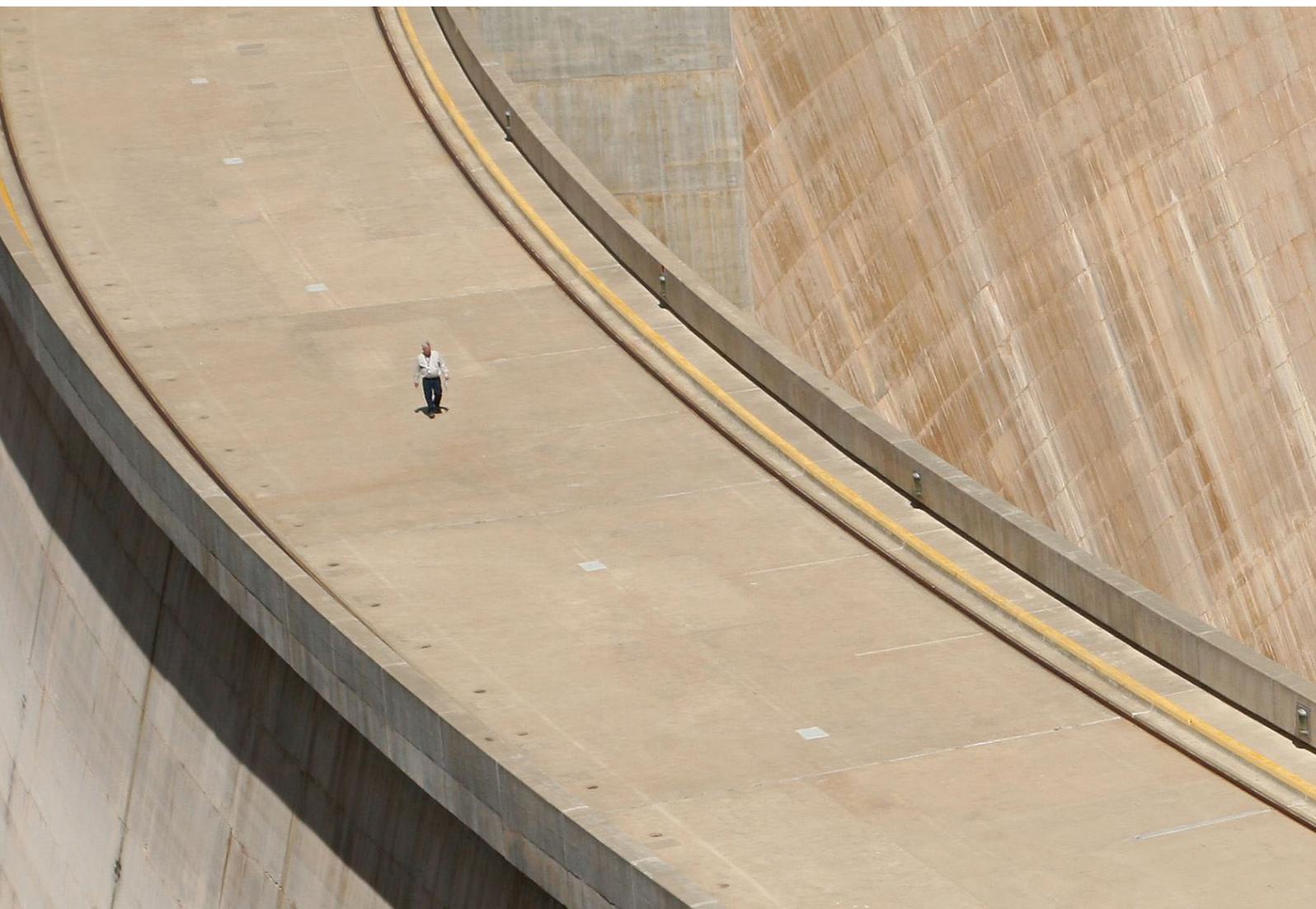


More from less — material resource efficiency in Europe

2015 overview of policies, instruments and targets in 32 countries



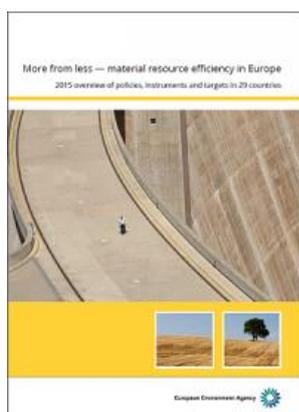
Bulgaria 

May 2016



This country profile is based on information collected by the Eionet network in Bulgaria. This document should not be seen as an official list of government priorities and is not necessarily an exhaustive list of all national material resource efficiency policies, objectives, targets or activities in place. The information is current as of June 2015.

This country profile was prepared as part of the 2015 EEA review of material resource efficiency policies, that aimed to collect, analyse and disseminate information about the development and implementation of material resource efficiency policies in EEA member and cooperating countries. The work resulted in the following outcomes.



32 short country profiles (this document) – self assessments prepared by countries, describing the current status of material resource efficiency policies including key strategies and action plans, policy objectives, instruments, targets and indicators, and the institutional setup. Countries were also invited to share reflections on the future direction of resource efficiency policies.

EEA report *More From Less – material resource efficiency in Europe* – prepared by the EEA and ETC/WMGE, the report analyses trends, similarities and differences in policy responses, showcases selected policy initiatives from the countries, and offers some considerations for the development of future policies.

The EEA report *More from less – material resource efficiency in Europe* and the 32 country profiles are available at: <http://www.eea.europa.eu/resource-efficiency>

For information about trends and policies on municipal waste management in the participating countries, please visit: <http://www.eea.europa.eu/publications/managing-municipal-solid-waste>

Information about EU Member States' waste prevention programmes can be found at: <http://www.eea.europa.eu/publications/waste-prevention-in-europe-2015>

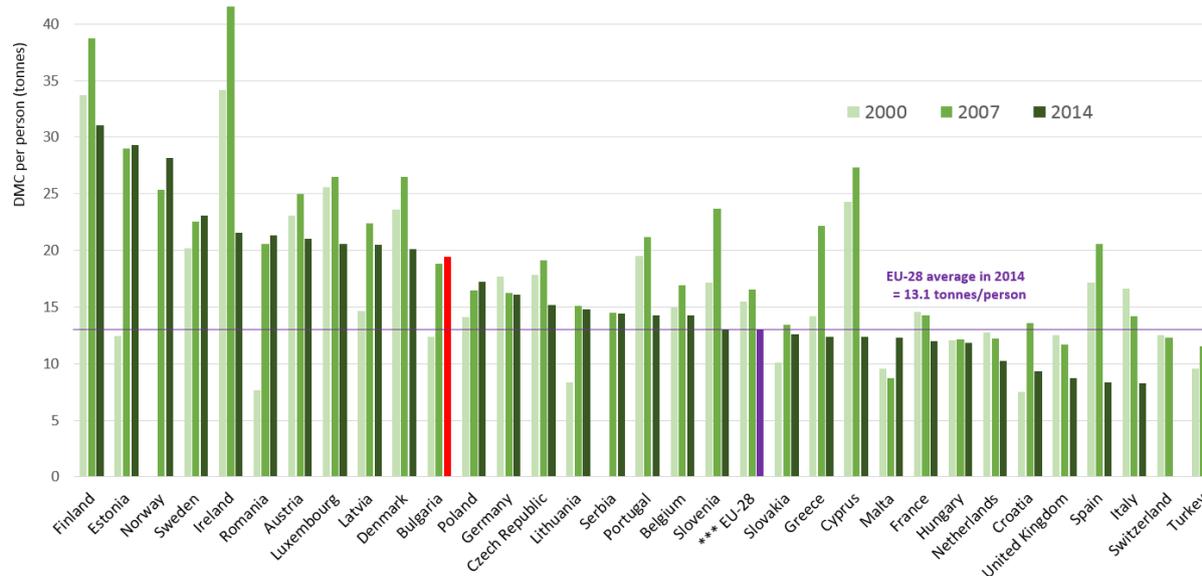
For information on climate- and energy-related policies, including those on energy efficiency, in the participating countries, please visit: <http://www.eea.europa.eu/themes/climate/ghg-country-profiles>

Bulgaria, facts and figures

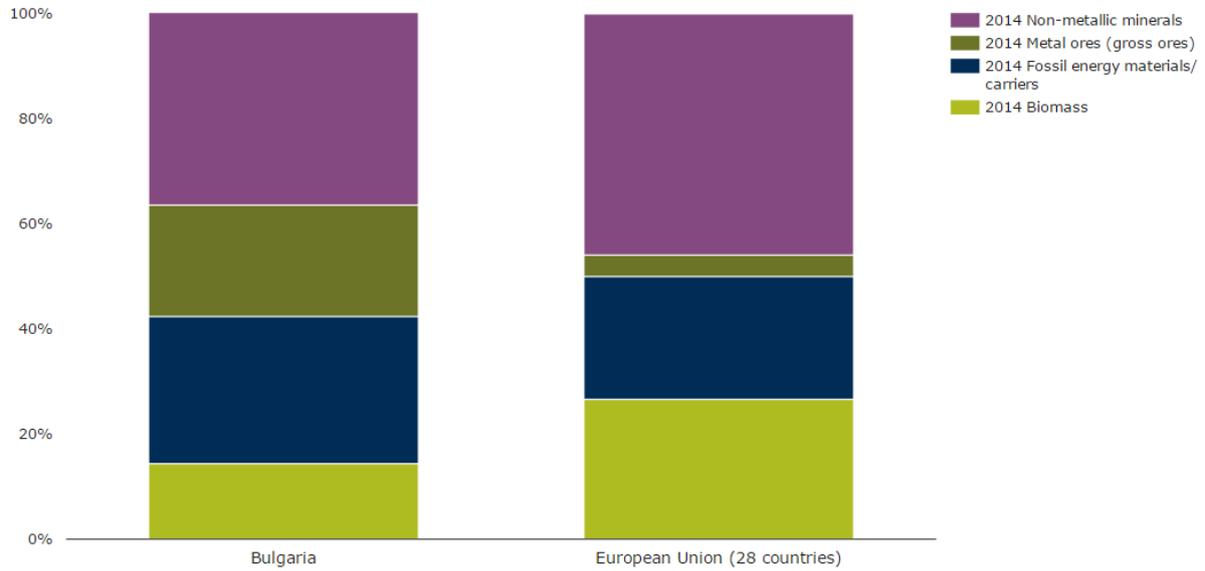
Source: Eurostat

 	GDP: EUR 43 billion (0.3 % of EU-28 total in 2014)
	Per person GDP: EUR 12,800 (in purchasing power standard) (47 % of EU-28 average per person in 2014)
	Use of materials: 140 million tonnes DMC (2.1 % of EU-28 total in 2014) 19.4 tonnes DMC/person (149 % of EU-28 average per person in 2014) Resource productivity 0.28 EUR/kg (14 % of EU-28 average in 2014)
	Structure of the economy: agriculture: 4.9 % industry: 31.2 % services: 63.9 % (2014 est.)
	Surface area: 111 thousand km ² (2.5 % of total EU-28) Population: 7.2 million (1.4 % of EU-28 total)

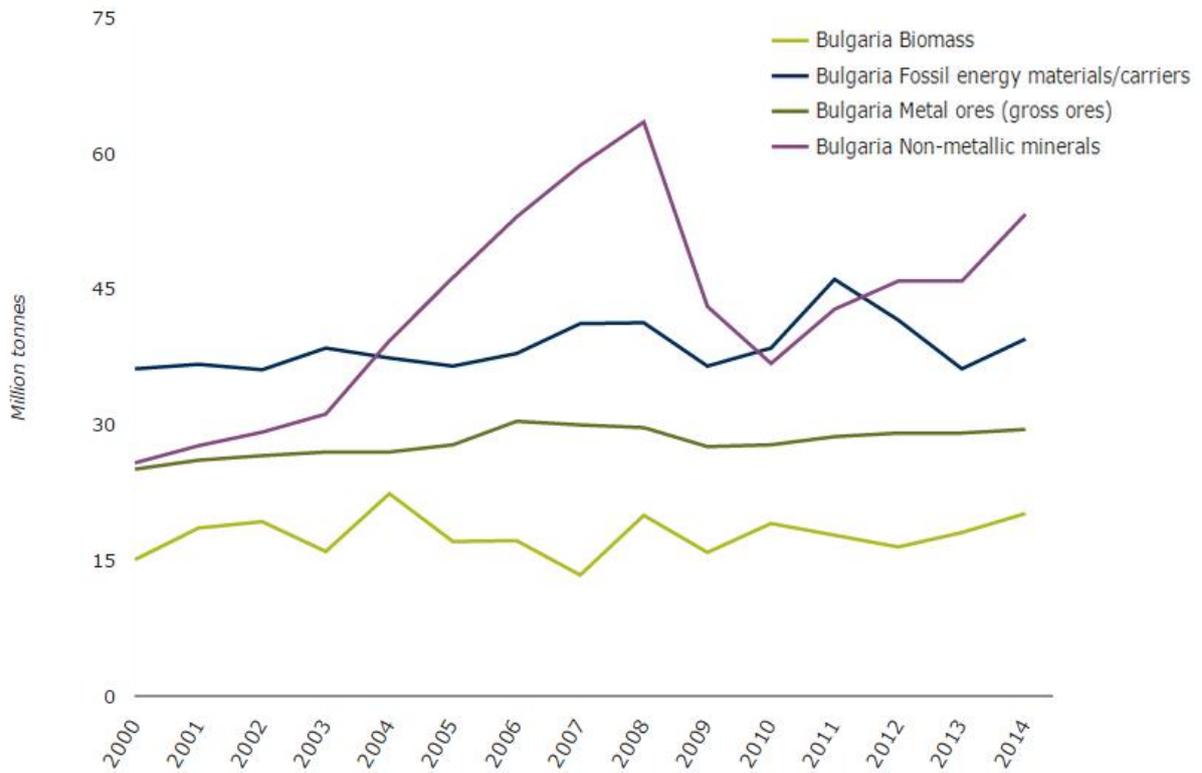
**Use of materials (DMC) per person, participating countries and EU-28
(2000, 2007 and 2014)**



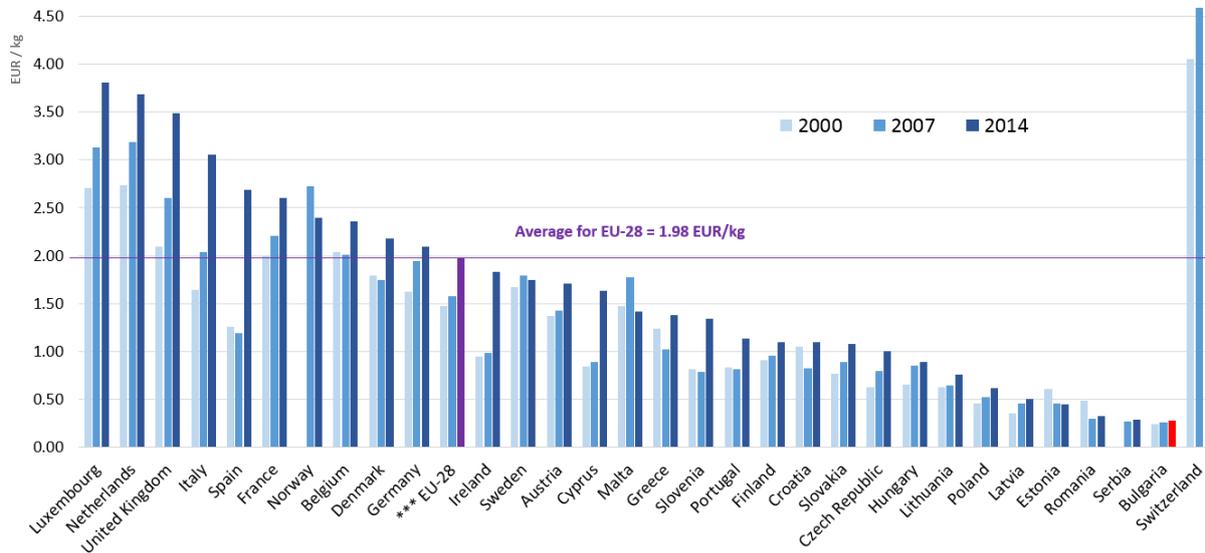
Domestic material consumption by category, EU-28 average and Bulgaria (2014)



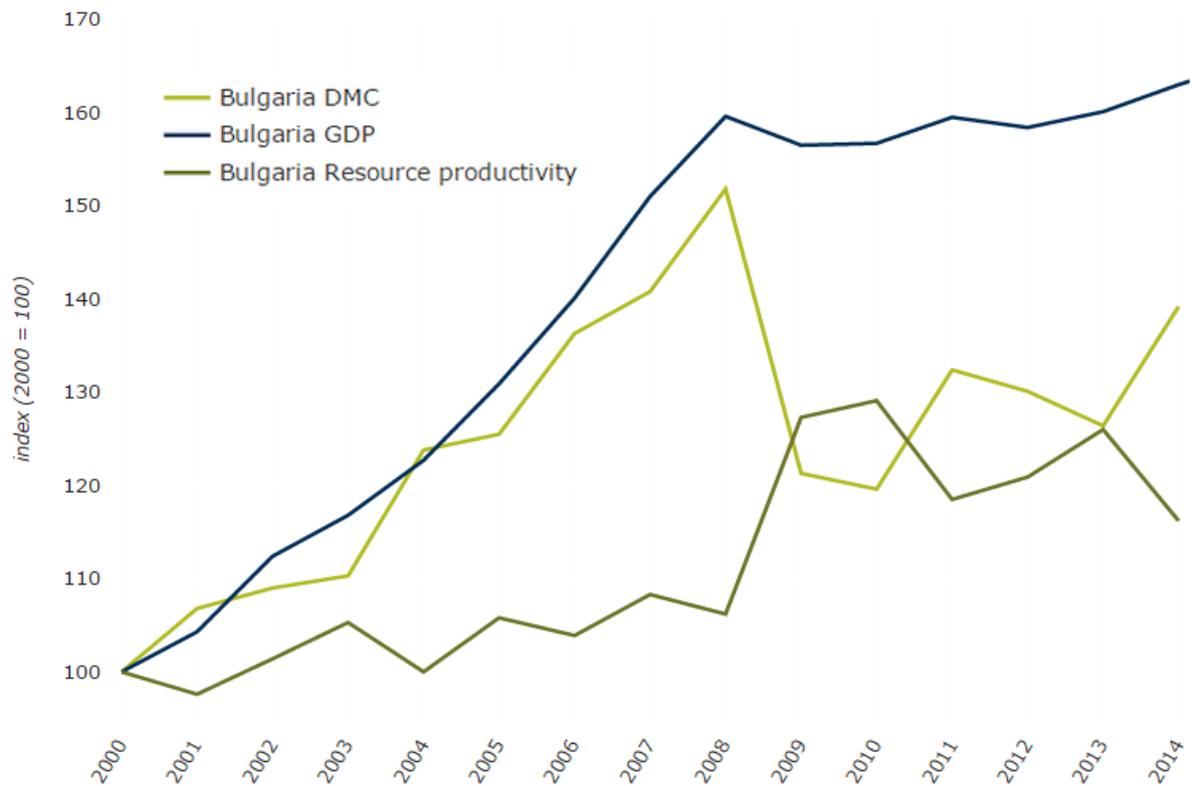
Trends in material consumption, Bulgaria by category (2000–2014)



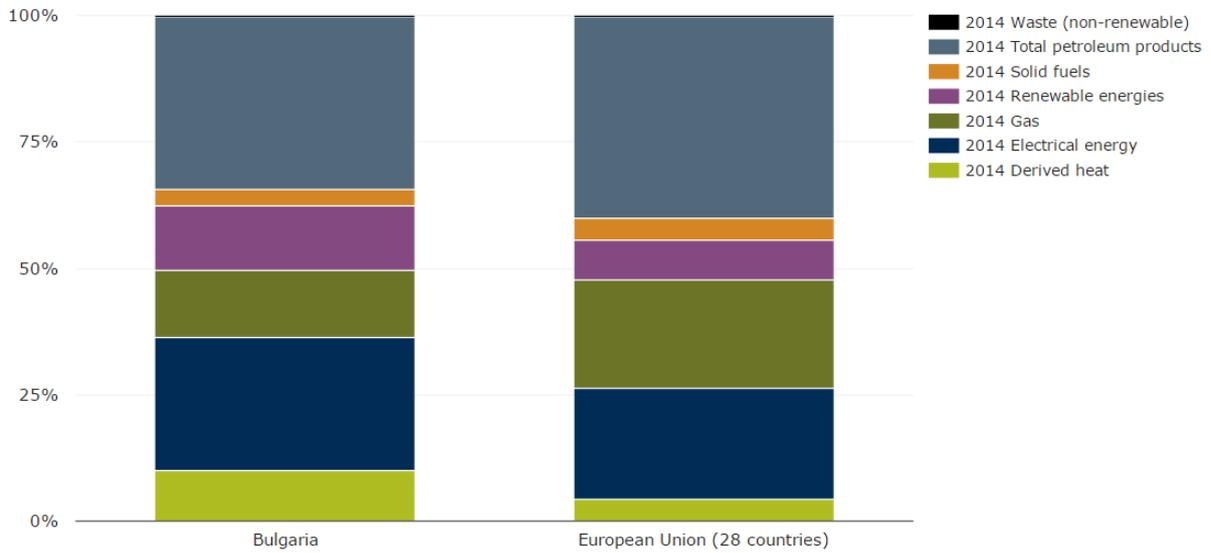
**Resource productivity (GDP/DMC), participating countries and EU-28
 (2000, 2007 and 2014)**



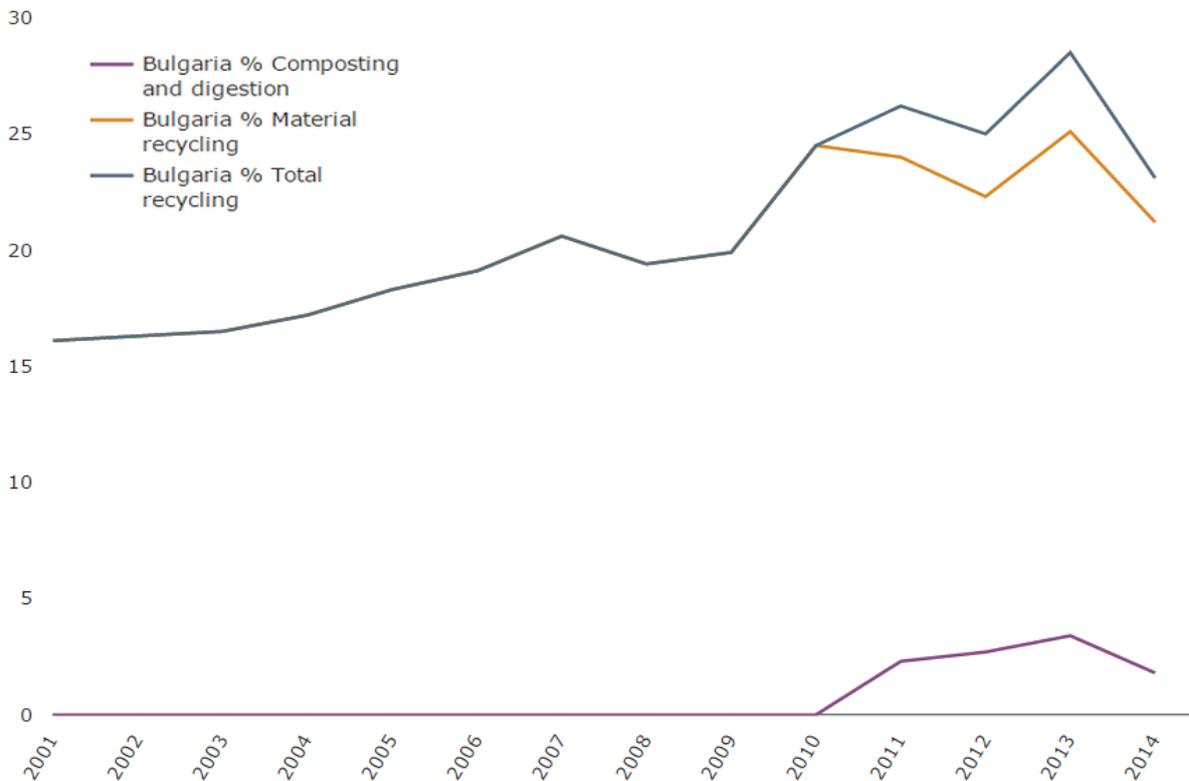
GDP, DMC and resource productivity trends, Bulgaria (2000–2014)



Share of final energy consumption by fuel type, EU-28 and Bulgaria (2014)



Recycling of municipal waste, Bulgaria (2001–2014)



Introduction

There is no dedicated national resource efficiency strategy or action plan in Bulgaria

Scope of material resource efficiency

The term 'resource efficiency,' as used in the policy documents, covers a broad spectrum of topics, including raw materials, energy, water, air, land and soil, biodiversity, stable climate and ecosystem services, following the Roadmap to a resource efficient Europe's approach. Raw materials/material resource efficiency is not defined differently/separately.

Driving forces of material resource efficiency

The Innovation Strategy for Smart Specialization of the Republic of Bulgaria 2014-2020 considers the fact that the country is lagging behind in the field of 'green markets' – energy efficiency technologies, technologies for waste recycling and treatment, mobility and transport technologies, water technologies, system and environmental engineering, life sciences, nanotechnology, eco-design, etc.– as an opportunity to participate in a relatively 'large' market.

Due to enormous gaps in this area, fast and efficient utilization of technology and knowledge and support for the creation and implementation of its own technologies and knowledge in the field of resource efficiency are required, in order achieved integration in this market.

The Operational Programme 'Innovation and Competitiveness 2014–2020', part of the implementation of the European Structural and Investment Funds (ESIF) in Bulgaria, indicates that Bulgarian enterprises rank first in the European Union (EU) in energy and resource intensity per unit of output, which is one of the main obstacles for the creation of sustainable competitiveness.

The high rates of consumption of raw materials and energy in production are due to outdated technologies and limited access to new practices, systems and production models.

Renewal of existing production equipment is essential, but it lags behind due to a lack of financial resources and the relatively slow return on investment in new ones, as the price of electricity and resources in the country are still among the lowest in EU.

Businesses should be encouraged to invest to increase resource and energy efficiency, which will reduce the cost of production per unit of output, contribute to the introduction and development of eco-industries and increase the sustainable competitiveness of enterprises.

Priority material resources, sectors, and consumption categories

Priority materials

Most of waste from **households** and other organisations is **biodegradable**, which, with a few exceptions, has been landfilled. Therefore, the Bulgarian legislation introduced specific quantitative targets for separate collection, recycling and recovery of municipal bio-waste as well as targets for diverting biodegradable municipal waste from landfills.

Waste from **construction and demolition** is highly recyclable and reusable. Thus, it can be turned from an environmental problem into a useful resource. This is a basic approach to sustainable waste management imposed by EU policy.

Furthermore, as a result of the Waste Framework Directive, waste paper, metal, plastic and glass are also priorities.

Wood should also be considered as a separate material resource addressed by policies, namely the National Strategy for Development of the Forest Sector.

Priority industries and economic sectors

Financial interventions under 'Innovation and Competitiveness 2014-2020' will focus on increasing of the resource efficiency of **small- and medium-sized enterprises (SMEs) in manufacturing industry**.

The Operational Programme states that promoting resource efficiency in enterprises, especially those from the **manufacturing industry (raw materials extraction)**, is a vital process as these companies have the lowest resource productivity and energy efficiency in the economy.

Priority consumption categories

No consumption categories were identified as a priority for resource efficiency.

Policy framework

National strategies or action plans for material resource efficiency

Bulgaria does not have a special national resource efficiency strategy or action plan. However, many national policies include measures for the management of resources.

The following are the most important national policy documents that contain resource efficiency measures:

National Development Programme: Bulgaria 2020

<http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=765>

The National Development Programme: Bulgaria 2020 (NDP BG2020), a long-term national document for the development of Bulgaria, is the basis of the programming of the strategic documents related to the implementation of both national and EU policies. The document will help to optimise the programming of development of Bulgaria up to 2020, by linking national priorities with those of EU in the context of the Europe 2020 Strategy. The NDP BG2020 summarizes all strategic documents, ensuring consistency between policies pursued in Bulgaria. The NDP is implemented through a three-year action plan, which is updated annually.

Increasing of the resource efficiency is one of the priorities of the **NDP BG2020 and its Action Plan 2015–2017**. It includes the following measures:

- incentives for innovation in widely used methods of production aimed at optimal efficiency in terms of resources;
- development of market-based tools for promoting the efficient use of resources in more environmentally friendly products (taxes, subsidies, green public procurement, etc.);
- stimulating the exchange between enterprises of best practice in relation to the efficient use of raw materials in production;
- technical support to help SMEs achieve the more efficient use of resources;
- development of incentives to encourage private sector investment in research and innovation aimed at resource efficiency;
- identifying subsidised environmentally harmful production and planning activities for the gradual removal of such subsidies;
- development of systems for assessing and reporting the value of ecosystems and their services as part of the process of elaborating sectoral policies;
- implementation of best practices in spatial planning in order to limit, mitigate and compensate soil sealing;

- application of good agricultural practices to maintain and increase organic matter in soil;
- promoting investment in modern facilities for waste recovery through recycling, reuse and/or extraction of secondary raw materials and energy;
- introduction of incentives within the public funding of projects aimed at giving priority to activities related to higher levels in the hierarchy of waste, according to the Waste Framework Directive 2008/98/EC;
- promoting the extension of producer responsibility to cover the full lifecycle of manufactured goods – including new business models, through guidance on deposit and recycling schemes and support for repairing services;
- technical assistance for companies to work together to make maximum use of waste and by-products that are generated – for example, using industrial symbiosis;
- Construction of adequate energy infrastructure for co-generation of bio-waste from agriculture and sludge generated by wastewater treatment plants.

Government Programme for Stable Development of the Republic of Bulgaria 2014-2018

<http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=950>

This is a current Bulgarian government programme covering 21 areas for which specific goals and targets have been identified, including the conservation of nature; climate change mitigation and sustainable economic growth through energy and resource efficiency – with measures for the improvement of the legislation in the field of biodiversity, improvement in the management of the protected areas and air quality, using waste as a resource by applying the hierarchy of its management, climate change adaptation, etc; as well as the implementation of coherent policy promoting the development of resources and energy efficiency – with measures for protecting and improving the condition of water bodies identified in four river basin management plans, and achieving and maintaining good environmental status of marine waters (the marine environment).

Innovation Strategy for Smart Specialization of the Republic of Bulgaria 2014-2020

<http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=948>

Goal 2 of the Strategy is “*support for accelerated uptake of technologies, methods, etc., for improvement of the resource efficiency and the application of information and communications technology (ICT) in enterprises of all industries*”. The priority activities under this goal include the promotion of innovation for resource efficiency in the water sector (reuse and recycling of water, water and waste water treatment, including resource recovery; and intelligent monitoring systems) and in waste sector (waste prevention, collection, recycling and recovery; introduction of high-tech information and communication systems for reporting quantities of waste collected).

National Waste Management Plan 2014–2020

http://www.moew.government.bg/files/file/Waste/NACIONALEN_PLAN/NPUO_ENG_22_10_2014_06_01_2015.pdf

The 4th National Waste Management Plan covers the transition from waste management to the efficient use of waste as a resource, and to sustainable development by preventing waste as far as possible. Successful implementation of the Plan will lead to preventing and reducing the harmful effects of waste on the environment and human health, and reduce the use of primary natural resources.

The Plan supports central and local authorities in concentrating limited resources from national and European funding sources on priority projects in the field of waste management.

The Plan includes, as separate annexed documents, the Waste Prevention Programme; the Programme for the achievement of objectives for the preparation for re-use and recycling of municipal paper, metal, plastic and glass waste; the Programme for achieving the objectives and requirements for biodegradable waste including biowaste; the Programme for achieving the objectives of recycling and recovery of construction and demolition waste; the Programme for achieving recycling and recovery targets of widespread waste stream – according to Bulgarian legislation, there are six widespread streams: packaging waste; end-of-life vehicles; waste electrical and electronic equipment; waste oils and petroleum products; waste batteries and accumulators; waste tires, all of which are managed on the principle of ‘extended producer responsibility’; the Programme for the improvement of the hierarchy of management of other waste streams and reducing environmental risks from municipal waste landfills; the Programme for improvement of institutional capacity on waste management; the Programme for improvement of information quality in order to support waste management decision making; the Programme for improvement of awareness and participation of citizens and business in waste management activities.

Partnership Agreement of the Republic of Bulgaria, outlining assistance from the European Structural and Investment Funds for 2014-2020

<http://www.strategy.bg/StrategicDocuments/View.aspx?lang=bg-BG&Id=918>

The Partnership Agreement is the document which determines the purposes and priorities of the Republic Bulgaria when using the resources from the European Structural and Investment funds for 2014–2020 programming period, and outlines the main investment spheres and activities for achieving sustainable, inclusive and intelligent growth. *“Increasing resource efficiency and competitiveness of SMEs,”* and *“moving towards a low carbon economy, energy and resource efficiency”* are two priority areas of the Agreement.

Europe 2020: National Reform Programme

The 2015 update of the NRP was prepared within the framework of the enhanced monitoring of the economic policies in the EU – the 2015 European Semester. The latter is the first semester during the mandate of the new European Commission (EC), which introduced an ambitious programme aimed at supporting job creation and the urgent revival of economic growth in the EU.

In the 2015 Annual Growth Survey the Commission recommended three pillars, which will serve as a basis for the economic and social policy: investment, structural reforms and fiscal responsibility. They are integrated by a growth-friendly approach, which allows a simultaneous impact on supply and demand. Member States will mobilise financial resources for investment to enable them to reach the real economy (“real economy” means the part of the economy that is concerned with actually producing goods and services, as opposed to the part of the economy that is concerned with buying and selling on financial markets) and improve the investment environment, including by enhancing the management of public finances.

In relation to resource efficiency, the Programme includes measures for:

- the introduction of appropriate incentives and mechanisms for effective water use, including requirements for providing identification and inclusion of cost recovery for water services and environmental costs;
- the implementation of reforms in the water supply and sewerage sector and strengthening the capacity of stakeholders;
- promoting investment in modern facilities for waste recovery through recycling, reuse and/or extraction of secondary raw materials and energy.

The circular economy and closing material loops

There are currently no specific policy approaches in Bulgaria that focus on closing material loops

General policy objectives for material resource efficiency

As mentioned above, increasing resource efficiency is a separate priority within the NDP: Bulgaria 2020.

The National Waste Management Plan 2014–2020 includes the following strategic objectives related to material resource efficiency:

1. reducing the harmful impact of waste by preventing its generation and the promotion of reuse;
2. increasing the quantities of recycled and recovered waste by creating conditions for establishing a network of facilities for the treatment of all waste, which will reduce the risks for people and the environment;
3. waste management, which will ensure a clean and safe environment;
4. making the public a key factor in applying the waste management hierarchy.

Wood is considered as a separate type of material resource addressed by policies – the National Strategy for Development of the Forest Sector in Bulgaria 2013–2020. It includes as a priority – “*using the potential of the forestry sector for development of green economy*”. A measure under this priority is “*sustainable production and consumption of biomass as a renewable energy source*” which sets the following actions:

- research, analysis and evaluation of the potential of forest areas in Bulgaria, concerning the possibilities for energy production from woody biomass;
- developing a national scheme for the sustainable production and consumption of wood biomass for energy, which contains relevant sustainability criteria;
- developing best practices for creating and managing intensive forest plantations for biomass production and for setting standards for residues after logging.

Another measure is “*Promoting the process of certification of forest areas*” by:

- supporting an increase in the share of certified forests;
- developing and implementing methodologies for the responsible stewardship and sustainable management of forests with high conservation value;
- introducing of certification for forest contractors to promote quality of services and compliance with legal requirements and labour safety;
- improving funding opportunities for the certification of state and non-state forests – guidance and preparation of documentation for applying for EU and donor programmes;
- promoting wider application of certification standards on the origin of wood by processing companies – chain of custody (COC), as a guarantee of traceability of production.

Institutional setup and stakeholder involvement

Institutional set up for material resource efficiency policies

There is no special authority for the co-ordination of resource efficiency policies. Different public bodies are responsible for different issues. It is up to the authority with leading role to co-ordinate any initiatives for resource efficiency. The main institutions that are responsible for the development and implementation of material resource efficiency policies are:

- **Ministry of Environment and Water** – waste management policy; Operational Programme „Environment”; integrated prevention and pollution control; environmental impact assessment and strategic environmental assessment; eco-labelling; environmental management systems (EMAS); hazardous substances; environmental liability; access to information, public participation in decision making and access to justice on environmental matters; campaigns.

<http://www.moew.government.bg/>

- **Ministry of Economy** – competitiveness and investment policy; Operational Programme "Innovation and Competitiveness"; public procurement policy; innovation; small- and

medium-sized enterprises (SMEs) and entrepreneurship; consumers; trade; standardisation and technical harmonisation.

<http://www.mi.government.bg/>

- **Ministry of Energy** – mineral resources and mining waste management; energy efficiency and renewable energy policy.

<http://www.me.government.bg/>

- **Municipalities** – management of the waste generated on their territory, according to the Waste Management Act, providing conditions each holder of household waste to be served by persons with contracts.

Process to ensure stakeholder participation

With the aim of ensuring active co-operation with environmental non-government groups and organisations (NGOs) and other participants in the public process of forming positions and taking initiatives by the Ministry of Environment and Water (MoEW) for the development and implementation of state policy on environmental protection, participation of NGOs is provided in advisory boards to Ministry of Environment and Water – the Public Council to the Minister of Environment and Water, the Supreme Expert Environmental Council, the National Biodiversity Council, the Supreme Advisory Council on Water, the Advisory Committee on Genetically Modified Organisms (GMO), the Advisory Council on Climate Change, etc. This practice is also applied by other authorities, the National Economic Council to the Ministry of Economy, for example.

Draft framework positions of the state for the matters to be considered at meetings of the working bodies of the Council of the EU (including in relation to the total EU contribution to international initiatives, processes, agreements, etc.) are coordinated/agreed within working groups of the National Council for European Affairs, the composition of which include representatives of associations of NGOs, syndicates, trade unions and others. This ensures the participation of the public concerned in the co-ordination and preparation of national positions for the negotiations at the EU level.

Through websites of the Ministry of Environment and Water and its structures/units and the Portal of the Council of Ministers for Public Consultations the public and NGOs are given the opportunity at the earliest possible stage to express their views on draft regulations, strategies, plans and programmes, created by the Ministry that affect the environment. The Portal of the Council of Ministers is also used by the other authorities.

According to Statutory Instruments (Normative Acts) Act (Art. 26, para. 2) *“before the introduction of a draft of a statutory instrument (normative act) for issuing or adoption by the competent authority, the draft shall be published on the Internet site of the respective institution together with the reasons and give the interested parties at least 14 days to provide proposals and comments on the draft”*.

According to the Regulation on the Structure and Functions of Council of Ministers and its Administration each minister who launches a draft normative act, shall prepare a report summarising the results of the public consultation and this report will be an integral part of the package of documents for the Council of Ministers and the National Assembly.

Suggestions for international support mechanisms to exchange experience

The European Resource Efficiency Platform should continue its work developing of new policy approaches with the support of the different stakeholders. Priorities could be the effective integration of resource efficiency in different policy areas and the assessment of the costs and benefits of the resource efficiency policies.

The EU and its Member States could work together to unlock investment in circular economy solutions and promote an enabling environment to overcome major market and governance failures, including through public-private partnerships, the full use of the European Structural and Investment Funds and of existing and innovative financial instruments, and leveraging and attracting private capital where feasible. They could also work together with businesses, consumers, social partners, education, research and training institutions and stakeholders to develop strategies and examples of best practice, and increase their dissemination to include all stages of the consumption and production cycle.

The European Semester, as a continuous monitoring dialogue between the Commission and Member States on economic governance and implementation of the Europe 2020 Strategy, is a key process with the potential to drive the necessary structural changes and develop win-win alliances to implement green growth and resource efficiency strategies. (Council of the European Union conclusions on Greening the European semester and the Europe 2020 Strategy - Mid-term review. http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/envir/145488.pdf).

Policy instruments

Policy instruments commonly used for material resource efficiency

Most important are regulatory and economic/financial instruments, because of their high efficiency and because they have achieved significant results, including, for example:

- Clearly defining the responsibilities of municipalities for waste management, including recycling targets. It is clearly defined in the Waste Management Act (WMA) that municipalities have a responsibility for waste management, including the setting of quantitative targets for biodegradable waste and the adoption of normative frameworks for bio-waste. From 2014, municipalities are obliged to organize separate collections of biodegradable waste. Within a project, financed with EU funds, a detailed legal framework was developed to encourage separate waste collection at source and composting. Technical requirements for compost are also regulated, including the status of "end of waste". The legal framework was developed in collaboration with leading experts in Europe.

- Regulations were approved in the Waste Management Act and the Ordinance on Management of Construction Waste and use of recycled building materials. They clearly differentiate the responsibilities of local, regional and central institutions, envisaging the following key requirements:
 - the contracting authority of an investment project is responsible for meeting the targets for recycling of construction waste;
 - the contracting authority is required to develop a plan for managing construction waste as part of its construction documentation for the investment project for obtaining a building permit, which shall be approved together with the entire design project. The implementation of the Waste Management Plan on Construction Waste provides for the traceability of quantities of waste from the time of their formation to their delivery for recycling or final disposal. The introduction of this mechanism facilitates control by the competent authorities and implements the requirements of the Ordinance both preventively – at the stage of issuance of a building permit – and subsequently – through the control of works and the procedure for site commissioning;
 - contracting authorities of investment projects financed by public funds are responsible for the use of a certain percentage of recycled materials or material recovery in backfilling in the construction. These percentages will increase gradually up to 2020;
 - Contracting authorities of construction and assembly works and/or removal of structures outside the preceding paragraph should reduce waste production to a minimum by the selective separation and material recovery of certain types of waste.
- Setting binding targets for recycling of household waste, including, minimally, paper and cardboard, metal, plastic and glass.
- Introducing a legal requirement for the administrative, economic, educational and businesses that generate waste to separate waste paper and cardboard, plastic, glass and metal and to contract for delivery of these to authorized companies and organizations .
- Introducing economic instruments to stimulate municipalities to improve performance in the recovery and recycling of household waste, such as exempting those who meet specified targets for recycling household waste is from 50% of the charges due for waste disposal.
- Another economic incentive is to exempt municipalities with sites that accept separately collected waste from citizens and companies from the the 15 % increase in disposal charges that municipalities that do not fulfil their obligation to provide these facilities have to pay.
- Providing by law an opportunity for municipalities to use their accumulated charges for disposal to finance investment in recycling and other recovery of household waste.
- About 10 facilities for separation of useful components of municipal waste are already functioning as a result of their development through public-private partnership between the packaging waste recovery organisations, as well as financial assistance through the Enterprise for Management of Environmental Protection Activities (EMEPA, this is the National Environmental Fund). Funding of these activities lies within the annual budget of EMEPA, as the enterprise is included in the country's consolidated fiscal programme.
- 20 contracts for the construction of regional systems for waste management under Operational Programme „Environment 2007-2013” (co-funded by the EU) are being implemented. The systems include:

- separating installations: 11 with a capacity of 294 000 tonnes per year;
 - composting plants: 19 with capacity of 180 000 tonnes per year;
 - Reloading stations: 9;
 - Recycling centres: 10;
 - Facilities for recycling bulky waste and construction and demolition waste: 9.
- Investment projects have been developed, approved for financing under the Operational Programme „Environment 2007-2013” and are being implemented for the construction of facilities for utilisation of municipal bio-waste in 17 Regional Waste Management Associations (RWMAs) and 2 RWMAs funded by the EMEPA. In the largest city and capital of Bulgaria, Sofia, a modern facility for the recovery of biodegradable waste is in operation producing energy and compost, while a mechanical biological treatment (MBT) facility is under construction. MBT facilities are also operating in two other big cities - Plovdiv /Shishmantsi and Varna.
 - The Operational Programme „Environment 2014-2020” (as part of the implementation of the European Structural and Investment Funds (ESIF) in Bulgaria) will provide financial support to modern technologies for separate collection, composting of biodegradable waste, recycling and environmentally sound disposal as part of the implementation of the Roadmap for Resource Efficient Europe, including: centres for re-use, repair and preparation for re-use, sites and installations for pre-treatment of waste, equipment and facilities for separate collection of biodegradable and green waste; anaerobic and/or composting installations for biodegradable and/or green waste and installations for the recovery of waste – the third phase of the integrated system of facilities for treatment of residential waste of Sofia Municipality; demonstration/pilot projects.
 - More than 6 million inhabitants of the country are covered by separate collection systems for packaging waste, paper and metal, and plastic and glass. This is an important prerequisite for the implementation not only of the national targets for recycling and recovery of packaging waste, but is a contribution to the local and national objectives of recycling at least 50 % of municipal waste by 2020.
 - Under the national law, annual targets for recycling and recovery of six groups of widespread waste have been set: packaging waste – from 2000; end-of-life vehicles (ELV) – from 2005; waste electrical and electronic equipment (WEEE) – from 2006; waste oils and petroleum products – from 2006; waste batteries and accumulators – from 2006; and waste tyres – from 2011. Targets for recycling and recovery of packaging waste, ELVs, WEEE and batteries and accumulators exist at the European level, while in Bulgaria national targets for waste tyres and waste oil and oil products are pre-set and are being implemented. Targets for the recovery and recycling of the six groups of widespread waste throughout the country have been successfully implemented by a scheme based on extended producer responsibility.
 - The legislation provides for responsibilities for people placing products on the market to organize separate collection, reuse, recycling and recovery of any after-use waste. The obligations set targets for recycling and recovery, which may be met individually, by taking back products to the point of sale, or through collection systems operated by recovery organisations.
 - Separate collection, treatment and recycling are organised, funded and managed by the so-called recovery organisations. These are collective bodies that accumulate product fees from the obligated producers and importers on the basis of the quantity of products placed on

the market. Municipalities pay no fees for these wastes. Every settlement with a population of more than 5 000 inhabitants must have a system for the separate collection of packaging waste in place. The obligations of municipalities consist of contracting with recovery organisations of packaging waste to organise the process and control it – using colourful street containers. The collected waste must undergo separation in installations for separation of packaging waste, which are owned by the organisations or their subcontractors.

- In settlements with more than 5 000 inhabitants separate collections of plastic, paper, glass and metal must be provided and differentiated from packaging collections. These wastes are not subject to extended producer responsibility and their costs are met by municipalities. In order to optimise the systems, contracting with recovery organisations and the use of containers for packaging and for other recyclables materials is recommended.
- Municipalities have an obligation to provide sites for the free transmission of separately collected household waste, which is mandatory for settlements with more 10 000 inhabitants (77 in total).
- Under the Operational Programme “Competitiveness 2007-2013” (as part of the implementation of the European Structural and Investment Funds (ESIF) in Bulgaria) investment was provided to support large enterprises in Bulgaria overcome their negative impact on the environment by encouraging the implementation of projects directly related to manufacturing products that are recyclable when they become waste, the efficient use of waste products and the reduction of energy intensity as a key factor for improving the competitiveness and sustainable development of large enterprises in Bulgaria. Funding was provided for the purchase and commissioning of new equipment, which is associated with more the efficient use and recycling of waste products and covers the reduction of waste through reuse in existing production or its use for the production of new products, as well as equipment for the production of products subject to recycling after they become waste. Under the instrument for its new programme period, the Operational Programme “Innovation and Competitiveness 2014-2020” (OPIC) will provide support for pilot and demonstration initiatives for increasing resource efficiency in enterprises and/or groups of companies.
- Ministry of Environment and Water produced Guidelines on Mainstreaming of Environmental Policy and Climate Change Policy in Cohesion Policy, Common Agricultural Policy and Common Fisheries Policy Funds of EU 2014–2020 (approved by a protocol decision under point 7 of the Protocol № 8 of the Council of Ministers meeting on March 1, 2013). The Guidelines were an important starting point for the planning of interventions in the field of the environment and climate change within the development of the Operational Programmes that will be financed by the European Structural and Investment Funds in the programming period 2014–2020. A second phase of the Guidelines – Implementation of the Partnership Agreement and Operational Programmes – has been prepared. The main goal of this document is to provide further integration of environmental and climate change policies in the Operational Programmes in order to ensure implementation of the mandatory legislative requirements within the projects and to encourage the selection of projects which contribute to environmental protection to the greatest possible degree. The Guidelines include important recommendations and requirements concerning resource efficiency (in broader context).

Examples of good practice

Operational Programme "Innovation and Competitiveness 2014-2020"

http://www.opcompetitiveness.bg/images/filerepository/3733_OPIC_2014_2020_adopted_by_EC_16.03.2015_EN.pdf

The Operational Programme "Innovation and Competitiveness 2014-2020" (OPIC), as part of the implementation of the European Structural and Investment Funds (ESIF), already adopted by the European Commission, is managed by the Ministry of Economy and will provide financial support for pilot and demonstration initiatives for increasing resource efficiency in enterprises and/or groups of companies.

Within the pilot and demonstration initiatives for increasing resource efficiency in enterprises and/or groups of enterprises measures to improve resource efficiency and sustainable use of raw materials, incl. industrial symbiosis, will be supported by:

- introducing high-tech and ICT solutions for optimising production processes and reducing the use of raw materials;
- introducing modern technologies to use waste as a raw material in new production and/or alternative applications;
- implementing modern waste-free technology, incl. the replacement of obsolete and resource-intensive equipment;
- introducing innovative production materials and increasing the use of recyclable materials, incl. through investment in adapt existing equipment;
- introducing rotations for water use in production processes.

There is a requirement for spreading information on the results to multiply effects, including capitalisation. Beneficiaries could be SMEs from manufacturing industry.

OPIC also will provide for the introduction of eco-innovation in companies. It will support: implementation of high-tech solutions to optimise production processes and reduce the use of raw materials; introducing modern technologies to use waste as a raw material in new production and/or other alternative uses; introduction of no-waste technologies, innovative manufacturing materials, technologies for the production of green products in all sectors of the economy. The focus of OPIC is the introduction of eco-innovation that contributes to the rational use of resources and energy, and to increasing productivity in enterprises.

Assessing and reporting the value of ecosystems and their services

Development of systems for assessing and reporting on the value of ecosystems and their services in the process of developing sectoral policies is an important priority of the resource efficiency policy of Bulgaria (set in the NDP BG2020). The first steps under way. The Bulgarian Ministry of

Environment and Water is Programme Operator for a programme under the Financial Mechanism of European Economic Area 2009–2014, BG 03 “Biodiversity and Ecosystem services”. Two calls for project proposals, related with the ecosystem services, were launched: BG03.02 “Ecosystem services mapping and assessment” (EUR 4.2 million) and BG03.03 “Sectoral policies for the systematic use of ecosystem services” (EUR 0.9 million). Projects have been selected and will start shortly. They will be focused on biophysical, rather than monetary, assessments of the ecosystems and their services for all areas outside Natura 2000. The results of the ongoing pre-defined project under the programme BG 03: “Methodological support for the evaluation of the condition of the ecosystems and biophysical assessment” will be used in the process.

Operational Programme “Environment 2014-2020” (as part of the implementation of the European Structural and Investment Funds (ESIF) in Bulgaria) will provide financial support for the verification of methodologies, elaborated under BG 03 “Biodiversity and Ecosystem services”, in Natura 2000 and their update if necessary. Carrying out biophysical assessments of the ecosystems in Natura 2000 and evaluation of their services will be also supported. Funding is also planned for the assessment of the economic value of these services and for the development of a scheme for paying their use.

Targets and indicators

Targets for material resource efficiency

There are no specific targets for material resource efficiency in Bulgaria.

The most relevant (aspirational) objective is for packaging waste in each year of the the **National Waste Management Plan 2014–2020 (NWMP)**:

- Not less than 60 % by weight of packaging waste must be recovered or for energy recovery.
- Not less than 55 % and not more than 80 % by weight of the packaging waste must be recycled – recycling should be not less than:
 - 60 % by weight of glass packaging waste;
 - 60 % by weight of paper and cardboard packaging waste;
 - 50 % by weight of metal packaging waste;
 - 22.5 % by weight of plastic packaging waste – the recycling is only to obtain plastic;
 - 15 % the weight of the wood packaging waste.
- Systems for separate collection of packaging waste cover not less than 6 million inhabitants of the country and must include resort towns and all cities with a population over 5 000 inhabitants.

All targets concerning specific waste streams can also be found in NWMP at:

http://www.moew.government.bg/files/file/Waste/NACIONALEN_PLAN/NPUO_ENG_22_10_2014_06_01_2015.pdf

Most of waste from households and other organisations is biodegradable, but, with a few exceptions, has been landfilled. Therefore, the Bulgarian legislation introduced specific quantitative targets for the separate collection, recycling and recovery of municipal bio-waste as well as targets for diverting biodegradable municipal waste from landfills. The provisions of the Waste Management Act require that, by 31 December 2020, the amount of biodegradable municipal waste is limited to 35 % of the total of those wastes in 1995 in the Republic of Bulgaria. This is compliant with the requirements of the European Landfill Directive.

In addition to the common European objective, ambitious national targets for the recycling of household bio-waste are envisaged in the Ordinance for the separate collection of bio-waste adopted in December 2013. The Ordinance requires mayors in each of the waste management regions under Article 49, paragraph 9 of the Waste Management Act to achieve the following regional targets for the separate collection and recycling of household bio-waste:

- by 31 December 2016 - not less than 25 % of the amount of municipal bio-waste generated in the region in 2014;
- by 31 December 2020 - not less than 50 % of the amount of municipal bio-waste generated in the region in 2014;
- by 31 December 2025 - not less than 70 % of the amount of municipal bio-waste generated in the region in 2014.

Waste from construction and demolition is highly recyclable and reusable. Thus, from an environmental problem, it can be transformed into a useful resource. This is a basic approach to sustainable waste management imposed by the active EU policy in this sector. According to the Waste Framework Directive by 2020, the preparing for re-use, recycling and other material recovery of non-hazardous construction and demolition should be increased to at least 70 % of their total weight, excluding contaminated soil, earth and rock masses from excavations. These ambitious targets are included in the national legislation which has defined stepped targets for recycling and other recovery, with the ultimate goal to be achieved in 2020:

- by 1 January 2016 – at least 35 % of the total weight of waste;
- by 1 January 2018 – at least 55 % of the total weight of waste;
- by 1 January 2020 – at least 70 % the total weight of waste.

Recycling targets for household waste paper, metal, plastic and glass as pre-set by Bulgaria is steps, with the ultimate goal to be achieved in 2020:

- by 1 January 2016 – at least 25 % of their total weight;
- by 1 January 2018 – at least 40 % of their total weight;
- by 1 January 2020 – at least 50 % of their total weight.

Targets are implemented by municipalities included in Regional Waste Management Associations, in accordance with the decision taken by the General Assemblies of the relevant regional systems.

Indicators to monitor use of materials and resource efficiency:

The monitoring is based on Eurostat-derived indicators presented in the Resource Efficiency Scoreboard (RES). The country does not complement this with its own framework of material indicators. Most commonly used RES indicators are: resource productivity, domestic material consumption per person, generation of waste, landfill rate of waste, and recycling rate of municipal waste.

Main indicators for monitoring the decoupling of environmental impacts from economic growth are the energy intensity of the economy and final energy consumption.