

Circular economy country profile 2024 – Slovakia



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Introduction

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

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

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

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

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

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

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

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

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

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

¹ [More from less – material resource efficiency in Europe – European Environment Agency \(europa.eu\)](https://europea.europa.eu/en/press-releases/2016/06/16-06-2016)

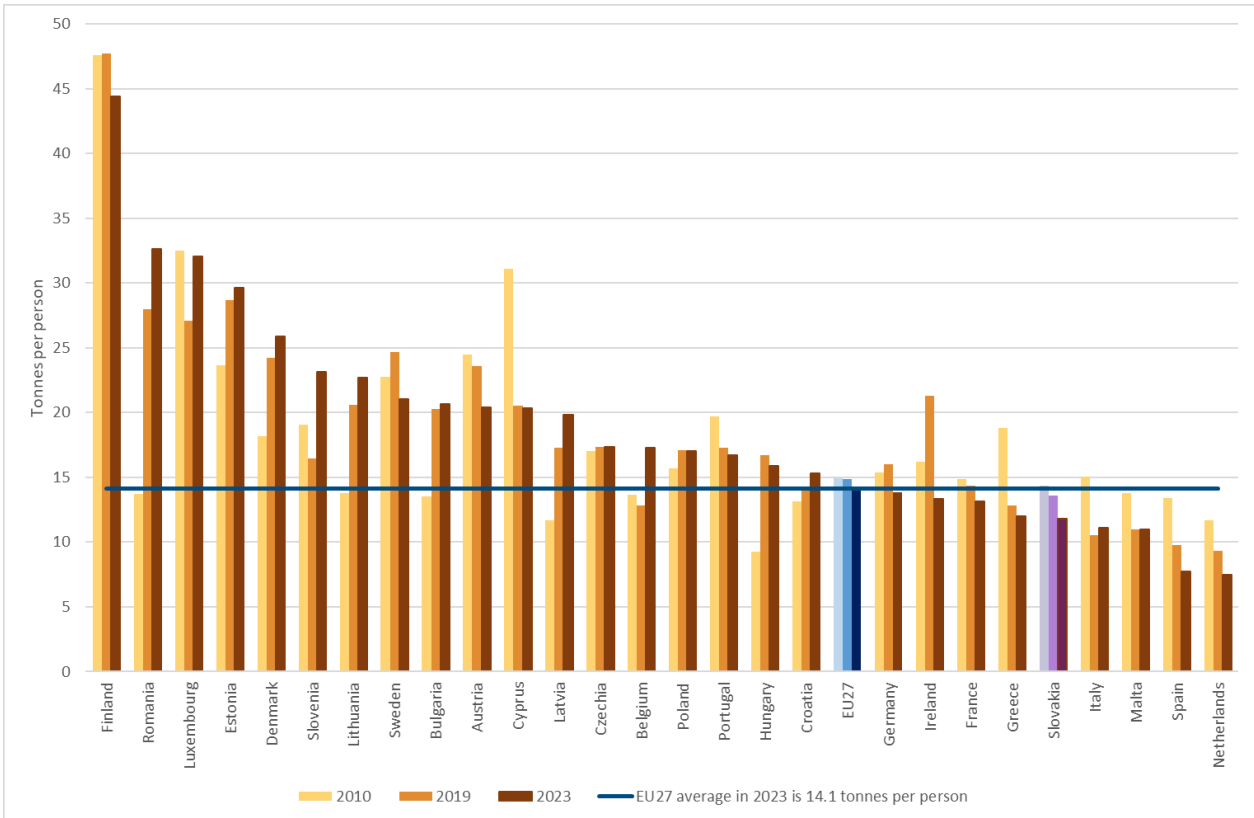
² [Resource efficiency and the circular economy in Europe 2019 – European Environment Agency \(europa.eu\)](https://europea.europa.eu/en/press-releases/2019/06/19-06-2019)

³ [Country profiles on Circular Economy in Europe – Eionet Portal \(europa.eu\)](https://europea.europa.eu/en/press-releases/2022/06/22-06-2022)

⁴ [draft-report-for-dg-env_final.pdf \(europa.eu\)](https://europea.europa.eu/en/press-releases/2022/06/22-06-2022)

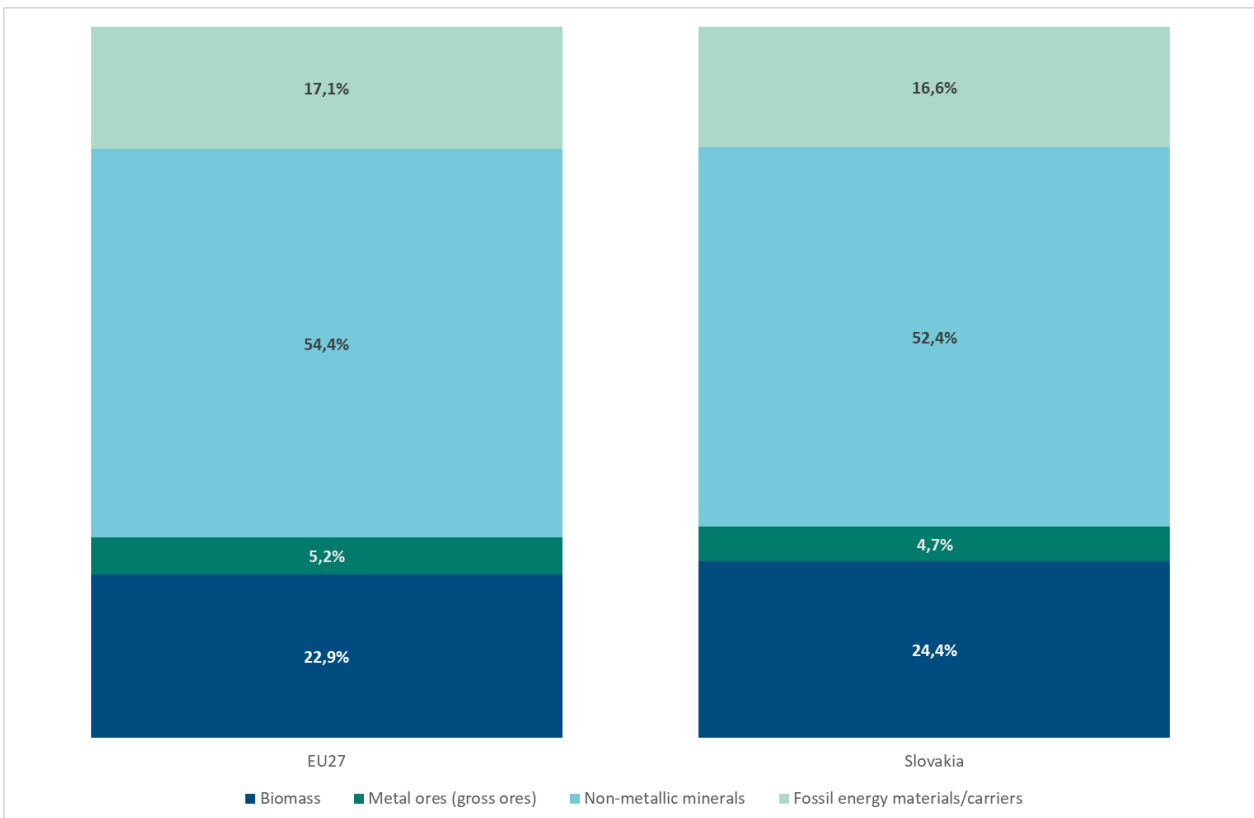
The information is current as of September 2024, when members of Eionet verified the content of this profile.

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



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

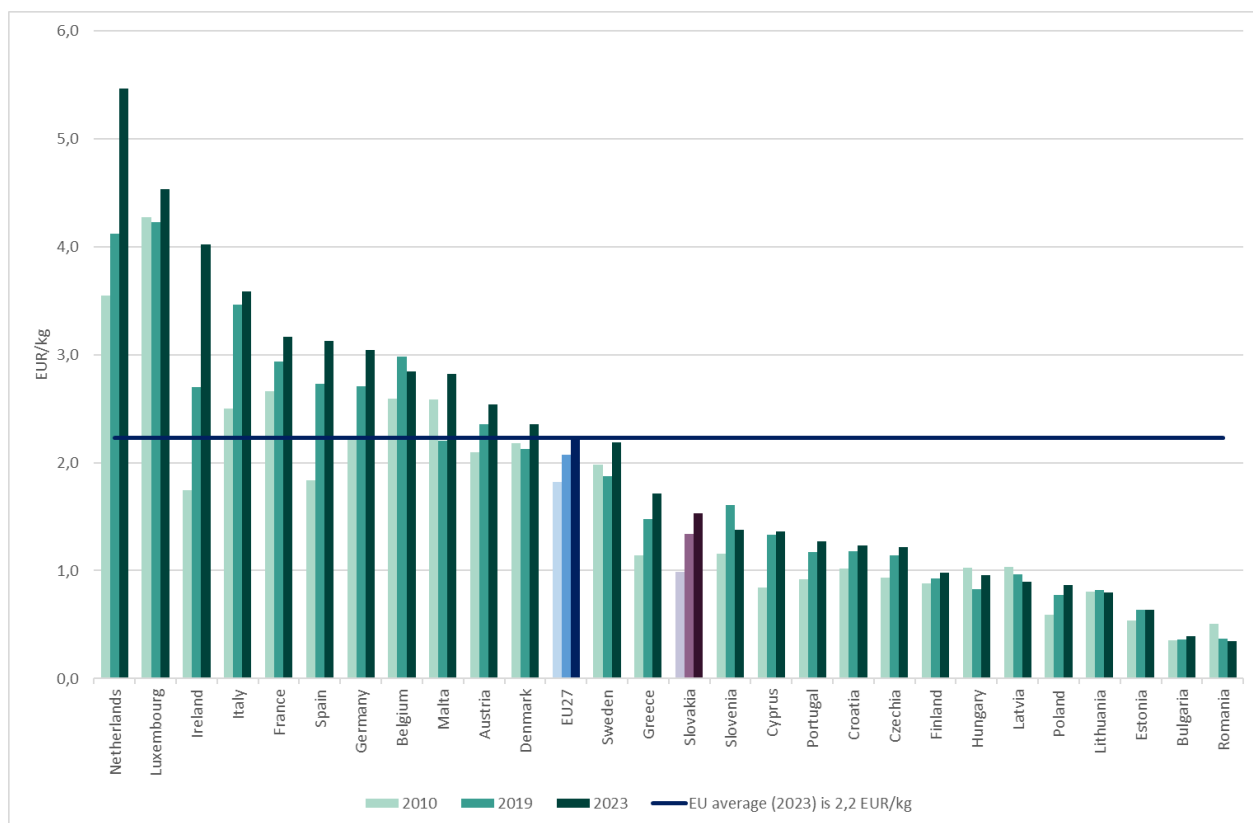
Figure 3 Domestic material consumption by selected material category, EU and Slovakia, 2023, per cent



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

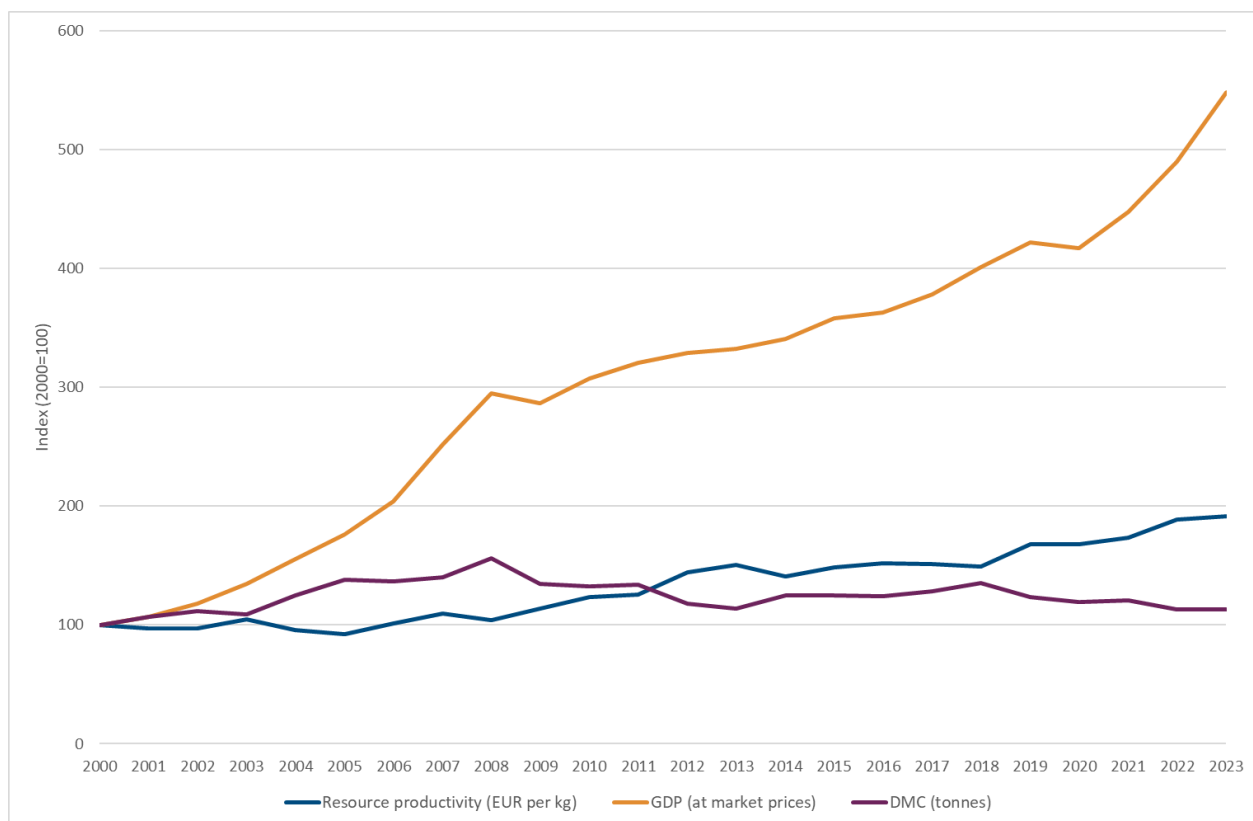
Source: Eurostat (2024) [env_ac_mfa] (accessed 21 August 2024)

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



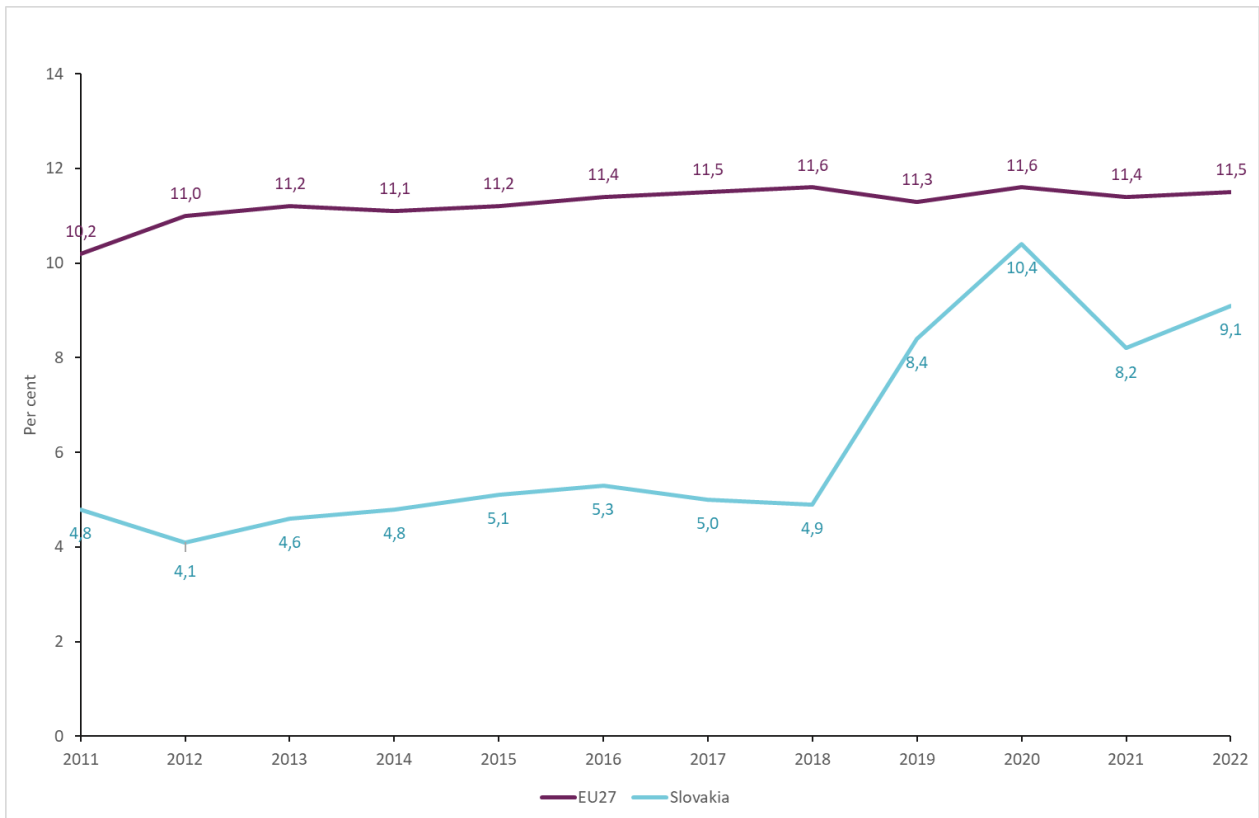
Source: Eurostat (2024) [env_ac_rp] (accessed 21 August 2024)

Figure 5 Gross domestic product, domestic material consumption and resource productivity trends, Slovakia, 2000–2023, index (2000=100)



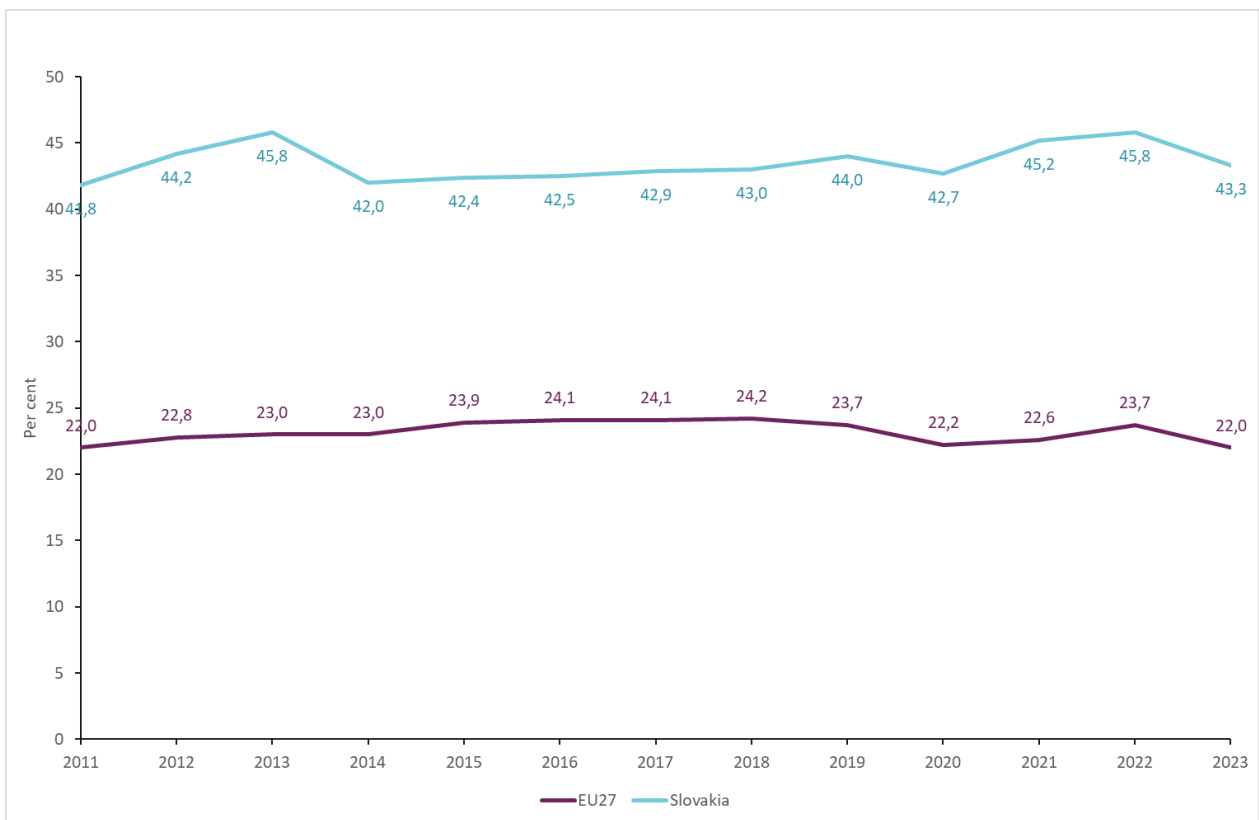
Source: Eurostat (2024) [env_ac_mfa], [env_ac_rp] & [nama_10_gdp] (accessed 21 August 2024)

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



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

Figure 7 Material import dependency in Slovakia, 2011-2023, per cent



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

Existing policy framework

Dedicated national and/or regional and/or local strategy, roadmap or action plan for circular economy

Slovakia has implemented the project **Roadmap for Circular Economy of the Slovak Republic** ⁽⁵⁾ with the support of the Organisation for Economic Co-operation and Development (OECD). The document was published in 2022 and has not been updated since.

- The Roadmap focusses on the three priority areas:
 1. sustainable consumption and production with a focus on economic instruments;
 2. CE potential in the construction sector;
 3. achieving circularity in the food and bio-waste value chain.
- The Roadmap proposes more than 30 concrete recommendations that should be implemented in these three priority areas by 2040. The recommendations are accompanied by proposed implementation plan and a framework for monitoring them. The implementation of these recommendations can help to achieve the circular potential of the Slovak economy as well as climate change mitigation objectives.

In 2021 - 2023, the Law on Climate Change and Low Carbon Transformation ⁽⁶⁾ of the Slovak Republic was prepared. To date, however, the legislative procedure has not been completed and the Act has not yet been approved by the Slovak Government.

As an instrument for making circularity measures mainstream across sectors and actors the Slovak Environment Agency is promoting the various circular solutions through an official website ^(7, 8)

In March 2021, the Capital City of the Slovak Republic, Bratislava, approved the **Strategy for Municipal Waste Management** ⁽⁹⁾ with the aim of transition to a circular economy. The city has set targets and measures in waste management for the period 2021 - 2026. A map of circular economy ⁽¹⁰⁾ is also available on the city's website.

The document sets out three main objectives which the City of Bratislava wants to achieve in the field of municipal waste:

- achieve a sorting rate and recycling/material recovery rate of at least 65 % by 2035,
- achieve a municipal waste landfilling rate of less than 5 % by 2035,
- the rest should be energy recovered by 2035.

Such maps ^(11, 12) are created for several cities in Slovakia.

In addition, three Slovak municipalities joined the project called "The Zero Waste Cities" ⁽¹³⁾. The three municipalities involved were: Košeca, Partizánske and Úľany nad Žitavou.

⁵ <https://www.oecd-ilibrary.org/environment>

⁶ <https://www.minzp.sk/klima/zakon-zmene-klimy/> (in Slovak)

⁷ <https://www.zelenehospodarstvo.sk> (in Slovak)

⁸ <https://www.zelenehospodarstvo.sk/en/solutions/1>

⁹ https://bratislava.blob.core.windows.net/media/Default/Dokumenty/Odpadove_hospodarstvo_2.pdf (in Slovak)

¹⁰ <https://bratislava.sk/en/environment-and-construction/environment/waste/circular-economy>

¹¹ https://www.inciem.sk/osveta/publikacie-sk/cirkularne-mapy/#pll_switcher (in Slovak)

¹² <https://www.inciem.sk/en/projects/municipalities/circular-maps/>

¹³ <https://www.zerowastecities.sk/> (in Slovak)

Example: town of Partizánske – in 2021 pilot project was launched - door-to-door collection of biodegradable kitchen waste in multifamily residential buildings (apartment buildings). The goal was to introduce the most convenient way of sorted collection of kitchen bio-waste for citizens. Residents just put full baskets in front of the door of their flats (if there is an elevator in the apartment building) or on the lowest floor (if there is no elevator in the apartment building). Town employees do the rest of the work.

Result: Very high purity of waste - analyses showed that only 0.07% of the total kitchen waste collected consisted of items that do not belong in biodegradable kitchen waste.

Circular economy policy elements included in other policies

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

Addition to “Diversion waste from landfilling”:

In April 2024, the Government of the Slovak Republic approved an update of the Waste management plan (the section on batteries and accumulators was modified). The reason for the update was to align with the legislation of the European Union. The document titled “*Vlastný materiál*” is available online ⁽¹⁴⁾.

Monitoring and targets

Assessment of circular economy performance

The European Commission has set up a [monitoring framework](#) to keep track of progress towards a circular economy. This framework provides a holistic view as it:

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

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

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

In terms of the observed trends over the last 5 years, the Slovak Republic assesses the progress at the national level as mixed.

¹⁴ <https://rokovania.gov.sk/RVL/Material/29487/1> (in Slovak)

In some indicators the Slovak Republic is achieving significant improvement. For example, the municipal waste recycling rate has increased from 29.8% to 49.5% in the period 2017-2022. The municipal waste landfilling rate fell from 61.4% to 39.4% over the same time period. Circular material use rate has increased from 5% to 9.1% over the same period. The material footprint decreased by over 14% between 2017 and 2022. Resource productivity increased by almost 26%.

In some indicators stagnation can be observed - for example, the number of people employed in circular economy sectors (as % of total employment) has been stagnant for a long time period. The number of municipalities with a PAYT scheme in place for municipal waste is stagnating in the observed period. In 2017, less than 9.7% of municipalities had a PAYT scheme in place and in 2022 it was 10%.

In some indicators even a deteriorating trend can be observed - for example, the amount of municipal waste per capita has risen from 378 to 478 kg, where The Slovak Republic is catching up with the EU average and which is probably related to the rising standard of living (higher incomes of the population reflect in higher consumption and hence an increase in municipal waste generation). Material import dependency has risen from 42.9% to 45.2% between 2017 and 2022 and moreover remains much higher than the EU average. It has decreased between 2022 and 2023, from 45.8% to 43.3%.

In addition to assessing circular economy indicators (according to the revised EU monitoring framework for the circular economy), The Slovak Republic also annually publishes a State of the Environment Report of the Slovak Republic (^{15,16}), which includes a chapter "Towards the circular economy".

Among the country-specific characteristics that may explain the differences between Slovak and average EU performance, the Slovak Republic considers, for example, the different structure of its economy, dependence on imports of raw materials (such as oil, natural gas, and various other minerals), lack of capacity for energy recovery from municipal waste, or lack of capacity for hazardous waste recovery.

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

The Slovak Republic uses only indicators that are part of the revised EU monitoring framework for the circular economy. In the future, the indicator set may be expanded by adding indicators that are part of the EEA's Circularity Metrics Lab. Indicators that include a social aspect are not included.

Data from the indicators for the Slovak Republic are publicly available free of charge (¹⁷). During 2024 these data are planned to be migrated to a new website, including a new design for the presentation of indicators. In addition, Slovak Environment Agency provides the "Envidat" website - a database of environmental indicators. The website is available in Slovak language (¹⁸) and allows the public to access indicators divided into 14 thematic areas (including the category "Circular economy and waste"). It is possible to customise the way the data is displayed, the type of graphs can also be changed and graphs can also be downloaded in different formats.

The Slovak Republic is trying to reach a wider audience by regularly posting highlights from the latest State of the Environment report on social media (for instance Slovak Environment Agency Facebook page).

¹⁵ <https://www.enviroportal.sk/spravy/detail/11841> (in Slovak)

¹⁶ <https://www.enviroportal.sk/spravy/soer>

¹⁷ <https://www.enviroportal.sk/indikatory> (in Slovak)

¹⁸ <https://www.enviroportal.sk/envidat> (in Slovak)

Circular economy targets

The goals associated with the CE are part of Greener Slovakia – Strategy of the Environmental Policy of the Slovak Republic until 2030 ⁽¹⁹⁾. Specific measures are set for individual objectives relevant to CE, which are:

- Support of the Circular Economy
- By 2030, the municipal waste recycling rate, including its preparation for re-use, will be increased to 60%
- Slovakia will use green public procurement at least in 70% of the total value of the public procurement
- Gradual Increase of Fees for Waste Landfill
- By 2035, the municipal waste landfilling rate will be reduced to less than 25%
- Introduce quantitative collection of municipal waste (pay as you throw scheme)

The target for municipal waste (set out in the Waste Act No. 79/2015) is to reduce the amount of municipal waste disposed of by landfill to at least 10% by 2035 and to increase the municipal waste preparation for re-use and recycling of municipal waste to at least 60% by 2030. These targets on recycling and landfilling of municipal waste are legally binding (arising from EU Waste Framework Directive).

No new targets have been adopted since 2022. The Slovak Republic added the "2030 Envirostrategy Indicators" to the indicators that have already been published. Some of the indicators were created for this purpose and some were just expanded to include an assessment in terms of the objectives set out in the document "Greener Slovakia - Strategy of the Environmental Policy of the Slovak Republic until 2030".

Concerning the **circular material use (CMU) rate**, the Slovak Republic only provides an assessment in the State of the Environment Report of the Slovak Republic 2022 in order to reach the non-binding 2030 target set by the EU (to double the circular material use rate by 2030 compared to 2020). The Slovak Republic needs to achieve a significant growth of more than 11.7 percentage points in 8 years, which is hardly achievable given the long-term stagnation.

Innovative approaches and good practices

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

→ *Good practice example: Education and awareness-raising*

The Slovak Environment Agency is the operator and webmaster of the **Green Economy Information Platform** ⁽²⁰⁾, which is a portal providing a free space for businesses, municipalities and non-government organisations to present their green or circular economy solutions. The solutions are divided into seven categories:

1. Climate Change Adaptation
2. Circular Economy and Sustainable Use of Resources
3. Sustainable Transport
4. Energy Efficiency
5. Green Buildings and Housing
6. Sustainable Landscape Management
7. Sustainable Bioeconomy

¹⁹ https://www.minzp.sk/files/iep/greener_slovakia-strategy_of_the_environmental_policy_of_the_slovak_republic_until_2030.pdf

²⁰ <https://www.zelenehospodarstvo.sk/en/homepage>

In 2023, the original visual design of the website was replaced with a new, clearer, and more simplified version, intended to be more attractive to users. The portal's homepage offers visitors an overview of the latest news in the green and circular economy sector (available exclusively in Slovak) and provides a preview of the most recently registered entity and its solution (also available in English).

Concrete examples from the category of municipalities are two solutions of the small Slovak village Korňa (however, it is more of an environmental educational activity than an example of a circular economy). This municipality won the Village of the Year 2023 award, which is granted by the Ministry of the Environment of the Slovak Republic and the Slovak Environment Agency.

The municipality of Korňa implemented two solutions:

1. Municipal apiary

This space is used for demonstrating beekeeping and serves for educational purposes, allowing pupils and students to learn about the life of bees and beekeeping practices. Detailed information and photos of this solution are available on the platform ⁽²¹⁾.

2. Nature trail "Herbal pharmacy"

The nature trail features eleven stops, each with an information board dedicated to a specific medicinal plant. These wooden boards provide a basic description and a photograph of each herb. The trail is popular among students from nearby schools and attracts tourists from the region. Detailed information and photos of this solution are available on the platform ⁽²²⁾.

A number of practical circular solutions are available on the platform, such as building charging stations for electric cars, planting trees in villages, building a municipal composting plant, water retention measures, etc. All solutions can be found online ⁽²³⁾.

Examples of private policy initiatives (sectoral)

The Slovak Republic does not have specific examples for systemic changes that are being implemented in industrial or economic sectors. However, there is a number of examples at the level of individual businesses that could be rolled out across the sector over time. Below two examples are listed.

