

ACTION PLAN TOWARDS BIO-BASED CIRCULAR ECONOMY

Sud Muntenia Region, Romania

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I. General information

Project: BIOREGIO - Regional circular economy models and best available technologies for

biological streams 2017-2021

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II. Policy context

The Action Plan aims to imp	pact: X	Investment for	Growth and J	obs programme
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European Territorial Cooperation programmeOther regional development policy instrument

Name of the policy instrument(s) addressed:

Regional Operational Programme 2014-2020 for Romania / Programul Operational Regional (POR) Axis 1.1 – Promoting investment in research and innovation

National Rural Development Programme 2014-2020 (PNDR) for Romania the European Agricultural Fund for Rural Development (EAFRD)

Further details on the policy context and description of the policy Instrument

In Romania regional development funds (ERDF) are managed at central (national) level. Regional Development Agencies only act as intermediate bodies, they sign and manage funding contracts, but have little power in allocating funds and designing funding schemes. Calls are launched and submitted at national level.

Regional Operational Programme¹

Romania

¹ Source: European Commission https://ec.europa.eu/regional-policy/en/atlas/programmes/2014-2020/romania/2014ro16rfop002







Programme description Main objectives

The Regional Operational Programme (ROP) aims at promoting smart sustainable and inclusive growth in all regions in Romania making them more attractive places in which to live and work. The programme addresses the major development challenges for Romania: regional competitiveness, sustainable urban development, the low-carbon economy, and economic and social infrastructure at regional and local level.

Funding priorities

The programme will focus on the following funding priorites:

- Supporting transfer of technology and innovation take up by SMEs in areas for smart specialisation.
- Enhancing SMEs' competitiveness focusing on Romania's high-growth economic sectors.
- Promoting the low-carbon economy through investments in energy efficiency in buildings, public lighting and sustainable multimodal urban mobility.
- Supporting sustainable integrated urban development and regeneration of deprived urban areas.
- Developing cultural heritage and tourism as drivers for local economic development.
- Improving inter-regional connectivity.
- Investing in health, social, and education and training infrastructure in support of national reforms.
- Extending the registration of land tenure.

Expected impacts

- An increased share of innovative SMEs collaborating with others (+ 3.7%)
- Support to more than 5,000 SMEs leading to a 46% increase in labour productivity in less developed regions
- Increase in the survival rate of SMEs by 10%
- Reduction of energy consumption by 37% in public buildings, 51% in residential buildings, and 33% for public lighting
- Improving urban public transport attracting 140 million additional passengers per year in less developed regions
- The rehabilitation and modernisation of more than 2,000 km of roads improving regional connectivity to the TEN-T network
- Creating 224,000 sqm of additional green spaces in cities
- Renovating 45 additional cultural heritage sites
- 500,000 people benefitting from better community and primary health care services in less developed regions while decreasing avoidable emergency admissions in hospitals
- Increasing the enrolment in crèches, pre-primary education, primary and secondary and vocational education and training
- Increase in the share of the population aged between 30 to 34 with tertiary level education from 20.4% to 28.2%
- Number of administrative units with all properties included in the land register increases from 0.24% to 28%







Instrument in focus² Priority Axis 1 - Promoting technology transfer Allocated budget - 206.51 mil euro Types of activities

Creating, upgrading and expanding innovation and technology transfer infrastructure, including assets

Potential beneficiaries

Legal entities operating or establishing a technology transfer infrastructure (ITT)

According to the Ministry of European Funds, Romania, the budget allocated to this axis was 206.51 mil. Euros. By the time the calls were launched, the budget was already reduced to 108.87 mil Euros (according to ADR SM), and the amount for Sud Muntenia region was 27.52 mil. Euros - 18.5 million Euros for the ITT calls (1.1.A and 1.1.B) .

The funding process went through the following phases:

- 1. Development of Concept Notes by all regions, to reflect the regional smart specialisation strategies (April 2017)
- 2. Letters of interest from technology transfer entities (March 2017, before the guide for applicants was available)
- 3. Prioritisation of letters of interest
- 4. Launching project calls under De Minimis State Aid applicable rules
- 5. Projects submission, followed by the evaluation, selection and contracting process..

