

PROJECT BIOREGIO
**“Towards a circular economy based
on biological streams”**
(2020-2021)

ACTION PLAN

Deputy Regional Ministry of Environment
Ministry of Sustainable Development
of Castilla-La Mancha, Spain

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Regional Action Plan - Castilla-La Mancha Deputy Ministry of Environment

I. Introduction

An **action plan** is an operational document that deals with the identified needs, analyses different problems and opportunities, and proposes sustainable and viable solutions in order to improve the policy instrument addressed within each region.

In this context, this action plan is developed as part of the activities integrated in the second phase of the BIOREGIO project. The action plan reflects on the good practices and lessons learned during the first years of its execution and establishes the actions and activities to be developed in the future to promote the circular bio economy in Castilla-La Mancha through the appropriate changes in the corresponding political instrument.

II. General Information

Project name: BIOREGIO PGI01963 – Regional circular economy models and best available technologies for biologic streams. 2017-2021

The BIOREGIO project is an INTERREG EUROPE project co-financed by ERDF funds, which aims to influence the regional policy through the promotion of the circular economy of biological streams, according to the objectives set in the Circular Economy Package adopted by the European Commission in December 2015. It looks for improving the regional bio-economy and increase the recycling rates of organic materials (household waste, compost, industrial and municipal sludge and agricultural waste among others).

The project involves six countries and eight partners, including Finland, Greece, Romania, Slovakia, France and Spain.

More information about the project: <https://www.interregeurope.eu/bioregio/>

Organisation: PP3 Castilla-La Mancha Deputy Ministry of Environment.

Country: Spain

Region NUTS2: Castilla-La Mancha

Other partners involved:

- Lahti University of Applied Sciences and Regional Council of Päijät-Häme (Finland),
- National Research and Development Institute for Chemistry and Petrochemistry ICECHIM, Calarasi Subsidiary (Romania),
- Association of the Chambers of Agriculture of the Atlantic Area (France),
- Slovak University of Agriculture (Slovakia),
- Aristotle University of Thessaloniki and Region of Central Macedonia (Greece).

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III. Castilla- La Mancha – Description of the Region

Throughout this section, a brief analysis of the regional context of Castilla-La Mancha is made in order to subsequently extract the needs and challenges that the action plan must face.

Castilla-La Mancha is a region of Spain, with 919 municipalities. It is made up of five provinces: Albacete, Ciudad Real, Cuenca, Guadalajara and Toledo and it is located in the central part of the Iberian Peninsula occupying most of the southern sub-plateau. It has an area of 79.463 km² and a population density of 25,49 inhab/km² according to data from 2018.

Castilla-La Mancha has a **developed economy**, with a greater weight of the services sector, followed by industry and a lesser importance of the primary sector. However, in coherence with the geographical disposition and the marked rural character of the territory, the primary sector has a comparatively more relevant presence in the regional economy than in the rest of Spain.

The importance of the agricultural sector is interrelated with the weight of the agrofood industry for the region, both in terms of GDP and export levels as well as in terms of jobs. The wine, olive oil, vegetables, fresh and processed meat, as well as cheese and dairy products sectors are being particularly relevant.

Based on aforementioned, the bio-economy supported by the primary sector and biological resources, constitutes a fundamental sector for the development of a new economic scheme. Castilla-La Mancha has an abundant extension of agricultural land and natural resources with a strong environmental value. In this sense, the existing asset in agribusiness, agro-food processing and renewable energies provide excellent opportunities for businesses related to the pharmaceutical industry, functional foods, new energies and the production of new materials.

Finally, to boost circular bio-economy in line with the Circular Economy Package adopted by the European Commission in 2015, a research and innovation effort properly funded through the different operational programmes is required.

IV. Political background

A political instrument is a mean of public intervention. It refers to any policy, strategy or law developed by public authorities in the field to improve a specific territorial situation. In most cases, financial resources are associated with a policy instrument. However, an instrument may also sometimes refer to a strategy or legislative framework without specific funding.

In the context of Interreg Europe, the operational programmes for investment for growth and employment as well as the European Territorial Cooperation Programmes are considered policy instruments. Beyond EU cohesion policy, local, regional or national public authorities also develop their own policy instruments.

This Action Plan aims to have an impact on: Other regional development policy instruments.

Name of the policy instrument: Castilla-La Mancha ERDF Operational Programme 2014-2020.

