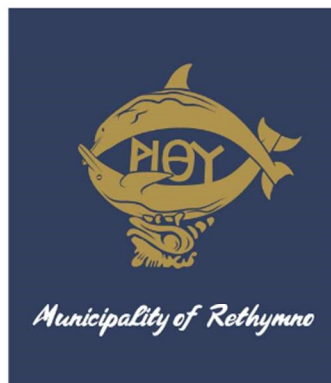




**European Union**  
European Regional  
Development Fund

**PLASTEKO**  
Interreg Europe

# REGIONAL ACTION PLAN



***A regional action plan is a document providing details on how the lessons learned from the cooperation will be implemented in order to improve the policy instrument addressed within the region.***

## Action plan of the Municipality of Rethymno

### Part I – General information

Project: PLASTEKO  
Partner organisation: Municipality of Rethymno  
Country: Greece  
NUTS2 region: EL43  
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### Information about the Project

#### Curbing plastic waste and littering in EU regions

The widespread plastic pollution necessitates a strong reaction from EU regions, to address growing environmental and health concerns. PLASTEKO, in line with the “European Strategy for Plastics in a Circular Economy”, will support participating territories to take the steps necessary for a transition towards a “new plastics economy”; the focus will be on advances in waste management, eradication of single – use plastics from regional value chains, and spurring growth through eco- innovation. PLASTEKO will cover the areas of waste management, public procurement, funding/ investments, secondary raw materials, and awareness raising.

PLASTEKO will support 8 partners from 8 EU Countries, through joint policy learning efforts and exchanges of experiences, to benefit from the momentum of the EU plastics strategy and achieve their goals in terms of protecting the environment, increasing resource efficiency, alleviating health effects, and boosting innovation. PLASTEKO will enable partners and key stakeholders to:

- Assess the current situation, potential, and barriers in their regions
- Identify pathways for sustainable growth in plastics value-chains
- Design and put into effect new policy measures and regulations

#### Overall objective and sub-objectives

The Project aims to support the represented regions to exchange experiences, benefit from the provisions and momentum of the EU plastics strategy, and, ultimately, achieve their goals in terms of protecting the environment, increasing resource efficiency, alleviating health effects, and boosting innovation. PLASTEKO will cover the areas of waste management, public procurement, funding/ investments, secondary raw materials, and awareness raising.

More specifically, the Project sets the following operational objectives:

- Advance territorial waste management planning (separation, collection, and recycling of plastic waste), and accelerate the achievement of targets for plastics recycling
- Encourage the phasing out of plastics packaging in public procurement, and develop guidelines for relevant green public procurement criteria
- Facilitate and encourage the emergence, acceptance, and uptake of plastic packaging in public procurement, and develop guidelines for relevant green public procurement criteria
- Promote awareness and acceptance of use of recycled plastics in products

- Improve both monitoring and curbing of aquatic litter
- Propose uses of structural funds to increase the capacities of regional value chains as concerns innovative solutions and technologies

**The implementation of PLASTEKO will:**

- Lead to increased capacity of 180 public administrations to effectively support new growth trajectories & energy security
- Potential 19 million euros unlocked to support projects on plastic reuse, eco- innovation, alternative technologies
- Increased awareness & consensus building among plastic producers and consumers/ the public

**Main outputs & Beneficiaries:**

- 8 action plans to improve the addressed policies, benefiting managing authorities & stakeholders
- 4 interregional workshops, 2 study visits, and 2 joint policy planning and strategic review procedures, to promote capacity building among partners and stakeholders
- 3 joint thematic studies on territorial needs and good practices

**The partnership of the Project follows:**

- Municipality of Rethymno
- Lombardy Region
- Office of the Government of Styria
- Stara Zagora Regional Economic Development Agency
- Cluster of Environmental Technologies Bavaria
- Auvergne – Rhone- Alps Energy Environment Agency
- Bucharest – Ilfov Regional Development Agency
- Association Baltic Coasts

**The action plans**

Through the action plan, each partner will detail the measures and actions to be taken within each territorial context, the actors to be involved, scheduling/ timing considerations, and financial/ funding requirements and mechanisms during phase 2 of the project. The policy instruments addressed are expected to be advanced in two possible manners: a) steer funding towards projects aiming to improve plastic waste management and/or accelerate growth within a “new plastics economy” and, b) improve governance towards better achieving relevant goals (e.g., better monitor the attainment of targets). Partners will also capitalise on their experience from previous IE projects in which they are participating, focusing on proven measures.

**Part II – Policy context**

The Action Plan aims to impact:	<input type="checkbox"/> Investment for Growth and Jobs programme <input type="checkbox"/> European Territorial Cooperation programme <input checked="" type="checkbox"/> Other regional development policy instrument
Name of the policy instrument addressed: Local Waste Management Plan of the Municipality of Rethymno	

## Information about the Local Waste Management Plan of the Municipality of Rethymno

The Local Waste Management Plan of the Municipality of Rethymno, was developed in accordance with the National Waste Management Plan and addresses the territorial challenges related to waste management and environmental pollution. It provides a constituent framework for waste related activities in the municipality over the period 2014-2020 as well as several targets and milestones for waste reduction and recycling, including actions required to meet those targets.

The plan seeks to ensure that Rethymno has adequate disposal and waste collection capacity, and to decrease Rethymno's reliance on landfills for disposing of solid waste. The overriding objective is to stimulate a shift from landfilling towards sustainable management options and resource efficiency, by ensuring that local communities and businesses have opportunities to reduce, reuse, and recycle waste.

### Reasons for improvement

1. The plan was drafted before the EU plastics strategy and the Circular Economy Package and sets low targets for plastic recycling & recovery. It thus needs to be updated to include the EU recycling targets for municipal and plastic packaging waste.
2. It focuses exclusively on consumption to reduce waste, improve resource use, and increase recycling, lacking measures on production that will help transform the way in which products are designed and packaged, increase plastic recyclability, and most importantly make recycling profitable for local businesses.

The policy instrument was initially designed to fund actions on the consumption -side of waste management (e.g., procurement of recycling bins, separate collection of municipal waste) to promote sustainability and resource efficiency in the area. Rethymno, through its participation in the project, seeks to direct investments towards the production- side in promoting business-oriented innovation and circular solutions.

- Rethymno, aspires to improve the governance of the policy instrument as follows:
- Establish a monitoring scheme to evaluate progress towards plastic recycling targets
- Develop indicators for businesses' involvement in separate waste collection and eco- innovation adoption
- Enhance the involvement of intermediate bodies (industry, environmental organizations, universities) in the monitoring of plastic management measures
- Prioritize investments in promoting a separate waste collection scheme for plastic in tourism and agriculture

## Part III – Details of the actions envisaged

### ACTION 1

1. **The background** (please describe the lessons learnt from the project that constitute the basis for the development of the present Action Plan)

A significant issue that was highlighted in the first 3 regional stakeholder meetings was that most of the citizens in the region of Crete are inadequately informed about the recycling process and the steps it requires (sorting at source, specific requirements on recyclable products, etc.). It was also highlighted that children can influence adults' behavior and great emphasis should be given to younger generations in recycling.

The local waste management plan suggests separate collection of biowaste and recycling products or a solution of a door- to -door system (picking up residential waste), with containers located within walking distance from households.

When it comes to the Project, sorting at source is a concept at which some of the partners have a lot of experience as a necessary element for efficient waste recycling and this was proved as a fact during interregional workshops and the 1<sup>st</sup> study visit of the Project, where relative presentations took place.

Particularly:

- In the context of A3.3 Interregional Workshop on “How to raise awareness on plastic littering and promote the purchase of products from recycled plastics” and specifically during the presentation entitled “Plastic waste management in the 3<sup>rd</sup> district of Bucharest” and made by the 3<sup>rd</sup> District Hall of Bucharest the partnership among with the participants were informed about the “Big Belly Project” – a system of 30 smart street bins for waste collection equipped with various sensors and powered by solar panels –. The waste collection through this Project is made in three fractions/ streams.
- In the context of A3.4 Study Visit on “Effective waste management policies and measures to reduce plastic waste landfilling and incineration” the Region of Styria presented measures to better implement the plastics strategy at regional level. The targets for circular economy of plastics in Syria were presented and include – among others- to increase plastics recycling through improved separation. In this direction, waste separation in public spaces as a pilot project of waste management association Weiz was presented.

Based on the above actions implemented in the partner’s regions the Municipality of Rethymno was influenced to plan and implement a similar action/ practice regarding sourcing at source in public/ municipal buildings such as schools.

In addition, the proposed action arises as an improvement in the context of the local waste management plan which as mentioned above suggests separate collection of biowaste and recycling products. This action will achieve expanding the existing network of recycling bins and promote an integrated waste management system with a particular focus on the separation of waste at source.

The implementation of a sorting at source system with bins with 4 streams for recyclable waste in schools and municipal buildings will encourage and give students and the local society in general the opportunity to get to know things properly regarding recycling in practice while highlighting its importance. Moreover, it will raise public awareness and be familiar with the process when it will be fully implemented at municipal level. Through sorting at source in school and municipal buildings energy is saved, second raw materials are recovered, and waste residue is being reduced.

**2. Action** (please list and describe the actions to be implemented)

**Sorting at source and recycling at municipal buildings**

This action aims to introduce facilities for the separate collection of waste for recycling in 4 streams: paper, metal, plastic, glass at some schools and municipal buildings. In this framework, the Municipality of Rethymno is the responsible body to coordinate the action and collect the above waste. Therefore, the below individual actions/steps are required:

- To procure the appropriate bins for schools via a tender procedure
- To coordinate the waste collection procedure
- To communicate with the key players involved with and ensure the successful implementation of the action

**3. Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)

Organisations in the region involved in the development and implementation of the action	The role of each organisation in accordance with the action
Municipality of Rethymno – Directorate of Cleaning, Waste Management – Urban Environment and Green	Coordinator
Directorate of Primary Education of Rethymno	Intermediate
Directorate of Secondary education of Rethymno	Intermediate



Schools	Beneficiaries
Region of Crete – Directorate of Environment and Spatial Planning	Public body responsible for planning waste management
ESDAK – Association of Solid Waste Management of Crete	Body responsible for waste management
Companies from the private sector belonging to the waste management system	Stakeholders
Municipal buildings	Beneficiaries

#### 4. Timeframe

- August 2022 – administrative decisions for the procurement processes and communication of the action with the Directorate of Primary and Secondary Education of Rethymno
- September 2022 – tendering phase and communication with schools directors
- October 2022 – implementation of the action and awareness raising activities in schools
- January 2022 – first action results evaluation and remedy actions if required.
- April 2022 – second action results evaluation
- July 2022 – final action results evaluation and reporting.

#### 5. Costs (if relevant)

Material costs (bins procurement) 37,000€.

Staff costs 10,000€ (1 person working for 50% during phase 2)

#### 6. Funding sources (if relevant):

- Municipal resources through the LWMP

### ACTION 2

#### 7. The background (please describe the lessons learnt from the project that constitute the basis for the development of the present Action Plan)

The need to collect and recycle the agricultural plastic waste produced in the regional unit of Rethymno has been the basis for this action. The regional unit of Rethymno produces massive quantities of agricultural plastic waste which could be collected and transformed into new products based on the principles of circular economy. Moreover, the regional unit of Rethymno has many agricultural cooperatives and farmers associations that could be benefited from this action. Informative actions and campaigns will be also launched in the context of the implementation of this action.

In addition, this proposed action emerged as a need in the first stakeholder meeting during which representative from Plastika Kritis who participated highlighted the fact that the agricultural plastic waste collected is often in condition which cannot be utilized. This arises because of inappropriate use of the agricultural plastics since the farmers are not informed about recycling.

Moreover, in the context of A3.2a interregional workshop of the Project on “How to support regional businesses to invest on eco- innovation in plastic production and reuse” hosted and organized by AURA-EE a presentation made by Barbier Group a company that produces polyethylene films for agriculture, industry, and trade and recycles many tons of plastic products for its own production in its own infrastructures was an inspiration for the Municipality for the proposal of a similar action in the action plan. The recycling process and the use of recycled raw material in the manufacture of products is part of the recognized and well-established expertise of this company (Barbier Group) and this led the Municipality of Rethymno to re-assess the information provided by Plastika Kritis and evaluate the feasibility of implementing an action targeted to agricultural plastic waste.

Finally, the Local Waste Management Plan suggests that targeted studies should be conducted for the management of the agricultural plastics without any actions proposed.

#### 8. Action (please list and describe the actions to be implemented)

## Development of agricultural plastic waste management system

Taking into consideration:

- The local waste management plan of the Municipality of Rethymno
- The national waste management plan for the period 2020-2030
- The current and the new regional solid waste management plan (is being written) and its general objectives (prevention, circular economy, information- awareness, monitoring, sorting at source, reuse-recycling, etc.), the following action is suggested
- The objectives of the Project (to support partners through joint policy learning efforts and exchanges of experience, to benefit from the momentum of the EU plastics strategy and achieve their goals in terms of protecting the environment, increasing resource efficiency, alleviating health effects, and boosting innovation),
- The Future Cohesion Policy Objective; a greener- low carbon Europe (including energy transition, the circular economy, climate adaptation and risk management)

the following action is suggested:

The municipality of Rethymno is planning to join the network of Plastika Kritis one of the leading European producers of masterbatches and agricultural film. Plastika Kritis in the context of protecting the environment has installed a plastics recycling unit at its plant in Heraklion- Crete with 6.500MT/year capacity. The plant is capable of handling industrial scrap from plastic factories, municipal waste and, most importantly, used greenhouse films. The company has developed a network with the main agricultural areas of the country. Part of the recycled material is used in some of the company's products (e.g., construction film, silage film, etc.) while the rest is sold to plastic factories in Greece for a variety of uses (plastic bags, irrigation pipes, etc.).

The agricultural plastic waste from greenhouse, the plastic irrigation pipes and plastic nets will be gathered at certain locations of the different municipal sections and then collected by Plastika Kritis through a deposit return system that the company has established since the late 1990s. The used agricultural waste will be transferred to the local factory of responsible for the process for recycling and within the principles of circular economy will be washed and transformed into raw materials which will be utilized from the beginning.

The Municipality will be the coordinator to support the agricultural plastic waste management system in cooperation with Plastika Kritis, in Rethymno. In order this process to be completed and successfully implemented it is essential the users of the agricultural plastics (farmers, farmers associations, and agricultural cooperatives) to be informed of the process and the deposit return system to further attract and raise awareness. In this direction, informative actions are needed. The Municipality will organize the meetings with agricultural cooperatives and farmers associations to inform about agricultural plastic recycling.

Relative information about the recycling process in Plastika Kritis is provided in the following video:

[https://www.youtube.com/watch?v=2sLfaehrAWM&t=139s&ab\\_channel=PlastikaKritisS.A.](https://www.youtube.com/watch?v=2sLfaehrAWM&t=139s&ab_channel=PlastikaKritisS.A.)

### 9. Players involved

Players involved	The role of each organization in accordance with the action
Municipality of Rethymno – Directorate of cleaning, waste management – urban environment and green	Coordinator
Plastika Kritis	Stakeholders
Agricultural Cooperatives	Stakeholders
Farmers Associations	Stakeholders
Farmers as individuals	Beneficiaries

### 10. Timeframe



- August till October 2022 - negotiations with the Plastika Kritis and agricultural cooperatives, technical study on landscaping and necessary construction works
- December 2022 – development of the agricultural plastic waste management system and awareness raising activities to farmers
- February 2022 – first action results evaluation and remedy actions if required.
- April 2022 – second action results evaluation
- July 2022 – final action results evaluation and reporting.

**11. Costs** (if relevant)

50,000€ for construction works required where the collection of the agricultural waste will take place

Staff costs 10,000€ (1 person working for 50% during phase 2)

**12. Funding sources** (if relevant):

- Municipal funds through the LWMP

**Date:** 14 June 2022

**Signature:**



**Stamp of the organisation (if available):**

