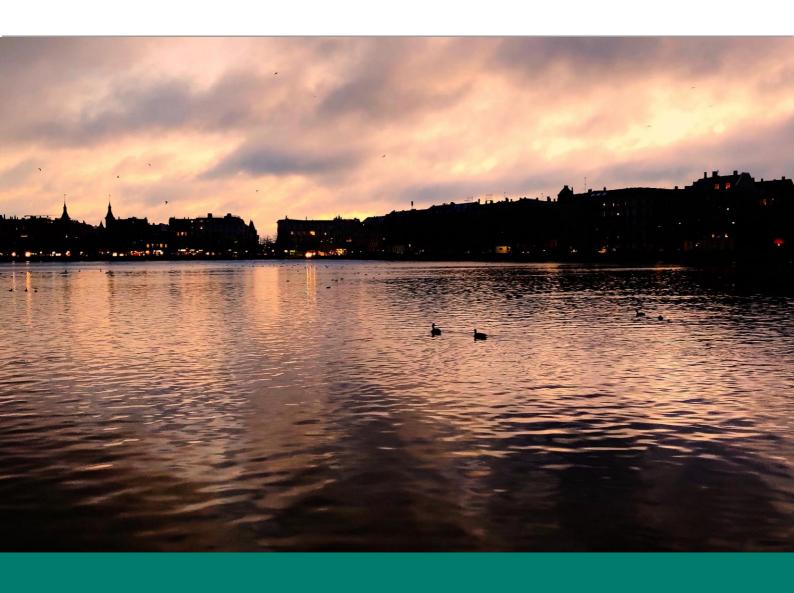
# Circular economy country profile – Slovakia



Cover design: EEA

Cover image © Peder Jensen

Layout: ETC CE

#### **Publication Date**

**EEA activity** Circular economy and resource use

#### Legal notice

Preparation of this report has been co-funded by the European Environment Agency as part of a grant with the European Topic Centre on Circular economy and resource use (ETC CE) and expresses the views of the authors. The contents of this publication do not necessarily reflect the position or opinion of the European Commission or other institutions of the European Union. Neither the European Environment Agency nor the European Topic Centre on Circular economy and resource use is liable for any consequence stemming from the reuse of the information contained in this publication.

ETC CE coordinator: Vlaamse Instelling voor Technologisch Onderzoek (VITO)

ETC CE partners: Banson Editorial and Communications Ltd, Česká informační agentura životního prostředí (CENIA), Collaborating Centre on Sustainable Consumption and Production (CSCP), Istituto Di Ricerca Sulla Crescita Economica Sostenibile, Istituto Superiore per la Protezione e la Ricerca Ambientale, IVL Swedish Environmental Research Institute, PlanMiljø, Università Degli Studi Di Ferrara (SEEDS), German Environment Agency (UBA), Teknologian Tutkimuskeskus VTT oy, Wuppertal Institut für Klima, Umwelt, Energie gGmbH, World Resources Forum Association.

#### Copyright notice

© European Topic Centre on Circular economy and resource use, 2022 Reproduction is authorized provided the source is acknowledged. [Creative Commons Attribution 4.0 (International)]

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

## **Contents**

Introduction	1
Slovakia – facts and figures	2
Existing policy framework	6
Dedicated strategy, roadmap or action plan for circular economy	6
Circular economy policy elements included in other policies	6
Monitoring and targets	7
Assessment of circular economy performance	7
Circular economy monitoring frameworks and their indicators beyond the ones from Eurostat	7
Circular economy targets	7
Innovative approaches and good practice	8
Examples of public policy initiatives (national, regional or local)	8
Examples of private policy initiatives (sectoral)	8
The way forward	10
Addressing barriers and challenges	10
Ranking types of barrier	10
Future policy plans	10

#### 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 29 September 2022 (final review), when members of Eionet verified the content of this profile.

## Slovakia – facts and figures

\*

**GDP:** EUR 92.1 billion (0.7 % of EU27 total in 2020)

**GDP per person:** EUR 16 860 (purchasing power standard) (70.0 % of EU27 average per person figure in 2020)

#### Use of materials (domestic material consumption (DMC))

64.8 million tonnes DMC (1.1 % of EU27 total in 2020)

11.9 tonnes DMC per person (88.1 % of EU27 average per person in 2020)

#### Structure of the economy:

Agriculture: 2.0 % Industry: 30.6 % Services: 67.5 %

#### **Employment in circular sectors:**

43 109 people are employed in circular economy (CE) sectors (1.2 % of

EU total in 2018)

People employed expressed as a percentage of total employment: 1.8 %

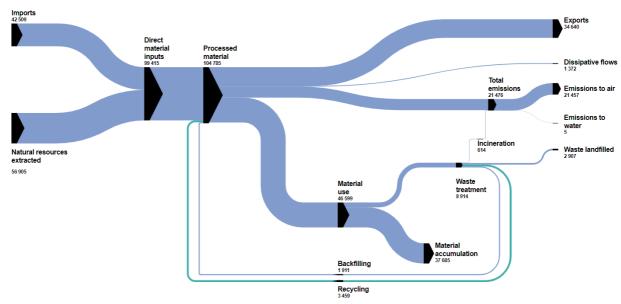
(EU average 1.7 %)

Surface area: 49 035 square kilometres (1.1 % of EU27 total)

**Population:** 5 457 873 (1.2 % 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 Slovakia in 2020, '000 tonnes



Source: Eurostat (2022) [env\_ac\_mfa], [en\_ac\_sd], [env\_wassd] (accessed 20 June 2022)

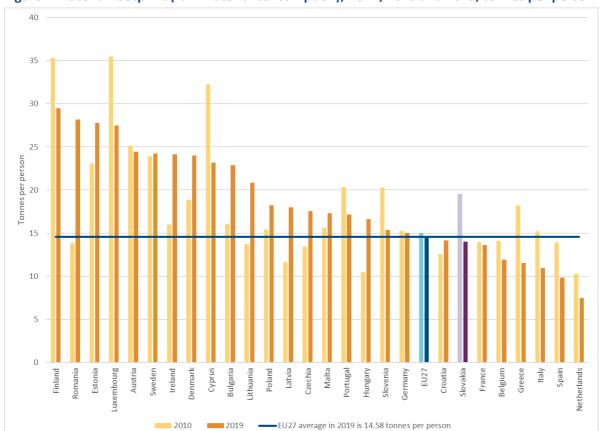
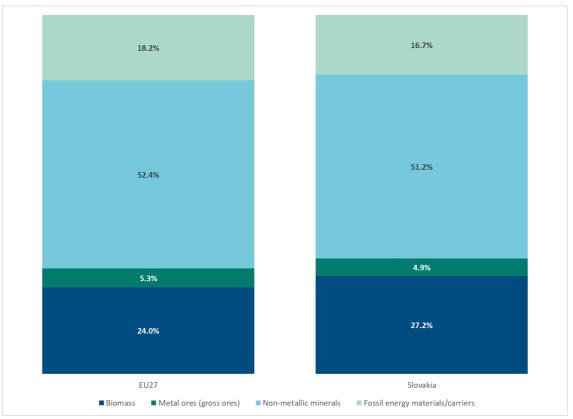


Figure 2 Material footprint (raw material consumption), EU27, 2010 and 2019, tonnes per person

Source: Eurostat (2020) [env\_ac\_rme] (accessed 4 July 2020)

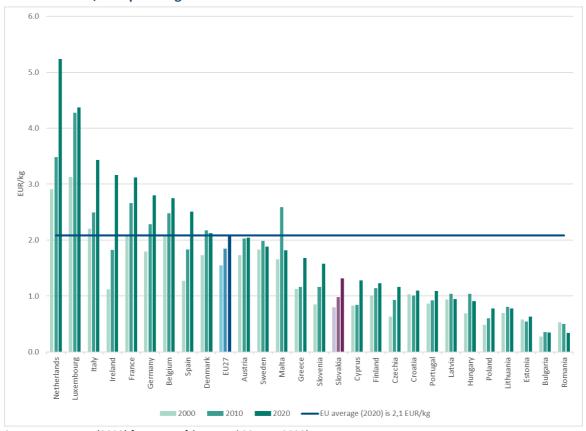
Figure 3 Domestic material consumption by selected material category, EU27 and Slovakia, 2020, per cent



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

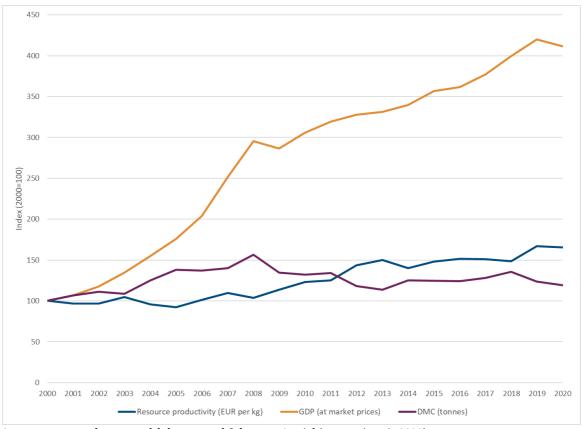
Source: Eurostat (2022) [env\_ac\_mfa] (accessed 20 June 2022)

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, Slovakia, 2000–2020, index (2000=100)



Source: Eurostat [env\_ac\_mfa], [env\_ac\_rp] & [nama\_10\_gdp] (accessed 4 July 2022)

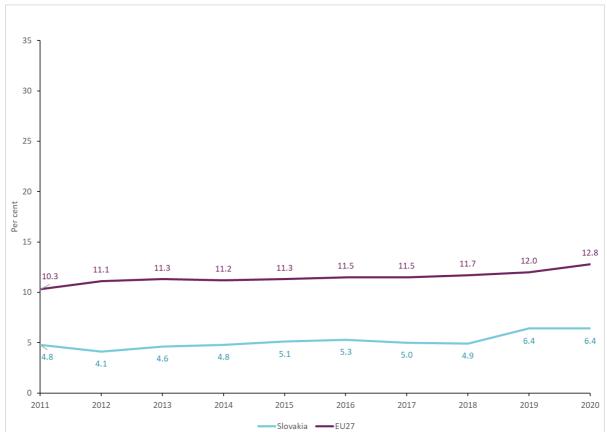


Figure 6 Circular material use rate in Slovakia, 2011–2020, per cent

Source: Eurostat (2022) [env\_ac\_cur] (accessed 20 June 2022)

## **Existing policy framework**

## Dedicated strategy, roadmap or action plan for circular economy

Slovakia has implemented a project related to the Organisation for Economic Co-operation and Development (OECD) and EC **Roadmap for Circular Economy of the Slovak Republic** (¹). The Roadmap focusses on the following priority areas: sustainable consumption and production with a focus on economic instruments; CE potential in the construction sector; and achieving circularity in the food and bio-waste value chain. The identified policy measures across these three areas will help to increase the use of secondary raw materials, support eco-design and eco-innovation, stimulate circular consumption patterns as well as improve waste management, reuse and recycling. The final report, annexes and policy highlights are available on the OECD website (²).

#### Circular economy policy elements included in other policies

Circular economy policy element	Included in policy
The circular economy is covered by objective no. 10	Greener Slovakia - Strategy of the Environmental
Towards the Circular Economy.	Policy of the Slovak Republic until 2030
Ensure efficient and sustainable management of	Vision and Strategy of Slovakia's Development until
natural resources; improve the sustainability and	2030 (in Slovak)
resilience of national and regional economies.	
Shift from material recovery as the only priority in	Waste prevention program of the Slovak Republic for
Slovak waste management to waste prevention.	<u>the years 2019 – 2025</u> (in Slovak)
Divert waste from landfilling, in particular for	Waste management plan of the Slovak Republic for the
municipal waste	<u>years 2021 – 2025</u> (in Slovak)

https://www.oecd-ilibrary.org/environment/closing-the-loop-in-the-slovak-republic acadd43a-en;jsessionid=6lyHkrvooFOTSFw8JovXMkB-GNexPlw8OHpfDMxc.ip-10-240-5-171

https://www.oecd.org/environment/waste/circular-economy-country-studies.htm

#### **Monitoring and targets**

#### Assessment of circular economy performance

To evaluate progress towards a CE, Slovakia uses indicators set by the European Commission - as mentioned below.

The status of the waste management sector is monitored by several main indicators selected from the Waste management plan of the Slovak Republic for the years 2021 - 2025 (3).

Waste prevention is monitored separately through indicators set out in the Waste Prevention Programme of the Slovak Republic 2019–2025. The Ministry of the Environment of the Slovak Republic, in cooperation with other relevant ministries and organisations, continuously evaluates the targets of the programme. Interim evaluations of the programme's objectives are submitted to the Government of the Slovak Republic.

Material intensity (4) is monitored separately and outside the CE framework.

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

Slovakia uses the indicator set (5) determined by the European Commission in the Circular Economy Monitoring Framework. In 2021, the indicator set was extended by the Consumption Footprint.

#### **Circular economy targets**

The goals associated with the CE are part of Greener Slovakia – Strategy of the Environmental Policy of the Slovak Republic to 2030 (6). Specific measures are set for individual objectives. Ministry of Environment of the Slovak Republic approved implementation plan with specific deadlines and managers of individual objectives will be set.

#### Examples of specific non-waste objectives and measures (objective-measure)

Support for the CE – apply concepts of promoting more environmentally friendly products that may affect consumption and the use of products, such as eco-labelling, which will give manufacturers a competitive advantage.

Slovakia will devote at least 70 % of the total value of public procurement to green public procurement (GPP). Green public procurement is in force from July 2020 for ministries and central government authorities, for selected product groups will be gradually expanded so that by 2030 the 70 % goal will be achieved. Electronic tools will be used to facilitate and monitor GPP.

https://www.enviroportal.sk/indicator/128?langversion=en

<sup>4 &</sup>lt;a href="https://www.enviroportal.sk/indicator/detail?id=1762">https://www.enviroportal.sk/indicator/detail?id=1762</a>

https://www.enviroportal.sk/indicator/321?langversion=sk (in Slovak)

https://www.minzp.sk/files/iep/greener\_slovakiastrategy of the environmental policy of the slovak republic until 2030.pdf

### Innovative approaches and good practice

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

→ Good practice example: financial support programme, education (consultancy and training), innovative business models

The Ministry of Environment of the Slovak Republic, in cooperation with Slovak Environment Agency, contributes to the promotion and support of the green economy, green companies and local authorities and their solutions through the **Green Economy Information Platform** (<sup>7</sup>). Among other things, the portal offers a database of companies and local authorities and their environmental solutions.

**Baterkáreň – the first reuse centre in Slovakia** (8) was established by two young activists as a community space for people from the town Trnava and the surroundings who live or want to live an environmentally conscious and sustainable life. It has been applying the principles of the CE in practice through a reuse centre, which is the first in Slovakia. It regularly organises swaps, lectures and creative workshops and provides instructions on how to live a better life without waste. The centre has its own shop with Slovak products, a packaging-free store with a pharmacy and cosmetics, a rental office, reuse center and a charity secondhand shop.

Olo a. s. company builds a permanent reuse centre (9) The Olo a. s. company regularly organises a bazaar of old and unwanted items that would otherwise become waste. People could get original, unique pieces at very low prices, with their contributions used to support the creation of a permanent reuse centre, which opens in October 2022. In addition to the sale of items, educational events on environmental topics and creative workshops will also be organized in its premises. In the near future, the centre also plans to establish a space for the repair of used items.

→ Good practice example: change in consumption patterns and consumer behaviour

**ERcuper® Water and ERcuper® Air** (<sup>10</sup>) (ENERGIA REAL, s.r.o.) The company has developed equipment for the reuse of thermal energy from buildings' wastewater (ERcuper® Water) and waste air (ERcuper® Air). This system saves the cost of producing hot water and heating.

**Sensoneo** (<sup>11</sup>) (SENSONEO j. s. a.) provides both hardware and software solutions for intelligent waste management. Some examples of company solutions include waste monitoring; route planning; a driver navigation app for the specific needs of waste collection vehicles; collection efficiency analysis solutions; deposit return scheme systems; bin access management; ultrasonic bin sensors; tags and stickers to simplify bin tracking, customer communication, invoicing and restraining unauthorised bin use.

**sobi.eco**® (<sup>12</sup>) /sobi, o. z./ produce products made from recycled textiles and plastics such as bags, fashion accessories, electronics packaging, etc.

#### **Examples of private policy initiatives (sectoral)**

In 2021, the civic association **Aliancia Stará tržnica (Old Market Hall Alliance)** (<sup>13</sup>) bought a composter to reduce municipal waste by up to 80 %. It produces up to 100 kg compostable waste every day in

https://zelene-hospodarstvo.enviroportal.sk/en

https://baterkaren.sk/o-nas/ (in Slovak)

https://www.olo.sk/z-vikendovych-mestskych-bazarov-sa-stava-kolo-bratislavske-centrum-opatovneho-pouzitia-jeho-sucastou-bude-aj-osvetovy-a-kreativny-priestor-so-zameranim-na-environmentalne-temy/(in Slovak)

https://zelene-hospodarstvo.enviroportal.sk/profil/4221 (in Slovak)

https://zelene-hospodarstvo.enviroportal.sk/profil/1741 (in Slovak)

https://zelene-hospodarstvo.enviroportal.sk/detail/2521 (in Slovak)

https://staratrznica.sk/en/alliance-old-market-hall

Bratislava's Old Market Hall, which is used by farmers and traders who sell their products in the markets that take place in the Old Market Hall.

### The way forward

#### Addressing barriers and challenges

- Frequent resistance of companies;
- disagreement with stricter legislation, which causes an increased administrative burden for businesses;
- disagreement with increasing various fees as during the approval process of increasing landfilling fees for industrial waste including CDW (the fee increase has already been approved, although at slightly lower rates than the original proposal);
- the barrier of responsibility, for example steps are expected to be carried out by the
  environmental sector, but this is not possible if no one, such as economy sector or finance
  sector, is responsible.

### Ranking types of barrier

High barrier	Institutional challenge to develop policy for a complex cross-sectoral issue
	Companies' ability to grasp opportunities
•	Consumer behaviour and awareness
	Market barriers for recycled resources
	Good indicators and targets
Low barrier	Barrier of responsibility of all involved sectors

#### **Future policy plans**

The aim of the amendment to the Waste Act, which is effective from 30 June 2022 is, inter alia, to support the recovery and recycling of CDW as well as its prevention through an obligation to ensure so-called selective demolition. This new obligation will prioritise the **recovery of construction waste and ensure its use on the construction site.** 

The proposed decree on CDW specifies, amongst other things, which unwanted construction materials, and CDW must be collected separately; recycling requirements for CDW; specific requirements for the operation of mobile waste processing equipment; specific requirements for non-contaminated soil and other naturally occurring material to be classified as a byproduct; and specific requirements for waste asphalt mixtures to be classified as byproducts.

The Regulation of the Government of the Slovak Republic amending the Regulation of the Government of the Slovak Republic no. 330/2018 Coll. sets the level of **fees for waste disposal** and provides details related to the redistribution of revenue from landfill fees In the years 2022, 2023 and 2024, there will be an significant increase in landfilling fees for industrial waste including CDW.

Implementation of several components of the National Recovery and Resilience Plan (14), in particular:

- Component 2: **Renovation of buildings** several reforms are associated with achieving the goal of increasing the potential of the CE in the construction sector by improving the recycling rate and the prevention of construction waste.
- Component 4: Decarbonisation of industry this reform is needed to ensure the cost-effective reduction of greenhouse gas emissions in industry. Project support for industry will be provided so that the maximum possible contribution to the Slovak and European climate goals can be achieved. This will be focussed on innovative energy- and material -intensive operations that produce greenhouse gas emissions through projects with medium to long-term returns. The aim is to reduce the use of fossil fuels in industry, provided that it is technically and economically efficient.

https://www.mfsr.sk/files/archiv/1/Plan obnovy a odolnosti.pdf

European Topic Centre on
Circular economy and resource use
<a href="https://www.eionet.europa.eu/etcs/etc-ce">https://www.eionet.europa.eu/etcs/etc-ce</a>

The European Topic Centre on Circular economy and resource use (ETC CE) is a consortium of European institutes under contract of the European Environment Agency.

