

Circular economy country profile – Croatia



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

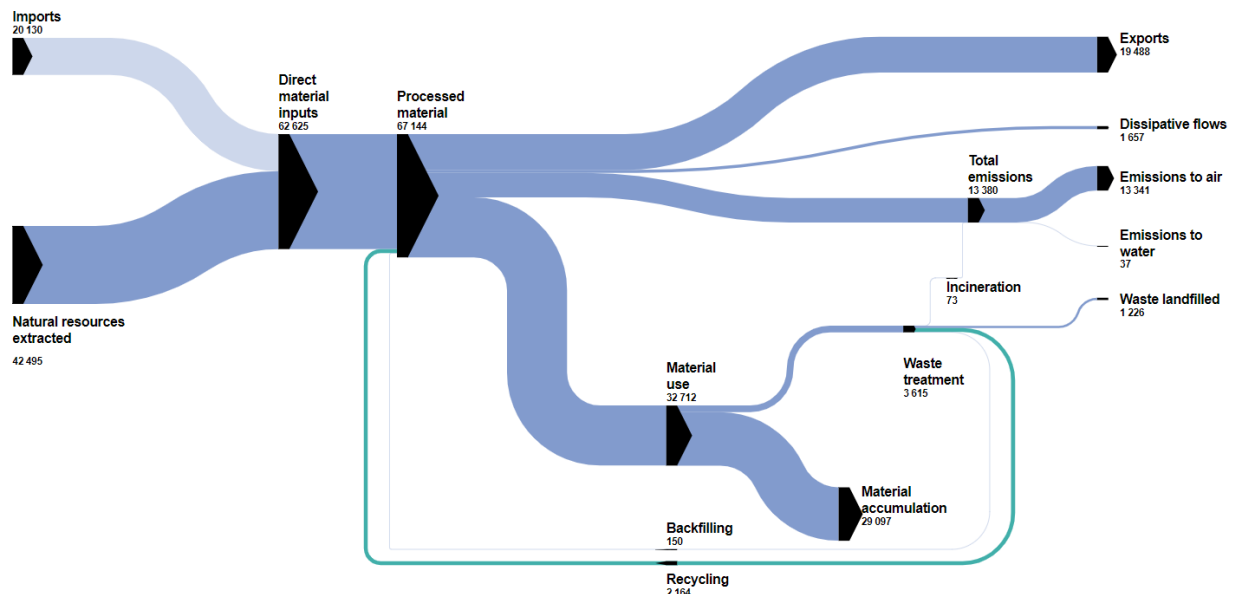
Croatia – facts and figures

	<p>GDP: EUR 50.2 billion (0.4 % of EU27 total in 2020)</p>
	<p>GDP per person: EUR 12 400 (purchasing power standard) (64.2 % of EU27 average per person figure in 2020)</p>
	<p>Use of materials (domestic material consumption (DMC)) 43.1 million tonnes DMC (0.7 % of EU27 total in 2020) 10.7 tonnes DMC per person (79.2 % of EU27 average per person in 2020)</p>
	<p>Structure of the economy: Agriculture: 3.8 % Industry: 25.3 % Services: 70.9 %</p>
	<p>Employment in circular sectors: 41 155 people are employed in circular economy (CE) sectors (1.2 % of EU total in 2018) People employed expressed as a percentage of total employment: 2.5 % (EU average 1.7 %)</p>
	<p>Surface area: 56 594 square kilometres (1.3 % of EU27 total)</p>
	<p>Population: 4 058 165 (0.9 % of EU27 total in 2020)</p>

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

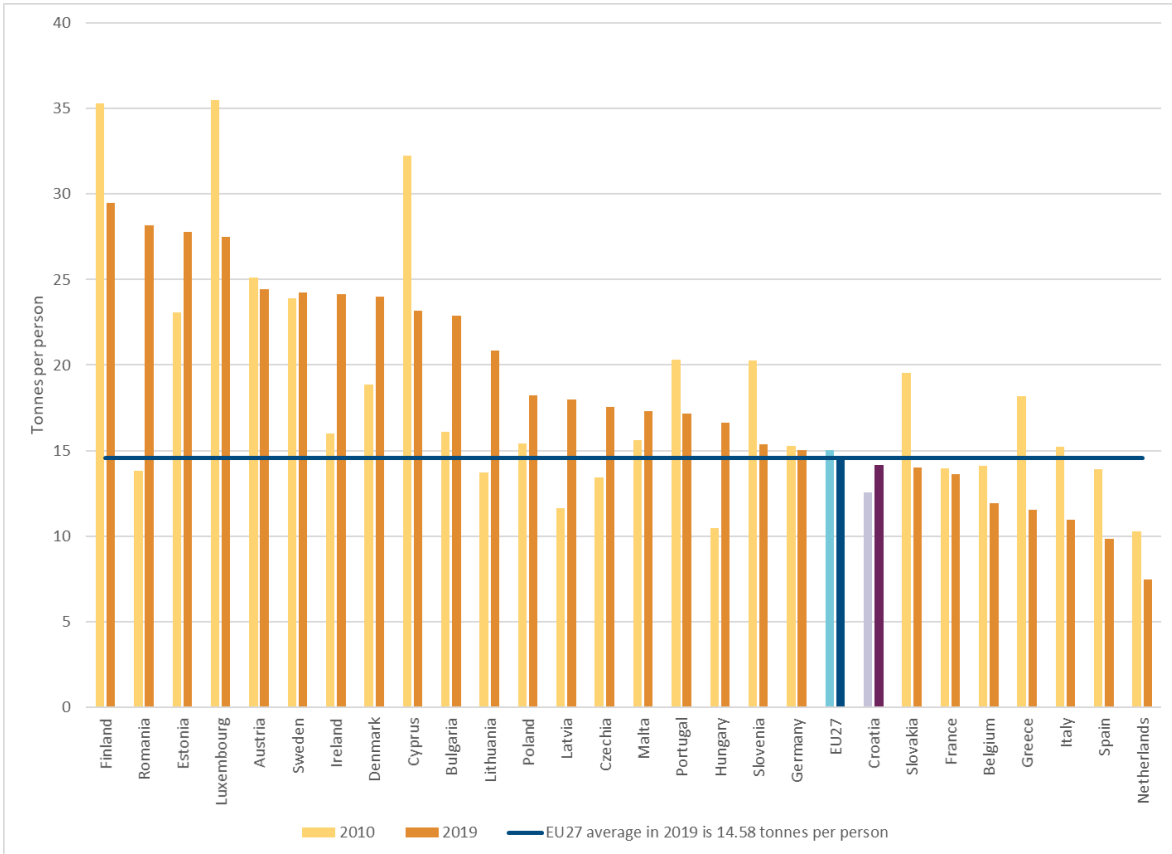
Source: Eurostat datasets, EU27 2020 (accessed 20 June 2022)

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



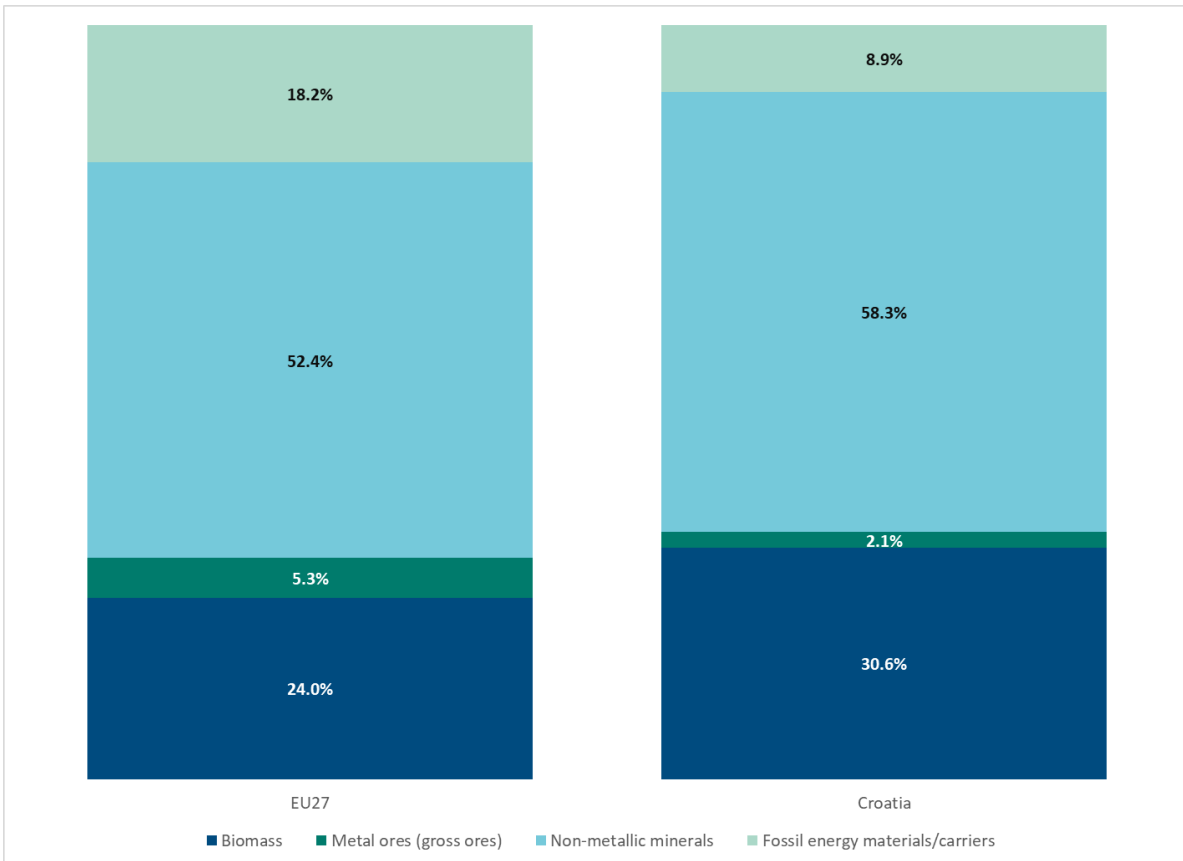
Source: Eurostat (2022) [env_ac_mfa], [en_ac_sd], [env_wassd] (accessed 20 June 2022)

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



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

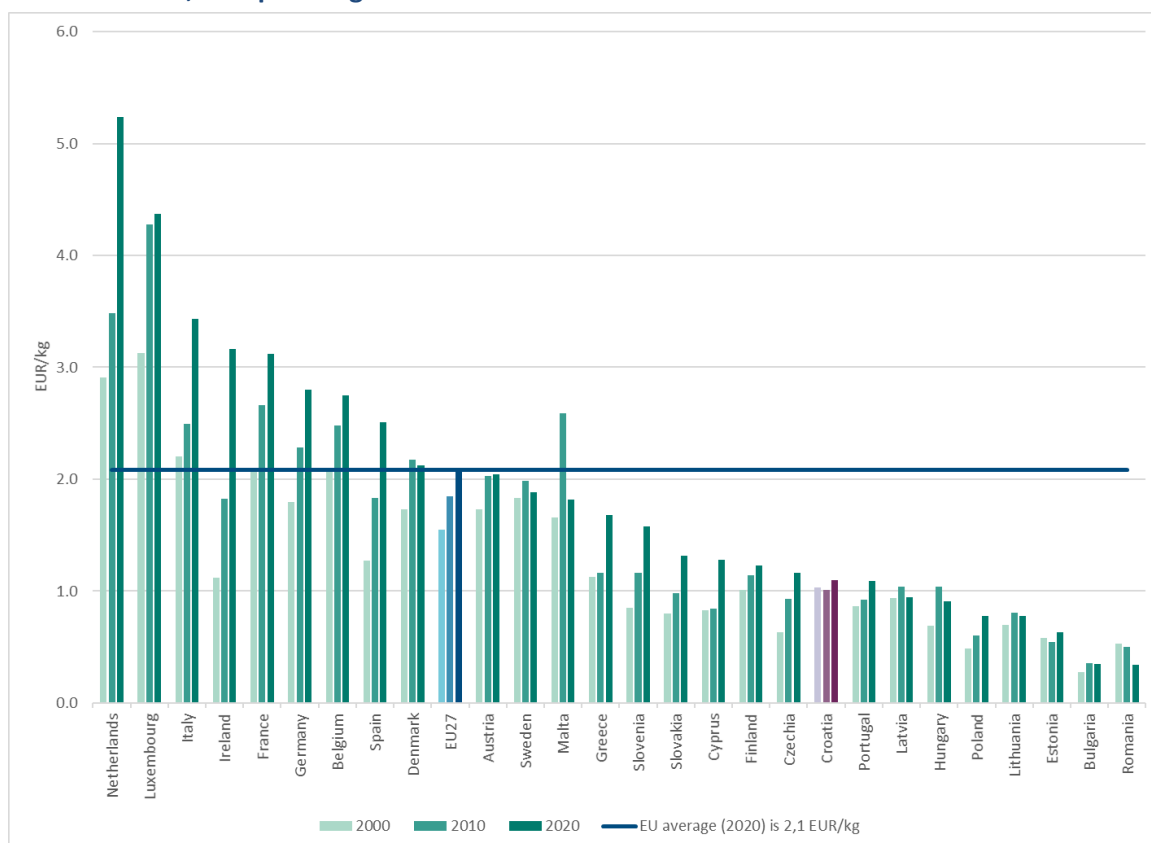
Figure 3 Domestic material consumption by selected material category, EU27 and Croatia, 2020, per cent



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

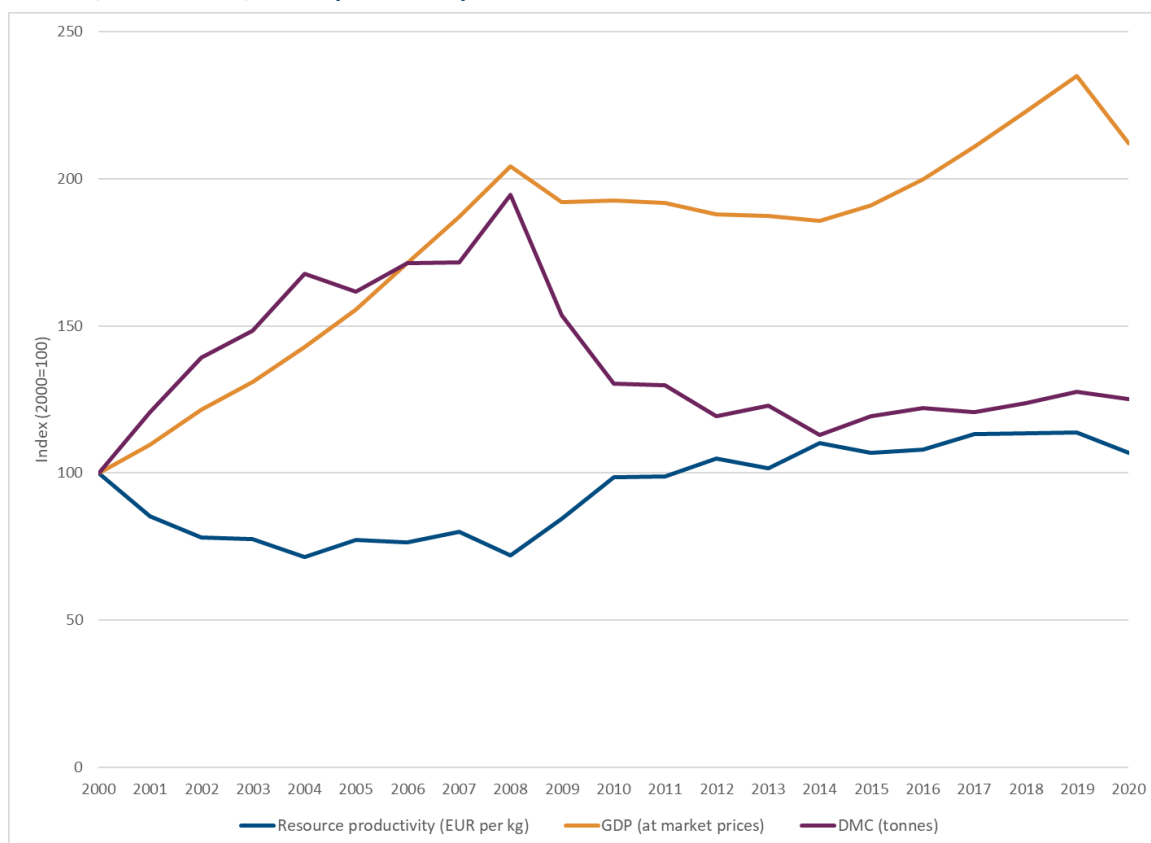
Source: Eurostat (2022) [env_ac_mfa] (accessed 20 June 2022)

