



PLASTEKO
Interreg Europe



European Union
European Regional
Development Fund



Action plan

PLASTEKO - Supporting EU regions to curb plastics
waste and littering

STARA ZAGORA REGIONAL ECONOMIC
DEVELOPMENT AGENCY, BULGARIA



August 2022 - JULY 2023



Part I – General information

Project	Supporting EU regions to curb plastics waste and littering – PLASTEKO
Partner organisation	Stara Zagora Regional Economic Development Agency
Other partner organizations involved (if relevant)	N/A
Country	Bulgaria
NUTS2 region	BG34 South-eastern Region (Yugoiztochen)
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Part II – Policy context

2.1. About this Action Plan

Action Plan is a document providing details on how the lessons learned from the cooperation will be implemented to improve the policy instrument that is addressed within the region. It specified the nature of the actions to be implemented, their timeframe, the players involved, the costs (if any), and funding sources (if any).

This Action Plan gives direct recommendations for measures that will significantly boost the support to EU regions to curb plastic littering and mitigate its economic, social and environmental impact. The identified key actions in the Action plan should be targeted and accordingly support the dissemination of innovative solutions to minimize plastic pollution and take the steps necessary for a transition towards a “new plastics economy”.

The current Action Plan consists of a detailed description of 3 key actions and guidance for their practical integration into the policy instrument addressed.

The Action Plan aims to impact:

<input checked="" 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(s) addressed:

Programme 'Environment' 2021-2027

Further details on the policy context and the way the action plan should contribute to improving the policy instruments:

The initially addressed Operational Programme 'Environment' 2014-2020 comprises objectives whose aim is to improve waste management capacities, in line with national and EU instruments and priorities for sustainable growth. The OP supports investments along 6 Priority Axes. PA2 – Waste supports measures for improving municipal waste management as outlined in the National Waste Management Plan and the EU Resource Efficiency Roadmap (O3.1, 3.2, 4.1) and in other national and EU policies. The OP's central purpose is to implement waste prevention measures and environmental protection investments, including waste reuse, recycling, and recovery to reduce the amounts of waste going to the landfill.

The national 2020 recycling target of 50% can be attained through measures targeting plastic waste specifically due to their extensive use in both production and consumption. Plastic waste prevention, reuse and recycling require the integration of a 'circular' economy rationale, as outlined in the "European Strategy for Plastics in a Circular Economy". The OP could increase its effectiveness in terms of reducing crucial waste mass caused by non-reusable and/or not recycled plastics that account for the bulk of solid environmental pollutants. Advancing cross-sectoral synergies to reduce, and in certain cases even eliminate plastic waste output back into the environment, is predicted to be an effective way of reaching the OP's target of reducing anthropogenic impact.

The new Programme "Environment" 2021 – 2027 (PE), being the central focus of this Action Plan, is a result of a comprehensive analysis of the Ministry of the Environment, considering the country-specific recommendations in the Annual Report of the EC for Bulgaria. The horizontal nature of the policies under environment and climate change as priorities for funding for the period 2021 - 2027 under the future OPE 5 areas are identified: water, waste, biological diversity, risk and climate and air change. For each of the areas, support will be within a separate priority axis. Specific objectives of the PE are the promotion of the transition to a circular and resource-efficient economy, the improvement of the protection and conservation of nature, biodiversity and environmentally friendly infrastructure, including in urban areas, and reducing all forms of pollution, the support of the adaptation to climate change, disaster risk prevention and sustainability, taking into account ecosystem approaches.

The current Action Plan is focused on Priority 2 "Waste" of the PE 2021 – 2027, which elaborates the following measures:

- Development of infrastructure related to household waste management to meet the 2030 waste recycling targets and reducing the amount of landfilled waste;
- Prevention of waste generation;
- Preparation for re-use and repair;
- Waste recycling;
- Construction, expansion and/or upgrade of the separate collection system of waste;
- Improving the knowledge base on the circular economy, monitoring the waste and material streams;
- Raising awareness of practices and behavior in relation to sustainable consumption, as well as information and awareness campaigns for stakeholders and the population.

1. Background

The current Action Plan (AP) within INTERREG Europe project PLASTEKO is focused on the South-eastern planning region (SER) in Bulgaria (NUTS2) that includes four districts: Stara Zagora, Burgas, Sliven, and Yambol with a total of 33 municipalities. The region has a total area of 19,798.7 sq. km (17,8% of the territory of Bulgaria) and a favorable geographical position with wide access to the Black Sea (224 km to the east) and a long border with Turkey to the south. Its crossroad position is a prerequisite for the development of intensive economic connections with other regions in Bulgaria and abroad. By 2020 the population of SER amounted to 1 022 151 people (NSI, 2021) with an average density of 57 people per sq. km. The settlement network in the region consists of 486 settlements (26 cities and 460 villages).



Figure 1 Yugoiztochen (Southeast) Planning Region and Stara Zagora District

The economy of the region is being influenced by several factors, the most important of which are the strategic geographical location with access to the Black Sea. The port of Burgas with import-export cargo flow through it defines the increased share of foreign direct investments in the SER. Another important element in the regional economy is the large lignite basin located in the region of Stara Zagora as a huge source of energy resources - the Maritsa East energy complex. Foreign direct investment is an important factor of the highest importance for the development of the region's economy and investment structure. A significant part of them is directed to the industrial and energy complex "Maritsa East". In terms of GDP, the region ranks third in Bulgaria with EUR 6 364,05 million in 2020 and EUR 6 226 GDP per capita. The average annual salary in the SER was EUR 7 077,30 in 2020 which is the third highest in the country.

2. Project Information

2.1. About PLASTEKO project

The PLASTEKO project, funded within INTERREG Europe program under its "Environment and resource efficiency" thematic field, started in August 2019 and ends in July 2023. It addresses the widespread plastic pollution, which necessitates a strong reaction from EU

regions, to deal with growing environmental and health concerns. PLASTEKO, in line with the “European Strategy for Plastics in a Circular Economy”, supports participating territories to take the steps necessary for a transition toward a “new plastics economy”. The focus of the project will be on advances in waste management, eradication of single-use plastics from regional value chains and spurring growth through eco-innovation. PLASTEKO covers the areas of waste management, public procurement, funding/investments, secondary raw materials, and awareness-raising.

2.1.1. Objectives

PLASTEKO supports 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.

2.1.2. Impact

The implementation of PLASTEKO is expected to:

- Lead to the increased capacity of 180 staff of 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

2.1.3. Main outputs

- 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



TOPIC
Environment and resource efficiency

2.2. Project Consortium



MUNICIPALITY OF RETHYMNO



LOMBARDY REGION



REGION OF STYRIA



STARA ZAGORA REGIONAL ECONOMIC
DEVELOPMENT AGENCY



CLUSTER OF ENVIRONMENTAL
TECHNOLOGIES BAVARIA



AUVERGNE-RHÔNE-ALPES ENERGY
ENVIRONMENT AGENCY



BUCHAREST-ILFOV REGIONAL
DEVELOPMENT AGENCY



ASSOCIATION BALTIC COASTS

2.3. Interregional exchange of experience

2.3.1. Stakeholders' meetings

The first PLASTEKO stakeholders' meeting took place in Stara Zagora, Bulgaria on March 13, 2020. The event's main focus was on the project's initial presentation, including its main goals, objectives, and tools for implementing them throughout the project's lifecycle. The workshop also aimed to identify key stakeholders who will serve as a crucial advisory body for the project's activities.

The second PLASTEKO stakeholder meeting was held on July 30, 2020, in Stara Zagora, Bulgaria. Due to the situation with Covid-19 pandemic, the meeting was organized in a hybrid format. The

central topic of the meeting was aquatic litter management, using as a basis for the discussion the Report on measures to curb aquatic litter and facilitate clean-up efforts by Association Baltic Coasts. A guest lecturer at the meeting was Mr. Nikola Bobchev from Less Plastic Bulgaria who shared a broad overview of marine litter in the Black Sea.

The third PLASTEKO stakeholder meeting was organized on March 18, 2021, in a hybrid mode - on-site in Stara Zagora, Bulgaria and online. The main topic of conversation was the market placement of alternatives to single-use plastic products, given the upcoming interregional workshop on the same topic. The meeting included two guest speakers: Alexandra Nissimova, SLAMka - an alternative to plastic straws made of wheat and Vera Markova, Green Revolucia - the first zero-waste online shop in Bulgaria.

The fourth PLASTEKO stakeholder meeting was conducted on December 15, 2021 again in a hybrid mode. The main topic of the event was the achievements in the field of recycling on a local level. Presentations were held by the Beloslav municipality, Bulgaria, which is considered a small municipality but with already 2 important projects in the field of plastic waste prevention:

- "Demonstration model for prevention and recycling of the household waste in the municipality of Beloslav" (presented by Nadya Dimitrova)
- "Introduction of an innovative model for reducing the amount of plastic waste in the marine environment from land-based sources" (presented by Yoanna Yoveva)

Precious Plastic Sofia, Bulgaria, presented by Georgi Balinov described the idea that we can recycle plastic ourselves.

2.3.2. Main stakeholders' groups

- National, regional and local authorities - mainly the Ministry of Environment and Water and Executive Agency Environment;
- Environmental and climate experts;
- NGO representatives;
- Plastic producing businesses;
- Businesses producing alternatives to plastic products
- Scientific organizations
- Academia;
- Citizen communities.

Thanks to the stakeholder meeting held within the PLASTEKO project over 120 people were able to increase their capacity, related to curbing plastic littering. Furthermore, a core stakeholder group was established that enabled the dialogue on the topic in a broader scope. The selected stakeholders were able to attend the Interregional workshops and study visits to further develop their capacity on the topic, in addition to being an important part of the Stakeholders' meetings and brainstorming on the Action Plan. Stakeholders were actively involved in the project implementation process by submitting information on good practices to the Interreg Europe good practice database.

2.3.3. Interregional workshops



A3.1: Interregional workshop on urban water management policies and practices to reduce microplastics leakage to the environment: Held online on November 24th, 2020, the interregional workshop was the first out of four interregional workshops that take place within the framework of the project PLASTEKO. Responsible for its organization was Umweltcluster Bayern, DE.

A3.2a: Interregional workshop on how to support regional businesses to invest in eco-innovation: AURA-EE, FR organized the interregional workshop online on May 27th, 2021. The meeting gathered about 50 people and allowed exchanges between public and private actors from the European partner countries.

A3.2b: Interregional workshop on how to facilitate the market placement of alternatives for single-use plastics: on April 15, 2021, SZ REDA, BG hosted the Interregional workshop online and gathered over 70 participants. Despite the difficulty in conducting a practical event in a virtual environment, SZ REDA's offered an interactive seminar, including a presentation and dialogue sections.

A3.3. Interregional Workshop on awareness-raising on plastic littering and promoting the purchase of products from recycled plastics: ADR BI, RO organized on the 16th of February 2022 the PLASTEKO's Interregional Workshop. The event took place virtually on WEBEX and gathered 58 participants, mainly coming from PLASTEKO consortium countries.

2.3.4. Study visits

3.4 Study visit on effective waste management policies and measures to reduce plastic waste landfilling and incineration: conducted online in November 2021 and onsite in April 2022. The physical event included a visit to a local plastic sorting plant & material scanner, a regional household waste collection center with differentiated household packaging collection and the local university.

A3.5 Study visit on aquatic plastics litter clean-up practices and efforts (upcoming)

2.4. Good practices


Name	Summary	Location
Tiri.Labi. City Without Waste	A project aimed to implement zero waste practices in local municipalities through the engagement of the municipality institutions, businesses and communities.	Latvia
Big Belly Project - Smart waste collection infrastructure	Big Belly is a revolutionary solution for reducing the CO2 footprint for waste collection logistics by 2/3 while also reducing the cost for these operations.	Romania
Mobile application "SOS Environment"	"SOS Environment" introduces a centralized collection of environmental reports, ensuring public participation and feedback in solving environmental problems.	Latvia
Plastic bag free Alonissos	The aim is to reduce the consumption and disposal of plastic bags and mitigate the environmental impact they cause to Alonissos.	Greece

ZAAO Nature and technology park URDA	URDA is a Nature and technology park where you can study the environment by offering licensed educational programs, excursions to landfills, and other activities.	Latvia
Mapping microplastic pollution along the coastline of Latvia	The student sorority Selga volunteered for a citizen science study – microplastic pollution detection along the coastline of Latvia by washing and sieving sand.	Latvia
Sorting at Source and door-to-door collection	The Municipality of Lipsi implements since 2014 an environmental policy practice for recycling and reducing plastic use at three different but related levels.	Greece
Demonstration model for prevention and recycling of the household waste in the municipality of Beloslav	The project envisages measures aimed at preventing the generation of municipal waste and separate waste collection in Beloslav	Bulgaria
Introduction of an innovative model for reducing the amount of plastic waste in a marine environment	Good practices from Norway in Beloslav for the introduction of a pilot model to reduce the amount of plastic household waste in the marine environment.	Bulgaria
Demonstration project for establishing a waste reduction model within hotels and lodging places	Decreasing the amount of waste generated by hotels and lodging places and optimizing the management of the waste quantities that cannot be avoided.	Bulgaria
Fish smarter-sustainable fishing, ocean clean – ups, environmental awareness, and prevention.	Enaleia is a non-profit social enterprise tackling 2 directly related problems: the marine environment and the Reduction of Fish Stocks & Plastic Sea Pollution.	Greece
Regional Charter "Zero Plastic Waste in the Mediterranean" in South France region	The regional council has been committed to a strong policy to fight against plastic pollution and has been promoting a "Zero Plastic Waste" commitment charter.	France
ORPLAST - Financial policy to support the use of recycled plastics	The French Agency for ecological transition (ADEME) has issued a financial policy to support and increase the use of recycled plastics by plastic manufacturers.	France

Green Public Procurement guidelines of Hamburg	The city of Hamburg developed Green Public Procurement (GPP) guidelines supporting the purchase of products with less environmental impact.	Germany
Sindra – Waste observatory of Auvergne-Rhône-Alpes Region	Sindra, a regional waste observatory, is the main tool for monitoring indicators of the regional waste prevention and management plan.	France
Clean-up campaign in Augsburg called “Clean is trend”	Augsburg’s municipal waste management company organizes an annual clean-up campaign called “Clean is trend” (German “Sauber ist in”).	Germany
Events on public ground in Munich: Prohibition on single-use items for provision of food and drinks	The city of Munich has an ordinance in place which prohibits the usage of disposable items for the provision of food and drinks during events on public ground.	Germany
Plastic Caps for Future initiative - TOGETHER we can do more	Initiative Plastic Caps for Future encourages charity, solidarity and recycling altogether for a better future of the youngest.	Bulgaria
A great alternative for plastic straws – straws made from wheat	Drinking straws made from wheat, a great alternative to plastic ones. With no added chemicals, also suitable for hot drinks, never soggy and fully compostable.	Bulgaria

Part IV – Details of the actions envisaged

Key Action 1	Supporting schemes for municipalities to reduce the amount of plastic household waste that enters the environment
Relevance to the project	<ul style="list-style-type: none"> • A1.2 Comparative Analysis of policies to promote the separation, sorting and recycling of plastics waste at partners' territories • Good practice: Sorting at Source and door-to-door collection, <u>link</u>: The Municipality of Lipsi implements a recycling program fully



supported by the citizens & the local businesses. the Municipality distributed waste bags for temporary storage to the residents and businesses. The waste separation takes place at the source of the following materials: paper, plastic, nylon, metal/aluminium, and glass. There are 3 recycling locations with separate collection points – including biowaste- on the main beaches of the island- to enhance the system.

- **4th PLASTEKO Stakeholders meeting showcasing a successful pilot action on a similar action with introduced separation and sorting and recycling plastic waste.**



Nature of the Action

Curbing plastic waste is a global problem that pollutes the ecosystem and pollutes the ocean in large quantities because it enters the ocean through streams.

It is of crucial importance that supporting schemes for reducing the amount of plastic household waste that enters the environment be introduced on a regional level.

The local and regional governments as well as the local public and business community, the media, and non-governmental organizations working in the field of environmental protection, are the intended beneficiaries of the action.

The **Supporting schemes for municipalities to reduce the amount of plastic household waste that enters the environment** shall bring together local authorities, communities, equipment, a dedicated platform, and information to develop an alternative system for the recycling and recovery of plastic waste.

The supporting schemes will include the following activities. Depending on the level of plastic collection and separation and plastic pollution, the municipalities could choose which activities to apply:

- **Creation of a municipal system for separate collection of plastic waste** - Development and implementation of a local alternative plastic waste recovery system. The activity is aimed at the PLASTEKO project's target groups, the local community and local government. The activity is critical to reducing household and municipal plastic waste in the environment. Contrary to the existing system for collecting household waste, the local population lacks trust in the local authorities and organizations responsible for waste treatment and lacks knowledge and awareness of the recycling of plastic waste. The goal is to empower the local community to fight plastic pollution.
- **Public awareness campaign on the municipal level on the avoidance of plastic pollution** - raising awareness of marine pollution with plastic waste through local awareness campaigns is a very important part of curbing the plastic waste. The activity will be aimed at the representatives of the target groups of the project - the local community and local authorities. The activity is aimed at solving the identified challenges in PLASTEKO A1.2 Comparative

Analysis of policies to promote the separation, sorting and recycling of plastics waste at the partners' territories level, which leads to the generation of plastic waste from household and economic activities of the local population - namely lack of involvement and insufficient participation of the local community in the organization for separate collection of packaging to reduce of their disposal and prevention of their entry into sea waters. The aim is to raise the awareness of the local community through initiatives that involve local authorities, the population, local businesses and the non-governmental sector. The aim is to involve as many people as possible, companies and organizations in the territory of Beloslav municipality.

- **Education campaign "Circular Economy - the way for reducing plastic pollution"** - The "Circular Economy - the way for reducing plastic pollution shall establish the development and implementation of educational campaigns on the sources of plastic pollution and initiatives to reduce them, as well as the promotion of circular economy. The activity will be aimed at representatives of the identified stakeholders, which include members of the local community and local authorities, as well as non-governmental organizations (NGOs) working in the field of environmental protection.
- **Mobile workshops on recovery of collected plastic waste into material or reusable items** - Possible additional activities to be combined with the above-mentioned actions.

Type of the targeted change (according to INTERREG Europe's program manual): Type 1. Implementation of new projects

Type 1 addresses a policy tool that provides funding, such as Structural Funds programs. Managing authorities and other relevant organizations might discover inspiration in other areas and import new ideas to be funded within their programs thanks to interregional cooperation. This type of impact necessitates the program's financing being available.

Stakeholders involved	<ul style="list-style-type: none"> • National authorities – Ministry of Environment, Executive Agency Environment, Managing authority of the PE 2021 – 2027 • Local authorities – municipalities and their environmental departments • Business – companies for waste utilization, collection and separation, companies in the plastic production field, companies producing alternatives to plastic products • Academia – local and national universities offering environmental specialties, research institutes • NGOs – being especially active in the field of environmental protection • Conservationists.
Timeframe	<p>2022 - 2025</p> <ul style="list-style-type: none"> • Draft of the project: June-September 2022 • Submission of the project: October 2022 • Validation of the project: February 2023 • Start of project implementation: June 2023 • Finalization of the project: June 2025
Costs	<p>750 000 EUR</p> <p>/Estimated 150 000 EUR per municipality, first call to be launched for 5 pilot municipalities to estimate the impact before multiplication./</p>
Funding sources	<p>Programme 'Environment' 2021 - 2027</p>

Key Action 2	Building of "Waste to Resource" Collection center
Relevance to the project	A3.4 Study visit on effective waste management policies and measures to reduce plastic waste landfilling and incineration



	<p>During the study visit to Styria region showed a successful waste collection center - a practice that is fully transferable to Stara Zagora region and thus included in the Action Plan. The regional household waste collection center with differentiated household packaging collection is an advanced step in the direction of improved waste management and support for local communities in their efforts for a cleaner environment.</p>
<p>Nature of the Action</p>	<p>Alongside the prevention and recycling of waste, an important pillar of the waste management approach is treating waste as a valuable resource. Using modern technologies, "Waste to resource" Collection centers can recover renewable energy from the non-hazardous waste collected through business and municipal waste operations.</p> <p>With high volumes of annual waste collection, the Collection Centres can greatly minimize waste sent to landfill, while also serving social services such as providing depositing systems for citizens. The Centre shall contribute to reducing environmental burdens for future generations and help save natural resources.</p> <p>The concept proposes that all citizens of the respective district can hand in old and problematic materials from households free of charge. In the resource center, waste is sorted, collected separately into fractions and thus fed back into the raw material chain. The "Waste to resource" center is financially supported by a pre-defined share of the waste tax fee paid by citizens in the district. Another source of financing is the sale of old items that were thrown away. In the reuse shop, many used but still functioning products can find their new owners and further support the functioning of the resource center.</p> <p>Type of the targeted change (according to INTERREG Europe's program manual): Type 1. Implementation of new projects</p> <p>Type 1 addresses a policy tool that provides funding, such as Structural Funds programs. Managing authorities and other relevant organizations might discover inspiration in other areas and import new ideas to be funded within their programs thanks to interregional cooperation. This type of impact necessitates the program's financing being available.</p>



Stakeholders involved	<ul style="list-style-type: none"> • National authorities – Ministry of Environment, Executive Agency Environment, Managing authority of the PE 2021 – 2027 - to set up the respective calls • Local authorities – municipalities and their environmental departments • Business – companies for waste utilization, collection and separation, companies in the plastic production field, companies producing alternatives to plastic products • NGOs – being especially active in the field of environmental protection • Conservationists. • Citizen communities
Timeframe	<p>2022 - 2027</p> <ul style="list-style-type: none"> • Draft of the project: June-September 2022 • Submission of the project: October 2022 • Validation of the project: February 2023 • Start of project implementation: June 2023 • Finalization of the project: June 2027
Costs	<p>1,5 million EUR for a pilot center in Stara Zagora Region, for the initial setup of the center.</p>
Funding sources	<p>Programme 'Environment' 2021 - 2027</p>

Date: _____

Name of the organisation(s):

Signatures of the relevant organisation(s): 