The call for 1A and 1B was non-competitive, only entities who submitted letters of interest were allowed to submit project proposals.

The evaluation, selection and contracting process for these calls is underway. It should be mentioned that no projects were submitted for the 1.1.B call in the South Muntenia Region (scientific parks). Regarding the 1.1.C call, competitive, which promotes the transfer of scientific research results to SMEs, 3 projects were submitted in South Muntenia Region, and all were rejected in the evaluation, selection and contracting process.

The second phase of the lagging regions initiative has started in early 2019 and an "entrepreneurial discovery" process has been organized in five Romanian regions in order to replicate the Joint (JRC) "RIS3 Research Center Implementation in Lagging Regions": http://s3platform.jrc.ec.europa.eu/ris3-in-lagging-regions.

In this second phase, the JRC continues to provide support to the NE and NW regions, provides methodological assistance for 5 Romanian regions to organize entrepreneurial discovery workshops and assists Bucharest-Ilfov Regional Development Agency to prepare the regional Smart Specialization Strategy.

These steps were part of the EC project supporting smart specialization areas in the Romanian regions.

In addition, the call dedicated to the NE and NW regions - financing the specific objective 1.2 of the 2014-2020 ROP, is underway.

² Source: Ministry of European Funds, Romania http://www.fonduri-ue.ro/por-2014







Major issues related to the instrument in focus:

- Financing was intended to assist the ITT (Innovation and Technology Transfer) entities, that were provisionally authorized / accredited or to be accredited during the implementation period of the project, in order to create an ITT entity, to develop or expand such entities in order to support technology transfer, in order to capitalize research results in the regional smart specialization areas. Also, complementary to this type of funding, 1.1.C call was meant to support SMEs in implementing technologies and research results with assistance from ITT entities a bidirectional scheme of financing from the ITT entities to the SMEs and from the SMEs to the ITT entities, respectively. To support ITT entities, for the financing lines intended for them, salary expenses have been included, up to 50% of eligible expenses; the operating costs are not eligible for the entities with economic activities..
- The Guides for Applicants, were subjected to public debate for 30 days, but received few comments. The final versions of the specific guides included the comments received, being the result of a consultation process (including with the Competition Council) in the elaboration of the de Minimis State Aid rules applicable to the technology transfer of the research results. The co-financing rates were set in accordance with the types of state aid applicable in the context of capitalizing of the research results - new products / services / processes / significantly improved - in order to make a profit. After the completion of the contracting process related to 1.1.C call and during the evaluation, selection and contracting process for 1.1.A and 1.1.B call, it was concluded that the potential beneficiaries did not understand the objectives of the financing lines, considering that any type of innovation, including enterprise innovation, represents a technological transfer in the meaning of the specific guides. In addition, most projects proposed procurement of high-performance equipment and not the implementation of research results to provide new or significantly improved product/services in terms of a technology transfer, directing the types of investments towards the specific financing provided within the Priority Axis 2 of the Regional Operational Programme (ROP).
- The instruments were designed for a very ambitious goal, but the market has not reached the level of maturity and competitiveness needed to produce tangible results in a short period of time. Technology transfer at the regional level is very low, and neither the research entities nor the private companies have the financial power to invest in this direction.
- The project proposals for 1A and 1B calls were not competitive, only the entities that have submitted letters of intent were qualified to submit project proposals, in accordance with the mechanism of implementation of ROP 2014-2020, Priority Axis 1. The methodology for selection of letters of intent has been prepared by the ROP Management Authority and sent to all the Regional Development Agencies involved in the process at that time, who have published the announcement on their own sites, in a transparent and non discriminatory way.

III. Details of the actions envisaged

The Action Plan is a part of the BIOREGIO project and was written in cooperation with the regional stakeholders involved in bio-based economy, representatives of governmental authorities, research experts, industry and NGOs representatives.

Actions were inspired by good practices from lessons learned during the BIOREGIO project. The Action Plan promotes the circular economy concept supported by the Smart Specialization Strategy of South Muntenia Region and includes three actions to promote the bio-based circular economy.







The actions will be implemented mainly during 2019-2021 and financed from different sources (own funds, other projects).

ACTION 1: Review of Regional Operational Programme funding instrument

Relevance to the project

Several project partners have already managed to include specific measures dedicated to circular economy (CE) in their regional programmes, e.g. Regional Council of Päijät-Häme, Region of Central Macedonia, Nitra Self Governing Region. This inspired the review of the Regional Operational Programme for Romania, to include more flexible instruments and adapt to regions' needs and EU Policy development.

Nature of the action

Launching projects under Priority Axis 1 required time to pass through several stages in which different measures were taken to ensure an optimal framework for efficient implementation of the projects in the smart specialization areas.

Identifying regional smart specialization areas has played an important role in the current programming period and founded the framework for 2021-2027 period.

Establishing the mechanisms of the entrepreneurial discovery process without having experience on research - business environment - local authorities - community collaboration was a difficult, time consuming challenge.

As of December 2019 calls for ROP Axis 1, Specific Objective 1.1 - Increasing innovation in companies by supporting innovation and technology transfer entities in the areas of smart specialization are closed. A call for proposals for the Specific Objective 1.2 - Increasing innovation in companies by supporting multi-sectoral approaches resulting from the implementation of the "less developed regions initiative" in Romania, ROP 2014-2020, has been launched. A series of relaunches / launches will follow in the next period. Also, a first evaluation of this Priority Axis 1 has been made and the related report will be published by the end of the year.

Although the ROP Management Authority had the option to quickly and superficially prepare a project portfolio, it made the difficult decision to initiate and to *thoroughly* prepare a regional entrepreneurial discovery process to create the optimal premises necessary to ensure a qualitative, mature and assumed project portfolio to be subsequently financed, both through AP1 and through the future policy objective 1 of the 2021-2027 programming period.

The activities proposed for this action include, without being limited to:

Review of the selection procedure (non-competitive call).

The procedure was revised by specifying in Annex 1 – ROP, regarding the mechanism of implementation of Priority Axis 1 – Promoting technology transfer that for the calls of projects related to the Specific Objective 1.1 - *Increasing innovation in companies by supporting innovation and technology transfer entities in the areas of smart specialization* launched after 2018, phases 2 and 3 of the implementation mechanism described no longer apply (no more letters of interest are required). This is because all seven development regions have approved their Regional Strategies for Smart Specialization by the end of 2018. Moreover, to relaunch the 1.1.C call - *SME or SMEs in partnership with ITT entities for*







- technology transfer investments, measures of simplification of the call have been considered, turning it into a non-competitive one, reducing the number of documents required when applying for funding and presenting them in the pre-contracting phase.
- Review of guidelines for applicants, The preparation of the 1.1.C specific guide was based on bidirectional consultation with the Intermediate Body of ROP (Regional Development Agencies), focusing on a clearer definition of the type of technology transfer project expected, indicating the types of projects which are not intended to be funded, offering the possibility for potential applicants to either create a partnership with ITT entities or to purchase the technology transfer services from ITT entities during the projects implementation, in accordance with the programming documents. The specific guide will be relaunched and published for public debate, and thus the potential applicants will be able to get actively involved in the process of reviewing and clarifying this financing line. Funding instrument review - The instrument will continue to be addressed to the ITT entities, which in Romania are both in public research institutions, but also in private entities, the financing rules being established on the basis of State Aid / De Minimis applicable rules, etc. The guide for 1.1.C call has been revised based on the views expressed by both the representatives of the Regional Development Agencies and the EC, and will be published for public debate soon. Also, after completing the process of evaluation of project applications, the guide for 1.1.A call will be relaunched according to the available funds.
- <u>Electronic submission platform</u> the current system, MySMIS 2014 is very difficult to use, it requires a lot of information to be entered in different fields, and moreover each required document has to be scanned, digitally signed by the legal representative and uploaded as a single file. A user satisfaction survey should be carried out and the system should be simplified or entirely redesigned on a user-friendly basis.
- Flexibility and specificity of the call while the instrument was based on regions' strategies for smart specialisation and concept notes, the calls did not specifically address the identified areas of interest, nor allocate budgets for specific specialisations. Although a second instrument was open (Axis 1.2) following the Lagging Regions JRC support, in two pilot regions, the same non-competitive approach was maintained. The financing instruments cannot be discriminatory in relation to the programming document, they are intended for the entire range of smart specialization areas identified following the implementation of the mechanism of identification and definition of the smart specialization regional areas and prioritized within each regional strategy. Moreover, for new areas, such as the circular economy, for which the legislative framework is not yet finalized and there is no critical mass in the field, it is risky to launch dedicated calls.

Stakeholders involved

The stakeholders involved in the process will include government/ regional/ national/ municipal authorities, regional development agency, research and education, public and private companies, farmers, NGOs, associations, public etc.

Timeframe

2019-2020







Costs

Staff costs, no external funds needed

Funding sources

N/A

ACTION 2: Economic and legal framework for bio-based circular economy

Relevance to the project

The BIOREGIO project was an excellent opportunity to see how funding can be used to support the development of circular bio-based economy, implemented by different actors (regional/ local public authorities, universities/ research centres, private enterprises, farmers and NGOs.

One such example is the <u>Programme to Support Integrated Rural Development LEADER NSK</u>, implemented in Nitra, Slovakia

Nature of the action

Bioeconomy is mainly based on materials with low market value, and bio-based businesses are often hardly profitable (e.g. most biogas plants depend on subsidies or green certificates to be profitable). However, the impact upon the environment is significant, so operators should benefit from grants/ incentives/ subsidies in order to start their business.

During the BIOREGIO stakeholder group meetings it became clear that there are some gaps in national legislation that do not allow biowaste to be valorised (e.g. wastewater treatment plant - WWTP sludge is classified as waste and may no longer be used).

The purpose of this action is to identify and remove any obstacles that are blocking the development of bio-based circular economy in Romania, and to create the legal environment and provide funding to support investments for processing unused bioresources (including biowaste and WWTP sludge) into value-added products, with multiple benefits for the economy and the environment.

The activities involved in this action include, without being limited to:

- Analysis of legal framework in order to identify legislative barriers towards the development of circular bio-based economy in Romania, compliance with EU regulations and policy, measures needed to promote investments in this sector. One example is the use of WWTP sludge for making compost, the restrictions of using such compost in agriculture, lack of clear and specific regulations in this field. Available reports and studies regarding existing standards and regulations in the EU for bio-based/ biowaste products could serve as inspiration for drafting missing legislation in this field. An option to declassify biowaste and sludge could be included based on contamination limits.
- <u>Funding instruments</u> apart from the Regional Operational Programme, many other national and EU funded programmes could be involved in supporting circular economy, and there are some discussions to include it as an ex-ante condition. This option should be analysed, and circularity should be included in all relevant funding programmes, either as dedicated measure or as criterion for extra-points in the evaluation of project proposals. A special attention should be paid to municipal facilities operators like sewage and waste who are currently struggling with the huge amounts of biowaste and sludge that cannot be







- processed and valorised in an optimum way and need dedicated programmes to upgrade their facilities according to the requirements of the circular economy package.
- <u>Economic/ financial measures and incentives</u> apart from funding to support initial investments, operators of circular bio-based economy may need further economic measures to keep them going, like green certificates for energy generated by biogas plants, taxes on landfills, vouchers for pellets of biogas heating systems, etc. The BIOREGIO good practices database provides a valuable resource for identifying such instruments and could serve as inspiration. There are also many other reports and analyses available, based on which a set of measures could be adopted to support bio-based circular economy in Romania.
- <u>Information and communication</u> all the above measures should be discussed openly with the civil society, farmers and business environment, as well as with government and local authorities, particularly because sludge and waste are sensitive issues, and there is a lot of resistance to recycling them. Safety issues should be properly addressed in order to change the public perception from waste to resource.

Stakeholders involved

Government and public authorities, state agencies, academy and research, consultants, municipalities, facilities operators, farmers, public and private enterprises, associations, NGOs, public.

Timeframe

2020-2021

Costs

5,000-20,000 €

Funding sources

Government funds, grants, local budget etc.

