

Circular economy country profile – Czechia



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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:

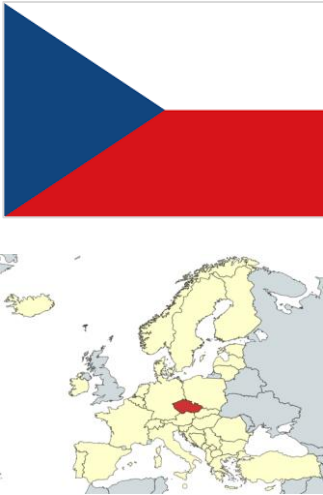
- ➔ circular economy policies being implemented at a national level with a particular focus on elements that go beyond EU mandatory elements; and
- ➔ best practice with a focus on policy innovation.

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

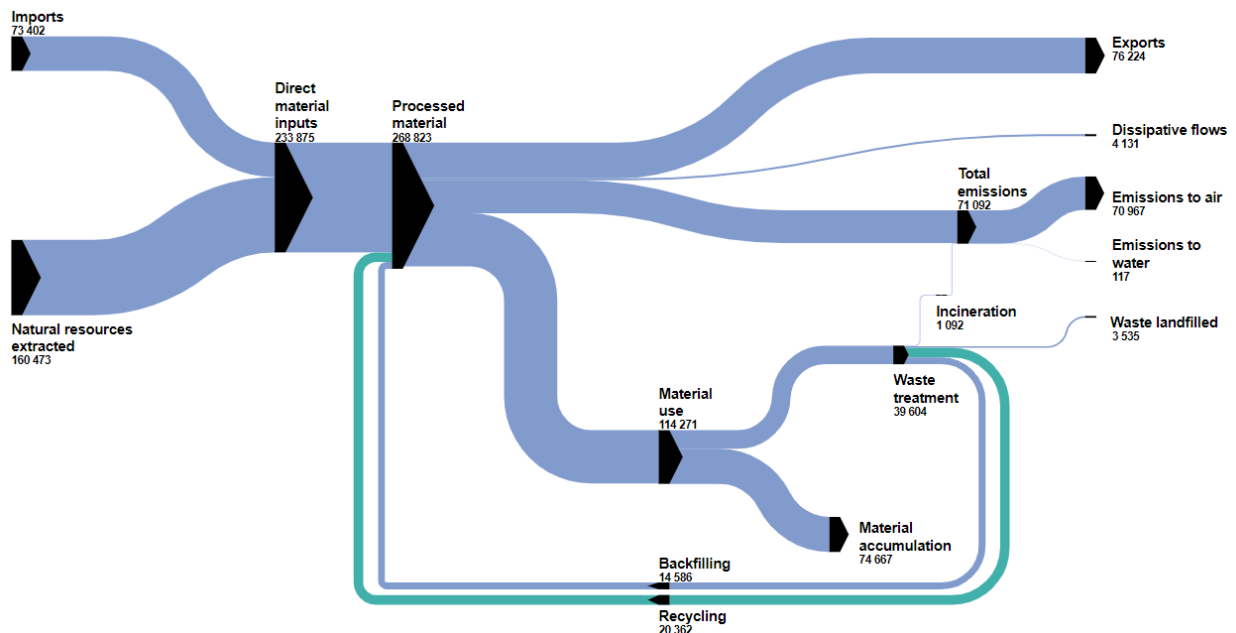
Czechia – facts and figures

	<p>GDP: EUR 215.2 billion (1.6 % of EU27 total in 2020)</p>
	<p>GDP per person: EUR 20 120 (purchasing power standard) (92.8 % of EU27 average per person figure in 2020)</p>
	<p>Use of materials (domestic material consumption (DMC)) 157.7 million tonnes DMC (2.6 % of EU27 total in 2020) 14.7 tonnes DMC per person (109.5 % of EU27 average per person in 2020)</p>
	<p>Structure of the economy: Agriculture: 2.1 % Industry: 33.8 % Services: 64.1 %</p>
	<p>Employment in circular sectors: Data not available</p>
	<p>Surface area: 78 868 square kilometres (1.8 % of EU27 total)</p>
	<p>Population: 10 693 939 (2.4 % of EU27 total in 2020)</p>