- *Priority objective:* 6. Preserving and protecting the environment and promote resource efficiency.
- *Investment priority:* 6a "Investment in the waste sector to meet the requirements of the Union's environmental acquis and to respond to investment needs identified by Member States that go beyond those requirements".
 - *Specific objectives EO.6.1.1.* To develop the separation, selective collection and treatment of waste, including actions to close the cycle; contemplating both management plans and investments in infrastructure.

Current regional policy framework

The action plan of the Deputy Regional Ministry of Environment aims to influence the Operational Programme of the European Regional Development Fund (ERDF) for Castilla-La Mancha in 2014-2020.

The political instrument is administered by the Directorate General of Financial Policy, Treasury and Community Funds, belonging to the Regional Ministry of Finance and Public Administrations. It was officially approved by [the Commission's implementing decision of 12.2.2015](#) and was subsequently modified twice in [2017](#) and [2018](#) respectively.

The Operational Programme has a total funding of EUR 747,447,717.00:

- The 80%, around 600 million euros, is financed by the European Union from the specific budget line 13 03 61 (ERDF - regions in transition) of the General Budget of the European Union for 2014.
- The remaining 20%, around 150 million euros, is financed by the Regional Government of Castilla-La Mancha.

The general objective of ERDF OP C-LM 2014-2020 is to promote a sustainable and inclusive economic development of the region by contributing to the generation of jobs, especially in higher value-added activities, and to improve the competitiveness of the regional economy. Through support for SMEs and to enhance the development of the regional R+D+I system by ensuring access to ICTs for the entire population.

In particular, the main objectives of the Operational Programme are:

1. Consolidate the regional R+D+I System, promoting investment and fostering collaboration between the agents that make up the system.
2. Promote the Information Society, taking advantage of the potential for development represented by ICTs to ensure high-speed Internet coverage of the entire territory.
3. Improve the competitiveness and internationalisation of the business fabric, especially SMEs.

4. Promote sustainability by supporting renewable energies, increasing energy efficiency and protecting the natural environment and resources.
5. Promotion of a rich heritage with a clear tourist potential.
6. Increase in human capital endowment and capacity enhancement.

ERDF OP C-LM 2014-2020 supports the following priority axes to achieve the above objectives:

- Priority Axis 1. "Strengthening research, technological development and innovation".
- Priority Axis 2. "Enhancing use and quality of the information and communication technologies and the access to them".
- Priority Axis 3. "Enhancing the competitiveness and international presence of SMEs".
- Priority Axis 4. "Supporting the shift towards a low-carbon economy in all sectors".
- **Priority Axis 6. "Preserving and protecting the environment and promoting resource efficiency".**
- Priority Axis 10. "Investing in education, training and vocational training for skills acquisition and lifelong learning".
- Priority Axis 13. "Technical assistance."

Specifically, the BIOREGIO project focuses its efforts on the specific objective 6.1.1 "*To develop the separation, selective collection and treatment of waste, including actions to close the cycle; contemplating both management plans and investments in infrastructures*". This objective falls under investment priority 6a - Investment in the waste sector to meet the requirements of the Union's environmental acquis and to respond to investment needs identified by Member States that go beyond those requirements; thematic objective 6 - Preserve and protect the environment and promote resource efficiency.

However, the objectives of the BIOREGIO project could also fit into the following priority axes:

- Priority Axis 1: Strengthening research, technological development and innovation.
- Priority Axis 3: Enhancing the competitiveness and international presence of SMEs.
- Priority Axis 4: Supporting the shift towards a low-carbon economy in all sectors.

V. Good practices Project BIOREGIO/Interreg Europe

Good Practices: initiative (project, process, technique) undertaken in one of the priority axes of the programme which has proved successful in one region and which is of potential interest to other regions. It is considered a "proven success" when the good practice has already delivered tangible and measurable results in the achievement of a specific objective. Although the Interreg Europe programme mainly refers to good practices, learning also derives from bad practices, where lessons learnt can be considered in the process of exchanging experiences.

During the first development phase of the BIOREGIO project, 43 good practices were detected. These can be consulted in the following links:

<https://www.interregeurope.eu/bioregio/good-practices/>

<https://www.interregeurope.eu/policylearning/good-practices/>

VI. Details of the planned actions

The Deputy Regional Ministry of Environment has defined the following actions for the action plan towards a circular economy based on organic resources:

1. Approval of the Regional strategy of circular economy
2. Promotion of domestic and community composting of bio-waste.

ACTION 1: Approval of the regional strategy of circular economy

Relevance to the project

The transition to a circular economy offers many opportunities. The scope of the circular economy goes far beyond waste prevention and management. The aim is to use natural resources efficiently, increase the use of secondary raw materials, ensure access to strategic resources and reduce dependence on imports. What is at stake is the environmental footprint, the competitiveness of the economy and, finally, the standard of living of the regional citizens.

