

Resource efficiency and circular economy in Europe – even more from less

An overview of policies, approaches and targets of Bosnia and
Herzegovina in 2018

July 2019



ETC/WMGE consortium partners: Flemish Institute for Technological Research (VITO), CENIA, Collaborating Centre on Sustainable Consumption and Production (CSCP), Research Institute on Sustainable Economic Growth of National Research Council (IRCrES), The Public Waste Agency of Flanders (OVAM), Sustainability, Environmental Economics and Dynamic Studies (SEEDS), VTT Technical Research Centre of Finland, Banson Communications Ireland (BCI), The Wuppertal Institute for Climate, Environment, Energy (WI), Slovak Environment Agency (SEA)

**European Environment Agency
European Topic Centre on Waste and
Materials in a Green Economy**



Cover photo © (CC) a.canvas.of.light, Attribution 2.0 Generic (CC BY 2.0)

Link to cover photo: <https://flic.kr/p/pa5PKr>

Legal notice

The contents of this publication do not necessarily reflect the official opinions of the European Commission or other institutions of the European Union. Neither the European Environment Agency, the European Topic Centre on Waste and Materials in a Green Economy nor any person or company acting on behalf of the Agency or the Topic Centre is responsible for the use that may be made of the information contained in this report.

Copyright notice

© European Topic Centre Waste and Materials in a Green Economy (2019)

Reproduction is authorized provided the source is acknowledged.

More information on the European Union is available on the Internet (<http://europa.eu>).

European Topic Centre on Waste and Materials
in a Green Economy
Boeretang 200
BE-2400 Mol
Tel.: +14 33 59 83
Web: wmge.eionet.europa.eu
Email: etcwmge@vito.be

Contents

Acknowledgements	1
Bosnia and Herzegovina, facts and figures.....	2
Policy framework.....	3
Driving forces for material resource efficiency and circular economy	3
Policies which include elements of material resource efficiency	3
Institutional setup and stakeholder engagement	3
Approaches to resource efficiency and circular economy policy evaluation.....	4
Monitoring and targets	4
Indicators to monitor progress towards a resource-efficient circular economy	4
Resource efficiency, circular economy and the 2030 Sustainable Development Goals	5
Examples of innovative approaches and good practice	6
Examples of good practice and innovative approaches	6
Seeking synergies with other policy areas	6
Resource efficiency and circular economy policy initiatives from subnational to local level.....	7
The way forward.....	7
Reflections on future directions of policies on resource efficiency and circular economy	7

Acknowledgements

This country profile is based on information reported by the Eionet network and, in particular, the National Reference Centres on Resource Efficiency and Circular Economy. The information is current as of March 2019, when members of Eionet verified the content of this profile.



This country profile was prepared as part of the 2019 EEA review of material resource efficiency, circular economy and raw material supply policies, which aimed to collect, analyse, and disseminate information about experience with the development and implementation of these policies in EEA member and cooperating countries.

At the time of writing, a summary report is being finalised. The report reflects on trends, similarities and differences in policy responses, showcases selected policy initiatives from member countries and identifies possible considerations for the development of future policies.

These country profiles were compiled and finalised by members from the European Topic Centre on Waste and Materials in a Green Economy, namely Bart Ullstein, Bettina Bahn-Walkowiak, Jeroen Gillabel, Margareta Wahlström, Jutta-Laine Ylijoki, Dirk Nelen, Theo Geerken, Veronique Van Hoof and Evelien Dils. The responsible EEA project managers for the work were Pawel Kazmierczyk and Daniel Montalvo.

Bosnia and Herzegovina, facts and figures

Note: data in this section was sourced from Eurostat databases (April 2019), except where noted otherwise. For Bosnia and Herzegovina available data were used as much as possible, but years will differ.

 	<p>GDP: EUR 15.3 billion in 2016</p> <p>Use of materials (domestic material consumption (DMC)) 35.5 million tonnes DMC (in 2015) 9.3 tonnes DMC per capita (in 2015)</p> <p>Structure of the economy (2016): agriculture: 7.5 % industry: 27.3 % services: 65.3 %</p> <p>Surface area: 51.2 thousand square kilometres (km²)</p> <p>Population: 3.5 million</p>
--	---

Policy framework

Driving forces for material resource efficiency and circular economy

Resource efficiency and circular economy are still not represented in the policies of Bosnia and Herzegovina. The current focus is still mostly on waste management, energy use and energy efficiency-related matters.

Official statistical data¹ show that resource productivity in Bosnia and Herzegovina decreased in the reference period 2009–2015, the result of a significant increase in domestic material consumption (DMC) alongside minor growth in gross domestic product (GDP). As resource productivity in the reporting period is significantly lower than GDP, it cannot be considered that there is a separation of the links between resource use and economic growth.

The level of resource productivity depends on the resource potential, the diversity of industrial activities, the role of the service and construction sectors, the extent and structure of consumption and the different energy sources.

The resource productivity of Bosnia and Herzegovina is rather low compared to the EU average. Resource productivity decreased by 9.2 per cent compared to 2010.

Policies which include elements of material resource efficiency

Material resource efficiency, circular economy and raw material supply are not specified in a national strategy or action plan in Bosnia and Herzegovina. The work mostly concentrates on topics and activities that are significant factors in environmental issues such as waste management, or relate to energy use and energy efficiency. Recently implemented projects are:

- Strategic Framework for Bosnia and Herzegovina;
- solid waste management sector review and recommendations on sector reform and investments;
- technical assistance for capacity building and institutional strengthening of solid waste management in Bosnia and Herzegovina;
- Sustainable Development Goal (SDG) Rollout Roadmap for Bosnia and Herzegovina;
- framework transport strategy for Bosnia and Herzegovina;
- determination of biomass potential in Bosnia and Herzegovina;
- an Action Plan to combat soil degradation and mitigate the consequences of drought in Bosnia and Herzegovina;
- Encouraging the use of renewable energy in Bosnia and Herzegovina – biofuels recommendation in the transport sector.

Institutional setup and stakeholder engagement

There is no specially established institutional framework for material resource efficiency, circular economy and raw material supply. The description of the jurisdiction of the state level Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (MoFTER) is as follows:

The Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (MoFTER) has the competence to perform duties and responsibilities under national jurisdiction that relate to defining policy, coordination of activities and harmonisation of entity authorities and institutions' plans on the international level, including the energy and environmental protection sectors and the development and

¹ Agency for Statistics of Bosnia and Herzegovina, www.bhas.ba (Croatian)

use of natural resources. There are no established strategies/actions for resource efficiency, circular economy and raw material supply in Bosnia and Herzegovina.

Approaches to resource efficiency and circular economy policy evaluation

Given that resource efficiency and circular economy are not yet represented at the policy level in Bosnia and Herzegovina, and work is mostly based on individual projects and promotions at the local level and financed by international organisations, we cannot talk about the impacts and effectiveness of policies for a resource-efficient circular economy at the national level.

Monitoring and targets

Indicators to monitor progress towards a resource-efficient circular economy

The Agency for Statistics of Bosnia and Herzegovina² publishes the following indicators bi-annually:

- domestic material consumption (DMC);
- resource productivity (RP).

DMC³ applies the economy-wide material flow accounts (EW-MFA) methodology in accordance with EU Regulation no. 691/2011 of the European Parliament and the Council on European environmental economic accounts, particularly Annex III: Module for EW-MFA. EW-MFA includes the following categories of materials:

- biomass and biomass-based products;
- metal ores and concentrates, raw and processed;
- non-metallic minerals, raw and processed;
- petroleum resources, raw and processed;
- other products.

Resource productivity⁴, as the ratio of GDP to DMC, indicates the efficiency of resource use where it is desirable to increase economic value while lowering the consumption of material resources. The indicator measures progress in realising one of the goals of the sustainable production and consumption policy and of sustainable development in general.

Relevant legislation includes:

- a. Bosnia and Herzegovina – Statistics Development Strategy 2020;
- b. EU Regulation no. 538/2014 of the European Parliament and of the Council amending Regulation no. 691/2011 of the European environmental economic accounts.

Bosnia and Herzegovina's DMC showed a slight increase in the period 2009–2014, caused by increasing exploitation of local material resources (domestic extraction of non-metallic minerals for construction and industrial use), as well as a slight increase in imported materials in total consumption (fossil fuels).

The DMC indicator trend for Bosnia and Herzegovina does not reflect general developments at the EU level, where there was a significant decline in DMC, mostly resulting from the reduction in consumption of minerals for construction and industrial use.

Domestic materials extraction (DME) in 2014 amounted to 30 million tonnes, a slight decrease of 2 per cent compared to the previous year. Broken down by category of material resources, the largest shares of DME are fossil fuels (38.1 per cent) and non-metals (36.1 per cent), followed by biomass (16 per cent) and metal ores (9.2 per cent).

² http://www.bhas.ba/saopstenja/2018/ENV_11_2015_Y2_0_BS.pdf (Croatian)

³ http://www.bhas.ba/saopstenja/2016/CE_2016_DPM_001_01_BA.pdf (Croatian)

⁴ http://www.bhas.ba/saopstenja/2016/ERO_2016_RP_001_01_BA.pdf (Croatian)

Imports of goods decreased by 3.2 per cent, which coincides with the diminishing trend in DME. The largest share of imports was recorded for fossil fuels (56.6 per cent), followed by biomass (28.7 per cent), metal ores (8.4 per cent), non-metals (4.9 per cent) and other (1.4 per cent).

Exports of goods increased by 2.4 per cent compared to the previous year. Biomass had the largest share in total exports (36.9 per cent), but the shares of metal ores (30.1 per cent) and fossil fuels (29.9 per cent) were also significant.

The Agency for Statistics of Bosnia and Herzegovina annually publishes indicators⁵ on:

- the total quantity of generated waste;
- waste recovery and disposal.

Resource efficiency, circular economy and the 2030 Sustainable Development Goals

Sustainable Development Goal Rollout Roadmap for Bosnia and Herzegovina (first draft: March 2018)

The purpose of the Sustainable Development Goal (SDG) Rollout Roadmap is to define the SDG Rollout Process in Bosnia and Herzegovina, key expected elements and outputs, as well as the responsibilities of key stakeholders in the process and members of the SDG Rollout Working Group. In particular, this document outlines operational detail including the timeline, necessary inputs and key approaches and tools that will be applied during the SDG rollout process. This document proposes the following **elements** to be defined and agreed:

- participatory consultations format/*modus operandi*;
- Output 2: Bosnia and Herzegovina SDG Framework Document (content/format);
- timeline;
- Output 3: SDG Action Plans (content/format/timing);
- SDG monitoring and evaluation systems;
- Output 4: Bosnia and Herzegovina 2019 Voluntary National Report (content/format);
- Output 5: 2019 SDG Bosnia and Herzegovina Progress Report (content/format/timing);
- events that support/inform on key Roadmap elements.

Analysis and tools in support of the SDG Rollout process/MAPS Approach (SDG mainstreaming, acceleration and policy support)

- **Rapid Integrated Assessment (RIA)**

This tool aims to aid countries assess their readiness to implement the SDGs. The assessment is a first step in the process of localising the SDGs. It reviews the current plans and strategies of relevant sectors at different governance levels, and provides an indicative overview of the level of alignment between the plans/strategies and SDG targets. It also identifies the potential need for multi-sectoral coordination around the achievement of specific SDG targets. Over 75 strategies will be reviewed, including the United Nations Development Assistance Framework (UNDAF), the EU Instrument for Pre-accession Assistance (IPA II), World Bank and International Monetary Fund strategies/documents for Bosnia and Herzegovina as well as Regional Cooperation Council's 2020 strategy.

- **SDG Dashboard**

While RIA focuses on policy analysis against SDGs/Targets, the SDG Dashboard looks into the SDG indicators and is done in phases. The first phase looks into the available data from global datasets. The second phase takes on board domestic data. Once these two phases are complete, the SDG Dashboard for Bosnia and Herzegovina, as well as identifying data gaps, offers the baseline for key administrative levels in the country as well as target setting and analysis of the

⁵ [http://www.bhas.ba/saopstenja/2017/ENV_05_2016_Y1_0_BS.pdf](http://www.bhas.ba/saopštenja/2017/ENV_05_2016_Y1_0_BS.pdf) (Croatian) and http://www.bhas.ba/index.php?option=com_publicacija&view=publicacija_pregled&ids=5&id=18&n=Okoli%C5%A1%20i%20energija (Croatian)

extent to which countries are on track in relation to identified indicators. The third phase of the SDG Dashboard offers a dimension of complexity in which SDG targets according to domestic data are analysed against their multiple influences, providing information that can be used for setting the country's priorities.

- **SDG monitoring and evaluation systems**

The Agency for Statistics of Bosnia and Herzegovina actively participates in the SDG rollout process. The SDG Dashboard exercise helps in the exploration of country data, including identifying gaps, but also provides an understanding of the statistical producers' and users' landscape, which will help identify the future support needs of statistical monitoring and evaluation systems, in particular in relation to the SDGs.

Examples of innovative approaches and good practice

Examples of good practice and innovative approaches

There have been some initiatives which could be considered a good way to support the concept of resource efficiency and/or circular economy, but they do not have a major impact on the national level. Efforts to raise public awareness of the importance of resource efficiency/circular economy began in some local communities in 2015.

As part of the European Waste Reduction Week (EWWR), in November 2015 in the Sarajevo Canton four non-governmental organisations (NGOs), in cooperation with educational institutions and several companies, implemented a series of ecological projects and measures aimed at promoting a reduction in the amount of generated waste and the possibility of its reuse. There was also a round table discussion on the circular economy in Canton Sarajevo for representatives of authorities, municipalities, directors of construction companies and relevant institutions registered for the management of special types of waste. Participants introduced the concepts of circular economy and green entrepreneurship, and showcased examples of green entrepreneurs in Bosnia and Herzegovina, with the aim of changing thinking in resource management.

Seeking synergies with other policy areas

The regional initiatives could be a driver for synergy between resource efficiency/circular economy and other policy areas in the Western Balkans – although most initiatives so far have a specific focus on environmental issues. The aim of the strategies is to promote a better and more strategic participation between Western Balkan countries with a special focus on the environment, raising awareness concerning the strategies and their mechanisms, introduce potential funding opportunities and assess the country's needs for a better and more strategic participation in the strategies. An example of **regional cooperation** is the Cross-border Cooperation Programme between Bosnia and Herzegovina and Montenegro (Financing source: IPA II Cross-Border Co-operation Bosnia and Herzegovina-Montenegro⁶, allocations for 2014, 2015, 2016). The objectives of the programme are:

- protecting the environment and fostering climate change mitigation and adaptation;
- risk prevention and risk management through, amongst others, joint action on environmental protection;
- promoting the sustainable use of natural resources, resource efficiency, renewable energy sources and the transition to a safe and sustainable low-carbon economy.

In addition, some **national projects** promote synergy and co-benefits between resource efficiency/circular economy and other policy areas:

⁶ <http://europa.ba/?p=42979> (English) and www.dei.gov.ba (Croatian)

1. National Cleaner Production Programme (NCPP) in Bosnia and Herzegovina⁷

The project's objective is to improve the efficiency of using natural resources and the environmental performance of companies in Bosnia and Herzegovina. The project is implemented by the United Nations Industrial Development Organization (UNIDO) with the financial support of the government of the Republic of Slovenia, and its implementation was supported by the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina. The project will contribute to sustainable industrial development in Bosnia and Herzegovina, and increase employment and income through the implementation of the Resource Efficient and Cleaner Production (RECP) programme.

2. Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME)⁸

The agreement associating Bosnia and Herzegovina with COSME was signed in 2016. Running from 2014 to 2020, COSME is the European Union's (EU) programme aimed at strengthening the competitiveness and sustainability of small and medium-sized enterprises (SMEs). Entrepreneurs and SMEs from Bosnia and Herzegovina can participate in COSME under the same conditions as their counterparts from EU Member States and other associated countries.

Resource efficiency and circular economy policy initiatives from subnational to local level

Examples from Bosnia and Herzegovina of resource efficiency and/or circular economy at the local levels.

- The document *Recommendations for municipalities, municipal utility companies, regional landfills and the private sector related to the infrastructure and logistics necessary for the production of fuels from waste*⁹ was produced for the municipal waste processing as an alternative fuel in the cement industry in Bosnia and Herzegovina project, which is being implemented in the period 2015–2018. The goal of the project is to create the conditions for using processed industrial and municipal waste and waste tyres as a source of energy for cement production in Bosnia and Herzegovina.
- The National Cleaner Production Programme in Bosnia and Herzegovina¹⁰ (2015–2017), funded by UNIDO, aims to improve the efficiency of natural resource use and the environmental performance of business organisations in Bosnia and Herzegovina. Sixteen industrial companies in food and service sectors, metal industry, construction materials sector and furniture production participated in the Programme, which evaluated options for resource efficiency and cleaner production. Companies identified opportunities to improve resource-efficient cleaner production and space for improvement; the measures they chose to apply to their industry have significantly contributed to a reduction in their carbon footprints.

The way forward

Reflections on future directions of policies on resource efficiency and circular economy

Resource efficiency and circular economy are not yet represented in Bosnia and Herzegovina's policies, and the focus is mostly on waste management, energy use and energy efficiency-related matters.

EU recommendations from the meeting of the Subcommittees on Transport, Energy, Environment and Regional Development of the Stabilisation and Association Agreement between the EU and Bosnia and Herzegovina, November 2016:

⁷ <http://ncpp.ba/en/our-work> (English)

⁸ http://ec.europa.eu/growth/smes/cosme/index_en.htm (English)

⁹ <https://www.rez.ba/wp-content/uploads/2017/11/Publ-024-Preporuke-za-op%C4%87ine.pdf> (Croatian)

¹⁰ <https://www.unido.org/news/national-cleaner-production-programme-launched-bosnia-and-herzegovina> (English)

1. overall progress in aligning with the EU acquis in the field of environment and enforcement is still limited;
2. in terms of strengthening administrative capacities, the Commission encouraged Bosnia and Herzegovina to take appropriate measures to build effective and efficient environmental capacities, in order to ensure adequate fulfilment of future tasks and requirements;
3. regarding waste management, the Commission noted that Bosnia and Herzegovina is at an early stage of the transposition and implementation of waste-related directives;
4. as regards nature protection, Bosnia and Herzegovina is at an early stage of *acquis communautaire* and implementation.

European Topic Centre on Waste and Materials
in a Green Economy

Boeretang 200
BE-2400 Mol
Tel.: +14 33 59 83
Web: wmge.eionet.europa.eu
Email: etcwmge@vito.be

The European Topic Centre on Waste and Materials
in a Green Economy (ETC/WMGE) is a consortium
of European institutes under contract of the
European Environment Agency.