→ *Good practice example for electronics & ICT*

„**Renovation of premium computer technology**“ ⁽²⁴⁾ by a private company ⁽²⁵⁾, which has been active on the Slovak market since 2003. The company was established in the city of Banská Bystrica as a store focused on sale and servicing of refurbished IT. The company offers refurbished IT and provides a wide range of refurbished IT – branded PCs, notebooks, LCD monitors, printers, and toners.

→ *Good practice example for packaging*

"**Repetito**" is a packaging solution using a reusable e-commerce package that brings an eco-friendly approach to the world of online shopping and shipping. When purchasing goods online, the customer chooses the Repetito package delivery option. After receiving the goods, the customer just returns the Repetito package folded in the enclosed bag to any Slovak Post box or Slovak Post branch. It has a fully

²¹ <https://www.zelenehospodarstvo.sk/en/OthGeSolution/942>

²² <https://www.zelenehospodarstvo.sk/en/OthGeSolution/943>

²³ <https://www.zelenehospodarstvo.sk/en/solutions/1>

²⁴ <https://www.zelenehospodarstvo.sk/en/OthGeSolution/425>

²⁵ MB TECH, s.r.o.

prepaid postage, so all the customer has to do is to send it back. Detailed information and photos of this solution are available on the platform ⁽²⁶⁾.

The way forward

Addressing barriers and challenges

At the national level or at the level of the institutions, the Slovak Republic probably lack the concrete implementation plan with circular activities following the roadmap for the circular economy. There is also a lack of more cooperation at the interdepartmental level, as well as linking activities with industry – creating a space for discussion and cooperation opportunities. Information campaigns to promote the idea of a circular economy, along with examples of good practice, are also important.

At the level of the business sector, the lack of availability of hazardous waste recovery facilities has been highlighted for a longer period of time, which causes problems for industry and may discourage foreign companies from investing in Slovakia in the future (due to the inability to meet corporate environmental targets).

Future policy plans

There are 6 key components of the Slovak Recovery and Resilience Plan ^(27,28) in the area of the green economy:

- Renewable Energy Sources and Energy Infrastructure
- Building Renovation
- Sustainable Transport
- Decarbonisation of Industry
- Climate Change Adaptation
- REPowerEU

Under the “**Building renovation**” component there are ongoing calls ⁽²⁹⁾ that are open to interested individuals who want to renovate an older family house. The target is to renovate 30 000 family houses by 2026.

Each of the components include several reforms and investments as listed below:

Renewable Energy Sources and Energy

Reforms:

- Adaptation of the legal framework in the electricity sector
- Legal framework for the support of renewable energy sources

Investments:

- Installation of new sources of electricity from renewable energy sources
- Upgrading existing sources of electricity from renewable energy sources ("repowering")
- Increasing the flexibility of power systems for greater integration of renewable energy sources

²⁶ <https://www.zelenehospodarstvo.sk/en/OthGeSolution/391>

²⁷ [Domov | Plán obnovy](#) (in Slovak)

²⁸ https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility/country-pages/slovakias-recovery-and-resilience-plan_en

²⁹ <https://obnovdom.sk/> (in Slovak)

Building Renovation

Reforms:

- Alignment of support mechanisms for the renovation of family houses
- Increasing transparency and streamlining of decisions of the Monuments Office of the Slovak Republic
- Management of construction and demolition waste

Investments:

- Improving the energy performance of family houses
- Renovation of public historic and heritage buildings

Sustainable Transport

Reforms:

- Reforming the preparation of investment projects in transport
- Reform of public passenger transport
- Reform of intermodal freight transport
- Introducing new policies for the long-term promotion of alternative propulsion in the transport sector

Investments:

- Developing low-carbon transport infrastructure
- Promoting clean passenger transport
- Development of intermodal freight transport
- Support for building infrastructure for alternative propulsion

Decarbonisation of Industry

Reforms:

- Closure of coal-power generation at Nováky power plant and transformation of the Upper Nitra region
- Adoption of a competitive scheme to reduce greenhouse gas emissions in industry

Main investment:

- Functioning of the industrial decarbonisation scheme

Complementary investment:

- Support for the functioning of the Slovak Environmental Inspectorate processes related to decarbonisation

REPowerEU

The REPowerEU component of the Slovak Recovery and Resilience Plan aims to reduce overall dependence on fossil fuel imports from Russia and increase energy security.

New reform examples:

- Supporting sustainable energy
- Supporting the green transformation in renewable energy
- Establishment of a database and data exchange system on the energy performance of buildings
- Management of government buildings
- Skills for a green transformation

New investment examples:

- Modernisation and digitisation of the transmission system and regional distribution systems
- Improving the energy performance and efficiency of state buildings
- Restoration of public historic and heritage buildings
- Support for the reconstruction of households at risk of energy poverty
- Developing low-carbon transport infrastructure
- Supporting clean passenger transport
- Providing school equipment and training

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