The regional government of Castilla-La Mancha has developed a standard on circular economy with the rank of law, with the aim of establishing the guiding principles of all economic and social policy in the region. However, because of its legislative nature, it is necessary to develop a strategic plan to implement the necessary measures.

The success with the good practice “*Regional road map towards circular economy*”, developed by the region of Päijät-Häme, Finland, has inspired the Deputy Regional Ministry of Environment for the development of a strategic plan. The aim of this action is to replicate this good practice in the region by approving a circular economy strategy as a development of the Circular Economy Law of Castilla-La Mancha, which has been approved.

The Päijät-Häme region began implementing this good practice in January 2017. The learning platform of the Interreg Europe programme adopted this action as a good practice with great potential to be transferred to other regions, considering it an example of how to translate national priorities with regard to the circular economy into a regional context through the creation of a regional strategy.

The approach of this good practice is based on the idea that in the development of the circular economy regional strategies and regional action plans is needed to implement EU and national strategies. The key to the success of the strategic process in Päijät-Häme was the active involvement of the Regional Council and stakeholders. In particular, the use of ERDF funds as a financing tool for strategic development is a useful practice, in which the Deputy Ministry of Environment in Castilla-La Mancha finds potential to be transferred to this region.

The Päijät-Häme Circular Economy Roadmap describes regional objectives and actions to achieve a circular economic model, based on resource efficiency. This strategy has five main issues, establishing regional objectives and actions for each of them:

1. Closing the cycle in the technical flows to create added value.

2. Sustainable enterprise based on the circular economy of organic flows.
3. Moving towards energy self-sufficiency through sustainable transport and energy solutions.
4. The shared economy generating new consumption models and business opportunities.
5. Guide and demonstration of innovative circular economy solutions.

Nature of the Action

The aim of this action is to achieve a change of economic model towards a low-carbon economy and sustainable consumption with production involving all agents in the value chain and actively involving the citizen to achieve responsible consumption.

The strategy will be divided into thematic blocks, which in turn will include the concrete measures to be developed. In particular, the strategy will cover at least the **areas** related to:

1. efficient management of resources,
2. production,
3. consumption,
4. waste, and
5. innovation.

This strategy will contemplate specific **crosscutting measures** related to:

1. the administration and the good governance, especially with the promotion of green public procurement and the circular public procurement,
2. the natural resources (water, soil and biodiversity),
3. the research,
4. the development and the innovation, and
5. the awareness-raising, training and disclosure (education for sustainability, responsible consumption and green jobs).

In addition, it shall provide for specific **sectoral measures**, related to:

1. local sustainability,
2. waste management,
3. the agri-food and forestry sector,
4. the energy sector,
5. the industrial sector, and
6. the tourism sector.

Likewise, the Strategy will establish planning mechanisms and actions defining the calendar of planned actions and the necessary resources preferably coming from European funds and, additionally, measurement and evaluation mechanisms by means of indicators that develop an annual follow-up of the actions that are implemented. To this end, the strategy should use a set of specific indicators for each phase, that will allow a follow-up of its implementation and development, and set objectives to be reached by installation, product, sector or social group. These indicators will be related to the different themes involved such as water, soil, air quality, biodiversity, energy, production,

consumption, waste management, research and innovation and socio-economic development.

The implementation of these actions will have a positive impact on the financing sources, in particular in the ERDF operational programme, as well as in the RIS3 specialisation strategy, which will also be covered in the strategy.

The Regional Operational Programme is the most important financing and development tool for the region, which includes projects and actions on a regional scale taking benefits of the local strengths. It is financed by the European Regional Development Fund (ERDF) and the European Social Fund (ESF). Its purpose is to strengthen the region's capacity to implement a full range of actions designed to serve the priorities of the strategy (RIS3). Therefore, the action plan should be based on the following pillars:

- Integration of circular economy actions in the operational programme 2014-2020.
- Integration of the circular economy in the operational programme for the next programming period (2021-2027).
- RIS3-specific strategic actions to enforce the circular economy.

Stakeholders involved

Considering that the success of this good practice was based on the active participation of the different stakeholders, the regional strategy will involve both the public Administration and the private sector.

- Castilla-La Mancha Deputy Ministry of Environment
- Directorate General for Financial Policy and Treasury and Community Funds,
- Body responsible for the RIS3 strategy,
- Rest of the Government organizations of Castilla-La Mancha,
- Private sector - bio economy.