ACTION 3: Promoting technologies for valorisation of biowaste/ biological streams

Relevance to the project

The action is inspired by the achievements of our project partners (e.g. building the CLAMBER pilot plant in Spain or the AgroBioTech Research Centre in Slovakia), as well as by the Interreg Europe Good Practices database. The project team wants to extract from the database the good practices related to circular bio-based economy, add more technologies from other EU projects, and make them available to Romanian stakeholders. For example, the Clamber plant was involved in a Horizon 2020 project where biowaste was converted to volatile fatty acids and subsequently to bioplastics. Such emerging technologies are currently not eligible for funding under structural instruments in Romania, and including more options would help go beyond the state of the art in this field.







Inspiration from BIOREGIO Good Practices and site visits:

- A demonstration R&D Biorefinery CLAMBER, Castilla la Mancha region, Spain
- The <u>AgroBioTech</u> Research Centre (ABT RC) of the Slovak University of Agriculture in Nitra self-governing region, Slovakia

Nature of the action

One weak spot that was identified by the instrument in focus is the poor transfer of technology/ low innovation rate in this field. Technology information and transfer should be supported, so that operators know what their options are for valorising biomass/ biowaste.

The activities proposed under this action include:

- mapping of bioresources in the region that are currently wasted and have potential for valorisation. This will include, but not be limited to: expired food from supermarkets and farmers markets, domestic biowaste, agro-food industry side-flows (e.g. slaughter house waste, vinasse etc.), wastewater treatment plant sludge, garden and park waste etc.
- creation of a database of available technologies for valorisation of biowaste, including Interreg Europe good practices, recent Horizon 2020 research results as well as other demonstrated and/ or emerging and innovative ways of turning biowaste into value-added products.
- identification of possible stakeholders, analysis of legal status and investment potential (private enterprises, municipalities, county/ regional authorities etc.
- proposals for funding instruments according to beneficiaries, investment needs and potential.

Stakeholders involved

Management Authorities in charge of structural funds (e.g. Ministry of Regional Development and Public Administration), Regional Development Agency Sud Muntenia, local authorities, research and academic community.

Timeframe

2020-2021

Costs

Staff costs

Funding sources

ICECHIM own resources/ related projects.

ACTION 4: Inclusion of circular economy in the National Rural Development Programme

Relevance to the project

The project has influenced another policy instrument through stakeholders meetings and interregional exchange. AFIR representatives who were involved in the project made specific proposals for circular economy to be included in new calls/ programme. Moreover, they highlighted







that Measure 4.1 - "Investments in agricultural holdings" could fund investments to reduce greenhouse gas emissions from agriculture, reduce water, energy and fossil fuels consumption and produce renewable energy.

The good practices that inspired this change were particularly LABIO biogas plant, from

Kujala waste centre in Finland

https://www.interregeurope.eu/policylearning/good-practices/item/169/utilisation-of-biowaste-streams-bio-based-industrial-symbiosis/ and

• BIOGAS LAGADA SA from Greece

https://www.interregeurope.eu/policylearning/good-practices/item/1010/bioenergy-and-fertilizers-from-livestock-and-agriculture-farms/

Nature of the action

The applicants guide for the 2018 call for project proposals on Measure 4.1 - Investments in agricultural holdings was modified to include circular bioeconomy. Project submission period 03.09.2018 - 31.03.2019

The following completions were made to the LIST OF INVESTMENT TYPES IN CONSTRUCTION AND INSTALLATION:

"construction and assembly investments that ensure proper management of plant debris by reducing GHG (greenhouse gases) emissions (promoting the circular economy)"

The budget allocated to the call was 303 mil. Euro

Stakeholders involved

Ministry of Agriculture and Rural Development Agency for Funding Rural Investments (AFIR).

Timeframe

2018

Costs

Stakeholder participation at project meetings and interregional events.

Funding sources

Interreg Europe, BIOREGIO Project budget

IV. Signature

On behalf of the Regional Operational Programme Management Authority (ROP MA), Ministry of Public Works, Development and Administration we agree to support and promote the implementation of the plan detailed above.

Date: 31.12.2019
Name, title: Corina Costea, Head of ROP MA
Signature:



