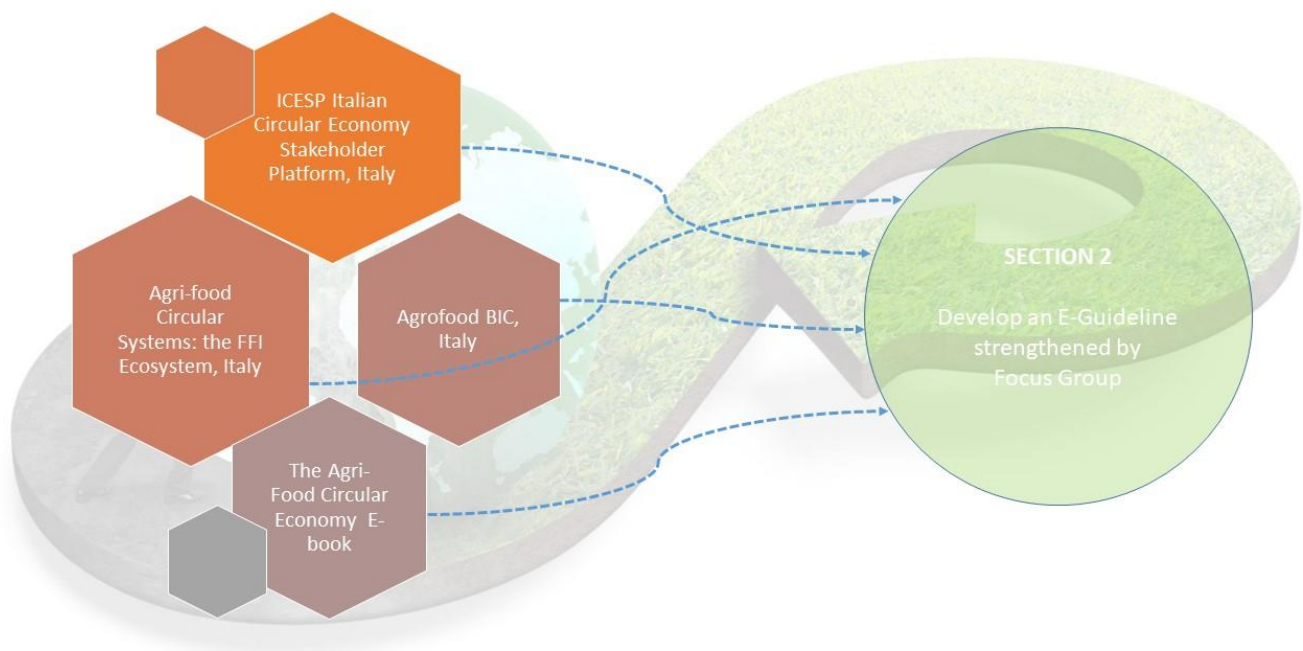
This work will be strongly supported by Focus Group involving all relevant actors listed (see “Stakeholders involved”). This working group of representatives of SMEs, chambers, practitioners, entrepreneurs, farmers and producers, waste management experts, university professionals and

policy makers will act as a regular platform to identify needs and provide support for agri-food businesses utilizing the lessons learnt from the selected good practices.

Relevance to the project

Section 2 has been generated on the basis of 3 good practices learnt within the project and was strongly inspired by the E-Book developed through the project implementation:

- ICESP Italian Circular Economy Stakeholder Platform
- Agri-food Circular Systems: The Future Food Institute Ecosystem - Education, Community, Innovation
- Agrofood BIC
- The Agri-Food Circular Economy E-Book



The **Italian Circular Economy Stakeholder Platform (ICESP)** is promoted by ENEA (National Agency for New technologies, energy and sustainable economic development) as a mirror initiative and integrated with ECESP (European Circular Economy Stakeholder Platform). ICESP is a network whose goal is to create a national convergence on initiatives, experiences, criticalities and expectations on the circular economy that Italy should represent in Europe, promoting the “Italian way of making circular economy”. ICESP has as objectives: **to promote circular economy** in Italy, **mapping Italian good practices, implement a permanent operational instrument to facilitate inter-sectoral dialogue and synergies** between the Italian actors.



The ICESP members are representative of local and central public administration, of educational, research and innovation system, of companies and professional associations, and representatives of civil society. All members adhere to the ICESP Charter, which defines the objectives, composition, fields of interest and operational tools of the platform.

The platform is organized into 7 working groups, each with specific expertise on issues related to the circular economy.

Currently ICESP is formed by 94 organisations as signatories and 177 organisations as expert participants in working group, of which 60% are companies and trade associations, 20% came from research and innovation sectors, 11% are public institutions, 9% are citizens and part of the Third sector. The GP is especially prioritized as it doesn't require financial resources but the human resources of the organizations involved.

Agri-food Circular Systems: the FFI Ecosystem - Education, Community and Innovation: the three ingredients to weave regenerative Agri-food systems.

To implement new regenerative agri-food system models, the Future Food Institute (FFI) operates by connecting the dots of the global food ecosystem. Through Education, its first pillar, it contributes to **raise awareness and build a new mindset at different levels:** secondary and middle school students (ConviviumLab, KidsLab K12), food actors and today's global citizens (Food Innovation Program, Boot Camp on Smart Kitchens); the global society (Research Initiative on Food Loss&Waste).

Through **events** and hackathons developed in its Living Labs, the Institute inspires, connects and feeds the Global Community to take collective actions (Waste2Value Hackathon, Hack Waste Rome, Hack for SDGs, Chockothon, Voices of Food Systems Live Marathon, Food for Earth Day event, Zero Waste Global Convivium digital event).

Through innovation, its third pillar, the FFI contributes finding solutions to multi-corporate challenges through research, new product development, fast prototyping Testing&Validation (Waste2Value, SmartRipe, The Wise Kitchen, FoodAlchemist Team, fermentation bar).

The GP with its 3 pillars is used as a future practice to be introduced via the Focus Team strengthening the link between the knowledge base (University of Debrecen) and innovative agri-food businesses.

Agrofood BIC - A Business Innovation Centre to scout innovative sustainable ideas through the improvement of research and development of the companies' part of the project.

The vision of Agrofood Business Innovation Centre is **to inspire innovative ecosystems and design the future of agri-food value chain**, acting in synergy with other partners to find solutions to meet the needs of an ever-changing society. Agrofood BIC is an accelerator of promising start-ups in the food & beverage and agro-industrial sectors, able to convert innovative ideas into concrete entrepreneurial initiatives, with adequate operational and strategic support. The shared goal is the creation of an



accelerator of promising and innovative start-ups specialized in selected focus areas including Sustainability & Circular economy.

In particular, the start-ups are followed along their growth path through **targeted advice and specific tools to facilitate market entry** and break down the initial barriers to their entry. The partners of the Agrofood BIC Project have created a real ecosystem for start-ups, providing factories, pilot systems, research and development support and access to a network of relationships in the food production chain that will decisively enhance the new entrepreneurs' chances of success.

Agrofood BIC S.r.l. is the result of a joint initiative of 6 firms: Granarolo, Gellify, Camst, Conserve Italia, Cuniola (IMA Group) and Eurovo. The project attracted also the participation of 3 public entities: University of Bologna, Enea - National Agency for New Technologies, Energy and Sustainable Economic Development and the regional development agency ART-ER.

E-Book - The main goal of this study is to provide an overview of circular economy, outlining the European regulatory framework, analysing the transition path, and illustrating the collected good practices at regional level. In particular, the first section deals with theoretical aspects introducing the concept and its limitations, and the agri-food sector context; the second section presents the regulatory framework and the recent developments in the EU; the third section reviews the recent research to identify and illustrate factors encouraging (or hindering) the transition. It elaborates also on the results of a survey carried out by project partners in seven countries; the fourth section mainly aims at monitoring the circular economy progress across EU deepening with the agri-food sector, while the following presents a systematisation of the good practices collected in each country. Finally, the last section briefly recaps and concludes with policy recommendations.

As it was indicated in the E-Book: “while there is an understanding of the concept of the Circular Economy among participating partners and regions, there is very limited knowledge or experience of the practices involved in the CE. This would seem to indicate a **significant gap between policy and practice** within the partner regions, with the consequent challenge in translating the policies and associated opportunities with the needs of businesses. The **lack of awareness and understanding** within the partner regions points to the need for **this fundamental challenge to be addressed** at an early stage and **to be an essential part of partner Action Plans**”.



NATURE OF THE ACTION

- A1.1 Formulating the structure and content of the Policy Guide
- A1.2 Organisation of a brainstorming workshop involving all parties concerned via the Circular Economy Agri-Food Focus Team to complete the draft version of the Policy Guide
- A1.3 Collection of data and information to create the county database of agri-food by-products
- A1.4 Development of the content of the E-Guideline
- A1.5 Compilation of the Policy Guide integrating both sections
- A1.6 Approval of the Policy Guide by the General Assembly

STAKEHOLDERS INVOLVED

- regional and local government actors
 - Municipalities concerned by large-scale agri-food business in Hajdú-Bihar County
 - General Assembly of Hajdú-Bihar County Government
- entrepreneurs and enterprises of agri-food sector – target group of activities
 - SMEs and entrepreneurs in agri-food sector
 - farmers' associations
 - hospitality actors
 - owners of existing good practices from national level
- chambers representing and supporting agri-food actors
 - Hajdú-Bihar County Directorate of the Hungarian Chamber of Agriculture
 - Chamber of Commerce and Industry of Hajdú-Bihar County
- knowledge base to improve the ecosystem of circular economy
 - University of Debrecen
 - NGOs (active in zero waste/circular economy)
 - representatives of existing initiations, good practice owners
- circular economy experts and bodies providing experience
 - national associations

TIMEFRAME

- April 2022 – May 2023



COSTS

- Staff cost working on the formulation of the database – 9.200 EUR
- Organisation cost of 2 Focus Group (July 2022 and January 2023): 1.100 EUR
- Translation cost of input materials – 1.500 EUR
- Domain and web storage fee for the online database – 1.500 EUR

FUNDING SOURCES

- Regional public funding through own institutional funding
- Potential new region-related and theme-related calls of national Operational Programmes using governmental sources

MONITORING AND EXPECTED IMPACTS OF THE ACTION

Implementing the activities of Action 1 including two mutually reinforcing Sections will strongly support the creation of a regional circular economy value chain in the agri-food sector.

The application of such database of by-products and its future link with potential by-product users will create a unique solution to be shared later at wider scale.

New and improved capacities and knowledge, enhanced relationship between by-product generating and using actors will strengthen the value chain.

It is expected to gain applicable input for improved knowledge and experience of governance staff as well to strengthen governance capacity.

Action 1 is intended to promote circular economy, share a wide range of good practices and implement a supporting tool to facilitate inter-sectoral dialogue.

The provision of a structured, widely accessible “information hub” in the form of a virtual guideline with contact information including separately applicable – sometimes simple – solutions is a must have to create a more supportive ecosystem in the county concerning the introduction of circular approach and strengthen the awareness and influence the behaviour of several actors operating in the agri-food chain. The support of an inter-sectoral Focus Group means the first network of circular economy in the county’s agri-food value chain so this can serve as a basis for the creation of future hub for education, community and innovation.

Hajdú-Bihar County Government (HBCG) will monitor the implementation of the action to see the progress and determine the impact of the collaboration.

Partners will continue the mutual learning process during the implementation phase of the action plan. “Exporting” and “importing” regions will be in continuous contact in order to successfully implement the defined action and adapt the selected lesson learnt to other regions’ context.



The following indicators are planned to be applied to measure the success of each activity within the action:

Activity	Indicator	Expected value
A1.1	Number of draft structure of Policy Guide	1
A1.2	Number of participants taking part in the brainstorming workshop/Focus Group	20
A1.3	Number of county database of agri-food by-products developed	1
A1.4	Number of E-Guideline developed	1
A1.5	Number of Policy Guide compiled	1
A1.6	Number of officially approved Policy Guide	1



ABOUT THE PROJECT

SinCE-AFC aims at involving SMEs of the Agri-Food chain in circular economy through the promotion of the appropriate managing and financial horizontal mechanisms. All the Agri-Food agents committed to production, processing, packaging, distribution and final consumption are expected to operate in a coordinated way to better adapt to circular economy.

This objective will be achieved via the intense collaboration and interregional exchange of experience of 9 partners representing 7 Regions from 7 EU countries. The partnership's tasks will focus on the investigation of efficient practices, via interregional thematic learning events, study visits, import workshops, stakeholders' meetings and consultation processes, of how the relevant policy instruments can be improved in order to assist SMEs to enter circular economy. The core results will be depicted in a joint study reflecting the related regulatory framework and good practices at regional and EU level.

The project will promote innovation, derive knowledge and develop close collaboration with the Interreg Europe Policy Learning Platform as well as with the European Circular Economy Stakeholder Platform and the RIS3 Platform Group.

PARTNERS

- ❖ ANATOLIKI S.A. Development Agency of Eastern Thessaloniki's Local Authorities (Greece)
- ❖ Regional Development Fund on behalf of the Region of Central Macedonia (Greece)
- ❖ Metropolitan City of Bologna (Italy)
- ❖ University of Bologna (Italy)
- ❖ Hajdú-Bihar County Government (Hungary)
- ❖ Donegal County Council (Ireland)
- ❖ Wielkopolska Region with the seat of the Marshal Office of the Wielkopolska Region in Poznan (Poland)
- ❖ South Muntenia Regional Development Agency (Romania)
- ❖ Devnya Municipality (Bulgaria)



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For further information about the SinCE-AFC project please visit:

<http://www.interregeurope.eu/since-afc>



ACKNOWLEDGEMENT

On behalf of the owner of the Regional Development Programme of Hajdú-Bihar County (RDP HBC) for 2021-2027 I acknowledge the content of the Action Plan.

Date: 24 June 2022

Name: Zoltán PAJNA, President, General Assembly of Hajdú-Bihar County

Signature:

Stamp of the organisation (if available):

