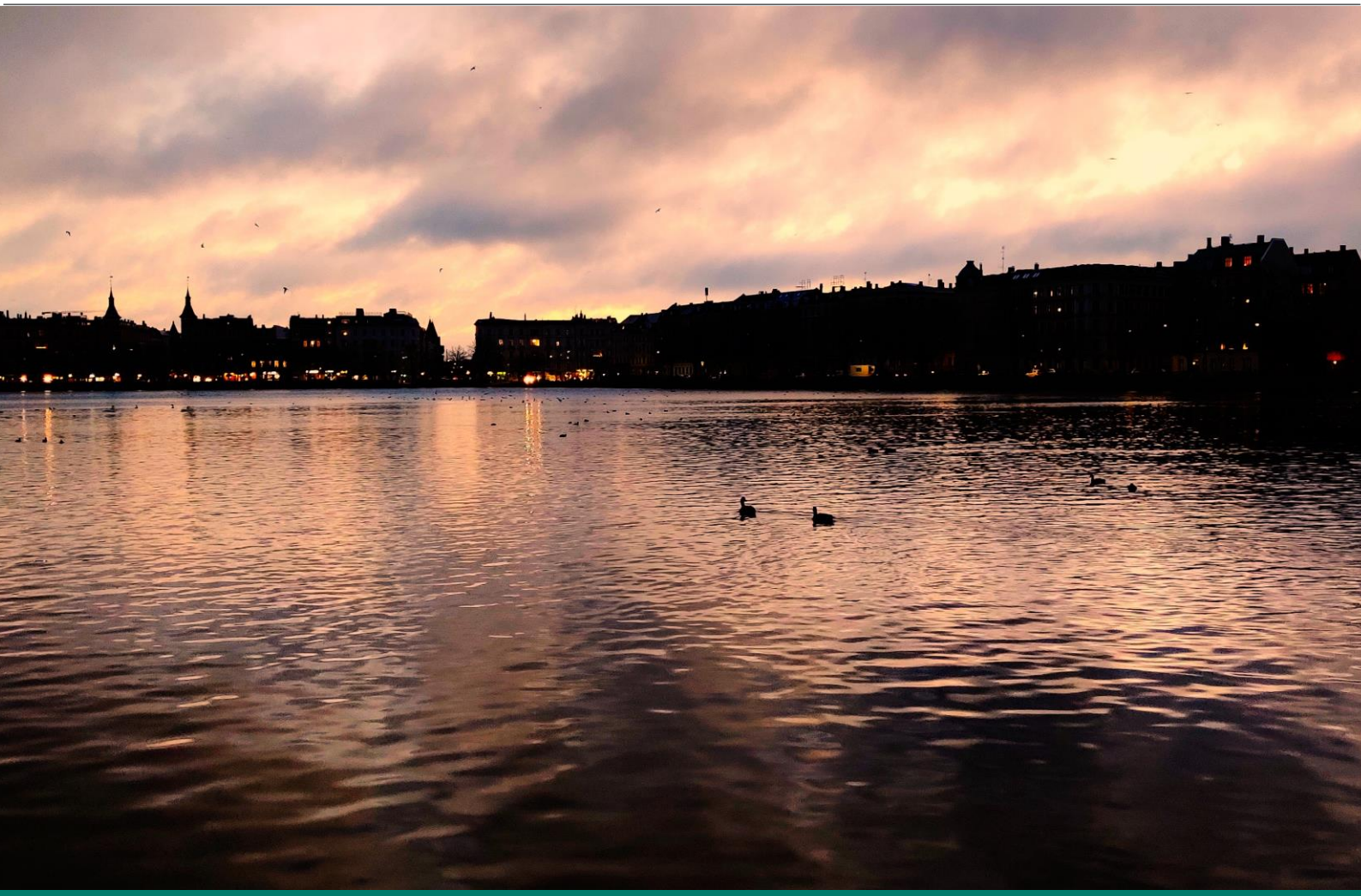
Circular economy country profile – Bulgaria



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European Topic Centre on
Circular economy and resource use
https://www.eionet.europa.eu/etcs/etc-ce

Contents

Introduction

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

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

While implementing the EU Circular Economy Action Plan (CEAP 2020), Member States are encouraged to advance circularity at a national level by adopting policies and initiatives that go beyond EU regulations, while preserving the Single Market.

This circular economy country profile is based on information reported by the Eionet network and, in particular, the Eionet Group on Circular Economy and Resource Use in the second quarter of 2022. The information was reviewed and edited by the European Topic Centre on Circular economy and resource use (ETC CE). A selection of Eurostat data was made to further complement this country profile.

The information is current as of 28 September 2022 (final review), when members of Eionet verified the content of this profile.

Bulgaria – facts and figures

GDP: EUR 61.33 billion (0.5 % of EU27 total in 2020)

GDP per person: EUR 8 840 (purchasing power standard) (54.8 % of EU27 average per person figure in 2020)

Use of materials (domestic material consumption (DMC))
141.6 million tonnes DMC (2.4 % of EU27 total in 2020)
20.4 tonnes DMC per person (151.7 % of EU27 average per person in 2020)

Structure of the economy:
Agriculture: 4.0 %
Industry: 25.3 %
Services: 70.7 %

Employment in circular sectors:
60 759 people are employed in circular economy (CE) sectors (1.7 % of EU total in 2018)
People employed expressed as a percentage of total employment: 1.7 % (co EU average 1.7 %)

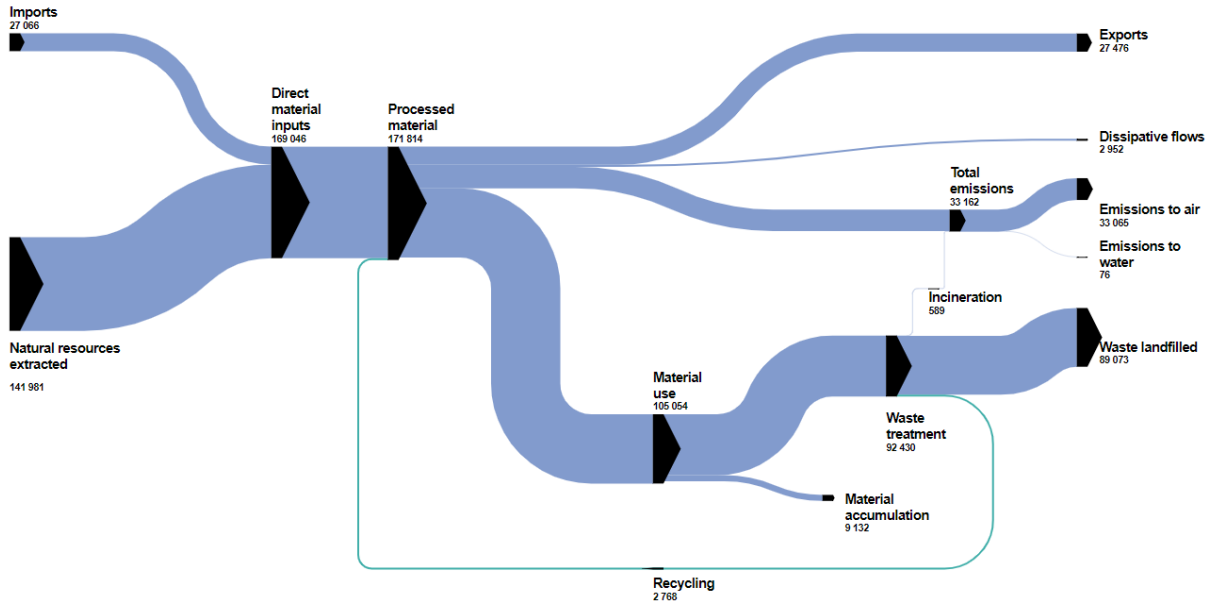
Surface area: 110 370 square kilometres (2.5 % of EU27 total)

Population: 6 951 482 (1.6 % of EU27 total in 2020)

Note: all definitions and metadata used in this profile are taken, as shown, from Eurostat

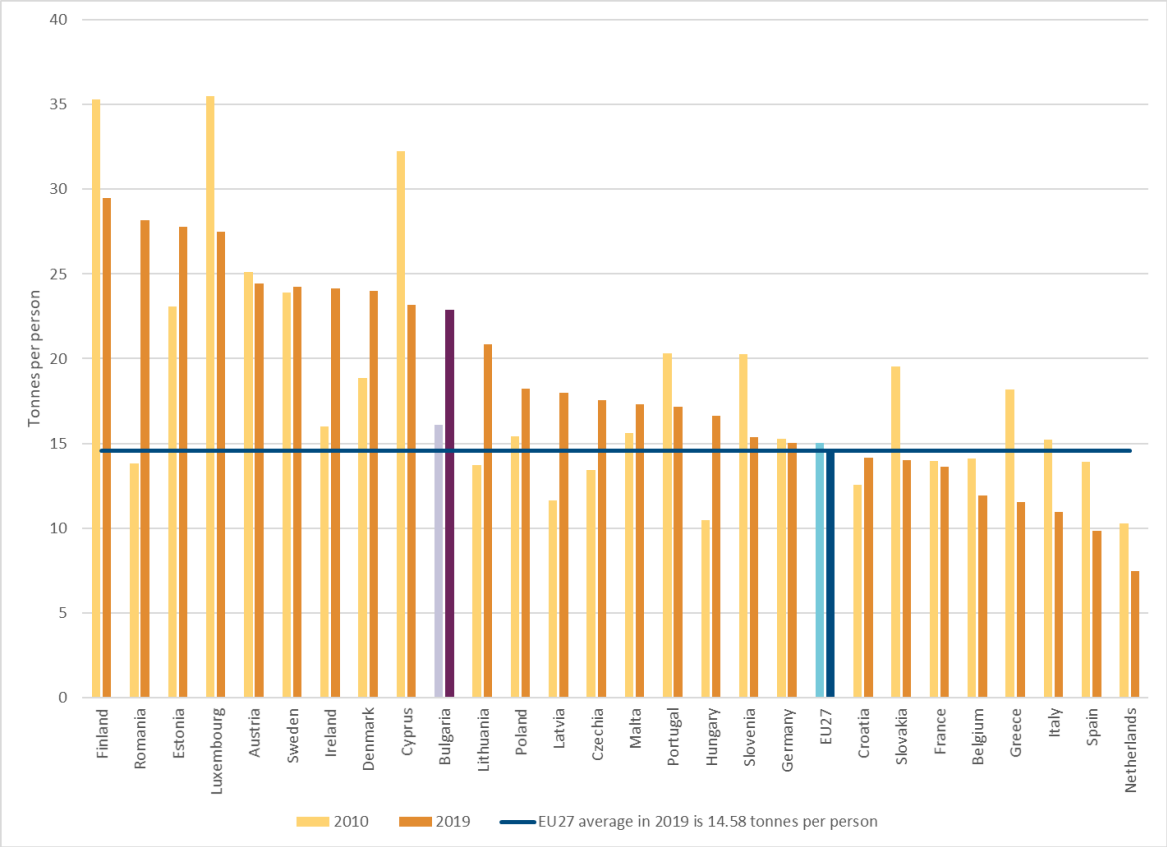
Source: Eurostat datasets, EU27 2020 (accessed 20 June 2022)

Figure 1 Material flow diagram for Bulgaria in 2020, '000 tonnes



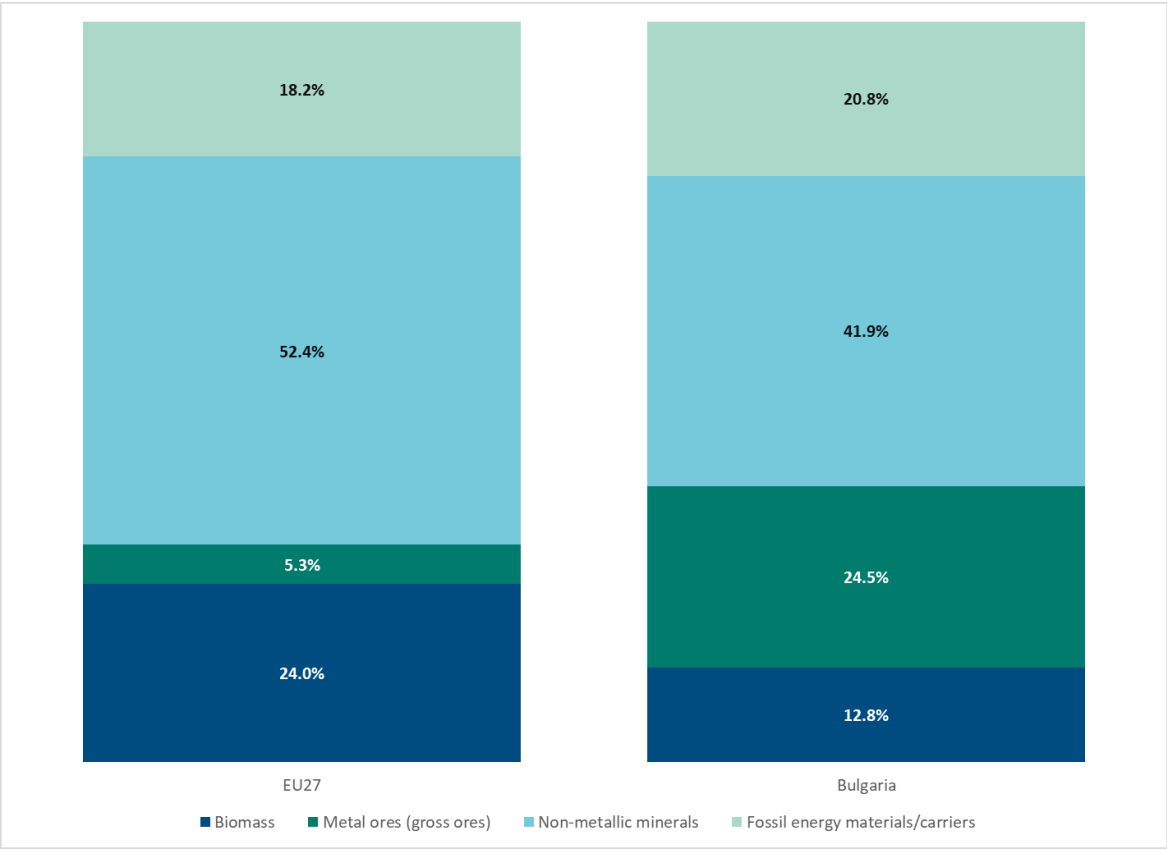
Source: Eurostat (2022) [env_ac_mfa], [en_ac_sd], [env_wassd] (accessed 20 June 2022)

Figure 2 Material footprint (raw material consumption), EU27, 2010 and 2019, tonnes per person



Source: Eurostat (2020) [env_ac_rme] (accessed 4 July 2020)

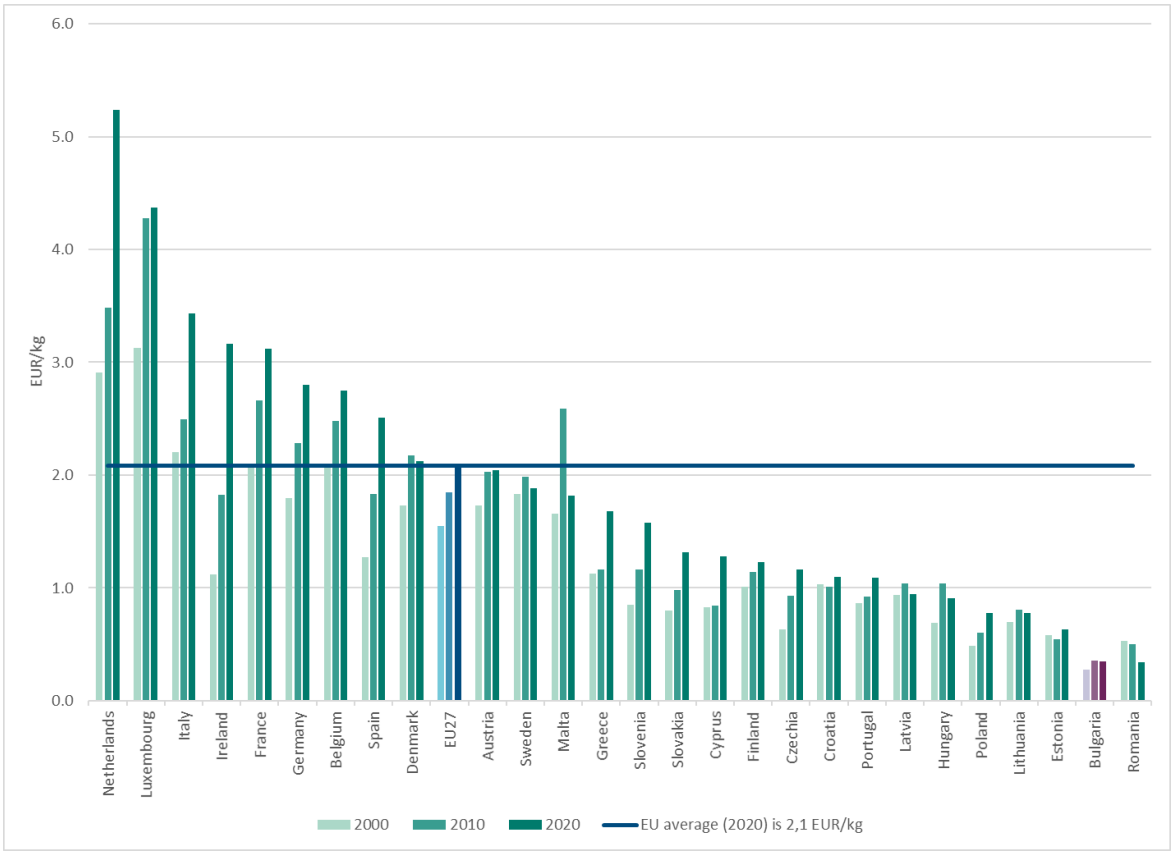
Figure 3 Domestic material consumption by selected material category, EU27 and Bulgaria, 2020, per cent



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

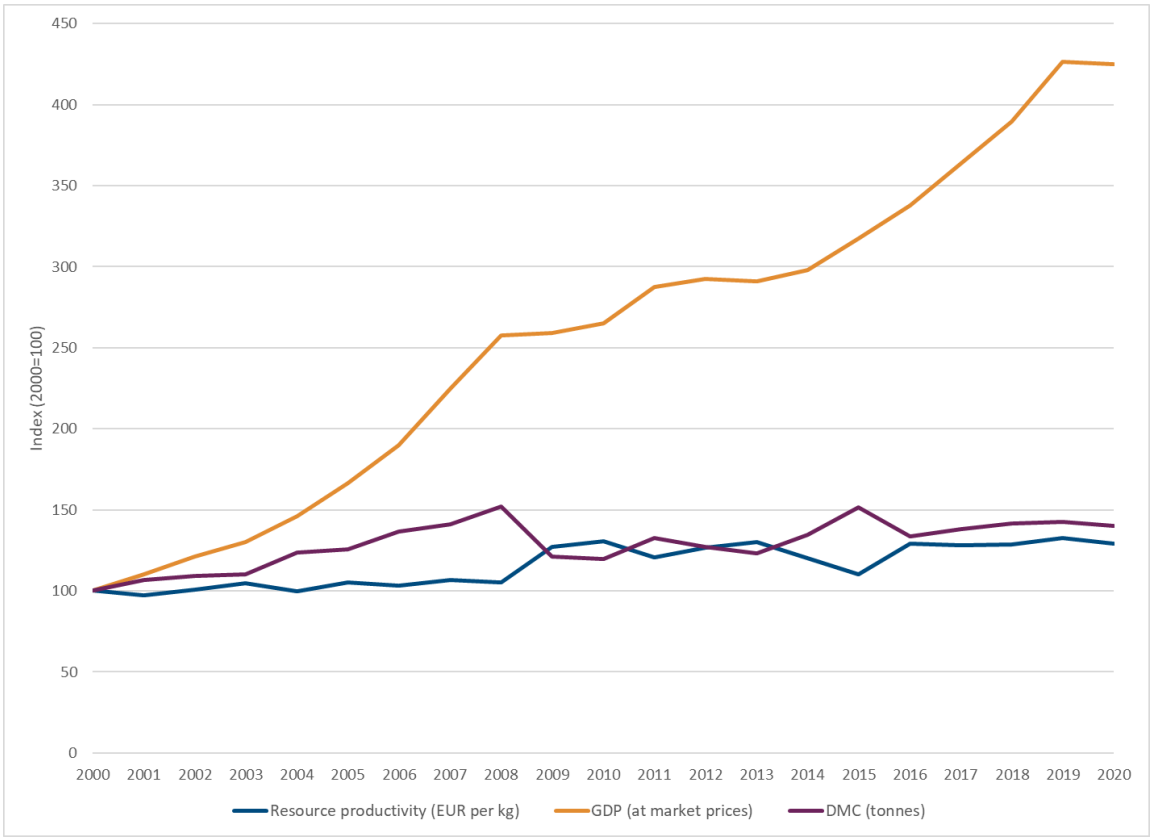
Source: Eurostat (2022) [env_ac_mfa] (accessed 20 June 2022)

Figure 4 Resource productivity (gross domestic product/domestic material consumption), EU27, 2000, 2010 and 2020, EUR per kilogram



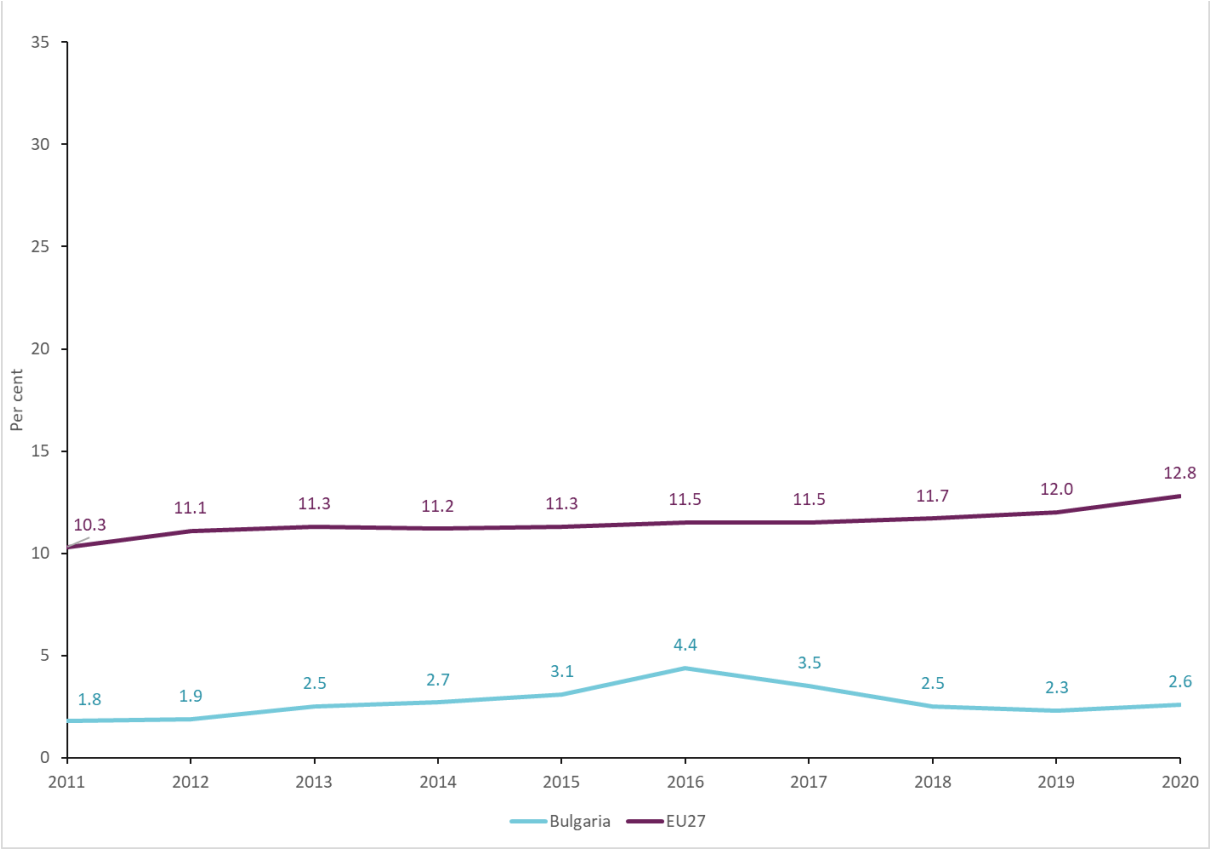
Source: Eurostat (2022) [env_ac_rp] (accessed 20 June 2022)

Figure 5 Gross domestic product, domestic material consumption and resource productivity trends, Bulgaria, 2000–2020, index (2000=100)



Source: Eurostat [env_ac_mfa], [env_ac_rp] & [nama_10_gdp] (accessed 4 July 2022)

Figure 6 Circular material use rate in Bulgaria, 2011–2020, per cent



Source: Eurostat (2022) [env_ac_cur] (accessed 20 June 2022)

Existing policy framework

Dedicated strategy, roadmap or action plan for circular economy

Bulgaria developed a **draft Strategy and Action Plan for the transition to a circular economy** ([1]) for the period 2022–2027 which both are expected to be formally adopted in autumn 2022.

The draft strategy is a cross-sectoral document which builds on measures set out in different strategies and programmes in the field of economy, environmental protection and regional development. It aims to achieve resource efficiency through the implementation of the waste management hierarchy, preventing waste generation, promoting material and reuse through recycling, reducing landfilling and limiting the harmful impact of waste on the environment and human health.
Three strategic objectives are set out in the draft strategy: **a green and competitive economy; less waste and more resources;** and **an economy that benefits consumers**. To achieve them, concrete measures are outlined in the Strategy and set out as concrete activities in the Action Plan, with the implementation of the Plan focussing on correcting imbalances and overcoming obstacles to achieve the objectives of the CE strategy.

The draft Action Plan includes the following types of activity.

1. Short-term activities (implementation horizon of 2022–2023):
   - analysis, development and adoption of sectoral legislation;
   - sectoral analyses and studies on critical raw materials, food and agricultural waste, water reuse, voluntary agreements, etc.;
   - raising awareness and organising information campaigns for business and consumers;
   - implementation of knowledge exchange platforms, such as an industry platform on material flows to promote industrial symbiosis between enterprises; exchange of good practice; industrial symbiosis materials linked to a reporting and certification system; exchange of information related to the demand and supply of secondary raw materials; etc.

2. Medium-term activities (implementation horizon of 2024–2027):
   - introduction of funding for resource-efficiency technology focussed on encouraging small and medium-sized enterprises (SMEs) from processing industry to implement innovation, activities and technologies enabling the transition to a CE. This includes reducing plastic packaging; the introduction of environmental standards; labelling; transitioning to a bioeconomy; shortening supply chains; more efficient water use; increasing the durability and possibilities for repairing or reusing products, as well as improving waste management in enterprises;
   - funding of SMEs from processing industry for the introduction of ecodesign;
   - establishment of reuse and preparation-for-reuse centres to encourage the reuse of usable products and the repair of appliances, bicycles, etc.;
   - training for acquiring or improving the professional qualifications related to repair work, mostly in the construction sector, for people from vulnerable groups.

3. Permanent measures (to be implemented throughout the period of the Action Plan):
   - involvement of the private sector in achieving goals for recycling of municipal waste;
   - activities for prevention, separate collection, reuse, recycling and recovery of waste;
   - application of new technologies for the separation and treatment of waste;
   - strengthening 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.

[1] https://www.strategy.bg/PublicConsultations/View.aspx?lang=bg-BG&Id=6954 (in Bulgarian)

Circular economy policy elements included in other policies

Circular economy policy element	Included in policy
Material efficiency Planned measures (an action plan is currently in preparation) will promote the sustainable and reduced use of raw materials in production, stimulating the use of alternative raw materials and increasing the use of recyclable materials. A particular focus will be on the improvement of the knowledge base on the CE and the monitoring of waste and material flows, as well as the introduction of new forms of interaction between producers and consumers to support the CE.	National Development Programme BULGARIA 2030
Product design Planned activities are, for example, improving the possibilities for product recycling, including the recycling of individual materials contained in the products by, amongst other things, 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 lifecycles, including by replacing them with safer alternatives; and increasing the durability, repairability, updateability or reuse of the products	Draft funding program "Competitiveness and Innovation in Enterprises" (CIE) (in Bulgarian)
Resource-efficient production processes Measures under consideration are the more efficient use of natural resources in production, including reducing the use of primary raw materials or increasing the use of byproducts and secondary raw materials; supporting partnerships between enterprises to achieve industrial symbiosis, sharing of resources, services and secondary products, creating a link between production through which waste from one process is recognised as raw material for another; creation of industry platforms to exchange good practices for, for example, material flows of plastics, wood and glass.	
Waste management Activities planned to foster the prolonged use of products, including reuse, design for durability, modification of the product's purpose, disassembly, remanufacturing, updating and repair, and sharing of products; support for improving waste management in enterprises, including the prevention and reduction of waste generation, preparation for reuse and recycling. Support will be provided for technologies for the treatment and reduction of pollution of industrial wastewater;	

The **National Development Programme BULGARIA 2030** is a strategic framework of the highest order in the hierarchy of national programming documents. It establishes the vision and general goals of development policies in all sectors of general government, including their territorial dimensions. The document sets out three strategic goals for the implementation of which it groups government intentions into five areas (axes) of development and sets 13 national priorities. A first three-year Action Plan for the implementation of the Programme is in preparation.

One of the priorities of the Programme is Priority 4 “A circular and low-carbon economy”. One of the focus areas under Priority 4 is material efficiency. The measures within this area will encourage the sustainable use of raw and process materials, reducing the amount of raw materials and intermediates used in production, stimulating the use of alternative raw materials and increasing the use of recyclable materials.

A particular focus of the measure is to improve the knowledge base on the CE, monitor waste and material flows, and introduce new forms of interaction between producers and consumers to support the CE. The measures aim to support resource-efficient enterprises and overcome their difficulties in implementing requirements related to staff qualifications, and waste collection and treatment. Digital technologies will be used to track, control, analyse and optimise supply, production and data collection on product use. A particular focus will be on research and development (R&D) and innovation related to the CE, with action aimed at supporting companies to adopt low-carbon and zero-waste technologies, reduce production waste and develop industrial symbioses. Measures will be taken to increase the circular (secondary) use of materials in the economy and promote resource efficiency throughout their lifecycles. The state's efforts are directed towards assisting enterprises to conduct waste stream analyses and review production activities to implement industrial symbiosis, introducing environmental standards, implementing eco-innovation to reduce pollution and use resources more efficiently, developing clean technology demonstration projects, and providing seed capital to support the development of new enterprises, including building new capacity in the CE. A specific indicator for the CE under Priority 4 “A circular and low-carbon economy” is the rate of use of circular materials (CMU); the target is a CMU rate of 11.7 %.

The Ministry of Economy has prepared a **draft programme, Competitiveness and Innovation in Enterprises (CIE),** as one of the programmes for the use of the EU funds in Bulgaria for the 2021–2027 programme period. The CIE directly targets the smart and sustainable growth of the Bulgarian economy and the implementation of industrial and digital transformations. The main target group of the programme are companies, 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 the European level:

- Policy Objective 1 “A more competitive and smarter Europe” by promoting innovative and smarter economic transformation and regional information and communication technology (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 investment, a CE, climate change mitigation and adaptation, risk prevention and management, and sustainable urban mobility'.

Priority 2 “Circular Economy” includes two specific objectives aimed at preparing businesses for the challenges of the green transition and achieving climate neutrality. The interventions under the first specific objective to promote energy efficiency and reduce greenhouse gas emissions, to which 6.87 % of the CIE budget, around EUR 1 493 million, is allocated, aims to improve energy efficiency in enterprises through targeted action including the implementation and certification of energy management systems, and energy consumption monitoring and control systems.

The second specific objective, Promoting the transition to a resource-efficient circular economy, to which 30.75 % of the CIE budget has been allocated, concerns the implementation of activities by SMEs in the areas of product design, production processes and waste management to achieve more resource-efficient, waste-free production oriented towards the principles of the CE. These activities will also be supported by planned measures to establish partnerships between companies to achieve industrial symbioses. The programme also prioritises technical assistance. The implementation period is 2021–2027, with an additional two years of eligibility for expenditure up to 31 December 2029.

Monitoring and targets

Assessment of circular economy performance

Bulgaria's progress in the transition to a CE and resource efficiency has been analysed by the European Commission, in the context of the European Semester, in the chapter *Green transition and resource efficiency* and Annex 7 *Resource Efficiency and Productivity* of a document entitled *2022 Country Report - Bulgaria* ([2]). This report states that Bulgaria is "*among the Member States lagging most behind in the implementation of circular economy policies*" and that "*the Bulgarian economy is among the most resource intensive in the EU and lags behind Member States in the implementation of the circular economy principle and eco-innovation*". These conclusions are based on statistical data – the country's circular material use rate was 2.6 % in 2020, almost five times lower than the EU average of 12.8 %, and resource productivity was 0.82 purchasing power standards (PPS) per kilogram in 2020, compared to 2.23 PPS per kilogram in the EU. Some possible reasons for this are outlined below.

Small and medium-sized enterprises are the backbone of the economy in Bulgaria. In 2018, SMEs contributed to 76 % of total employment and 65 % of value added in the Bulgarian economy, a share higher than the EU average of 56 %. The competitiveness and innovation of the Bulgarian economy and its growth depend to a large extent on the development of SMEs and the support they receive.

The share of SMEs offering environmentally-friendly products or services is one of the lowest in the EU, due to the low demand for environmentally-friendly products, which tend to be more expensive. Promoting the higher quality of ecolabelled products would boost demand and production.

It is not common to analyse individual products in terms of their lifecycle and their impact on the environment at the time when their use ends – in recycling, reprocessing or disposal. The low interest in ecolabelling and the EU's Eco-Management and Audit Scheme (EMAS) is due to the fact that manufacturers do not take full advantage of the opportunities offered by these voluntary instruments.

Companies show great interest in industrial symbioses. Difficulties, however, arise from insufficient and untimely information on free materials and the cost of transferring byproducts to another company.

The country has significant potential for the extraction and recycling of many raw materials important to the EU. Many wastes from the mining and metallurgical industries are rich in important raw materials and should be considered for use in new economic sectors while improving the environment.

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

There are no specific national or regional CE monitoring frameworks in place in Bulgaria. The monitoring framework of Eurostat is used.

The draft Strategy for the Transition to a Circular Economy in Bulgaria 2022–2027 includes a plan for monitoring the implementation and updating of the Strategy and Action Plan. Progress in the implementation of the Strategy will be monitored and reported. Each governmental body is responsible for monitoring the implementation of the relevant sectoral action identified in the Strategy. The monitoring plan will be based on the indicators set out in the updated 2022 EU CE Monitoring Framework. To achieve synergies between the institutions, an inter-institutional working group will explain to all stakeholders how the new indicators are to be calculated, in particular with regard to project selection criteria, and the performance indicators that will be defined for each programme supported by the EU Structural Funds.

[2] https://ec.europa.eu/info/system/files/2022-european-semester-country-report-bulgaria_en.pdf

The implementation indicators established in the procedures for financing projects under each operational programme will be monitored through the Information System for the Management and Monitoring of EU Funds in Bulgaria.

By the end of 2022, the European Commission will take action to support the implementation of the Circular Economy Action Plan (CEAP)[3], focussing on sustainable product policies, key product value chains, better waste management and cross-cutting action. The CE Monitoring Framework will be updated to reflect new policy priorities and develop additional resource-use indicators. A working group will be established within the Coordination Council in early 2023 to update the strategy based on the upcoming key action that the Commission will take to support the Action Plan.

Circular economy targets

A set of CE targets is available in the National Development Programme BULGARIA 2030 ([4]) for Priority 4 "Circular and low-carbon economy". While most of them are related to the waste management targets set in EU legislation, there is also a special target for the CMU rate. The target value is 11.7 % with no specified target year, but the time frame for the document is 2030.

[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A98%3AFIN

[4] https://www.minfin.bg/en/1394

Innovative approaches and good practice

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

➔ *Good practice example: institutional and regulatory arrangements to support the transition towards a resource-efficient CE*

Waste Management Act and secondary legislation for its enforcement

Regulatory and economic/financial instruments are in place in Bulgaria for promoting investment in modern facilities for waste recovery through recycling, reuse and/or extraction of secondary raw materials and energy. They were introduced by the Waste Management Act and secondary legislation for its enforcement.

- Clear definition of the responsibilities of municipalities concerning waste management, including recycling targets. Municipalities have a responsibility for household and construction waste management, including the setting of quantitative targets for biodegradable waste. Municipalities are obliged to organize separate collection of biodegradable waste.
- 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.
- Legal requirement for municipalities to provide a system for separate collection of packaging waste in every settlement with a population of more than 5 000 inhabitants.
- Introduction of economic instruments – deductions for waste disposal, which are more popular in other countries as landfill taxes – for stimulating municipalities to improve their preparation for the reuse and recycling of paper and cardboard, metal, plastics and glass from household waste and a reduction in the amount of household waste going to landfill. Those municipalities that meet specified targets are exempt from 50 % of the charges due per tonne for waste disposal. Municipalities can use the accumulated saved waste disposal charges to finance investment in household waste recycling and other recovery facilities.
- Introduction of legal requirements for administrative, industrial and educational organisations, and businesses that generate waste to separately collect waste paper, cardboard, plastic, glass and metal.
- Municipalities have an obligation to provide waste sites for the collection of hazardous and bulky wastes from the households as a free service offered to the citizens in settlements with more than 10 000 inhabitants.
- The introduction of extended producer responsibility (EPR) principle and responsibilities for people placing products on the market to organize separate collection, reuse, recycling and recovery activities for six groups of widespread waste – packaging, end-of-life vehicles, electrical and electronic equipment, oils, batteries and accumulators and tyres. In the scope of the obligations is achieving targets for recycling and recovery, which may be met individually, or through participation in collective systems organised by recovery organisations.

➔ *Good practice example: financial support programme*

The Environment 2014–2020 Operational Programme

The Operational Programme ([5]) as one of the programmes for the implementation of the European Structural and Investment Funds (ESIF) in Bulgaria, which provide financial support of about EUR 295 million for:

- design and construction of installations for preliminary treatment of municipal waste;
- delivery of necessary equipment and facilities, as well as equipment for separate collection of biodegradable and green waste;
- design and construction of anaerobic and/or composting installations for separately collected biodegradable and/or green waste;

[5] https://www.eufunds.bg/en/opos/term/411

- design and construction of installation for waste recovery – the third phase of Sofia Municipality's integrated project for municipal waste treatment facilities for Sofia;
- design and construction of adjoining infrastructure to the above-listed installations, for example, power supplies, roads and water supplies, serving only the sites/installations;
- implementation of demonstration/pilot projects for collecting, synthesising, disseminating and implementing new, non-traditional, successful waste management measures, good practice and management approaches in the field of waste as well as the introduction of new technologies.

The Innovation and Competitiveness Operational Programme 2014–2020 (OPIC)

This Operational Programme ([6]) is also an instrument for implementing the EU's European Structural and Investment Funds (ESIF). It aims to increase the share of SMEs that have implemented resource efficiency measures. Under Priority 2 Energy and Resource Efficiency, SMEs in the manufacturing sector are financially supported for pilot and demonstration initiatives that increase resource efficiency in companies and/or groups of companies. The pilot and demonstration initiatives will support measures to improve resource efficiency and the sustainable use of raw materials, including industrial symbiosis; the introduction of high-tech and ICT solutions to optimise production processes and reduce raw material consumption; Introduction of modern technologies to use waste as raw material in new production and/or alternative applications; the introduction of modern waste-free technologies, including replacement of obsolete and resource-intensive equipment; the introduction of innovative production materials and increased use of recyclable materials, including and through investment to adapt existing equipment to produce new products; the introduction of reusing water in production processes. To date, 89 companies have received grants totalling EUR 37 million for resource efficiency.

In addition, OPIC provides support for specialised services for SMEs to develop and strengthen management capacities focused on the management of production, with an emphasis on capacity building for the adoption and adaptation of European and international knowledge and best practice. Support will be provided for the development, implementation and certification of quality management systems, environmental protection, eco-labelling, energy management systems, information security and other international, European and national standards. Support will also be provided for the improvement of the business environment, for example, technical and metrological monitoring, quality control and notification of authorities to assess compliance, as well as the completion and accreditation of laboratories to verify the compliance of Bulgarian products with national and EU quality standards. Target beneficiaries are SMEs, business support organisations and institutions. Funding for the support of specialised services for SMEs amounts to EUR 29.4 million and will be provided to 241 SMEs.

Examples of private policy initiatives (sectoral)

Industrial symbiosis

Under the S.W.A.N. project ([7]), funded by the EU's INTERREG Balkan-Mediterranean 2014–2020, a report entitled *Study of the generated waste in the country, the possible business models for treatment and study of opportunities in other countries* ([8]) has been prepared by Denkstatt ([9]).

The report focusses on industrial symbiosis and includes examples of good practice in this field in Bulgaria. Some of the more notable are the following.

- Technical gypsum (REA) from the desulfurisation installations of the ConturGlobal Maritsa Iztok 3 thermal power plant 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 in international markets with

6 https://www.eufunds.bg/en/opic/term/436
7 https://www.swan-interreg.com/
8 https://www.bia-bg.com/uploads/files/Projects/Report_SWAN_all.pdf (in Bulgarian)
9 https://denkstatt.eu/

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

- In the Devnya industrial zone, the fertiliser producer Agropolychim AD and the producer of phosphates for the feed industry, Aliphos Bulgaria EAD, are located next door to one another. Aliphos Bulgaria EAD buys phosphoric acid from Agropolychim AD. With one additional step this raw material is cleaned and made suitable for food purposes.
- The main byproduct in the extraction of copper from copper concentrates is iron silicate, also known as fayalite. This 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 has also been 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 utilised internally (remelting) or externally in SC AS Metal Romania – a metal recycling centre; 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 which are 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 sulfate bleached cellulose and products made from it. With the construction of the "*installation for integrated treatment and utilisation of production waste*" the following benefits are achieved: utilisation by drying and granulation of chemical calcium carbonate, wood ash waste and sludge from the regeneration of chemical substances from the production of cellulose; transformation of waste into raw materials for the production of a soil improver and acid neutraliser for agricultural applications.

Secondary material use

A widespread practice for the pellet production sector is to use waste wood from furniture enterprises.
Another CE sector practice is implemented by the sunflower oil producers who use sunflower seed flakes as fuel for steam production in their factories.

There is a trend of producing oil from grape seed, which is normally considered to be waste.

The way forward

Addressing barriers and challenges

According to the European Green Deal, achieving climate neutrality and the CE requires the full mobilisation of industry, including SMEs. The transition to the CE is an opportunity to introduce sustainable and job-creating activities in SMEs that benefit society and the environment.

The current results achieved by Bulgarian companies in the field of waste management are not optimal and the potential of the CE business models is not being realised. Only 10.1 % of SMEs consider recycling to be part of their production process and 12.1 % of SMEs face challenges in meeting the requirements related to the classification, collection and treatment of waste according to an analysis of SMEs conducted for the National Strategy for SMEs 2021–2027. There is a need for additional support through the provision of information and guidance on the modernisation of waste management. Only a very small proportion of entrepreneurs are aware of the opportunities or are willing to develop circular business models.

The share of SMEs that have benefited from public support for the manufacture of environmentally-friendly products has increased by 9 % between 2014 and 2018. Nevertheless, the share of SMEs offering green products or services is below the EU average. The share of companies offering green products and services is 9.5 %, and almost the same share, 9.0 %, is planning to introduce such services according to the analysis of SMEs conducted for the National SME Strategy 2021–2027. There is a need to raise awareness among entrepreneurs about the opportunities and benefits of developing circular business models and support for starting the production of environmentally friendly products and services.

To coordinate the state institutions involved in the implementation of the strategy, a Coordination Council will be established, which will include representatives from the Ministry of Economy and Industry, the Ministry of Innovation and Growth, the Ministry of Energy, the Ministry of Finance, the Ministry of Regional Development and Public Works, the Ministry of Agriculture, the Ministry of Education and Science and the State Agency for Research and Innovation. The work of the Coordination Council will be supported by sectoral working groups, which will include representatives of the state institutions directly involved, local authorities, research institutions, employers' organisations and sectoral associations, trade unions, and consumer and non-governmental organisations. Issues of critical importance will also be discussed in the newly established advisory board of the European Green Deal.

The transition to a CE and new responsibilities requires significant changes in the way management works. Joint management at all levels of the value chain is required. Each ministry and institution playing a role in the transition to a CE should adapt its functional organisation and provide the necessary administrative capacity and resources to meet the new challenges successfully.

Ranking types of barrier

High barrier	Institutional challenge to develop policy for a complex cross-sectoral issue
↑	Consumer behaviour and awareness
	Market barriers for recycled resources
	Good indicators and targets
Low barrier	Companies’ ability to grasp opportunities

Future policy plans

The National Economic Recovery and Resilience Plan of the Republic of Bulgaria includes the Economic Transformation Programme as one of its key investments. The programme provides 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. The timely implementation of the programme is not

only a tool to promote economic transformation, but 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 Circular Economy and Fund 3 Investments in Climate Neutrality and Digital Transformation.

Fund 2 **Green Transition and Circular Economy** is structured in two directions. The first aims to support the transition to carbon neutrality by improving energy efficiency and independence at the corporate level. The second focusses on access to finance for large companies and SMEs to support the transition to a CE through the introduction of circular models for production and consumption, environmental standardisation and the promotion of technologies related to the recycling and reuse of waste, repair and the use of bio-based products. Support is provided in the form of grants totalling EUR 92 million.
Activities funded targeting SMEs and large enterprises in Sector C Manufacturing, including partnerships between them to achieve industrial symbiosis, include the following.

- Projects related to technologies for processing waste generated by enterprises' own activities, including textiles, polymers and rubber waste, electrical appliances, etc.
- Activities related to limiting and reducing plastic packaging and single-use plastic products, introducing technologies to ensure that plastic products comply with European requirements for single-use plastics, introducing reusable and alternative products and materials including biodegradable/recyclable/green packaging.
- Activities related to the reduction of the consumption of raw materials and materials – the use of alternative, natural and renewable bio-resources instead of synthetics to reduce the waste footprint on natural resources and to make the transition to a bio-economy, including the processing of essential and vegetable oils in medicines, food supplements, etc.; replacement of fossil materials with bio-based, recyclable and biodegradable materials; and bio-regeneration methods in relevant value chains. Producers of biological resources such as essential oil seeds, wood, etc. are not eligible for funding.
- Activities related to improving the quality of products and their sustainability, including supporting companies to implement environmental standards for incoming material flows, programmes to reduce chemical preservatives in food, eliminate hazardous substances and extend the life of products.
- Improve end-user awareness of the production chain, including labelling of key characteristics – carbon dioxide consumption in production, water consumption, availability of bio-based products, etc.

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