

Circular economy country profile 2024 – Romania



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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 Romania, national contributions were coordinated by Mihaela Ștefănescu, of the International Relations and European Affairs General Directorate of the Romanian Ministry of Environment, Waters and Forests. 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/more-from-less)

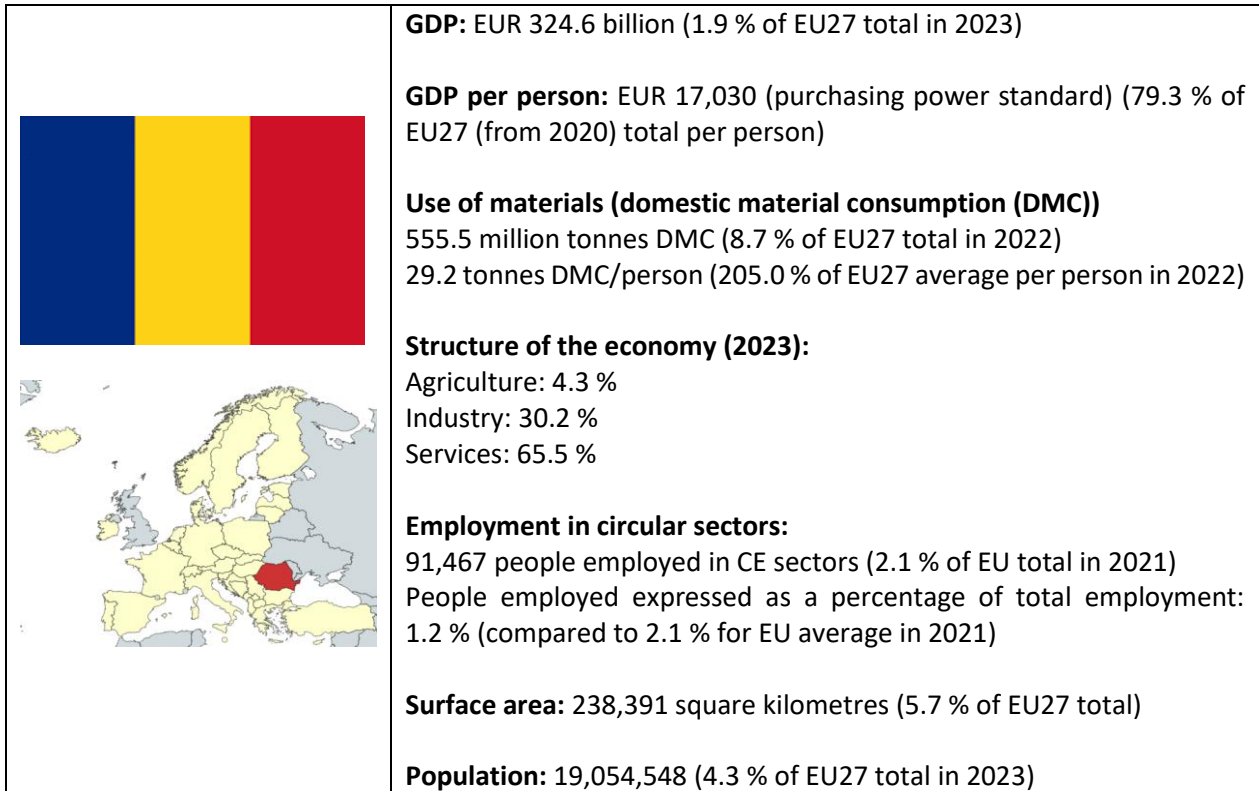
² [Resource efficiency and the circular economy in Europe 2019 — European Environment Agency \(europa.eu\)](https://europea.europa.eu/en/resource-efficiency-and-the-circular-economy-in-europe-2019)

³ [Country profiles on Circular Economy in Europe — Eionet Portal \(europa.eu\)](https://europea.europa.eu/en/country-profiles-on-circular-economy-in-europe)

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

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

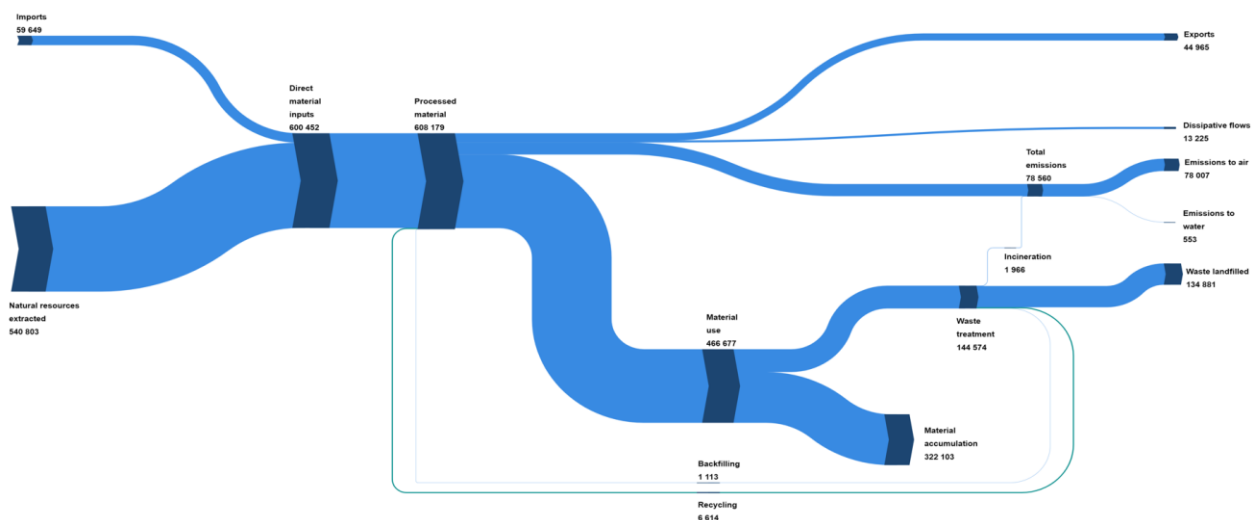
Romania– facts and figures



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

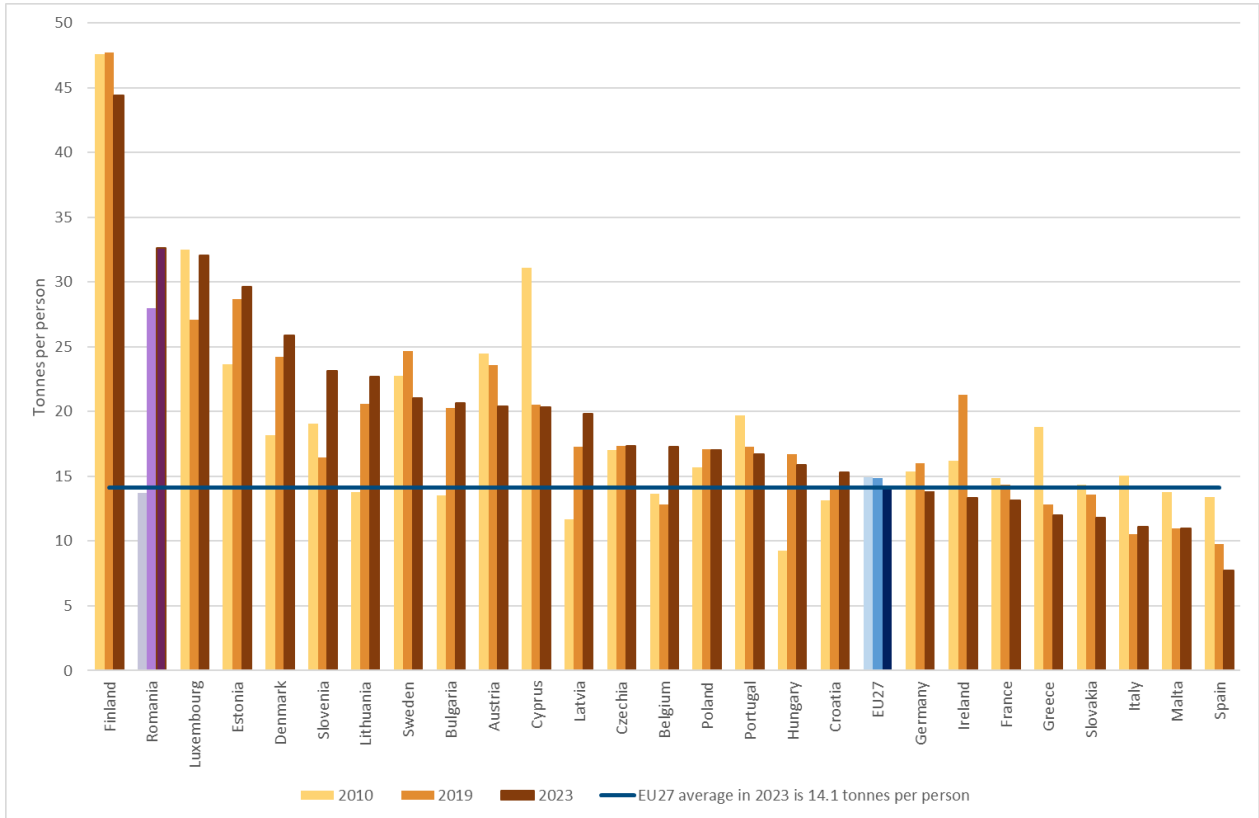
Source: Eurostat datasets, EU27 2021 EU27 2022 and EU27 2023 (accessed 21 August 2024)

Figure 1 Material flow diagram for Romania in 2022, thousand tonnes



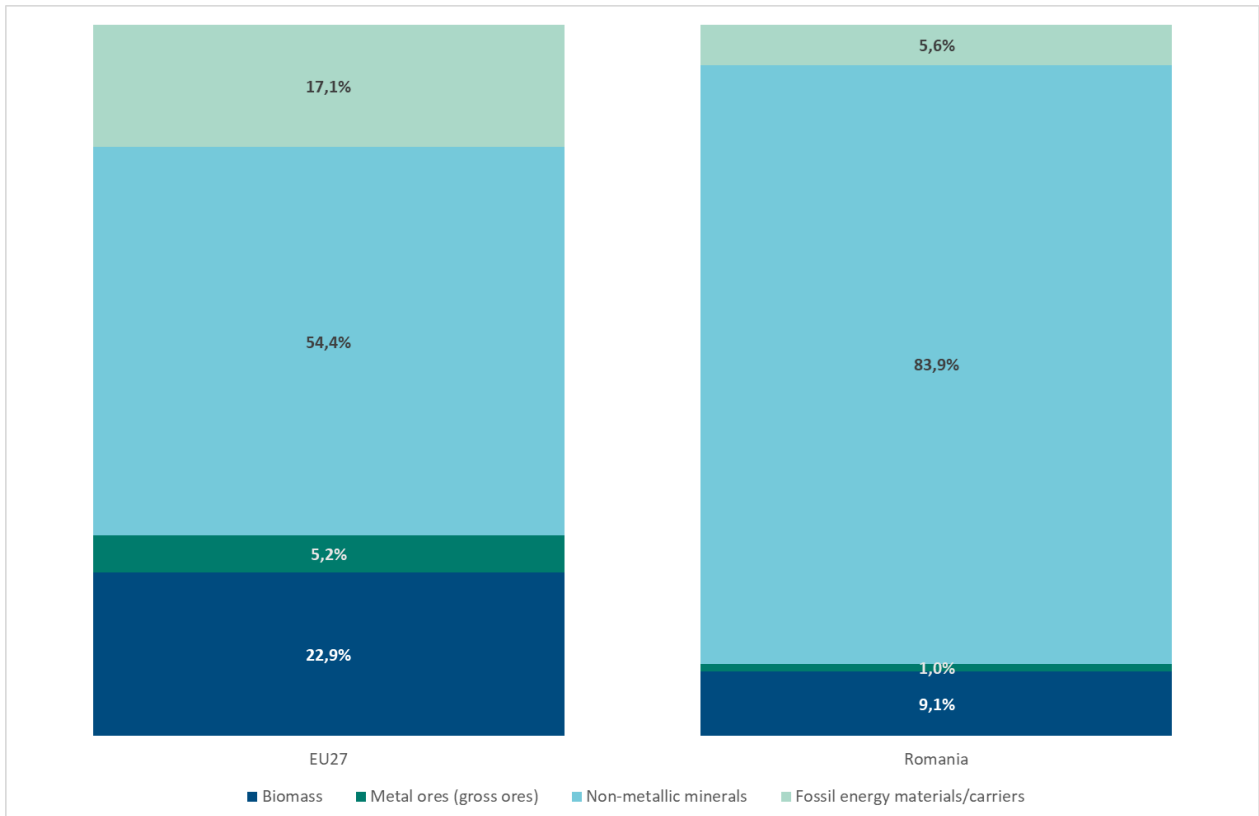
Source: Eurostat (2024) [env_ac_mfa], [en_ac_sd], [env_wassd] (accessed 21 August 2024)

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



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

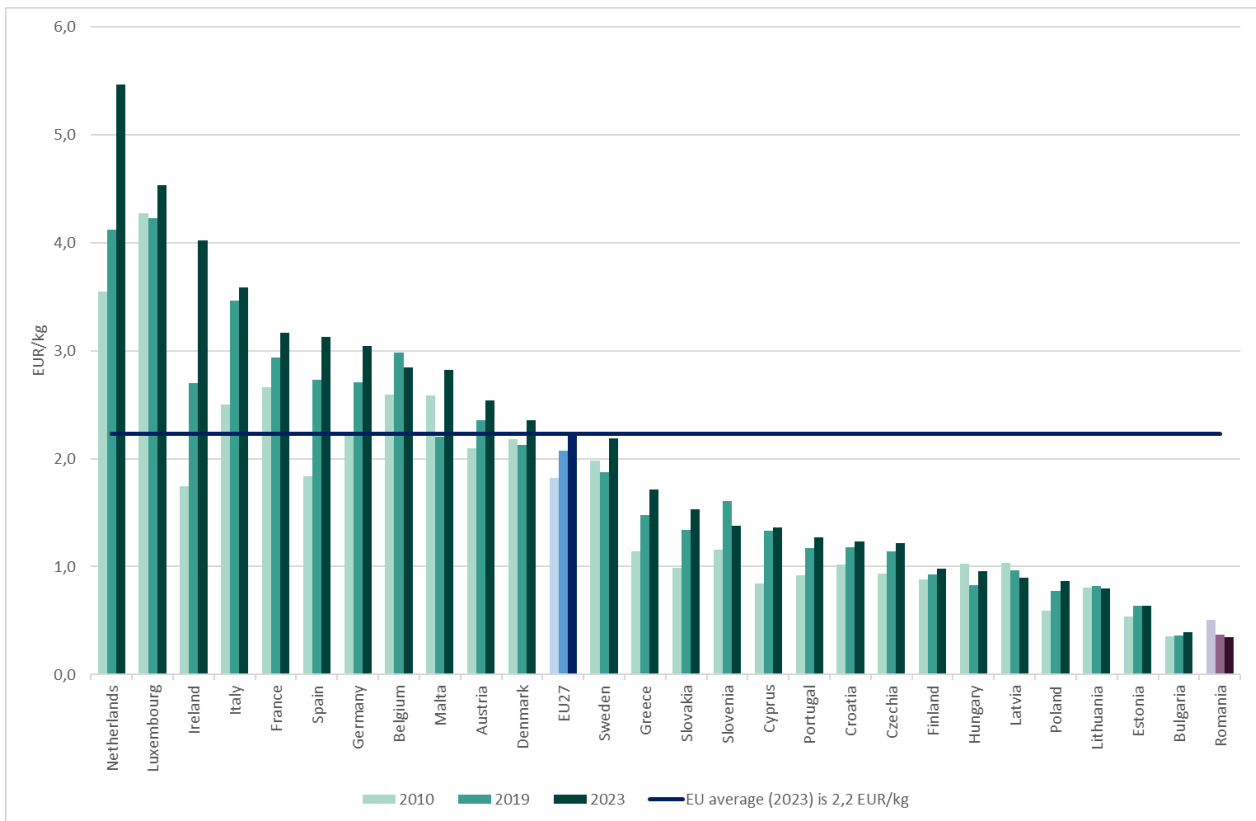
Figure 3 Domestic material consumption by selected material category, EU and Romania, 2023, per cent



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

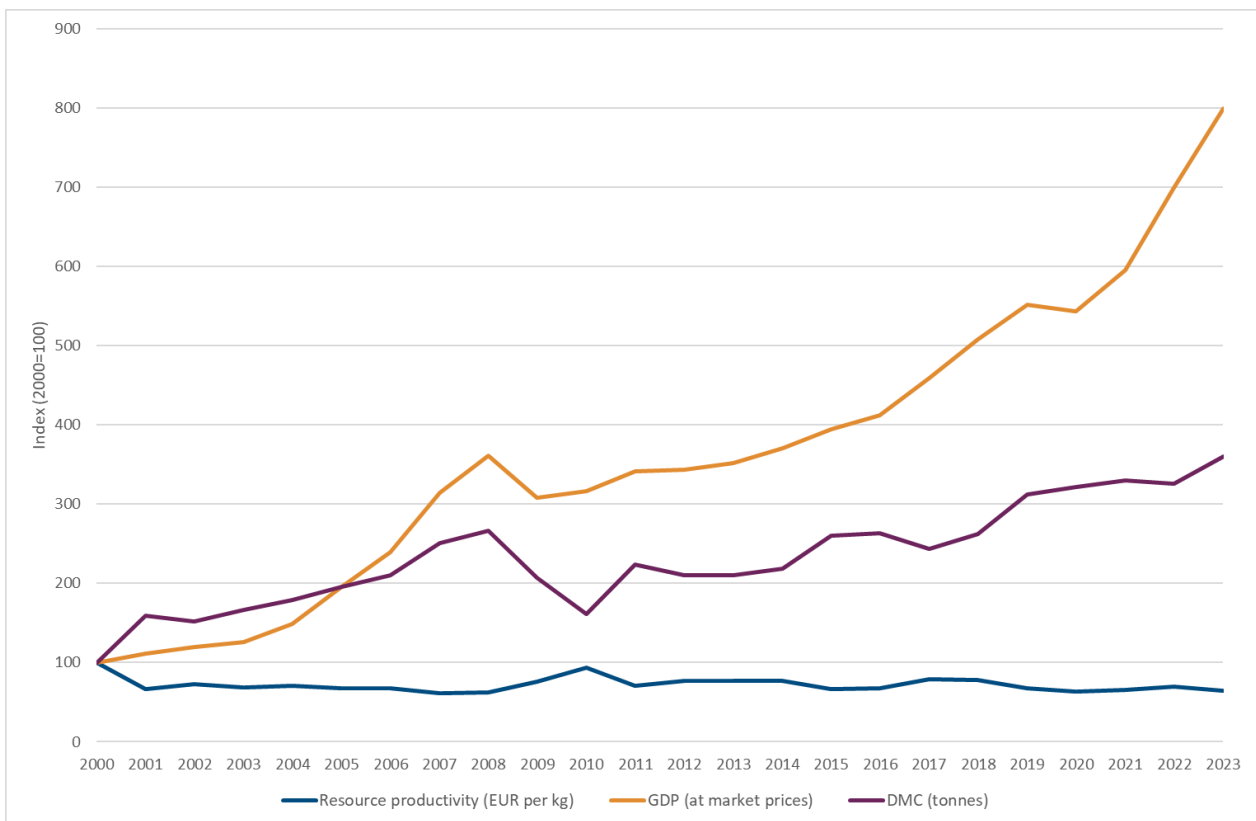
Source: Eurostat (2024) [env_ac_mfa] (accessed 21 August 2024)

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



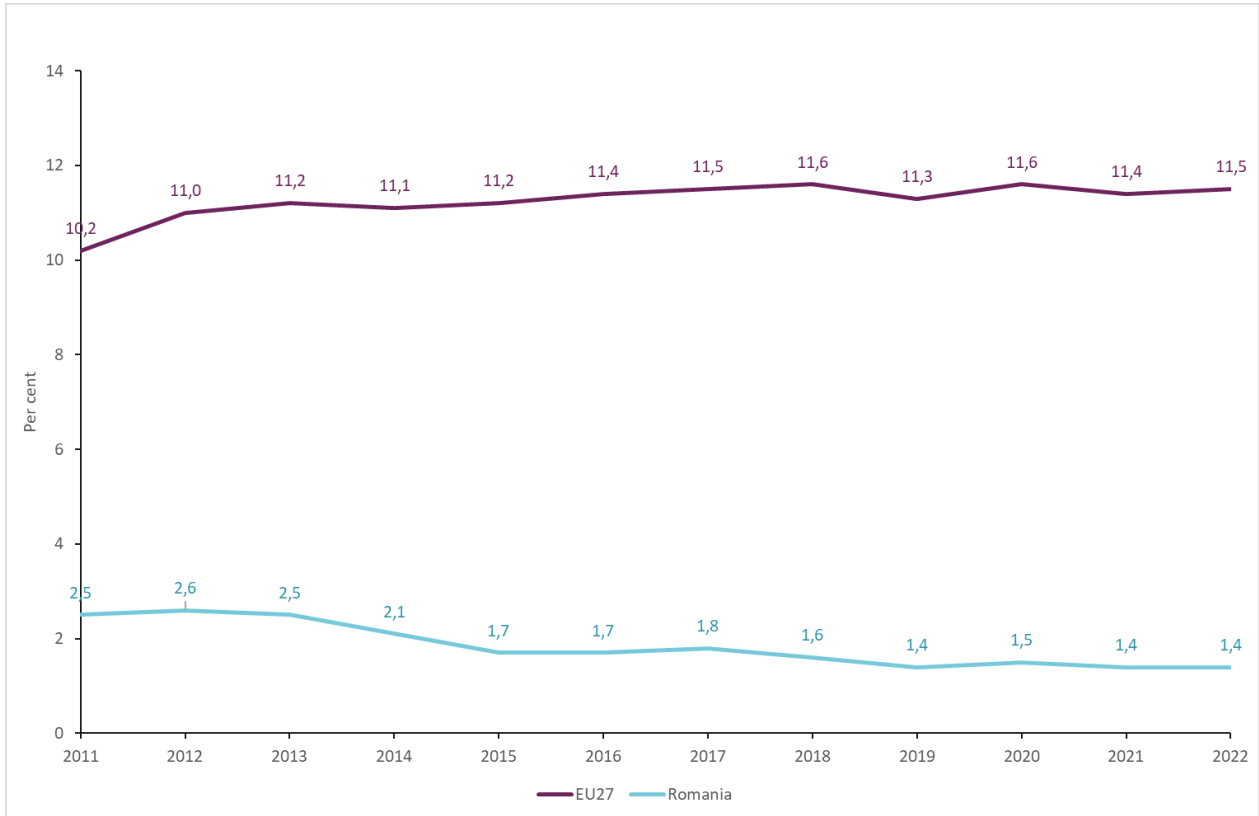
Source: Eurostat (2024) [env_ac_rp] (accessed 21 August 2024)

Figure 5 Gross domestic product, domestic material consumption and resource productivity trends, Romania, 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 Romania, 2011–2022, per cent



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

Figure 7 Material import dependency in Romania, 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

Since 2022, when the adoption of the **National Circular Economy Strategy** (SNEC) took place through the **Government Decision no. 1.172/2022**, the process moved ahead being followed by the **Action Plan for the National Circular Economy Strategy** (PAEC) approved by the Government Decision no. 927 of October 5, 2023 ^(5, 6).

As new initiatives marked by the adoption of the **Action Plan for the National Circular Economy Strategy** (PAEC), 52 priority actions (concentrated in 9 economic sectors) were launched to fulfil the SNEC objectives and promote the transition to the circular economy in Romania, with three implementation deadlines: short (2025), medium and long (for the time horizon 2031-2032).

The PAEC offers a unique perspective by focusing its actions at the transversal and sectoral levels. Transversal actions include measures on education and vocational training, research, development and innovation, green procurement and encouraging digitisation, which are essential for facilitating circular transformation in the Romanian economy.

In terms of the greatest potential for circularity in the Romanian economy, the PAEC has identified actions in 9 sectors, as follows:

- agriculture and forestry;
- automotive;
- constructions;
- food and beverages;
- packaging such as glass, paper, plastic materials, wood and metal materials;
- textiles;
- electrical and electronic equipment, batteries and accumulators;
- waste;
- water and wastewater.

Under the provisions of the PAEC, we are working on the **Monitoring and Evaluation Plan** for the implementation of the PAEC, which will configure the support measures (terms, funding sources) for the institutions responsible at the sector/commission level.

To ensure good governance and coordination, the "**Coordinating Committee for the Circular Economy**" was established in Romania (which includes all ministries), led by the Head of the Prime Minister's Chancellery, and the Secretariat of the Committee is provided by the Department for Sustainable Development.

In close correlation with the aspects provided in the SNEC regarding the circularity potentials, we have included as an example the construction sector.

Romania is part of the **Green City Accord** (GCA) ⁽⁷⁾ which is a movement of European mayors committed to making cities cleaner and healthier. It aims to improve the quality of life for all Europeans and accelerate the implementation of relevant EU environmental laws. By signing the Accord, cities commit to addressing five areas of environmental management: air; water; nature and biodiversity; circular economy (CE) and waste; and noise.

At the national level, 7 cities are part of this initiative (Alba Iulia, Bistrița, Brasov, Cluj-Napoca, Galați, Roman, Tulcea).

⁵ <https://dezvoltaredurabila.gov.ro/planul-de-actiune-pentru-strategia-privind-economia-circulara-10519261>

⁶ <https://circulareconomy.europa.eu/platform/en/strategies/romaniacs-circular-economy-action-plan>

⁷ https://environment.ec.europa.eu/topics/urban-environment/green-city-accord_en

Circular economy policy elements included in other policies

Circular economy policy element	Included in policy
Construction	State Aid Scheme established based on the National Program for the development of domestic production of construction products and materials CONSTRUCTPLUS⁸ approved by Government Emergency Ordinance no. 68/2023.
Waste management	National Recovery and Resilience Plan
Ecological criteria for the selected categories of product or services	National Strategy in the field of public procurements 2023 - 2027

Construction

The **CONSTRUPLUS** ⁽³⁾ scheme is implemented by the *Ministry of Economy, Entrepreneurship and Tourism* and targets the design of buildings and their components to ensure flexibility and disassembly, giving priority to durable and ecological materials that are friendly to the environment and sustainable, to increase the renovation rate and improve energy efficiency in existing buildings, as well as improving the management and proper treatment of construction and demolition waste.

The construction and buildings sector represents approximately 45% of the total energy consumption in Romania. To achieve its energy efficiency goals, the built stock needs an increased energy performance. Unfortunately, the programs implemented so far have had limited success in this direction. To improve the efficiency of renovation programs and to ensure the reduction of resource consumption, both material and energy, EC measures must be included in the construction and renovation sector.

The **CONSTRUCTPLUS** program targets regional development and aims for:

- reduction of the trade deficit resulting from the import of construction materials;
- stimulating investments in less developed counties;
- increasing domestic production of construction products and materials.

Waste management

An important component of the National Recovery and Resilience Plan ^(9, 10, 11, 12) is represented by Pillar 1 – Green Transition, whose Component C3 Waste Management aims to accelerate the process of expanding and modernizing waste management systems in Romania with an emphasis on separate collection, prevention, reduction, reuse and recovery measures to comply with the applicable directives and the transition to the circular economy.

Ecological criteria for the selected categories of product or services

The *National Strategy in the field of public procurements 2023 – 2027* ⁽¹³⁾ aims to develop a National Green Procurement Plan that will establish multi-year targets for the realization of green public procurement by the contracting authorities/entities for the selected categories of products, services or works and for which ecological criteria were developed by the European Commission.

⁸ <https://economie.gov.ro/schema-de-ajutor-de-stat-pentru-materiale-de-constructii-constructplus/> (in Romanian)

⁹ <https://mfe.gov.ro/wp-content/uploads/2021/09/f2211c7d8ea2e3d3ba5831dc0c68fc72.pdf>

¹⁰ <https://mfe.gov.ro/wp-content/uploads/2021/09/2d03353eb00e239cb0ef2e26de9f42aa.pdf>

¹¹ https://www.edu.ro/sites/default/files/_fi%C8%99iere/Minister/2023/PNRR/Scoli_verzi/lansare-apel/Ghid_solicitant_apel_retea_pilot_scoli_verzi.pdf (in Romanian)

¹² [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733641/EPRS_BRI\(2022\)733641_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733641/EPRS_BRI(2022)733641_EN.pdf)

¹³ <https://anap.gov.ro/web/wp-content/uploads/2023/12/SNAP-2023-2027-oficial.pdf>

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 Romania'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.

The **Action Plan for the National Circular Economy Strategy** (PAEC) provides objectives, implementation deadlines and tables for monitoring and evaluating progress in the implementation of actions. For better monitoring of the PAEC implementation, **the Progress/Stage Monitoring and Evaluation Plan** (PME) is in the works.

Also, the Department for Sustainable Development, Government of Romania, is the institution responsible for Action 4 of the PAEC: *Developing a digital platform to track and communicate the implementation of circular economy actions, performance indicators, and other relevant information*. In this regard, this action was included in the **National Recovery and Resilience Program's** project *One stop shop – virtual centre for the localization of sustainable development objectives* ⁽¹⁴⁾.

As a result, a digital platform will be developed that will be aligned with the EU Circular Economy Monitoring Framework and will include information related to PAEC actions and progress in their implementation, annual progress reports, and the possibility of collecting opinions and observations from the general public. Additionally, the platform can be a dissemination tool for practical guides and funding opportunities to facilitate the implementation of SNEC and PAEC by entities in the private sector. This initiative is planned to be launched in Q3 of 2025 and to collect also data on monitoring of the circular economy.

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

The **National Circular Economy Strategy** (SNEC) envisages that for each key objective indicators will be developed or obtained from Eurostat, the National Institute of Statistics or indicators used in existing regulations such as the **Plan National Waste Management**, the national indicators of sustainable development, covering the social, economic and environmental dimensions.

Circular economy targets

As regards to specific CE targets, Romania has not yet adopted this approach.

¹⁴ <https://dezvoltaredurabila.gov.ro/proiecte-pnrr-16432617> (in Romanian)

Innovative approaches and good practices

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

→ Good practice example: Education and awareness-raising

The circular economy approach is increasingly becoming part of many public policy national initiatives, such as education for the environment:

- "**Recycle in Romania**" ⁽¹⁵⁾ is the first national campaign developed by the Ministry of the Environment, Forests and Waters in partnership with the Environmental Fund Administration (AFM) aiming to increase the level of information and awareness on the importance of separate collection.

The communication campaign is an integrated one, broadcasted on the most watched televisions and radios and with a consistent component of online and social media communication, based on educational spots about separate collection. The main message of the campaign refers to the responsibility of the agents involved in the waste production chain, such as local public authorities, the general population, parents, children, etc. The call to action was focused on the following message: "*Some things are better separated. So it is waste. Collect separately*".

The objective is to provide the next generations with a model of good conduct and responsibility towards tomorrow.

In terms of impacts, the campaign had the following outcomes:

- There were 5,000 A5 brochures printed for public education and awareness purposes and a guide to separate collection. The printed materials appeared in the Tribuna Verde newspaper, which was produced and distributed to local public authorities (territorial administration units).
- The outdoor campaign was carried out in two stages (in November 2022 and in March 2023), each stage having a display period of 30 days.
- In online media, the campaign was visible through press articles and banners. The banners were visible on: Realitatea.net, Puterea.ro, Jurnalist.ro, Stiripesurse.ro, FinancialIntelligence.ro.
- TV spots of 30 seconds each were broadcast on the most relevant television stations. Also, radio spots were broadcast on the most important radio stations.
- Specific social media channels were created:
 - Facebook – channel Reciclam in Romania ⁽¹⁶⁾ (a newly created page for the campaign)
 - TikTok – Reciclam in Romania;
 - ✓ Youtube – Reciclam in Romania ⁽¹⁷⁾
 - ✓ Instagram - Reciclam in Romania ⁽¹⁸⁾
 - X (formerly Twitter) – Reciclam in Romania ⁽¹⁹⁾
 - ✓ Collaboration with influencers on Instagram and TikTok Mircea Bravo reached more than 500,000 visualisations;
 - Official website – Reciclam in Romania ⁽²⁰⁾

¹⁵ <https://reciclaminromania.ro/>

¹⁶ <https://www.facebook.com/ReciclaminRomania> (in Romanian)

¹⁷ <https://www.youtube.com/@reciclaminromania/about> (in Romanian)

¹⁸ https://www.instagram.com/reciclam_in_romania/ (in Romanian)

¹⁹ https://twitter.com/Reciclam_in_RO (in Romanian)

²⁰ <https://reciclaminromania.ro/> (in Romanian)

- In social media networks, more than 200 posts and more than 200 graphics were created. In order to provide content specific to social media platforms, more than 65 promotional videos were developed and published. The best-performing video promoted online has over 1,500,000 views.
 - Also, a survey was conducted for both the general population and representatives of territorial administration units. The survey revealed that this campaign had an impact among the population in terms of awareness of separate collection and the need for these types of information campaigns.
 - The national campaign Recycle in Romania ended with a series of 8 regional conferences, organized in cities from the 8 development regions of the country (Bacău, Arad, Cluj, Constanța, Ploiesti, Brașov, Târgu Jiu, Bucharest), which were attended by representatives of local authorities, subordinate institutions of Ministry of Environment, Waters and Forests, experts in environmental protection and in the field of waste recycling, NGOs, etc. who joined our initiative.
 - The "Recycling in Romania" regional conferences were broadcast online on all 3 platforms: Facebook, Instagram and Youtube. The total view count reached 49,855, and the video clips generated 70,524 views.
- **The National Recovery and Resilience Plan** ⁽²¹⁾ provides funds for the creation and support of a network of "green schools", the purchase of electric buses and the renovation of school buildings to increase energy efficiency. In order to acquire the status of "green school", among other criteria, schools will have to integrate educational elements regarding sustainable development into their school programmes and extracurricular activities. The methodology behind this concept also encourages partnerships and collaborations with local organizations in areas related to sustainable development and environmental protection.

The general objectives aim at *"The development of school infrastructure by supporting and developing a network of "green schools" for the transition to an environmentally sustainable, circular and climate-neutral economy and the promotion of a culture of sustainability at the level of educational institutions"*.

The Ministry of Education ⁽²²⁾ launched the competitive call for projects for "Building and developing a pilot network of green schools", a call for projects that will be financed through the National Recovery and Resilience Plan - Component C15: Education.

The development of a green school network is an ongoing process. Currently, after the last stage of the selection call that took place on 20.05.2024, around 227 ⁽²³⁾ schools have been selected to be part of this network.

- Romania recently adopted the **National Strategy on Education for the Environment and Climate Change 2023 – 2030** ^(24, 25), which introduces specific measures to improve the level of awareness and knowledge, especially among younger students, regarding environmental responsibility and sustainable development.

²¹ https://www.edu.ro/sites/default/files/_fi%C8%99iere/Minister/2023/PNRR/Scoli_verzi/lansare-apel/Ghid_solicitant_apel_retea_pilot_scoli_verzi.pdf (in Romanian)

²² <https://www.edu.ro/etichete/%C8%99coli-verzi> (in Romanian)

²³ <https://www.edu.ro/sites/default/files/> (in Romanian)

²⁴ https://www.edu.ro/comunicat_presa_03_2023_adoptare_SNEM (in Romanian)

²⁵ <http://www.monitoruljuridic.ro/act/strategia-na-ional-din-18-ianuarie-2023-privind-educa-ia-pentru-mediul-schimb-ri-climatic-2023-2030-emitent-guvernul-264529.html> (in Romanian)

The strategy was shortly followed by the adoption of a "Green Week" methodology^(26, 27) (Order no. 6755/2023). During the period allocated to the "Green Week"⁽²⁸⁾ program, teachers design, carry out and evaluate educational activities that are inter- or multidisciplinary, explore/ investigate nature, contribute to solving local environmental problems and inform/ make aware local community members, often with the involvement of their families and/or in partnership with other organizations. Through this platform, both students and teachers have at their disposal educational resources to support the organization of activities within the chosen week to run the program. The schools will carry out, for 5 consecutive days, educational activities that contribute to the prevention of climate change and the protection of the environment. The educational platform includes various types of resources such as project data, a digital library with educational resources, ideas for educational trails in nature; a map of protected natural areas, resources on how to respond to natural disasters, suggestions of activities proposed by national Non-Governmental Organization (NGOs); examples of good educational practices regarding climate change and the environment, etc.

Romania is also in the process of establishing funding protocols for environmental education and public awareness programs, including activities related to circular waste management.

➔ *Good practice example: Local initiatives*

The circular economy approach is increasingly becoming part of many **local initiatives**, such as:

- **Local strategy & projects on circular economy**

At the local level, *Buzău* is the first city in Romania with a circularity strategy (2020)⁽²⁹⁾, carried out two years before the National Strategy for the Circular Economy (2022). Also, the city supported the creation of a circular school⁽³⁰⁾ that collects waste in 8 fractions, rainwater for the public network and produces more solar energy than it consumes (the energy surplus is put into the national energy grid).

- **Promoting the use of compost**

The *composting station in Oradea*⁽³¹⁾, located in the Bihor County was inaugurated in 2010 and meets the most rigorous Romanian and EU requirements. The purpose of establishing this composting station was to properly treat biodegradable organic waste collected separately from the metropolitan area of Oradea municipality and Bihor County.

The technological process⁽³²⁾ consists of several stages, some simpler (mechanical sorting, chopping, sieving, rotating the prisms), and others more complex (laboratory analyses, calculations to determine the necessary additives), after which several types of finished products are created, such as:

- ✓ universal soil for flower (in different packages 3l, 5l, 10l, 15l, etc.), with the content of category I organic compost, peat, humus, clay and river sand;
- ✓ compost for category I agriculture;
- ✓ biofilter material - category II compound;

²⁶ https://www.edu.ro/sites/default/files/fi%C8%99iere/Legislatie/2023/OM_6755_2023.pdf (in Romanian)

²⁷ <https://eurydice.eacea.ec.europa.eu/news/romania-approval-methodology-organisation-green-week-programme>

²⁸ <https://www.saptamanaverde.edu.ro/ro> (in Romanian)

²⁹ <https://primariabuzau.ro/wp-content/uploads/2021/02/Strategy-for-Buzau-circular-economy-2020-2030.pdf>

³⁰ <https://www.edupedu.ro/scoala-gimnaziala-nr-11-din-buzau-prima-scoala-verde-din-tara-finalizata-inca-din-2020-din-fonduri-europene-si-locale-vizitata-azi-de-presedintele-iohannis-scoala-colecteaza-deseuri-pe-8-fractii/> (in Romanian)

³¹ <https://ecobihor.ro/> (in Romanian)

³² <https://ecobihor.ro/statia-de-compost/> (in Romanian)

✓ intensive substrate for green roof.

- **Agriculture**

- *Romanian Association for Sustainable Agriculture (A.R.A.D.)* is a partner in the project GO-GRASS ⁽³³⁾ – Grass-based circular business models for rural agri-food value chains, financed by the EU program "HORIZON 2020" – A funding scheme, in the period 2019 – 2023. The project is developing sustainable circular business models by considering social, economic and environmental impacts in rural areas. It aims to diversify and revitalise rural economies and provide quality jobs and opportunities in cooperation with entrepreneurs and local authorities. Farmers could install equipment for processing grass e.g., animal bedding or biochar at the farm scale and work to develop a distribution network beyond the local area.
- The *Romanian Plant Protection Industry Association* ⁽³⁴⁾, a member of CropLife Europe, represents 85% of the companies that develop and sell plant protection products. The purpose of the association is to promote the responsible use of plant protection products in the context of sustainable agriculture, which combines respect for people's health with care for a healthy environment while satisfying the demand for agricultural products. The Association promotes sustainable agriculture by developing products with low impact on the environment, encouraging the system of integrated agriculture, getting involved in voluntary initiatives, building a dialogue along the entire food chain, providing support to the training of farmers, as well as promoting integrated management of crops (a system that aims to support farmers in balancing the economic, environmental and social components of sustainable agriculture). This integrated plant production system aims to support farmers in balancing the economic, environmental and social components of sustainable agriculture.
- *Banca pentru Alimente Bucharest* ⁽³⁵⁾ was established as part of the European Federation of Food Banks, by some of the largest retailers and farmers, to donate food to NGOs and operates in 5 large cities of the country, respectively in Bucharest, Oradea, Braşov, Cluj - Napoca and Roman. As part of this initiative are 183 partner organisations that together have collected around 6,107 tonnes of food ⁽³⁶⁾. Thus, around 51,451 vulnerable people in need have been helped through this initiative.

➔ *Good practice example: Change in consumption patterns and consumer behaviour*

Another initiative of the Ministry of Environment, Waters and Forests is the nationwide Deposit-Return System (DRS) launched in November 2023, the second largest system of this kind in Europe, after Germany, in terms of the number of containers/packages processed. The legal base is ensured by the Government Decision no. 1,074/2021 which envisages to collect packaging as follows:

- a) 65% glass, 65% plastic, 65% metal for the year 2024;
- b) 75% glass, 80% plastic, 80% metal for the year 2025;
- c) 85% glass, 90% plastic, 90% metal starting in 2026.

³³ <https://www.go-grass.eu/publications/>

³⁴ <https://www.aiprom.ro/despre-noi> (in Romanian)

³⁵ <https://bucuresti.bancapentrualimente.ro/> (in Romanian)

³⁶ <https://bucuresti.bancapentrualimente.ro/despre-noi/#impactul> (in Romanian)

For each product with packaging marked SGR, the consumer pays LEI 0.50 (approx. EUR 0.10), which is returned to him as a voucher or cash at the time of return, even if he does it in a store other than the one where the product was bought.

The system aims to contribute to a cleaner and greener environment and achieve the European collection and recycling targets as provided by the new EU circular economy package. Currently, 3 operational centres in Cluj, Timisoara and Brasov are functional, out of 17 regional industrial centres. Monthly reports are available on the DRS portal, preliminary and final reports, but also a reporting in terms of the quantity of packages returned by county, city or village.

RetuRO is the company established by a consortium of three private shareholders and a public shareholder - designated by law as being the administrator of the Deposit-Return System. The private stakeholders are the representative associations of beverage producers and traders to manage the deposit-return system implemented in Romania.

- **The national WEEE collection/ recycling system**

In Romania, there are systems and platforms at the national level that have similar technical specifications to Voluntary Collection Centres (CCV) and can serve as a model for local authorities wishing to implement CCVs. One example is the Municipal Collection Center (CMC) ⁽³⁷⁾ in Iași, established in 2016 by Ecotic in partnership with Iași City Hall.

CMC Iași ⁽³⁸⁾ is one of the few existing centres at the national level where 11 categories of waste can be collected: furniture, decorative items, electronic equipment batteries and accumulators clothing, footwear, paper and cardboard packaging, plastic packaging (except polystyrene and PVC), glass packaging, metal packaging, including contaminated packaging, books, stationery, construction and demolition waste, plant waste. The centre also has an area for reusable goods, which are checked before reusing. They accept also: oils, detergents, paint, resins, adhesives, clothing with oil stains.

In the period 2016-2022, more than 1600 tons of waste were delivered by the citizens of Iași to CMC, thus important resources re-entered the circuit of the production of new products. Currently, 597 packages of containers are being distributed between the centres.

- **Development of infrastructure for waste collection**

Selective door-to-door collection

A good example can be found in the Romanian municipality of Sălcea ⁽³⁹⁾, which introduced selective door-to-door household waste collection for 5 fractions (paper and cardboard, plastic and metal, glass, biological waste, residual waste). Before changing the collection infrastructure, an extensive four-week education program was implemented. After 3 months of implementing the system, the separate collection rate increased significantly, from 1% to 61%, and the recycling rate increased to 40%. The involvement rate of local citizens increased from 8.4% to 97%. The municipality also recognized the need to financially stimulate the new separation system. In the previous system, each person paid 5 lei (1 euro) per month for waste management services. With the new system, citizens who did not agree to join paid a higher fee of 10 lei/month (2 euros). For those who joined the scheme, the fee remained the same as before. This could be considered a simple first step towards a PAYT-type payment system and proved to encourage selective collection.

³⁷ <https://www.ecotic.ro/stiri/cmciPredare/> (in Romanian)

³⁸ <https://www.cmciasi.ro/deseuri-acceptate/> (in Romanian)

³⁹ <https://www.zerowasteromania.org/salacea-spre-zero-waste/> (in Romanian)

➤ Pulp and paper industry

The representative of all manufacturers of paper for corrugated boards and suppliers of sustainable packaging solutions⁽⁴⁰⁾ in Romania emphasises that the circular business model plays a central role in online commerce, retail and industrial consumer goods value chains. Moreover, the members use circular design principles. Thus, paper factories can produce 100% recycled paper, from materials collected 100% from the Romanian market. More than 90% of the waste generated by the cardboard manufacturing process corrugated is returned as raw material to paper mills. In this regard, the organisation monitors industry-specific indicators. In 2023, 498,000 tonnes of wastepaper were collected, used for the production of 451,700 tonnes of corrugated paper.

➔ *Good practice example: Industrial symbiosis*

As models of industrial symbiosis, we can mention the following models:

➤ *Integrated Nutrient Pollution Control* ⁽⁴¹⁾ project

Romania received a loan through the Ministry of Environment, Waters and Forests from the International Bank for Reconstruction and Development and a Grant from the Global Environment Facility to support the implementation of the project in localities selected as vulnerable or potentially vulnerable to nutrient pollution (ZVN). The original project ended in 2017, but obtained additional financing for investments at commune level throughout Romania (EUR 35.00 mil.) for the period 2017 – 2022. The development objective ⁽⁴²⁾ during the second phase is to support the Government of Romania in fulfilling the requirements of the EU Nitrates Directive at the national level.

To achieve this objective, the following activities were carried out:

- Investments in manure management (communal manure storage and management platforms, composting and handling systems, packaging/pelletizing and biogas stations to promote better management of manure or to purchase equipment for the development of existing arrangements for the storage of manure and/or its composting);
- Improvement of the existing arrangements for the storage of manure and/or its composting;
- Investments to reduce wastewater pollution (sewerage and wastewater treatment);
- Improving the protection of watercourses against nutrients and surface runoff (establishment of forest protection curtains- approx. 256 ha in 63 municipalities).
- The elaboration of the environmental management plan and environmental guidelines for Integrated Nutrient Pollution Control Project. ⁽⁴³⁾

Also, as part of the project, a pilot plant was created for biogas production at Seini, Maramureş County and took place training on the application of the Code of Good Agricultural Practices (4627 small farmers took part in the demonstration activities carried out on the farms).

The project supported the establishment of 11 Demonstration and Training Centres, after which the project's investments began to be developed in other communes, so that a total of 81 communes benefited from investments supported by the project ⁽⁴⁴⁾.

⁴⁰ <https://rompap.ro/> (in Romanian)

⁴¹ <http://www.inpcp.ro/> (in Romanian)

⁴² <http://www.inpcp.ro/componenta-1/> (in Romanian)

⁴³ http://www.inpcp.ro/wp-content/uploads/2019/08/Revised-INPCP-AF-EMP_Aug2019.pdf

⁴⁴ <http://www.inpcp.ro/rezultate/> (in Romanian)

➤ Sustainable products from natural ingredients

The Romanian company⁴⁵ developed its recipes and techniques to create delicious, nutritious and sustainable products from ingredients that would normally have been thrown away. They are collaborating with local producers of artisanal drinks from which they obtain fruit and vegetable pulp, malt and grains or nuts (46). The production process focuses on giving a new life by transforming for example malt into snacks or chips. Through this business model, there is a reduction of CO2 by 2,429 kg, around 2,074 kg spent grains used and 686 Kg juice pulp used as part of their business model.

➤ Social enterprise model: transforming advertising materials into new fashion products

This is an initiative of the Ateliere Fără Frontiere Association (47), where advertising materials from buildings (banners and meshes) are recovered and transformed into ethical and sustainable fashion products.

Since 2011, Remesh has recovered over 12 tons of materials from buildings and sewn more than 77,000 products and supported more than 10 people every year to integrate into labor market. In the coming 5 years, Remesh aims to grow in order to become financially sustainable and support more people, by increasing sales and becoming innovative in the circular economy.

Financial support programmes targeting CE

As regards the support offered to companies to promote CE, by Government Ordinance no. 27/2022 (48), some financial measures were regulated by establishing the “*De minimis aid scheme for the transition to the circular economy*” coordinated by the Ministry of Economy, Entrepreneurship and Tourism, to support the adoption of a circular model, which brings added value by repairing, revaluing and reusing raw materials, by re-introducing products into the life cycle and promoting the circular economy.

The categories of activities co-funded (85%) concern:

- equipping and/or modernizing testing laboratories for materials and products resulting from circular economy activities, as well as their accreditation, as appropriate;
- establishing and/or equipping and operating centres for repair and reconditioning of goods to reuse waste and repair goods;
- expansion of waste recycling activities;
- creating centres for the collection and valorisation of wool, linen, hemp, textile products, resulting from the application of circular economy principles;
- the recycling/reuse and/or recovery of industrial waste generated into secondary raw materials or products with added value higher than that of the waste from which they originate.

The aim is to stimulate the realization of some investments and categories of activities with funding from funds from the state budget and has generated significant interest at the industry level, considering the large number of funding applications submitted (94 projects/requests financing), but also the complexity of the submitted projects. Following the evaluation process, out of the 94 funding applications, 47 funding applications were admitted in descending order of scores, within the allocated budget.

⁴⁵ FAVR: <https://favr.ro/product/strong-eco-pack/>

⁴⁶ <https://favr.ro/sustainability/>; <https://favr.ro/produse/>

⁴⁷ <https://remesh.ro/atelierul-remesh-de-pe-cladire-pe-umar/>; <https://atelierefarafrontiere.ro/>

⁴⁸ <https://economie.gov.ro/schema-ajutor-de-minimis-pentru-economia-circulara/> (in Romanian)

The development of socio-economic systems in the circular economy is closely related to the creation of new jobs, this being one of the essential conditions imposed for accessing the funds made available through the scheme for the circular economy. Thus, the number of jobs created within the 47 projects financed under the scheme is 150.

On the other hand, we highlight the fact that the de minimis aid scheme provides for green investments, such as the modernization of existing recycling facilities that result in greenhouse gas emissions — hereinafter referred to as GHGs, at least 30% lower, as well as reductions of the levels of other pollutant categories concerning the existing technological line.

The promotion of the transition from the linear economic model to the circular model is supported by the collection of good circular economy practices through the section of the "**Success Stories**" of the beneficiaries of the "De minimis aid scheme for the transition to the circular economy" which reveal innovative approaches and circular models Business.

According to the provisions of the "Applicant's Guide for the establishment of the de minimis aid scheme for the transition to the circular economy", the circular nature of the projects proposed for financing under the de minimis scheme are considering the following criteria:

- Sustainable conception of the proposed project;
- Conservation of natural resources;
- Increasing the amount of secondary raw material;
- Reduction of CO₂ emissions in the value chain;
- Increasing the degree of reuse of products (quantitative estimate);
- Extending the life of products.

Another instrument through which the Ministry of Economy, Entrepreneurship and Tourism, as industrial policy coordinator, supports the application of the principles of the circular economy and the sustainable development of industrial zones is the *State Aid Scheme regarding the granting of grants for investments intended for the manufacturing industry* established by Government Decision no. 959/2022 ⁽⁴⁹⁾.

It aims to support businesses by granting grants for making initial investments for an initial investment in favor of new economic activity in the sectors. Thus, in the list of eligible activity sectors, the so-called Classification of Economic Activities in the European Community ("CAEN codes" ⁽⁵⁰⁾) targets the repair, maintenance and installation of machines and equipment, respectively, the collection, treatment and disposal of waste; recovery activities of recyclable materials.

Also, principles of the sustainable economy and green investments are eligibility criteria for the state aid scheme. Thus, 10% of the value of the project/investment must be allocated to green investments. Example for this programme is the company **Ateliere Fără Frontiere** ⁽⁵¹⁾.

⁴⁹ <https://economie.gov.ro/schema-de-ajutor-de-stat-privind-acordarea-de-granturi-pentru-investitii-destinate-industriei-prelucratoare> (in Romanian)

⁵⁰ CAEN is the Romanian equivalent for NACE classification of economic activities

⁵¹ <https://atelierefarafrontiere.ro/centrul-de-reparare-si-reconditionare-a-bunurilor-educlick/> (in Romanian)

Examples of private policy initiatives (sectoral)

→ Good practice example: New business models

After a series of research carried out in the last 3 years, together with Politehnica University of Bucharest and partners from private sector⁽⁵²⁾,⁽⁵³⁾,⁽⁵⁴⁾ started a project that uses certain components present in aluminium slag, to obtain a new product with applications in the steel industry. This project aims to obtain the following results:

In 2027, the quantity stored at the landfill will be reduced by 50% and will lead to a reduction of the carbon footprint by 5.1% for purpose 3;

It will completely be reduced (100%) in 2030 as regards the amount stored in the landfill. This target will lead to the reduction of the carbon footprint by another 5.1% for purpose 3;

This initiative is a patented method obtained through private funds.

Platforma de Mediu pentru București⁽⁵⁵⁾,⁽⁵⁶⁾ is an initiative of the Bucharest Community Foundation and a Romanian bank⁽⁵⁷⁾. It launched a new round of financing for waste management and circular economy projects, with the support of a Romanian company⁽⁵⁸⁾. The fund allocated LEI 300,000 (EUR 60,000) to address infrastructure, education and advocacy challenges and opportunities in the field of consumption and waste.

The following projects were awarded:

✓ *Climato Sfera Association - Compost Academy: ADC (Budget: 200,000 lei, or 40 000 EUR)*

The project will be implemented over at least 2 years by a consortium formed by the Association for Sustainable Consumption, Climato Sfera, Asociația Culturalis, Livada Comunitara Mărțișor, together with other partners⁵⁹. The main goal of this project is to promote Local Community Composting (CCL) of non-hazardous compostable waste in the proximity areas of Bucharest. This project will contribute to increasing the awareness and practice of CCL in the community through the participatory development of a normative and operational framework for sustainable waste management. Also, it will allow the education of the general public on the impact of consumption and waste production.

✓ *Association Nod Makerspace - Dâmbovița Apa Dulce (Budget: 100,000 lei, or 20 000 EUR)*

The "Dâmbovița Apa Dulce" project is a complex undertaking that will involve the piloting of a technical solution for waste management to improve the water quality of the Dâmbovița River. This project will also include the implementation of an ensemble of street furniture created from recycled materials and will promote public education and awareness regarding waste and the relationship with the river. Through advocacy campaigns, the project will support the improvement of the waste management process in the aquatic environment.

A research project example is *EXCornsEED* where the National Research and Development Institute for Chemistry and Petrochemistry ICECHIM Bucharest was among the partners. The *EXCornsEED*⁽⁶⁰⁾ project combined chemistry, biology, engineering and biotechnology tools and expertise to develop and validate processes for recovering a range of bioactive compounds from bioethanol and biodiesel refinery side

⁵² [Tenaris SilcoTub](#)

⁵³ <https://asmetal.ro/sustenabilitate-2/> (in Romanian)

⁵⁴ <https://asmetal.ro/2024/01/31/economia-colaborativa-o-solutie-pentru-viitorul-industrial-constantin-apostolceo-as-metal/>

⁵⁵ <https://platformademediu.ro/media/cp-noul-apel-de-finantare-300-000-lei-pentru-proiecte-de-management-al-deseurilor-si-economie-circulara> (in Romanian)

⁵⁶ <https://platformademediu.ro/media/proiectele-finantate-in-runda-a-treia-dedicata-managementului-deseurilor-si-economiei-circulare> (in Romanian)

⁵⁷ [ING Bank Romania](#)

⁵⁸ [Nhood Romania](#)

⁵⁹ Ecoteca: <https://ecoteca.ro/> and Urban Cultor: <https://www.urbancultor.ro/>

⁶⁰ <https://www.cbe.europa.eu/projects/excornseed>

streams, specifically corn oil from bio-ethanol and rapeseed meal. The project developed a process for extracting proteins and other biologically active natural substances. As outcomes ⁽⁶¹⁾, it can be mentioned: transforming waste into sustainable packaging, facilitation of switch from fossil-based to bio-based production; extracting protein from seaweed and legume by-products, etc. Meanwhile, the laboratory testing finished with a positive outcome and a pilot plant is currently being built in Slovakia.

✓ The *AquaSPICE* ⁽⁶²⁾ project aims at materializing circular water use in European Process Industries, fostering awareness of resource efficiency and delivering compact solutions for industrial applications. The project has received funding from the European Union's Horizon 2020 Research and Innovation Programme and has a duration of 51 months (01/12/2020-28/02/2025). By analyzing the real needs of process industries in seven countries: Germany, the Netherlands, Belgium, Italy, Slovenia, Romania and Turkey, the AquaSPICE project aims to implement innovative ideas for the development of holistic water management within the entire value chain, implementing and evaluating technologies and water reuse practices under specific conditions in six demonstration cases.

➔ *Good practice example for textiles*

➤ Facilities for collecting and sorting used textiles

According to environmental with authorisations in Romania, there are the following types of **facilities for collecting and sorting used textiles**:

- 3 textile waste shredding facilities being located in the South-West (Vâlcea), North-East (Botoșani) and North-West (Bistrita-Năsăud) regions;
- 4 installations for the production of textile briquettes or/and granulation of this type of waste are located in the Center (Mureș), North-East (Bacău), North-West (Bihor) and South-East (Galați) regions. In this case, the outcomes are used for energy recovery purposes;
- a geotextile carpet production facility in the West region (Hunedoara);
- a facility that treats textile waste for the production of efiloxane in the Southeast region (Galați).

Overall, the main outcomes of processing textile waste are in the form of threads, patches of fabrics, knits, non-wovens, etc. Also, in order to recover fibres, processes of cutting or shredding and defibrating are undertaken and the resulting fibres can be used to obtain threads for non-woven textiles. Thus, the resulting sub-products can be put on the market through the collaboration with other economic operators that will create new products.

Other initiatives:

A romanian company ⁽⁶³⁾ launched a new production line called **Puzzletex** ⁽⁶⁴⁾, where pre-production textile waste is collected and turned into new durable products such as bags and accessories.

In 2022, they collected 425 kg of textile waste that was used for Puzzletex production, resulting in an environmental impact of -435.5 tons of CO₂. Through this initiative in 2023 around 365 kg were recycled, 8,578 new products were produced for the Puzzletex product range with 20 new design models, reaching a total of 50 Puzzletex designs, exclusively made from textile waste.

Starting from 2023, textile processing equipment is used that transforms the smallest textile scraps into textile filling used as pillow stuffing.

⁶¹ <https://www.cbe.europa.eu/achievements>

⁶² <https://aquaspice.eu/the-project/>

⁶³ Atelierul de Pânză

⁶⁴ <https://atelieruldepanza.ro/categorie-produs/puzzletex-produse-din-deseuri-textile/>

Other good practice consists of using natural cotton fabric for tote bag production, reducing chemical pollutants from dyes, and saving water and physical labor. The cotton fabric we use has a thickness of 280 g/m², resulting in tote bags with high wear resistance, thus enduring multiple uses.

The project *Quantification and composition analysis of textiles intended for re-use, recycling and disposal* ^(65, 66) was financed by JRC and methodologically coordinated by the Fashion for Good in cooperation with the following partners: the Institute of Circular Economy from the Czech Republic, the Humana Organization from Italy and The National Research and Development Institute for Textiles and Leather Bucharest (INCDTP) - Romania. The project aims among the objectives: to quantify the current routes of textile management in the 3 selected EU member states, to map the potential future routes of post-consumer textile management in the 3 EU member states, to identify the potential of TMW and TIR to be redirected from the current destinations towards more circular ones, generating a common understanding of textile flows in Europe and beyond, developing local capacity to conduct textile quantification and characterization studies, stimulating policies and investments to accelerate the transition to circular textiles, etc.

In Romania, a benchmarking analysis study was carried out based on a questionnaire elaborated within the project in which waste collection units participated. The main outcomes revealed a low interest in textile waste management. From the total textile waste, approximately 42,612 tons/year (20%) are recycled and 80% are incinerated.

According to the Romanian Association for Textile Reuse and Recycling (ARETEX) – yearly, Romania generates about 160,000 tons of textile waste. Of this estimated volume, the textiles (especially clothing) that are separately collected for reuse, is about 30 % (up to 50 000 tons) with a collection rate of ~ 0.5 kg/person per year. (Green Forum, 2024)

According to the European Environment Agency, in 2020, Romania produced ~ 7, 5 kg of textile/capita. Of this quantity, ~ 75-80% represents textile waste which ended up in mixed municipal wastes (from household sources), and the rest (20% to 25%) represents textile wastes collected separately from economic activities (European Environment Agency, 2024)

The infrastructure for the selective collection of textile waste is not provided. There is also a lack of financial support programs for investments aimed at the mechanical or chemical recycling of textile waste.

In order to identify the structure of textile waste and possible future management routes, sampling, quantification and characterization (degree of wear, color, fibrous composition, structure, etc.) of some batches of textile waste that end up in solid municipal waste (TMW) were carried out - approx. 2000kg and textile waste intended for reuse/recycling (TIR) - approx. 3000 kg. For TMW, 2 fractions were identified: NoBins and TextileBins, and for TIR, 4 possible fractions were identified, depending on the degree of wear: EU export, non-EU export, recyclable, incinerable.

Concerning other stakeholders involved, the INCDTP collaborated with a private company ⁽⁶⁷⁾ for TMW-type waste and the General Directorate of Social Assistance of the Municipality of Bucharest for TIR. At the level of the Ministry of Research, Innovation and Digitization, a Plan for the involvement of research in the application of the principles of the Circular Economy was developed, in which INCDP proposed the introduction of activities aimed at the development of selective collection activities, sorting of textile waste after collection, assessment of the potential recycling/reuse, design and implementation of mechanical/chemical recycling technologies, etc.

Humana People to People Romania through the *Repair project* ⁽⁶⁸⁾ aims to promote sustainable fashion by extending the life of each item. Thus, the company promotes a network of tailoring, shoemaking and

⁶⁵ http://revistaindustriatextila.ro/images/innercovers/cop23_2024_01.pdf

⁶⁶ <https://www.qmagazine.ro/karina-bolin-humana-changing-lives-through-disposed-clothes/>

⁶⁷ [3D Green Company](#)

⁶⁸ <https://humana-romania.ro/blogs/our-projects/proiectul-repair-repara-%C8%99i-reutilizeaza-hainele-preferate> (in Romanian)

leather goods repair workshops. The aim is to support activities of retouching and repairing articles, support sustainable development and create jobs in the field.

Another private company (⁶⁹) has committed to offering their customers eco-friendly, sustainable garments, thus being an active member of the Ethical Fashion Forum – the industry body for sustainable fashion, representing over 10,000 members in more than 100 countries. Their environmental focus spans within their supply chain thus influencing more than 50 mid- and high-fashion brands throughout the EU. The company is involved in several research projects (^{70, 71}), such as REGIOGREENTEX⁷²-Strengthening innovative textile circularity in Europe's regions.

RegioGreenTex promotes collaboration in research and development between 43 partners from the four major sectors of society – industry, government, research institutes, and the public – for the textile industry. Partners come from 11 regions in 8 European countries. Among the objectives, the company addressed the challenge related to the high footprint of textiles in terms of material use and related energy and water use by focusing on developing unique and specialized modules focused on digital product development and collaborative design.

➔ *Good practice example for repair and reuse*

➤ **Promotion of reuse and repair in Romania**

At the national level, there are several examples of companies active in promoting reuse and repair as a practical tool for implementing a circular economy. In this regard, we can mention the following:

- ✓ promotion of product reuse, focused on mobile phones, offering a 12-month warranty period for repairs(⁷³).
- ✓ promotion of refurbished products, such as mobile phones, laptops and tablets with a standard 24-month warranty(⁷⁴).
- ✓ promotion of electronic equipment rental platform. Last year, it was more than 3,000 rented products and in 2024, it is counting on a volume of more than 10,000 rented electronic products(^{75, 76}).
- ✓ promotion of a humanitarian centre for the collection, sorting, sanitization and distribution of clothing and footwear for children and adults, toys, electronics and household appliances, furniture pieces (⁷⁷), all of which come from donations. This project was implemented by the Capital City Hall, through the General Directorate of Social Assistance of the Municipality of Bucharest, in partnership with the Eco Durabil Association.

Another example of best practice is *one of* the most important integrated recycler of WEEE, PET and glass from Southern-Eastern Europe and supplier of secondary raw materials(⁷⁸). The company has a recycling

⁶⁹ [KATTY FASHION SRL](https://katty-fashion.com)

⁷⁰ <https://katty-fashion.com/rd-projects/>

⁷¹ <https://www.regiogreentex.eu/dashboards/home>

⁷² <https://katty-fashion.com/rd-projects/regiogreentex/?>

⁷³ <https://flip.ro/business/cumpara/> (in Romanian)

⁷⁴ <https://klap.ro/business/> (in Romanian)

⁷⁵ <https://rb.gy/d815re> (in Romanian)

⁷⁶ <https://www.revistabiz.ro/telerenta-bugeteaza-investitii-de-3-milioane-de-euro-in-2024/> (in Romanian)

⁷⁷ <https://www.pmb.ro/interes-public/arhiva/get-press-releases-menu/2021/670> (in Romanian)

⁷⁸ [GreenGroup](https://www.green-group.ro)

capacity of 360,000 tons per year, all waste is recycled and transformed into new products, reducing carbon dioxide emissions by 45,380 tons annually.

- The largest operator of biogas stations - biogas, energy and compost are produced from biowaste^(79, 80), by locating the production facilities next to the large generators of biowaste (farms, large retailers).

In the consortium that uses technology ⁽⁸¹⁾ to turn organic waste into biogas and then into electricity and heat, with an annual capacity of 2.1 MW electricity and 2 MW heat being equivalent to the daily consumption of 6,000 households.

Biomass is subjected to a separation procedure, where unwanted or non-organic materials (such as plastics or metals) are removed.

The prepared substrate is introduced into the anaerobic digestion fermenter. The biogas obtained in this way is used in high-efficiency cogeneration plants, where electricity and heat are produced. The electricity produced is fed into the electricity grid, thus contributing to the supply of green energy. Thermal energy is used for heating and hot water supply.

The circular economy is promoted through:

- *Collection and recycling of organic waste* from various business sectors, including the food industry, hotels and restaurants, are transformed into biogas and digestate (organic fertilizer).
- *Generation of renewable energy*

The biogas produced is used for the production of electricity and heat, which can power local homes and businesses. This energy contributes to reducing carbon emissions and diversifying the energy source.

- *Transforming waste into resources*

The digestate resulting from the biogas production process becomes an organic fertilizer rich in nutrients. It can be used in agriculture to improve soil quality and support plant growth.

- *Efficient waste management* (reduced the amount of waste that ends up in landfills and prevents soil and groundwater pollution).

The way forward

Identifying and addressing barriers and challenges

The process of mainstreaming a circular economy approach is many times rather challenging, especially concerning sectoral policies in terms of the degree of flexibility of adapting the already existing legislation. For example, there is a need to further define the status of secondary raw materials and the conditions to be reintroduced on the market (e.g. compost).

A new circular approach needs better information and available resources for all stakeholders to seize opportunities in terms of new investments. Thus, information campaigns could offer new perspectives regarding the overall process and encourage the involvement of consumers as an important pillar of the circularity process.

For implementing a circular economy, in terms of the institutional framework, there is space for increasing cooperation among central- and local public entities to create positive synergies.

⁷⁹ <https://genesisbiopartner.ro/despre-noi> (in Romanian)

⁸⁰ <https://genesisbiopartner.ro/economie-circulara>

⁸¹ <https://genesisbiopartner.ro/proces>

Future policy plans

The Ministry of Environment, Water and Forests (MMAP) is responsible, within the National Recovery and Resilience Plan, for milestone no. 43- elaboration of the National Circular Economy Strategy (achieved), milestone 44- elaboration of the "Action Plan for the circular economy national strategy" (achieved), milestone 45- "Implementation of the actions provided for in the National Circular Economy Strategy and the related action plan, assigned to the authorities public" (due for completion in the first quarter of 2026), within Component 3 "Waste management", Reform 1 "Improving governance in the field of waste management to accelerate the transition to the circular economy".

The overall objective of the National Strategy on circular economy is to provide the framework for the transition to circular economy, through the implementation of the Action Plan. The success indicator of this transition is the decoupling of economic development from the use of natural resources and environmental degradation.

The Interministerial Committee on Climate Change (CISC) ⁽⁸²⁾ ensures the coordination of climate policies across the relevant ministries as regards the commitments made at the national level, towards the European Union, the United Nations and other international organizations to which Romania is a party and monitors the progress made by Romanian institutions in their implementation. Also, CISC analyses, monitors and proposes the annual priority policies in the field of climate change following the commitments made at the national level, towards the European Union, including through the National Recovery and Resilience Plan of Romania, the United Nations and other international organizations to which Romania is a member party or in the process of acceding.

⁸² <https://sgg.gov.ro/1/wp-content/uploads/2022/04/HGANEXA-8.pdf> (in Romanian)

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

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.

European Environment Agency
European Topic Centre
Circular economy and resource use