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

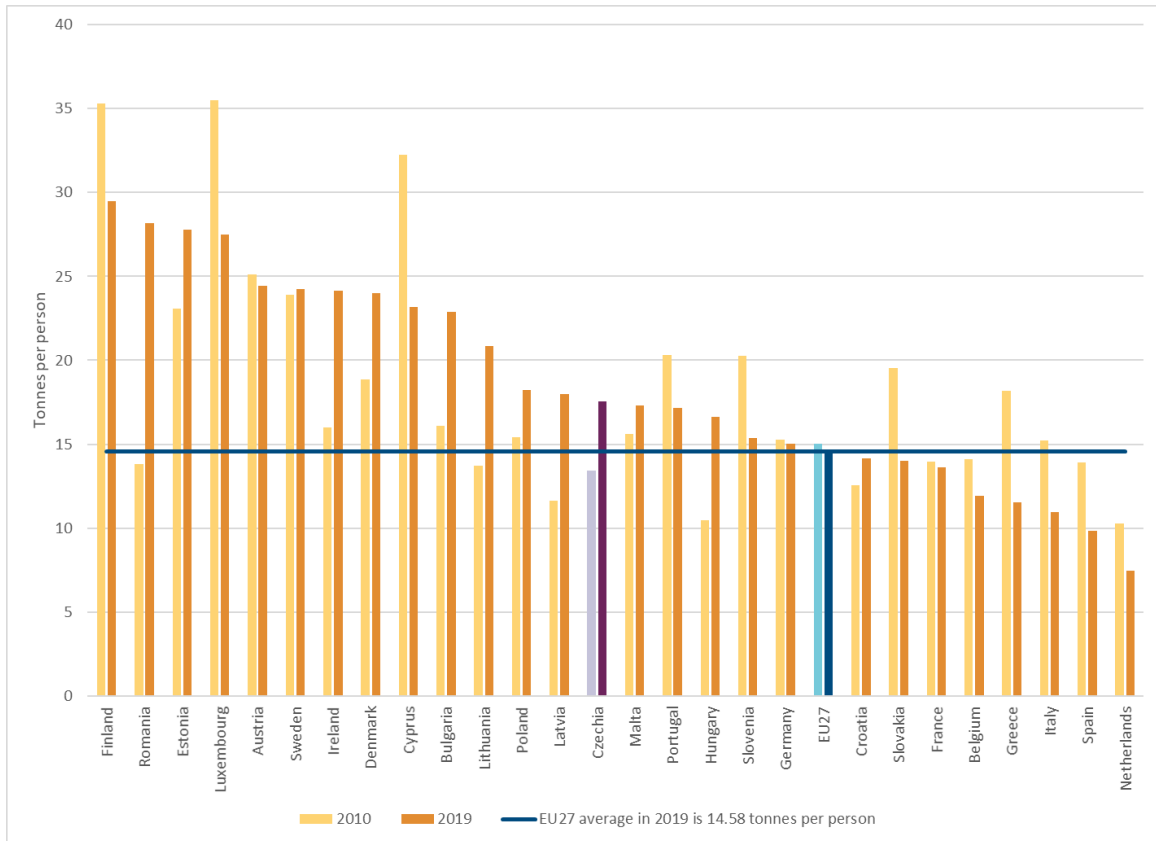
Source: Eurostat datasets, EU27 2020 (accessed 20 June 2022)

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



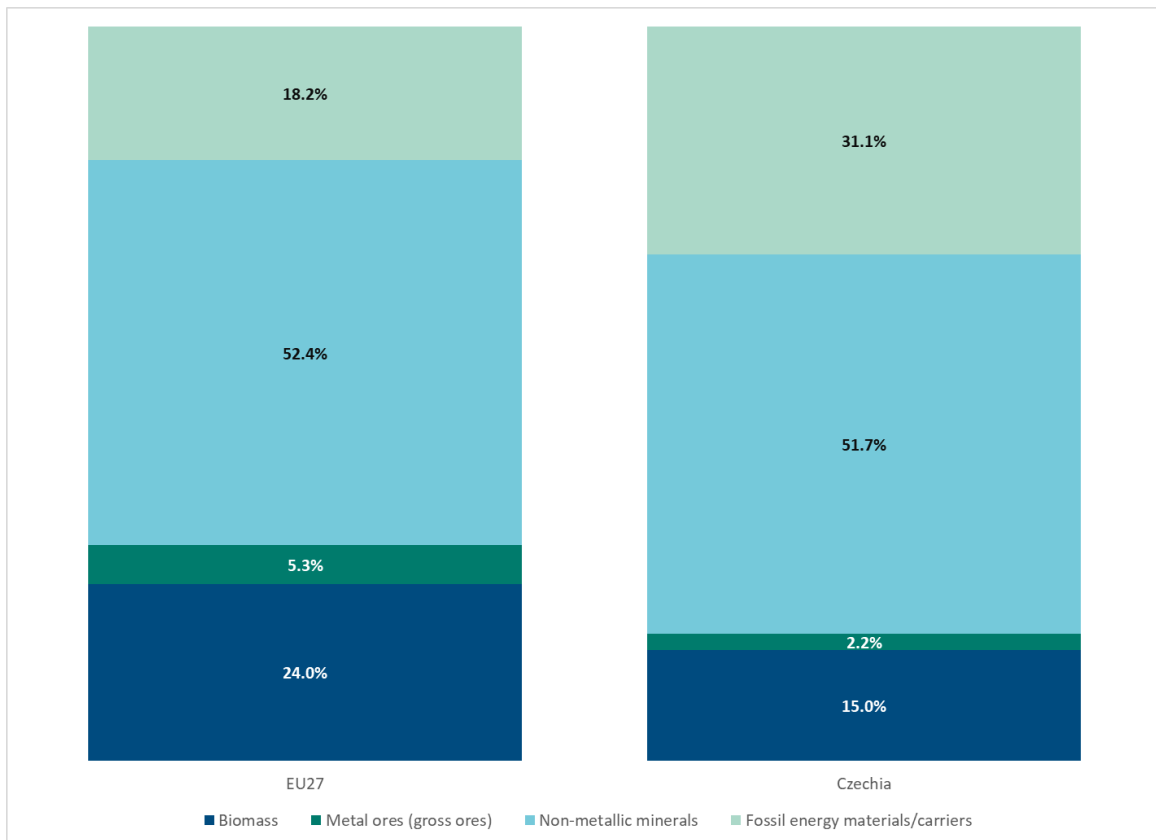
Source: Eurostat (2022) [env_ac_mfa], [en_ac_sd], [env_wassd] (accessed 20 June 2022)

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



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

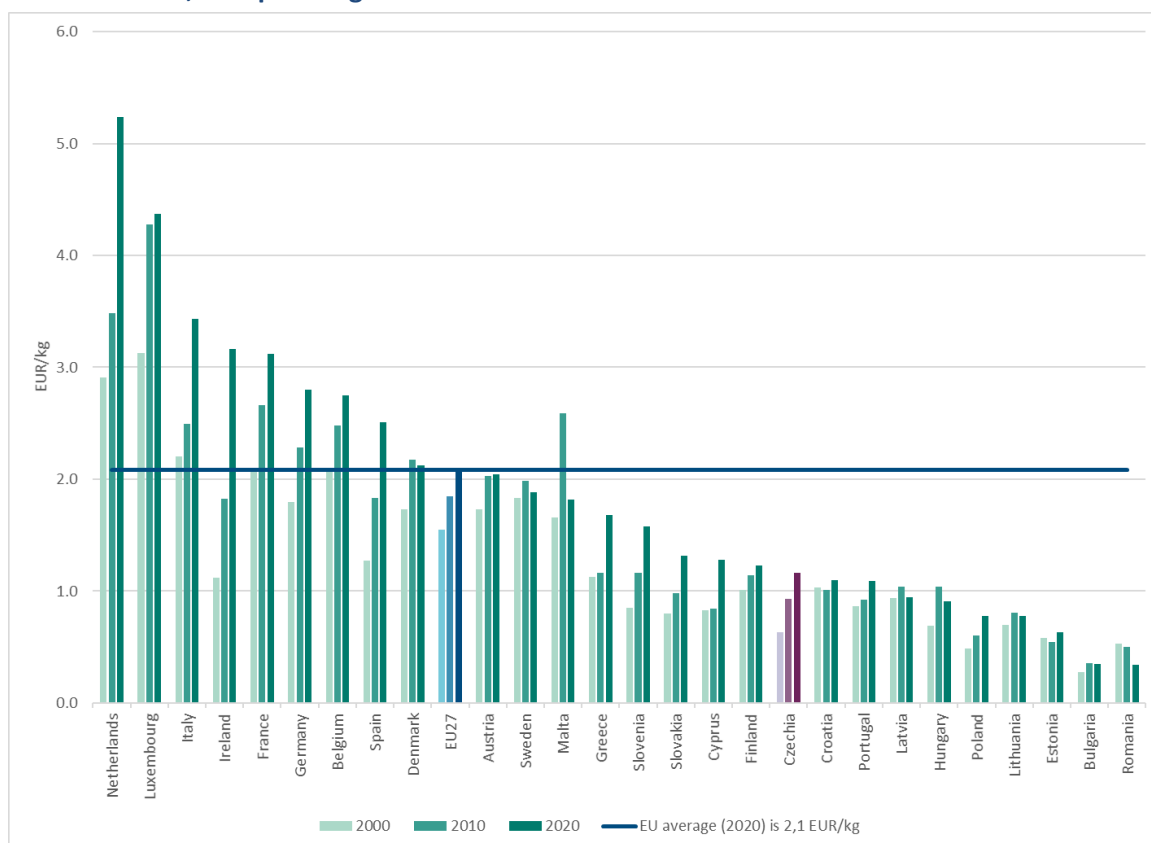
Figure 3 Domestic material consumption by selected material category, EU27 and Czechia, 2020, per cent



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

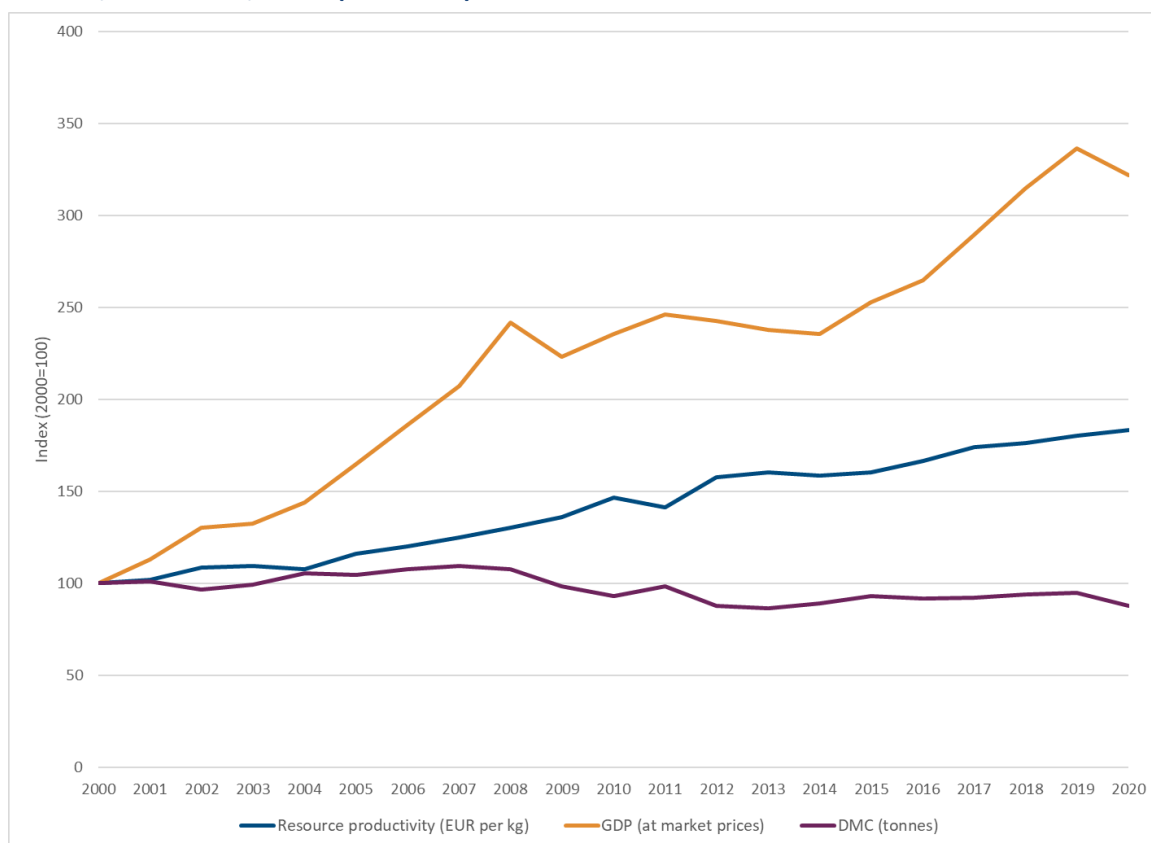
Source: Eurostat (2022) [env_ac_mfa] (accessed 20 June 2022)

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



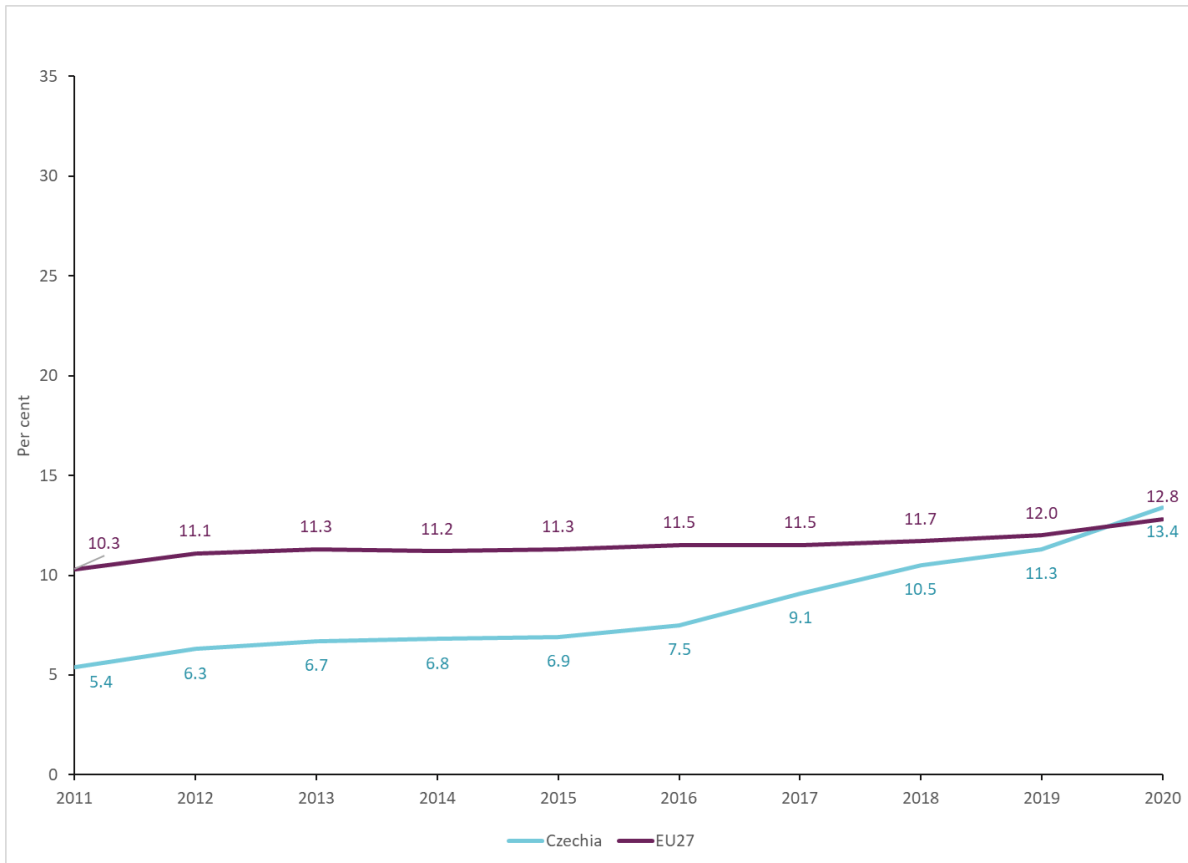
Source: Eurostat (2022) [env_ac_rp] (accessed 20 June 2022)

Figure 5 Gross domestic product, domestic material consumption and resource productivity trends, Czechia, 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 Czechia, 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

The Czech Republic adopted a dedicated national circular economy (CE) strategy called the **Strategic Framework of the circular economy of the Czech Republic 2040** ⁽¹⁾ (or Circular Czechia 2040) in December 2021.

It sets out a vision: *“In 2040, the circular economy brings significant environmental, economic, and social benefits to the Czech Republic. As part of the measures taken, the Czech Republic systematically supports the circular economy as a model for improving environmental protection, strengthening competitiveness and technological sophistication, creating new jobs, increasing raw material security, and acquiring new competencies of the citizens,”* with a main goal of **“Less waste and more value for the Czech Republic”** and 10 strategic goals:

1. improving the state of the environment;
2. reduction of waste production and better waste management;
3. strengthening competitiveness;
4. creating of new jobs;
5. increasing raw material security, increasing the efficiency of natural resources management and increasing the share of renewable resources;
6. improving technological sophistication and innovation;
7. support for innovative forms of consumption;
8. the acquisition of new competencies, knowledge and skills;
9. creating a non-toxic environment and protecting the health of the population;
10. expanding the CE at regional and municipal level.

Moreover, Circular Czechia 2040 defines 10 priority areas for a CE in the Czech Republic, formulates individual goals within these priorities and determines measures for achieving them. The priority areas are:

- products and design;
- industry, raw materials, construction, energy;
- bioeconomics and food;
- consumption and consumers;
- waste management;
- water;
- research, development and innovation;
- education and knowledge;
- economic instruments;
- circular cities and infrastructure

As the Strategic Framework was adopted in December 2021, no initiatives have yet been implemented. Implementation will be carried out through three Action Plans, each for a six-year period.

The first Action Plan, for the period 2022–2027, is currently in preparation and will be released by the end of October 2022.

¹ [https://www.mzp.cz/C1257458002F0DC7/cz/cirkularni_cesko/\\$FILE/OODP-Cirkularni_Cesko_2040_web-20220201.pdf](https://www.mzp.cz/C1257458002F0DC7/cz/cirkularni_cesko/$FILE/OODP-Cirkularni_Cesko_2040_web-20220201.pdf) (in Czech)

Circular economy policy elements included in other policies

Circular economy policy element	Included in policy
The material intensity of economy is decreasing	The State Environmental Policy of the Czech republic 2030 with outlook to 2050
The waste management hierarchy is fully observed and respected.	The State Environmental Policy of the Czech republic 2030 with outlook to 2050
Sustainable development of society and the transition to a circular economy.	Waste Management Plan of the Czech Republic for the period 2015-2024
The maximum utilization of waste as a substitute for primary resources.	Waste Management Plan of the Czech Republic for the period 2015-2024
Supporting innovation and development of the CE within business.	The update of the Secondary Raw Materials Policy of the Czech Republic for the period 2019–2022 (in Czech)
The share of the CE is increasing in the total volume of material flows.	Strategic Framework Czech Republic 2030
Circular economy offering farmers and businesses in rural areas opportunities to diversify their business, mitigate risks and ensure sufficient incomes.	Bioeconomy concept in the Czech Republic from the perspective of the Ministry of Agriculture (2019-2024) (in Czech)
Sustainable rural value chains in sectors such as biotechnology, bioenergy and the CE.	Bioeconomy concept in the Czech Republic from the perspective of the Ministry of Agriculture (2019-2024) (in Czech)

Monitoring and targets

Assessment of circular economy performance

The state of the environment is regularly monitored in assessments and statistical reports, particularly the State of the Environment Reports ⁽²⁾ and the Statistical Environmental Yearbooks ^(3,4), both prepared by the Czech Environmental Information Agency.

Both these reports provide information on the state of the environment in recent years and are publicly available. The documents summarise current knowledge on the state and trends of individual environmental components, environmental impacts of economic sectors, environmental policy instruments, the impacts of the current state of the environment on human health and ecosystems, and the state of the environment in an international context, but do not cover all the indicators contained in the EU Circular Economy Monitoring Framework.

The Czech Republic shows **higher recycling rates** for almost all specific waste streams than the EU average, with the **exception of biowaste**. The high recycling rates of packaging waste streams and e-waste are due to the fact that Czech Republic has well established collection networks and a high density of collection points for these types of waste. On the other hand, the low rate of biowaste recycling is caused by the fact that the obligation to collect municipal biowaste was only set in the Czech legislation in 2015.

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

The Strategic Framework of the Circular Economy of the Czech Republic 2040 ⁽⁵⁾ proposes a set of basic indicators for monitoring the CE (in Chapter 10.7 of the Strategic Framework).

The results of monitoring will be published every three years in the report on the Strategic Framework. Additional indicators for monitoring the CE will be developed in the upcoming Action Plan for the period 2022–2027.

Circular economy targets

The Czech Republic currently does not have specific measurable targets for the CE. Goals and objectives set in the newly published Circular Czechia 2040 strategic framework are qualitative. Specific measurable objectives with deadlines will be set in the upcoming Action Plan for period 2022–2027, which is in preparation.

Regarding the circular material use (CMU) rate, no objective has been set in Czech policies. The update of the Secondary Raw Materials Policy of the Czech Republic for the period 2019–2022 states, however, that to increase circular material use in the coming years, measures that directly affect the recycling rate and the production and consumption of secondary raw materials need to be highlighted.

² <https://www.cenia.cz/wp-content/uploads/2022/03/Zprava2020.pdf> (in Czech)

³ https://www.cenia.cz/wp-content/uploads/2022/01/Statisticka_Rocenska_ZP_CR-2020.pdf (in Czech)

⁴ https://www.cenia.cz/wp-content/uploads/2021/05/Report_Env_CZE_2019.pdf

⁵ [https://www.mzp.cz/C1257458002F0DC7/cz/cirkularni_cesko/\\$FILE/OODP-Cirkularni_Cesko_2040_web-20220201.pdf](https://www.mzp.cz/C1257458002F0DC7/cz/cirkularni_cesko/$FILE/OODP-Cirkularni_Cesko_2040_web-20220201.pdf) (in Czech)

Innovative approaches and good practice

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

→ *Good practice example: taxation and economic instruments*

Reduction of value added tax (VAT) on the repair of bicycles, shoes, clothing and textile products – from 1 May 2020, by the amendment of the Act No. 235/2004 Coll., on Value Added Tax, VAT on a range of goods and services, including the repair of bicycles, shoes, clothing and textile products, was reduced from 21 % to 10 %. This is a measure on a national level that should contribute to waste prevention.

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

The Enough plastic initiative (*Dost bylo plastu*) – In 2018 Ministry of the Environment (MoE) launched an initiative to tackle the overuse of single-use plastics, such as disposable utensils. The aim of the initiative was to encourage voluntary agreements with restaurants in shopping centres, cafés and fast-food outlets to ensure that customers have the opportunity to give up using plastic utensils, and not pay extra for the alternatives.

Through this, the MoE hopes to motivate firms to conclude a voluntary agreement and to take individual steps to reduce the use of disposable plates. The aim is to end plastic straws being offered to customers and to increase the use of porcelain plates in exchange for a deposit.

From 2019, companies, institutions and individuals can participate by making voluntary commitments on the website ⁽⁶⁾.

→ *Good practice example: spatial planning and urban policy, change in consumption patterns and consumer behaviour, and education (awareness-raising and training)*

Let's recycle buildings! (*Recyklujme stavby!*) ⁽⁷⁾ – an online catalogue of products and materials containing secondary raw materials that is financed and operated by the Ministry of Industry and Trade. It is aimed at helping municipalities, cities and other public sector bodies when awarding public contracts. It is also intended to be a useful tool for the professionals, especially designers and business entities engaged in construction activities and their contractors. The catalogue has two basic sections – overviews of secondary raw materials and recycled products. Legislative requirements and related regulations, standards and test procedures for using recycled products are also available to supplement this.

The Rethink Architecture initiative ⁽⁸⁾ – this initiative focusses on education and awareness raising activities in architecture. Specific topics addressed include materials, water, circularity and green roofs.

Examples of private policy initiatives (sectoral)

Memorandum on circular procurement ⁽⁹⁾ – an initiative founded in September 2020 brings together key actors from both the private and public sector who committed to collaborating on the implementation of CE aspects in tendering procedures through the implementation of pilot circular tenders and sharing the experience they gain.

⁶ www.cr2030.cz (in Czech)

⁷ <http://www.recyklujmestavby.cz/> (in Czech)

⁸ <https://www.rethinkarchitecture.cz/> (in Czech)

⁹ <https://incien.org/memorandum/> (in Czech)

The way forward


Addressing barriers and challenges

Main barriers and challenges to the implementation of a CE in the Czech Republic are:

- lack of capacity for recycling municipal waste;
- lack of public awareness of the environmental issues - citizens do not have enough information about the state of the environment and information about the possibilities of how they can contribute to improving the situation; as a result they are not motivated to engage in more environmentally-friendly behaviour;
- primary materials are often cheaper than secondary materials, although this has been changing in the light of recent crises (Covid and Ukraine).
- to some extent, insufficient cooperation among responsible authorities.

There are currently enough policies and strategies addressing the main barriers and challenges mentioned above, but they are often not fully implemented or properly followed yet.

Ranking types of barrier

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

Future policy plans

The Czech Republic has not included any CE-related activities in its National Recovery Plan that have not already been defined in the Circular Czechia 2040 strategic framework or other Czech national strategies that contain objectives related to the CE.

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