Timeframe

According to the Circular Economy Law, the Regional Strategy of Circular Economy will be published at the latest within twelve months following the date on which the Law enters into force, accomplishing the following steps:

- Creation of a working group with representatives of environmental groups, companies, relevant authorities in water, energy, industry, economy, treasury, trade, consumption, education, land use and spatial planning; etc. (1st semester 2020).
- Process of Strategic Environmental Assessment (1st semester 2020).
- Report of Regional Advisory Board on Environment (1st semester 2020).
- Report of Regional Climate Change Office about the impact of the Regional Circular Economy Strategy on the objectives of the Regional Climate Change Strategy (1st semester 2020).
- Public information (2nd semester 2020).

- Final text (2nd semester 2020).
- Adoption by Governing Board through Decree (2nd semester 2020 – 1st semester 2021).

Costs

- The approval of the circular economy strategy does not entail any associated costs.
- However, each of the actions included in them does have a cost that must be estimated.

Funding sources

- These actions must be financed by the ERDF Operational Programme.

ACTION 2: Promotion of domestic and community composting of bio-waste.

Relevance to the project

Bio-waste refers to biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail outlets, as well as comparable waste from food processing plants.

In Castilla-La Mancha bio-waste is being collected mixed with other wastes, within what is known as the residual fraction, which means that although it is treated in mechanical-biological treatment plants (TMB), a significant part of it is not recycled or recovered. Such management is associated with the loss of resources, as well as the consequent emission of methane associated with the degradation of organic matter under anaerobic conditions. Faced with this situation, the Directive 1999/31/EC on the landfill of waste requires a drastic reduction in the input of biodegradable material into landfills; at the same time as the Directive 2008/98/EC on waste sets a target of 50 % reuse and recycling for household and commercial waste by 2020. In addition, the Directive (EU) 2018/851 of the European Parliament and of the Council of 30th May 2018 amending Directive 2008/98/EC on waste introduced in its Article 22 an obligation for Member States to ensure that, by 31st December 2023 at the latest, bio-waste is either separated and recycled at source or collected separately and not mixed with other types of waste.

For this reason, the Integrated Waste Management Plan of Castilla-La Mancha contemplated the preparation of a strategic document on the management of bio-waste in Castilla-La Mancha. This document sets out the lines and key objectives and serves as a reference framework for all agents and entities involved in the proper management of bio-waste; however, the different collection models must be determined on the basis of urban configuration, demographic and socioeconomic characteristics, generation processes and climatic aspects.

It is important to bear in mind that the region of Castilla-La Mancha has a high percentage of the population living in **isolated or dispersed rural areas** due to the remoteness of important population centres; consequently, the government of Castilla-La Mancha intends to face the difficulties presented by these areas and which represents a challenge for the management of municipal waste.

The experiences of BIOREGIO related to the selective collection and recovery of bio-waste are one of the central issues of the project, which are addressed most frequently in all interregional events of the project. The good practices presented by the French [partner AC3A in the area of Pays de la Loire](#), which promote composting in small residential areas, have inspired the region of Castilla-La Mancha to provide a solution to the existing problems in these areas.

In particular, this good practice is based on the implementation of an integrated waste management service and incentives to reduce the proportion of bio-waste in household waste. The frequency of waste collection is decreasing, households are billed according to the volume of waste generated and composters were supplied to carry out home composting and consequently to reduce or even eliminate the fraction of bio-waste in the residual fraction.

Nature of the Action

This action aims to improve the management of domestic waste in isolated areas of the region of Castilla-La Mancha.

In order to achieve this, we will bet on the implementation of domestic or community composting in those municipalities considered isolated and for which, due to their characteristics, the collection of organic matter is too expensive economically, energetically and environmentally speaking.

The objective is to eliminate the organic fraction from the trash bag providing a proper management of it and consequently, decrease the frequency of collection of the residual fraction. The result will be a reduction in the cost of collection, a reduction in the carbon footprint (GHG) and the achievement of a fertilizer material that can be used in the gardens or municipal areas.

The development of this action involves providing domestic or community composters, depending on the model chosen. However, it will be necessary to carry out a life cycle assessment of the different options in order to achieve the expected results. It will also be essential to provide the necessary training and advice to develop an adequate compost, as well as to keep monitoring this action.

Action nº 2 is divided into three sub-actions:

2.1. Promotion of domestic and community composting of bio-waste through calls for expressions of interest.

The characteristics of Castilla-La Mancha, both in extension and land use, make the treatment of bio residues by community or domestic composting be considered as a very interesting option for certain areas. According to population census of 2016, there are in the region 640 municipalities with a population of less than 1000 inhabitants, and another 204 municipalities with a population between 1000 and 5000 inhabitants. For these areas the projects of community composting would be developed in several municipalities of different provinces.

Stakeholders involved

- Regional Government of Castilla-La Mancha,
- Local entities,
- Provincial domestic waste Consortium,
- Federation of Municipalities and Provinces.

Timeframe

- Period: 2020 - before 31st December 2023, in accordance with the implementation phases of selective collection set out in the Regional strategy for the management of bio-waste.

Costs

According to the regional competence framework, the main weight in the execution of this action falls on the local entities, which have the competences in the matter of domestic waste management.

The tasks of the regional Administration in this area are related with prevention, planning, coordination, monitoring, authorization, and surveillance. Therefore, the economic participation by the Ministry of Sustainable Development will be at the level of coordination and monitoring, tasks that will be undertaken through its own staff.

Funding sources

The European Regional Development Fund (ERDF), in its Operational Programme for 2014-2020, includes a priority intended for "preserving and protecting the environment and promoting the resource efficiency", and within this axis, an investment priority related to "investment in the waste sector to meet the requirements of the Union acquis". Within the ERDF 2014-2020 Operational Programme for Castilla-La Mancha, this priority axis contemplates as possible beneficiaries the local entities responsible for the management of domestic waste and the consortia responsible for the management of waste treatment centres.

Thus, the agreement of 22nd January 2018 of the Governing Board, that establishes the regulatory norms of calls for expressions of interest for the selection and execution of projects within the framework of Operational Programme ERDF Castilla-La Mancha 2014-2020 (DOCM Nº. 22, de 31 January 2018), in Annex IV “Eligible Operations for calls of expressions of interest related to improvement of waste management by local entities” establishes a line of action in domestic waste management programme for the implementation of systems of community or self composting. These calls would be run as soon as the funds would be available.

2.2. Promotion of domestic and community composting of bio-waste through PEMAR funds.

The Ministry for the Ecological Transition calls this subsidies for local entities to promote the deployment of innovative projects to foster, among others, community composting, supporting the implementation of the convenient changes in the waste treatment models in order to achieve the community targets accordingly to the National Waste Management Plan (*Plan Estatal Marco de Gestión de Residuos – PEMAR*).

Stakeholders involved

- Regional Government of Castilla-La Mancha,
- Local entities,
- Provincial domestic waste Consortium,
- Federation of Municipalities and Provinces.

Timeframe

- Period: 2020 – 2021.

Costs

According to the regional competence framework, the main weight in the execution of this action falls on the local entities, which have the competences in the matter of domestic waste management.

The tasks of the Regional Administration in this area are related with prevention, planning, coordination, monitoring, authorization, and surveillance. Therefore, the economic participation by the Ministry of Sustainable Development will be at the level of coordination and monitoring, tasks that will be undertaken through its own staff.

Funding sources

The subsidies for promoting community composting of biorresidues through calls for PEMAR funds will be distributed to the Autonomous Communities, according to article 86.1 of Law 47/2003, General Budget Law. The total amount expected to finance in Castilla-La Mancha with this fund line is 62.400 €.

2.3. Development of a regional regulation on community composting.

Community composting is an activity promoted by the European Union Member States, referred in regulatory texts like *Commission Green Paper on the management of bio-waste in the European Union*, and is considered as a prevention operation broadly speaking.

Article 22 of *Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives*, considers that Member States must take measures to encourage the separate collection of bio-waste with a view to the composting and digestion of bio-waste. In Spain, Law 22/2011 on Waste and Contaminated Soils, that transposes the above mentioned Directive to the Spanish legal system, establishes in article 24 that environmental authorities should take measures to encourage domestic and community composting, by means of plans and programs of waste management.

At a regional level (regional Strategy on bio residues management in Castilla-La Mancha, community composting is considered as one of the key stage in the implementation of a new model of bio residues management.

Thus, with the aim of promoting and developing community composting in the region, and endowing it with a legal framework, the development of a regional regulation on community composting is going to be proposed.

Stakeholders involved:

- Regional Government of Castilla-La Mancha,
- Local entities of Castilla-La Mancha.
- Provincial domestic waste Consortium,
- Federation of Municipalities and Provinces.

Timeframe:

- The development of this regulation will be performed following consultation to the relevant sectors.
- Period: 2021

Cost:

- The approval of a regional regulation on community composting does not entail any associated costs.

Signature

On behalf of the Deputy Ministry of Environment, I agree to support and promote the implementation of the plan detailed above.

Signature: