Circular economy country profile 2024 - Bulgaria





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Introduction

The European Commission requested the EEA to produce EU country profiles that offer an updated view of the following elements:

- what circular economy policies are being implemented at a national level with a particular focus on elements that go beyond EU mandatory elements, and
- what are best practices with a focus on policy innovation.

With the EU Circular Economy Action Plan (CEAP 2020) "the Commission [..] encourages Member States to adopt or update their national circular economy strategies, plans and measures in the light of its ambition".

These country profiles originate in the work leading to the EEA More from less report (2016)¹, that presented an overview of approaches to material resource efficiency and to circular economy in thirty-two European countries. The More from Less report was followed by the 2019 EEA Report 'Resource efficiency and the circular economy in Europe 2019 – even more from less: An overview of the policies, approaches and targets of 32 European countries'².

It presented an updated and extended assessment of approaches and identified trends, similarities and new directions taken by countries in the connected policy areas of resource efficiency and the circular economy.

These reports, comprising a compilation of extensive survey responses from countries, were accompanied by 32 country profiles.

In the second quarter of 2022 a new survey with questions and guidelines was launched. Based on information reported by the Eionet network, in particular, the Eionet Group on Circular Economy and Resource Use, and after review and editing by the European Topic Centre on Circular economy and resource use (ETC CE), the 30 2022 Circular Economy country profiles³ were published alongside the EEA report 'Circular Economy policy innovation and good practice in Member States'⁴ (2022).

These 2024 Circular Economy country profiles are an update of the 2022 ones and based on the responses of 29 countries to the survey questions and guidelines that were launched in March 2024. The information in the countries' responses was again reviewed and edited by the European Topic Centre on Circular economy and resource use. A selection of Eurostat data was made to further complement these country profiles.

The main objectives of these assessments and its updates are to: • stimulate exchange of information and share good practice examples among country experts; • support policymakers in Eionet countries, the European institutions and international organisations by providing an updated catalogue of circular economy actions being undertaken in European countries.

This circular economy country profile is based on information reported by the Eionet network and, in particular, the Eionet Group members on Resource Efficiency and Circular Economy in the second quarter of 2024. Proposals for the further development or amendment of policies represent the view of the reporting country. For Bulgaria, all input was provided by the Ministry of Environment and Water Bulgaria and the Bulgarian Executive Environment Agency. The information was reviewed and edited by the European Topic Centre on Circular economy and resource use. A selection of Eurostat data was made to further complement this country profile.

¹ <u>More from less — material resource efficiency in Europe — European Environment Agency (europa.eu)</u>

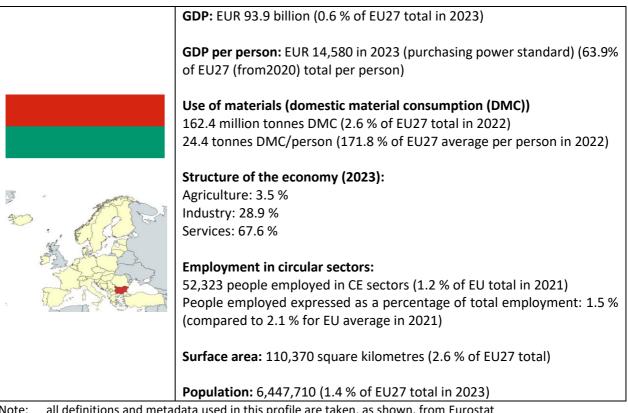
² <u>Resource efficiency and the circular economy in Europe 2019 — European Environment Agency (europa.eu)</u>

³ <u>Country profiles on Circular Economy in Europe — Eionet Portal (europa.eu)</u>

⁴ <u>draft-report-for-dg-env_final.pdf (europa.eu)</u>

The information is current as of September 2024, when members of Eionet verified the content of this profile.

Bulgaria – facts and figures



Note: all definitions and metadata used in this profile are taken, as shown, from Eurostat Source: Eurostat datasets, EU27 2021 EU27 2022 and EU27 2023 (accessed 21 August 2024)

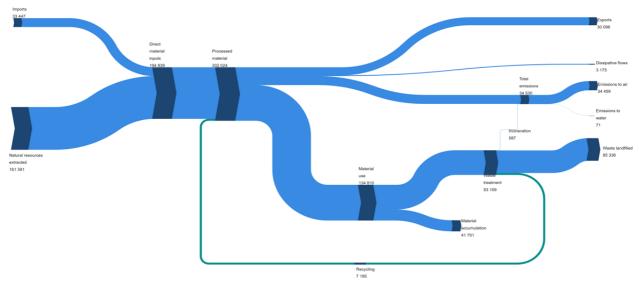


Figure 1 Material flow diagram for Bulgaria in 2022, thousand tonnes

Source: Eurostat (2024) [env_ac_mfa], [en_ac_sd], [env_wassd] (accessed 21 August 2024)

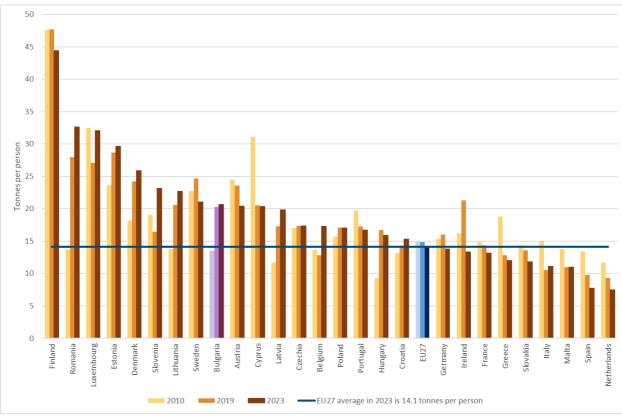


Figure 2 Material footprint (raw material consumption), 2010,2019 and 2023, tonnes per person

Source: Eurostat (2024) [env_ac_rme] (accessed 21 August 2024)

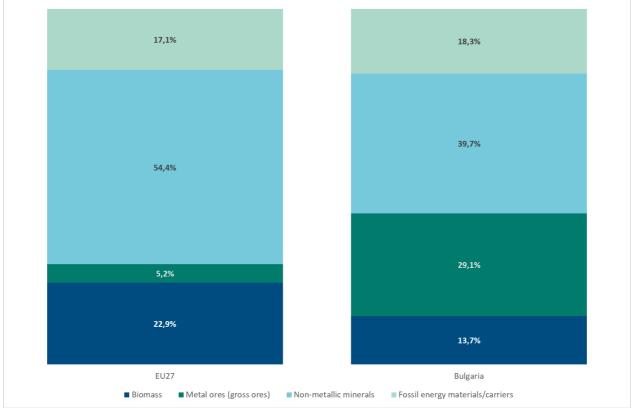


Figure 3 Domestic material consumption by selected material category, EU and Bulgaria, 2023, per cent

Note: totals may not sum to 100 % due to rounding

Source: Eurostat (2024) [env_ac_mfa] (accessed 21 August 2024)

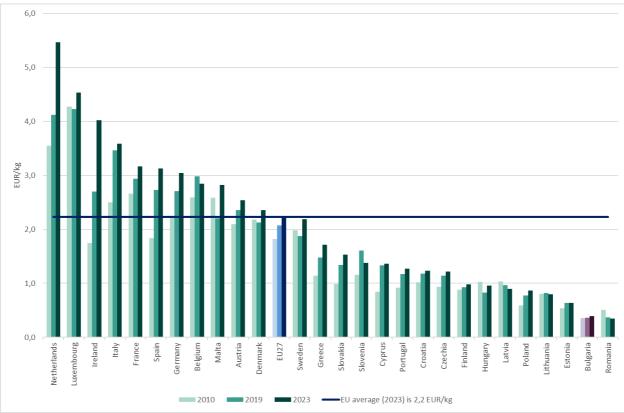
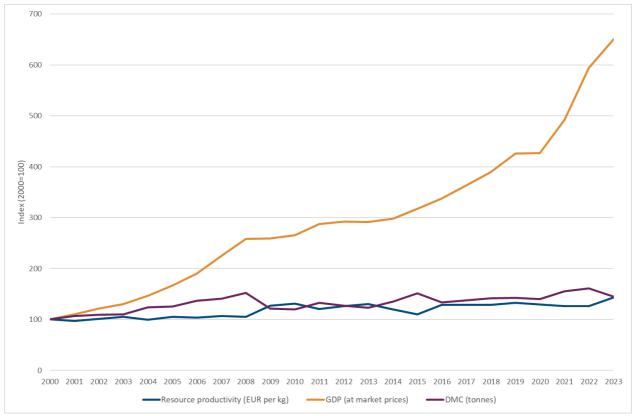


Figure 4 Resource productivity (gross domestic product/domestic material consumption), EU27, 2010, 2019 and 2023, EUR per kilogramme

Source: Eurostat (2024) [env_ac_rp] (accessed 21 August 2024)





Source: Eurostat (2024) [env_ac_mfa], [env_ac_rp] & [nama_10_gdp] (accessed 21 August 2024)

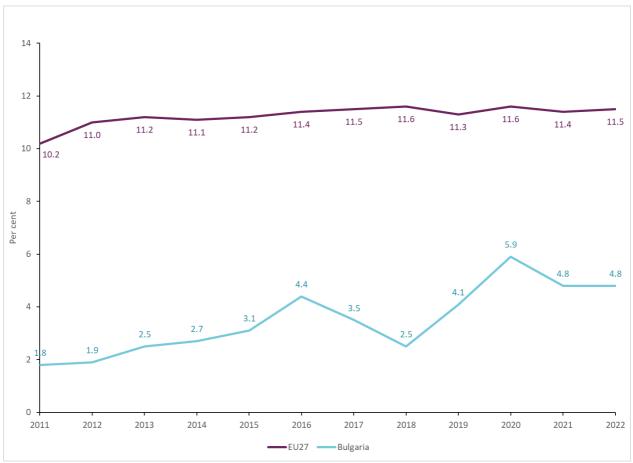
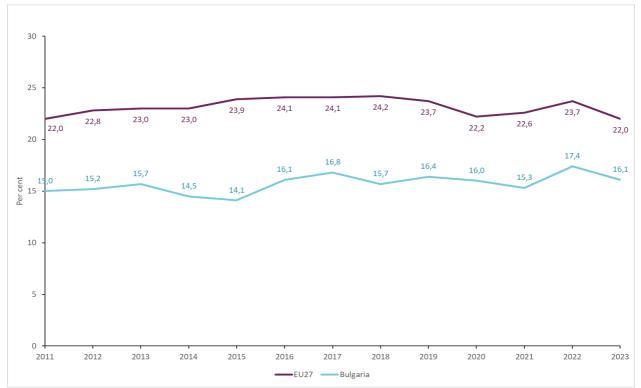


Figure 6 Circular material use rate in Bulgaria, 2011–2022, per cent

Source: Eurostat (2024) [env_ac_cur] (accessed 21 August 2024)





Source: Eurostat (2024) [cei_gsr030] (accessed 21 August 2024)

Existing policy framework

Dedicated national roadmap or action plan for circular economy

The Strategy and Action Plan for the transition to a circular economy for the period 2022-2027⁵ were adopted with Decision № 832 of the Council of Ministers from October 2022.

The documents aim to achieve resource efficiency by applying a hierarchy in waste management, i.e. prevention of waste generation, promotion of reuse and recovery by recycling, reducing landfills and limiting their harmful effects on the environment and human health. The strategy formulates **three** strategic goals:

- green and competitive economy;
- less waste and more resources;
- economy that benefits consumers.

To achieve them, specific measures are justified in the strategy, and these measures are enshrined as specific activities in the action plan accompanying the strategy. The implementation of the plan focuses mainly on correcting imbalances and overcoming obstacles to achieve the goals of the circular economy strategy.

The Action plan includes the following types of activities:

Short-term activities

The short-term activities had an implementation horizon from 2022-2023 and included:

- Analysis, development and adoption of sectoral legislation;
- Sector analyses and studies (critical raw materials, food and agricultural waste, water reuse, voluntary agreements, etc.);
- Raising awareness and organizing information campaigns for business and consumers;
- Creation of platforms for exchange of information and good practices (industry platforms on material flows to promote industrial symbiosis between enterprises, exchange of good practices, industrial symbiosis materials, linked to a reporting and certification system; exchange of information related to the demand and supply of secondary raw materials, etc.)

Medium-term activities:

Medium-term activities are the real incentives. They have an implementation horizon of 2024-2027 and will include:

- Financing the introduction of technologies for resource efficiency (focused on Small and Medium sized Enterprises (SMEs) from the processing industry) to implement innovations, practices and technologies enabling the transition to a circular economy;
- Restriction of plastic packaging, introduction of environmental standards, labelling, transition to the bio-economy, re-orientation to short supply chains; more efficient use of water; increasing the durability and possibilities of repairing or reusing the products; improving waste management in enterprises (including preparation for reuse and recycling of waste);
- Financing of SMEs from the processing industry for the introduction of eco-design;
- Establishment of reuse and preparation centres for reuse (reuse of usable products and repair of appliances, bicycles, etc.);
- Training for acquiring or improving the professional qualification of people from vulnerable groups (mostly from the construction sector) related to repair work.

Permanent activities:

These are activities that will be implemented throughout the period of the Action Plan and include:

Involvement of the private sector in achieving the goals for recycling of municipal waste;

⁵ <u>https://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=1559</u> (in Bulgarian)

- Activities for prevention, reuse, separate collection, recycling and recovery of waste;
- Application of new technologies for separation, treatment and treatment of waste;
- Strengthening the control over the unregulated dumping / disposal of construction and demolition waste;
- Supporting companies involved in repair activities to be present in reuse centres in cities.

The strategy is a cross-sectoral document which builds on the measures set out in the draft new sectoral strategies and programs, the main ones being in the field of economy, environmental protection and regional development. The Circular Economy Council, a permanent advisory body of the Council of Ministers for the coordination of public authorities on issues related to the transition from a linear to a circular economy, will propose to the Council of Ministers the adoption of updates to the Strategy and Action Plan, as well as draft regulations related to ensuring the transition to a circular economy. The council is recently established with Decree of the Council of Ministers No 95/4.4.2024⁶

- The decree established three sectoral working groups to the Council in the following areas:
 - Production and consumption (chaired by the Minister of economy and industry);
 - Competitiveness and Innovation (chaired by the Minister of innovation and growth);
 - Waste Management and Secondary Raw Materials (chaired by the Minister of environment and water).

Circular economy policy element	Included in policy
Sustainable use of raw materials	National Development Programme BULGARIA 2030
stimulating the use of alternative raw materials	
increasing the use of recyclable materials	
improve the knowledge base on the circular economy	
increasing the amount of recycled and recovered waste	Second action plan for the implementation of the National Development Programme BULGARIA 2030 for the period 2024-2026 (in Bulgarian)
reducing the harmful impact of waste, preventing its generation and promoting its reuse	
development and implementation of innovations for the transition to a circular economy in enterprises	

Circular economy policy elements included in other policies

The **National Development Programme BULGARIA 2030** is a strategic framework document of the highest order in the hierarchy of national programming documents, determining the vision and general goals of the development policies in all sectors.

The document sets out three strategic goals for the implementation of which it groups the government intentions into five areas (axes) of development and sets 13 national priorities.

One of the priorities of the Programme is **Priority 4 "Circular and low-carbon economy".** One of the areas of impact within Priority 4 is "Material efficiency". The measures within this area will aim at sustainable use of raw materials and supplies, reducing the amount of raw materials and supplies used in production, stimulating the use of alternative raw materials and increasing the use of recyclable materials.

A particular focus of the interventions will be to improve the knowledge base on the circular economy, the monitoring of waste and material flows, as well as the introduction of new forms of interaction between producers and consumers to support the circular economy.

The measures will, in addition, aim to support resource-efficient businesses and overcoming their difficulties in implementing the requirements related to staff qualification, waste collection and treatment. Digital technologies will be used to track, control, analyse and optimise supply, production and data collection on the use of the product. A particular focus will be on R&D and innovation related to the circular

⁶ <u>https://pris.government.bg/document/c58c8ed503c04dd6f07c8543dda03472</u> (in Bulgarian)

economy, with interventions that will be oriented towards supporting companies in introducing low carbon and non-waste technologies, reducing production waste and developing industrial symbiosis.

Action will be taken to increase the circular (secondary) use of materials in the economy, as well as to promote resource efficiency throughout their life cycle.

The efforts of the state will be directed towards assisting enterprises in carrying out waste flow analysis and reviewing production activities to implement industrial symbiosis, introducing environmental standards, implementing eco-innovations to reduce environmental pollution and use resources more efficiently, developing clean technology demonstration projects and providing start-up capital to encourage the development of new businesses, including building new capacities in the field of circular economy. A specific circular economy indicator under Priority 4 "Circular and low-carbon economy" is **"Circular material use rate"** and the target values is 11.7 %.

The National Development Programme BULGARIA 2030 determines the general policy framework which is detailed and specified by action plans for its implementation where the concrete measures are set. The first action plan for the implementation of the National Development Programme BULGARIA 2030 for the period 2022-2024 was adopted by Decision № 671/15.09.2022 of the Council of Ministers. In view that the measures set there, related to the circular economy, are long term, they have been continued with the Second action plan for the implementation of the National Development Programme BULGARIA 2030 for the period 2024-2026 which was recently adopted (with Decision № 154/07.03.2024 of the Council of Ministers). These measures encompass:

- Circular and resource-efficient economy in enterprises (guarantee debt instrument).
- Support for the transition to a circular economy in enterprises (grants).
- Development and implementation of innovations in enterprises in the area "Clean technologies, circular and low-carbon economy" of the Innovation Strategy for Smart Specialization 2021-2027.
- Increasing the amount of recycled and recovered waste.
- Reducing the harmful impact of waste, preventing its generation and promoting its reuse

Monitoring and targets

Assessment of circular economy performance

The European Commission has set up a <u>monitoring framework</u> to keep track of progress towards a circular economy. This framework provides a holistic view as it:

- measures direct and indirect benefits of 'becoming circular'; and
- values the contribution of a circular economy in living well within the limits of the planet;
- addresses energy and material supply risks.

It consists of **5 thematic sections** with a total of **11 statistical indicators**, some of which have additional sub-indicators. In some cases, policy targets exist which should be achieved in the future, and the indicators monitor progress towards these targets. The current monitoring framework is a revision of the original framework which was set up in 2018.

This section elaborates on the assessment of Bulgaria its progress in terms of observed trends over the last 5 years and what country characteristics or policy actions may explain differences between the country its performance and the average EU performance.

The progress of Bulgaria with regard the transition to circular economy and resource efficiency has been analyzed by the European Commission within the European semester in the so called "country reports"⁷. In Annex 9: "Resource productivity, efficiency and circularity" of the most recent report, conclusions about Bulgaria's circular economy transition, policy framework, waste treatment, finance, etc. are provided.

⁷ <u>2023 Country Report - Bulgaria</u>

The analysis is based on a set of overall and systemic indicators by Eurostat on circularity which present the trends in the last years also regarding the growth in persons employed in the circular economy. For instance, it is stated that:

- Bulgaria's use of circular materials fluctuated, reaching 4.9% in 2021 and showing a steady decline in secondary material usage in recent years; the rate is well below the EU 2020 average of 11.7%;
- Bulgaria's material footprint is above the EU average, with a tendency to increase the gap further;
- With EUR 0.33 generated per kg of material consumed in 2021 (Eurostat), resource productivity in Bulgaria is below the EU average of EUR 2.09 per kg;
- Bulgaria remains one of the Member States with the highest landfilling rates and lowest recycling performance. In 2020, landfilling represented 61.7% of the waste generated (compared to the EU average of 23%);
- Bulgaria did not meet the 2020 recycling target for municipal waste and is assessed to be at high risk of not meeting the 2025 recycling targets for municipal and packaging waste (Eurostat, 2020);
- In terms of health and safety at work in the circular economy, fatal accidents in waste management and material recovery are above the average for all sectors of the economy and above the EU average in Bulgaria.

According to the European Commission the observed financing gap in the Circular Economy in Bulgaria, including waste management, may be a reason for these developments. Investment areas such as ecodesign, repair, reuse and remanufacturing as well as the uptake of new business models will be necessary to reach the EU's circular economy objectives. Additional investments are necessary in improving separate waste collection and treatment infrastructure to divert waste from landfilling and incineration with focus on plastic and biowaste.

Circular economy monitoring frameworks and their indicators beyond the ones from Eurostat

Bulgaria does not have a specific national or regional Circular Economy monitoring framework in place. Instead, the monitoring framework of Eurostat is used to describe the development of Circular Economy in Bulgaria.

In addition, the National Report on the State and Protection of the Environment in the Republic of Bulgaria is prepared and adopted annually and published by the Executive Environment Agency on its website⁸. The report includes a separate chapter on "Waste and Material Resources", where most of the circular economy indicators of Eurostat are presented. But currently, the focus is on waste generation and waste treatment, incl. recovery and recycling of different waste streams. The Eurostat data is complemented by national statistics, provided by the National Statistical Institute⁹. Regarding material resources, an analysis based on the Eurostat data is provided for the use of and trade with recycled materials to reduce the generation of waste and to limit the extraction of primary raw materials.

Circular economy targets

A set of different Circular Economy targets is available in the above-mentioned National Development Programme BULGARIA 2030¹⁰ for Priority 4 Circular and low-carbon economy (p. 27). While most of them are related to waste management targets set in EU legislation, although a target is also set for the **Circular material use rate (CMU rate)**. The target value for the CMU rate is 11.7 % without a fixed target year, but in view that the time frame for the document is 2030.

⁸ <u>https://eea.government.bg/bg/soer/2023</u>

⁹ <u>https://www.nsi.bg/en/content/2541/environment</u>

¹⁰ <u>https://www.minfin.bg/en/1394</u>

In addition, a target for the eco-innovation index, as defined by the European Commission in the Eighth Environment Action Programme (8th EAP)¹¹, is defined. The target value is set to 83.

Innovative approaches and good practices

Examples of public policy initiatives (national, regional or local)

→ Good practice example: Institutional and regulatory arrangements to support the transition towards a resource-efficient Circular Economy

Regulatory and Financial Framework for Waste Management

Bulgaria has regulatory and economic/financial instruments to promote investment in modern facilities for waste recovery through recycling, reuse and/or recovery of secondary raw materials and energy. They have been introduced by the <u>Waste Management Act</u> and the secondary legislation for its enforcement and consist of:

- a clear definition of the responsibilities of municipalities concerning waste management, including recycling targets. The municipalities have a responsibility for household and construction waste management, including defining quantitative targets for biodegradable waste. Municipalities are obliged to organize the separate collection of biodegradable waste.
- a legal requirement for municipalities to provide a system for separate collection of plastic, paper, glass and metal, in each settlement with more than 5.000 inhabitants.
- a legal requirement for the municipalities to provide a system for separate collection of packaging waste in every settlement with a population of over 5.000 inhabitants.
- introduction of economic instruments (deductions for waste disposal, which are more popular in other countries as landfill taxes) or stimulating the municipalities to improve preparation for re-use and recycling of wastepaper and cardboard, metal, plastics and glass from the household waste and to reduce the amount of household wastes going to landfill, as those municipalities who meet specified targets are exempt from 50 % of the charges due for waste disposal. The municipalities could use the accumulated amount of waste disposal charges (deduction paid by municipalities per ton of disposed waste) to finance investment costs for household waste recycling and other recovery facilities.
- introduction of legal requirements for the administrative, economic, educational, business and other similar businesses that generate waste to separately collect wastepaper and cardboard, plastic, glass and metal.
- municipalities have an obligation to provide waste sites for collection of hazardous and bulky wastes from the households as a free service offered to the citizens in settlements with over 10.000 inhabitants.
- extended producer responsibility principle and responsibilities of the persons placing on the market products, after use of which is generated waste (6 groups of widespread waste – packaging, end-of-life vehicles, electrical and electronic equipment, oils, batteries and accumulators and tires) to organize separate collection, reuse, recycling, and recovery. In the scope of the obligations is achieving the targets for recycling and recovery, which may be met individually, or through participation in collective systems, represented by recovery organizations.

→ Good practice example: Financial support programmes targeting Circular Economy

Programme "Environment" 2021-2027

The Programme "Environment" 2021-2027 is one of the programmes for the implementation of the EU funds in Bulgaria for the programming period 2021-2027. It focusses on interventions stimulating the transition to a circular economy, including and completion of the necessary infrastructure for the

¹¹ EEA – EcoInnovation Index

development and improvement of municipal waste management systems at the regional level, in particular with a focus on reuse, separate collection and recycling of waste to achieve the 2030 targets at the EU level and for Bulgaria. Additionally, support is provided to municipalities for the reclamation of landfills that meet the regulatory requirements. The investments at the amount of EUR 312.7 million are aimed at developing facilities, systems and business models for using waste as resources, in support of the circular economy, as well as providing the necessary infrastructure for the treatment of the household waste generated in the country.

In particular, the eligible measures are in accordance with the needs identified in the National Waste Management Action Plan 2021-2028 and the programmes to it, as well as in the Strategy and Action Plan for the transition to a circular economy for the period 2022-2027.

- measures to build, expand and/or upgrade municipal/regional systems for separate collection and recycling of biodegradable waste
 The first part of the procedure has already been announced on 8.4.2024, and the second is in the process of coordination and is expected to be announced in the end of 2024 or early 2025;
- measures to build systems/centres for separate collection and preparation for reuse and repair The construction of municipal centres and systems for the separate collection of municipal waste streams will be supported, including of bulky waste, as well as providing the opportunity for repair and preparation for reuse. The appropriate type and scope of the procedure is currently under investigation. Indicatively, the procedure is planned to be announced in late 2024 or early 2025;
- raising awareness of practices and behaviour in relation to sustainable consumption, circular economy, waste monitoring as well as information and explanatory campaigns for stakeholders and the population

A mandatory activity under this measure is the organization of information and explanatory campaigns supporting the increase of the population's awareness of waste management in the relevant settlement, municipality, waste management region. Eligible beneficiaries under this measure are municipalities and non-profit legal entities;

models for optimizing the municipal waste management process in Bulgaria
 On 04.07.2023, procedure BG16FFPR002-2.001 "Models for optimizing the process of municipal waste management in Bulgaria" was announced. The purpose of the procedure is to increase the capacity of municipalities to improve waste management models, to fulfil the responsibilities assigned to them by the applicable legislation and to achieve the goals set in the National Waste Management Plan for the period 2021-2028. Through the activities under the procedure, municipalities will be assisted in introducing the fee for municipal waste based on the quantity of municipal waste.

A project proposal has been submitted by National Association of Municipalities in the Republic of Bulgaria, which was evaluated and on April 8, 2024, a financing agreement was concluded with the National Association of Municipalities in the Republic of Bulgaria;

• waste recycling measures - permissible in combination with separate collection and pretreatment of separately collected waste

The measure is to be implemented exclusively through financial instruments (loans) to companies in the recycling sector (legal entities with an economic purpose, performing activities under code 38.32 "Recycling of sorted waste from the Classification of Economic Activities"¹². A mandatory element of the support will be the construction of new or increasing the capacity of existing waste recycling facilities. The provision of separate collection sites and/or the construction or upgrading/optimization of existing facilities for the pre-treatment of separately collected waste is envisaged as an additional financing option, if necessary. The activities refer to municipal, production and construction waste (without hazardous waste), and must necessarily lead to an increase in recycling capacity. With the implementation of the

¹²https://nsi.bg/sites/default/files/files/publications/KID-2008.pdf (in Bulgarian)

projects, it is planned to provide additional waste recycling capacities of up to 330,000 tons per year and separately collected waste of the same amount are to be collected.

Operational Programme "Innovations and Competitiveness"

The strategy for the transition to a circular economy is an intersectoral strategic document, and most of the identified financing measures specifically for SMEs are through the Operational Program "Innovations and Competitiveness" (OPIK).

Such a financing measure through OPIK 2021-2027 has already been announced with procedure BG-RRP-3.008 "Support for the transition to a circular economy in enterprises"¹³. The purpose of the procedure is to contribute to the acceleration of the transition to a circular economy by providing grants to enterprises in the production sector with the aim to introduce circular models for the use of resources and the implementation of climate-neutral methods and technologies for the production and consumption of products from their activity.

Eligible applicants are micro, small, medium and large enterprises from sector C "Processing industry" according to the Classification of economic activities⁸, which can apply independently or in partnership for the acquisition of new technologies, ensuring the introduction of circular models in one or multiple of the following areas:

- 1. Reduction of waste generation;
- 2. Limiting the use of single-use plastic products;
- 3. Use of resources of biological origin;
- 4. Improvement of standards for environmental compatibility of products;
- 5. Improving the energy efficiency of products.

In addition to the mandatory directions specified in items 1) - 5), proposals for the implementation of investments may also include activities on:

6. Introducing other models of the circular economy by implementing technologies for the use of alternative raw materials, including recycled ones, and/or increasing the use of recyclable raw materials, and/or replacing or reducing the use of hazardous substances used in manufactured products, etc.

"Implementation of demonstration projects in the field of waste management" under the Operational Programme "Environment 2014-2020"

The procedure contributes to the transition to a circular economy in Bulgaria and supports the increase of recycling in the country. It should although contribute to built up a zero-waste society, raising public awareness of compliance with the waste management hierarchy and reducing the amount of landfilled household waste. The total amount of funds for all approved project proposals is up to EUR 4.998.125¹⁴. The maximum amount of funding for each project proposal is up to EUR 199.925⁹.

54 projects were financed and implemented, such as:

- Educational program for children, with the aim of raising awareness about waste in the municipality of Karlovo;
- Implementation of a demonstration project aimed at preventing the generation of household waste on the territory of the municipality of Belovo;
- Smart waste management;
- Demonstration project for preparation for reuse and recycling of used mattresses;
- Demonstration project for prevention, reuse and recycling of household waste materials;
- Demonstration project for paper recycling at home;

¹³ <u>https://www.mig.government.bg/wp-content/uploads/2023/09/3.008_circle-economy_presentation.pdf</u> (in Bulgarian)

¹⁴ Conversion from Bulgarian Lev to Euro at the exchange rate of May 1, 2024 (1 LEV= 0,5100 EUR)

- "Zero waste introduction of good practices to prevent the generation of household waste through composting training and creation of a public environmental center";
- "Introduction of good practice to reduce the amount of landfilled waste and increase awareness and capacity for recycling in the municipality of Smolyan";
- "From composting to zero waste introduction of good practices for the prevention of household waste generation through composting training and creation of a public environmental center" of the Municipality of Elena;
- Implementation of underground installations for the storage of mixed household waste and separate collection of specific streams of household waste;
- System for automated separate collection of used packaging of soft drinks in schools and giving bonuses in return;
- "With knowledge of nature towards zero waste";
- Think before you throw away;
- Environmental and recycling administrations;
- "Demonstration of a system for the separate collection of textiles, re-use, preparation for re-use and making carpets from non-reusable textiles";
- "A hub for the separate collection of used textiles and an electronic automated management system, including sorting and preparation for reuse and recycling";
- Test implementation of good practices in approaches to collection and recycling of textile waste;
- A demonstration project to reduce the amount of landfilled waste through preparation for reuse;
- Introducing a large-scale initiative to prevent waste generation by promoting the extension of the life cycle of products Repair Café;
- "Our zero-waste village";
- Development and demonstration of a web-based model (tool) (WASP-Tool) for waste prevention, encouraging local authorities to reach the goals under Art. 31, para. 1 of the Waste Management Act;
- "Demonstration project to introduce a model for waste prevention in hotels and accommodation";
- Circular Economy Pilot Demonstration Model;
- "Don't throw away compost";
- "Reducing waste at the source in Samokov with the challenges of Roubaix."
- Cleaner Grass separate collection in invisible containers;
- Introduction of good practices for the prevention of household waste generation through composting;

→ Good practice example: Technology & innovation

Programme "Competitiveness and Innovation in Enterprises" 2021-2027

The Programme "Competitiveness and Innovation in Enterprises" (CIE) is also one of the EU funded programme in the programming period 2021-2027. CIE 2021-2027 is directly aimed to achieve intelligent and sustainable growth of the Bulgarian economy, as well as the implementation of industrial and digital transformation. The main target group of the programme are enterprises with a focus on SMEs.

The programme is structured in two priorities: Priority 1 "Innovation and Growth" and Priority 2 "Circular Economy", each of which contributes to the achievement of the following Policy Objectives set at European level:

- Policy Objective 1 "A more competitive and smarter Europe by promoting innovative and smarter economic transformation and regional ICT connectivity";
- Policy Objective 2 "A greener, lower-carbon and sustainable Europe with an economy in transition to zero net carbon emissions by promoting a clean and equitable energy transition, green and blue investments, a circular economy, climate change mitigation and adaptation, risk prevention and management and sustainable urban mobility".

Priority 2 "Circular Economy", with a budget about EUR 591.56 million, has two specific objectives - **promoting energy efficiency and reducing greenhouse gas emissions** as well as **promoting the transition to a circular and resource-efficient economy**, which are aimed at preparing businesses to meet the challenges of green transition and achieving climate neutrality.

The interventions under the first specific objective "Promoting energy efficiency and reducing greenhouse gas emissions" aim to improve energy efficiency in companies through targeted measures, including the introduction and certification of energy management systems and systems for monitoring and controlling energy consumption.

The specific objective "Promoting the transition to a resource-efficient circular economy" provides for the implementation of measures by SMEs in the areas of product design, production processes and waste management in companies in order to achieve more resource-efficient, waste-free production based on the principles of the circular economy. These activities are also supported by measures to form partnerships between companies in order to achieve industrial symbiosis. In particular, the following indicative groups of activities in the areas of product design, production processes and waste management are planned for implementation:

- efficient use of natural resources in production, incl. reducing the use of primary raw materials or increasing the use of by-products and secondary raw materials;
- increasing the durability, repairability, modernization or reuse of the products;
- improving the possibilities for product recycling, including the recycling of individual materials, contained in the products, inter alia by substituting or reducing the use of products and materials which are not subject to recycling;
- reducing the content of hazardous substances in materials and products throughout their life cycle, incl. by replacing these substances with safer alternatives;
- prolonging the use of products, including through reuse, design for durability, modification the purpose, disassembly, remanufacturing, modernization, and repair, and sharing of products;
- support for an improved waste management in enterprises, including prevention and reduction of waste generation, preparation for reuse, recycling. Support will be provided for technologies for treatment and reduction of pollution of production wastewater;
- support for creating partnerships between enterprises to achieve industrial symbiosis sharing of
 resources, services, secondary products, creating a link between productions in which waste from
 one represents raw material for the other. Industrial symbiosis between enterprises along value
 chains will be encouraged;
- development of industry platforms (e.g. by material flows: plastics, wood, glass, etc.) to exchange good practices.

At this stage, one measure under Priority 2 "Circular Economy" is in progress: the guarantee debt instrument "Circular and Resource-efficient Economy in Enterprises". The measure aimed to promote the transition to a circular and resource-efficient economy in enterprises, as well as improving energy efficiency and reducing greenhouse gas emissions. It will improve the access of the businesses to finance for promoting the transition to a circular and resource-efficient economy. It is expected to support at least 120 enterprises by 2026.

Other measures under CIE 2021-2027 support innovations in the area of clean technologies and circular economy in enterprises –one addresses the development of innovations and another is focusing on the implementation of innovations in enterprises. It is expected to support at least 225 enterprises by 2026.

→ Good practice example: Green/Circular/Sustainable public procurement

Mandatory Green Public Procurement in Bulgaria

Some important legislative measures have been implemented to introduce mandatory green public procurement (GPP) in Bulgaria for the first time.

The Public Procurement Law (PPL)¹⁵ has been amended in 2024 with the mandatory inclusion of minimum environmental requirements in the tender documentation for all public contracting authorities under the PPL when they award public procurement contracts. According to the amendments (new Art. 47a and § 2, p. 9a of the supplementary provisions of the PPL), when public procurements of a value referred in the PPL (Art. 20, (1) and (2)) are awarded by public contracting authorities, the procurement documents shall contain environmental requirements to the products that are supplied or used for the services provided. Contracting authorities shall apply the requirements by setting them in the technical specifications of the public procurement, or as indicators for award criteria (under Art. 70, para. 2, item 2 or 3).

The products, the mandatory minimum requirements for environmental protection and the manner in which compliance with these requirements must be demonstrated are determined by an ordinance issued by the Minister for the Environment and Water together with the Minister for Finance and the Minister for Economic Affairs and Industry.

Environmental requirements are defined in the supplementary provisions of the PPL as requirements that ensure that the products supplied or used for the services provided have a reduced impact on the environment throughout their whole life cycle. In compliance with the legal requirements, a draft Ordinance on the environmental requirements for certain products subject to public procurement has been elaborated, which determines the product scope, the minimum mandatory environmental requirements for the products subject to public procurement, as well as the means of verifying these requirements. Minimum mandatory environmental requirements are defined for the following product groups: "Copying and graphic paper", "Indoor cleaning services", "Computers and monitors" and "Food catering services and vending machines". These requirements are based on the core GPP criteria of the European Commission. Some of them are directly related to circular economy:

- Purchasing recycled office paper made entirely from recovered paper fibres;
- Use of eco-labelled cleaning products for the cleaning services;
- Preventing food and beverage waste and prevention, sorting and disposal of other waste for the catering services;
- Use of reusable cups for vending machines for food and drinks.

→ Good practice example: Education and awareness-raising

Programme "Development of Human Resources" 2021-2027

The programme "Development of Human Resources"¹⁶ 2021-2027 is again an EU funded programme for the programming period 2021-2027. It enables the professional qualification and acquisition of skills and competences that meet the needs of employers to facilitate the management of dynamic change in production, including workers at risk of losing their jobs due to restructuring, the closure of non-environmental activities, etc.

The support provides opportunities for enterprises to receive funding for specific training fostering circular economy and green transition, the introduction of low-carbon, resource-efficient and waste-free processes and technologies, digital skills, etc. For this purpose, in 2024 the programme will finance the "New Skills" operation, which is planned to cover at least 38,000 employees. The budget of the operation is EUR 25.6 million.

Examples of private policy initiatives (sectoral)

→ Good practice example for textiles

¹⁵ <u>https://www2.aop.bg/wp-content/uploads/2024/04/Public-Procurement-Act.pdf</u>

¹⁶ <u>Programme "Development of Human Resources"</u> (in Bulgarian)

Bulgarian Association Circular Textile

The Bulgarian Association Circular Textile (BACT)¹⁷ unites companies, experts in separate collection and utilization of textile waste as well as experts in preparation for reuse and its entry in the second-hand clothing market. The association consists of about 50 Bulgarian and international companies with years of experience in the sector which apply the circular business model into their operations for more than 25 years and carry out their activities in other member states of the EU (incl. Germany, Netherlands, Denmark and Sweden), as well as third countries like Switzerland and USA.

BACT is the legal successor of the Association of Recyclers and Traders of Second-hand clothes – the most experienced organization in separate collection and processing of used textiles in Bulgaria. The association is a member of the European Recycling Industries' Confederation, the Bulgarian Industrial Association, Bureau of International Recycling and also of the German-Bulgarian Chamber of Industry and Commerce.

The members of the Association have collected over 6 000 tons of textile products in Bulgaria in the period 2019 - 2021, whereas nearly 70% were collected in Sofia. They have more than 280 containers for textile waste placed in over 30 municipalities nationwide, which have a special locking mechanism so that waste cannot be removed.

Two of the Association's member companies have signed contracts with Sofia Municipality and ensure the collection and subsequent processing of unnecessary textiles. There are 150 different locations in Sofia. The waste collected from the containers is transported to Textile Ecocenters for processing, sorting, and preparation for reuse and recycling. Textiles are separated by type: the reusable ones are split from the rest, which are either cut up and are being used as cotton rags or handed over to other companies for proper recycling and utilization. Non-reusable textile materials are sorted by colour. Their buttons and zippers are passed on to produce insulating padding.

BACT claims that significant environmental savings from the activities of the organization has been achieved for the period 2019-2021¹⁸:

- 5 472 tons separately collected textile waste;
- 96 170 tons sorted textile waste (broader category including beside separately collected waste in containers also textile waste from other sources – for instance, directly provided by producers and traders of clothes);
- 13 million cubic meters of water saved from clothing production;
- 220 million cubic meters of water saved from irrigation of fibre crop;
- 200 km² agricultural land saved;
- 1.7 million tons of carbon emissions saved from the production of new textiles and clothing;
- Prevented disposal of 35 000 tons of natural fabrics and the emissions resulting from their decay.
- → Good practice example for industrial symbiosis

S.W.A.N project

Within the S.W.A.N. project¹⁹, funded by INTERREG Balkan-Mediterranean 2014-2020 a report by Denkstatt entitled: "Study of the generated waste in the country, the possible business models for treatment and study of opportunities in other countries"²⁰ has been prepared.

The report focused on the industrial symbiosis and included examples of good practices in this field in Bulgaria:

• Technical gypsum (REA) from the desulfurization installations of the thermal power plant "ConturGlobal Maritsa Iztok 3" is successfully used as a substitute for natural gypsum in the production of gypsum products by Knauf Bulgaria. The benefits are both environmental and economic. Thanks to these practices, Knauf Bulgaria is positioned at international markets with

¹⁷ https://bact.bg/en/

¹⁸ <u>https://bact.bg/wp-content/uploads/2022/12/BACT_report.pdf</u> (in Bulgarian)

¹⁹ <u>https://www.swan-interreg.com/</u>

²⁰ <u>https://www.bia-bg.com/uploads/files/Projects/Report_SWAN_all.pdf</u> (in Bulgarian)

greener products that have received customer and scientific recognition, incl. by the German Institute for Construction and Environment.

- In Devnya industrial zone, the fertilizer producer Agropolychim AD and the producer of phosphates for the feed industry Aliphos Bulgaria EAD are located in the immediate vicinity. Aliphos Bulgaria EAD buys phosphoric acid from Agropolychim AD. With one additional step in production the raw material is cleaned and is made suitable for food purposes.
- The main by-product in the extraction of copper from copper concentrates is iron silicate, also known as fayalite. Fayalite is a raw material for the production of cement clinker, due to its high content of iron oxides. The secondary material is used by all three cement plants in Bulgaria, which produce clinker, as a base raw material for forming the mineral composition of their products. In the last years fayalite is also exported to other cement plants abroad. Fayalite is a certified building material for application in various areas of the construction process. Its entry into this new market is currently being developed.
- Montupet is a leading manufacturer of aluminium products for the automotive industry. It has been operating in Bulgaria since 2006, producing cylinder heads and carriers for the most famous car companies in the world. The enterprise has introduced internal and external recovery of the following waste: sawdust, shavings, scraps from non-ferrous metals which are utilized internally (remelting) or externally in SC AS Metal Romania - metal recycling center; iron and steel waste which is recycled by Rousse Secondary Metals; machine emulsions and solutions, non-chlorinated motor oils, lubricating oils and mineral-based gear oils converted into raw materials for the production of oils for the automotive industry by LUBRIKA.
- Svilosa AD, through its main subsidiary Svilocell EAD, is the only producer in Bulgaria of sulphate bleached cellulose and products made thereof. With the construction of the "Installation for integrated treatment and utilization of production waste" the following benefits are achieved: utilization by drying and granulation of chemical calcium carbonate and wood ash waste and sludge from regeneration of chemical substances from the production of cellulose; transformation of waste into a raw material resource for the production of a soil improver and acid neutralizer for agricultural applications.

The way forward

Identifying and addressing barriers and challenges

According to the European Green Deal, achieving climate neutrality and circular economy requires full mobilization of industry, incl. SMEs. The transition to circular economy is an opportunity to introduce sustainable and job-creating activities in SMEs that benefit society and the environment. The results currently achieved by Bulgarian enterprises in terms of waste management are not optimal and the potential of the new business models of the circular economy is not used.

Only 10.1 % of SMEs consider that recycling is part of their production process, and 12.1% of SMEs face challenges in the fulfilment of the requirements related to the classification, collection and treatment of waste²¹. There is a need for additional support in providing information and guidance on modernizing waste management. A very small proportion of entrepreneurs are aware of the opportunities and are ready to develop circular business models.

The proportion of SMEs that benefited from public support measures for the production of green products increased by 9% in the period 2014-2018. Nevertheless, at 9.5%, the proportion of SMEs offering green products or services is below the EU average. A further 9.0% of SMEs plan to introduce such services8⁸. Entrepreneurs need to be made aware of the opportunities and benefits of developing circular economy models and receive support to start producing green products and services

²¹ <u>Analysis of the state of the SME carried out for the purposes of the National Strategy for SMEs 2021-2027</u> (in Bulgarian)

The transition to a circular economy requires significant changes in the way the administration works. Joint management at all levels of the value creation chain is needed. Every ministry and institution that plays a role in the transition to a circular economy should adapt its functional organization and provide the necessary administrative capacity and resources to successfully meet the new challenges.

To address these challenges and barriers observed, Bulgaria recommend that on the **EU level** the priority should be the implementation of a consolidated, consistent and harmonized concept for the integrated introduction of circular business models and resource efficiency criteria in various instruments of the EU product policy. This is seen as an essential factor for creating the appropriate environment, on the one hand, for the implementation of circular technologies, production methods, business models and products, and on the other hand to promote a circular consumption. Among these tools, eco-design deserves special attention, as it plays a key role in the circular design of products, taking into account considerations related to climate change and the protection of natural resources. The common product policy framework should promote wider and better choices for consumers by offering innovative business models – renting, borrowing or sharing as an alternative to owning products, while respecting the interests of consumers (in terms of cost, protection, information, contractual conditions, insurance aspects, etc.). It is also necessary to guarantee the availability, clarity, credibility and relevance of information for producers, suppliers and consumers regarding circular models of production and consumption, including characteristics of recycled materials and secondary raw materials, product recycling possibilities, duration of use, availability of spare parts, etc.

In the context of the ambition to achieve zero pollution, efforts should also continue aiming to improve the quality of recycled materials and traceability of their chemical components, introduction of uniform standards, e.g. for secondary raw materials, etc. Special consideration should be given to the potential of digitalization, as a stimulus for the circular economy, thanks to its ability to introduce visibility and intelligence in the production and use of products, materials, raw materials and equipment, by creating a knowledge base on the location, condition and availability of the assets. The development of digital technologies is also the basis for the introduction of new forms of interaction between producers and consumers in support of the circular economy. Digitization enables, through virtual networks and platforms, communication with users to create the necessary critical mass for the practical implementation of innovative circular business models.

At national level, overcoming the challenges Bulgaria faces regarding the circular economy requires a longterm commitment for better coordination, improved strategic planning and effective institutional cooperation. For this reason, it is necessary that a coordination mechanism is provided. The Strategy and Action Plan for the transition to a circular economy for the period 2022-2027 envisages to establish a **Circular Economy Council** as a coordination body regarding the transition to a circular economy.

The Circular Economy Council has been recently adopted with Decree of the Council of Ministers²². It will be a permanent advisory body of the Council of Ministers for the coordination of public authorities on issues related to the transition from a linear to a circular economy, which also will ensure cooperation with other state bodies, incl. regional and local level and with non-governmental organizations in determining the implementation of state policy in the areas of the circular economy. The decree established three sectoral working groups to the Council in the following areas:

- Production and consumption (chaired by the Minister of economy and industry);
- Competitiveness and Innovation (chaired by the Minister of innovation and growth);
- Waste Management and Secondary Raw Materials (chaired by the Minister of environment and water).

Members of the Council will be the Ministers of Environment and Water, Economy and Industry, Innovation and Growth, Energy, Finance, Regional development and Public Works, Agriculture and food, Education and Science, Labor and Social Policy, two regional governors and the executive director of the National Association of the Municipalities in Republic of Bulgaria.

²² <u>https://pris.government.bg/document/c58c8ed503c04dd6f07c8543dda03472</u> (in Bulgarian)

The Council will:

- resolve issues of a coordination nature related to the transition to a circular economy, which are within the competence of more than one ministry or department,
- issue guidelines and recommend actions to implement the goals and measures of the Strategy and the Action Plan for the transition to a circular economy of the Republic of Bulgaria for the period 2022-2027,
- monitor and evaluate the progress of circular economy initiatives in Bulgaria.

The Circular Economy Council will propose to the Council of Ministers the adoption of updates to the Strategy and Action Plan, as well as draft regulations related to ensuring the transition to a circular economy.

Future policy plans

Economic Transformation Programme

The National Recovery and Resilience Plan of the Republic of Bulgaria²³ includes as a key investment the Economic Transformation Programme. The programme envisages targeted support in the form of grants and financial instruments to Bulgarian enterprises to facilitate their transition to a digital, low-carbon and resource-efficient economy. Apart from being a tool for promoting economic transformation, the timely implementation of the programme will also be a catalyst for the economic recovery of Bulgarian enterprises from the negative consequences of the economic crisis caused by the COVID-19 pandemic. The programme consists of three funds: Fund 1 "Growth and Innovation", Fund 2 "Green Transition and the Circular Economy" and Fund 3 "Investing in Climate Neutrality and Digital Transformation".

Fund 2 "Green Transition and Circular Economy" is structured in two directions. The first direction aims to support the transition to climate neutrality by improving energy efficiency and independence at the enterprise level. The second direction within the fund focuses on access to financial resources for SMEs and large enterprises in support of the transition to a circular economy through the introduction of circular models of production and consumption, standardization and promotion of technologies related to recycling and reuse of waste, repair and use of bio-based products. The support in the form of grants amounts EUR 92 million.

In particular, the activities financed in this second direction include:

- Projects related to technologies for the processing of waste in companies generated by their own activities (pre-consumer recycling), including textiles, polymer and rubber waste, electrical appliances, etc.
- Activities related to limitation and reduction of plastic packaging and the disposable plastic products including the implementation of technologies to ensure compliance of plastic products with European requirements for disposable plastics, implementation of reusable and alternative products and materials, incl. biodegradable / recyclable / green packaging.
- Activities related to reducing the consumption of raw materials and materials, the use of
 alternative raw materials and natural and renewable bio-resources instead of synthetic raw
 materials in production to reduce the waste burden on natural resources and promote the
 transition to the bio-economy, including processing essential oils and plant oils in medicines, food
 supplements, etc.; replacement of fossil-based materials with bio-based ones, recyclable and
 marine biodegradable materials; bio-regeneration methods in the relevant value chains. Financing
 of producers of bio resources such as essential oilseeds, wood, etc. is not eligible.
- Activities related to improving the quality of products and their sustainability, including helping companies implement environmental standards for incoming material flows, programs to reduce chemical preservatives in food, eliminate hazardous substances and extend the life of products.

²³ <u>https://nextgeneration.bg/14</u>

- Improvements in end-user awareness of the production chain, including labelling with key characteristics CO2 used in production, water used, availability of bio-based products, etc.
- Within the Economic Transformation Programme, a procedure "Circular economy in enterprises" is in progress. The procedure covers the SMEs and large enterprises from the processing industry and aims to provide financial support for the acquisition of new technologies that ensure the reduction of waste generation, increase the use of resources of biological origin, limit the use of plastic products and single-use packaging and introduce other circular economy models. It is expected at least 120 enterprises to be supported by 2025.

Main target group of these activities are SMEs and large enterprises in the manufacturing sector incl. partnership between them for the purpose of achieving industrial symbiosis.

Fund for promoting the technological and green transition of the agriculture

The main objective of the Fund for promoting the technological and green transition of the agriculture under the National Recovery and Resilience Plan of the Republic of Bulgaria is to provide timely targeted support to Bulgarian farmers, in the form of grants, for rapid recovery from the consequences of the COVID-19 pandemic, overcoming the barriers that hinder competitiveness and the sustainability of the agrarian sector and acceleration of its adaptation to climate change, greening of production, digital transformation and improvement of genetic resources.

The Fund focuses on green and digital investments and aims to increase the number of farmers who have successfully adapted their farms to meet the challenges of the green and digital transition.

The direction "Investments in technological and environmental modernization" of the Fund, with a budget EUR 325.2 million (50 % public and 50 % private finance), supports investments in circular economy models, like:

- equipment/facilities for storing animal and vegetable manure waste;
- equipment/facilities for processing waste raw materials from agricultural products used for own consumption;
- equipment for the application of precision farming for the protection of natural resources (optimization of soil treatments, the use of fertilizers and preparations for plant protection, etc.).

The direction "Investments related to efficient water management in farms", with a budget EUR 101.99 million (50 % public and 50 % private finance), provides support for more efficient use of water resources in farms, based on the implementation of water-saving technologies, use of purified wastewater, automation of water management processes, reduction of water losses, etc.

The admissible investments include:

- irrigation systems, including sprinkler installations, drip irrigation systems and other systems for efficient use of water resources in the irrigation process;
- installations for purification and recycling of waste and incoming water, and for reuse of water;
- equipment/facilities for applying innovative water-saving technologies;
- facilities for storing water tanks, cisterns, etc.;
- systems for automated irrigation, including digital and robotic solutions;
- other investments related to the efficient use of water in agricultural activities.

European Topic Centre on Circular economy and resource use https://www.eionet.europa.eu/etcs/etc-ce The European Topic Centre on Circular economy and resource use (ETC-CE) is a consortium of European institutes under contract of the European Environment Agency.