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



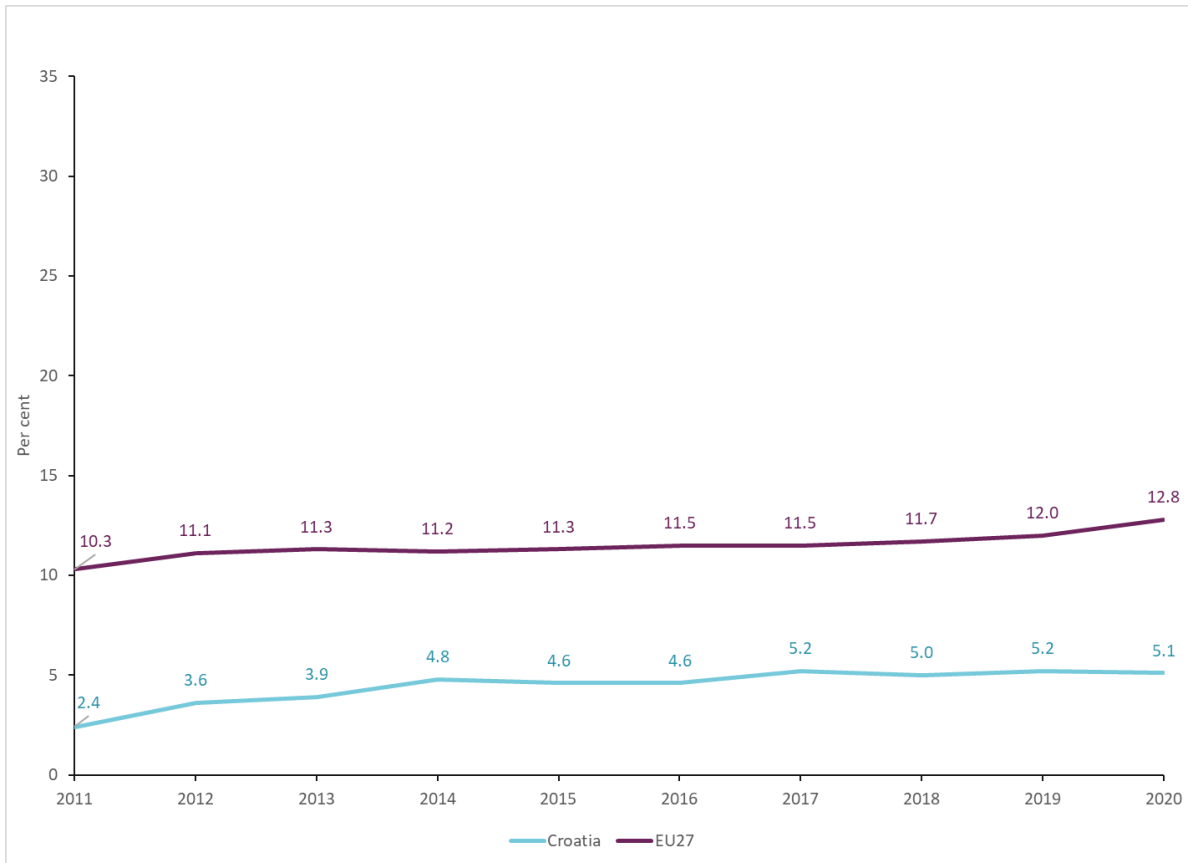
Source: Eurostat (2022) [env_ac_rp] (accessed 20 June 2022)

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

No information available.

Circular economy policy elements included in other policies

A wide range of national strategies might have the potential to promote CE approaches in Croatia.

Waste Management Plan of the Republic of Croatia for the period 2017–2022 (OG 3/17, 1/22) ⁽¹⁾

The Waste Management Plan of the Republic of Croatia (WMP) is a waste management planning document that is reflected at all levels, from national to local, and as a segment within other sectors, such as water management, health, spatial planning and construction. It sets objectives and measures for the establishment of waste management based on CE criteria. The Plan focusses on developing a recycling and recovery system to separate waste streams, reducing the total quantity of mixed municipal waste by applying measures such as establishing reuse centres, home composting, development of quality and categorising criteria for compost and digestate enhancing separate collection of waste, financial incentives for separate waste collection, introducing a fee for landfilling, enhancing recycling, strengthening the market for waste intended for recycling and planning energy recovery. Further specific measures include the improvement of municipal and hazardous waste management systems, remediation of polluted sites, improvement of the waste management information system and supervision and administrative procedures in waste management.

Achieving the specific goals for waste prevention contributes to the achievement of general goals for waste management: separating economic growth from the increase in the amount of waste generated, conserving natural resources, reducing the total mass of waste disposed of in landfills, reducing emissions of pollutants into the environment and reducing hazards to human health and the environment.

Targets for waste management to be achieved by 2022 compared to 2015

No	Objective	N° of Objective	Description
1	Improve the municipal waste management system	Objective 1.1	Reduce the total amount of municipal waste generated by 5 %.
		Objective 1.2	Separate collection of 60 % of municipal waste generated by weight – primarily paper, glass, plastic, metal and biowaste.
		Objective 1.3	Separate collection of 40 % of generated biowaste by weight which is an integral part of municipal waste.
		Objective 1.4	Dispose of less than 25 % by weight of municipal waste generated.
2	Improve the system of management of specific waste categories	Objective 2.1	Separate collection of 75% by weight of construction waste produced.
		Objective 2.2	Establish a system for sludge waste management from wastewater treatment plants.
		Objective 2.3	Improve the management of waste packaging.
		Objective 2.4	Establish a marine litter management system.
		Objective 2.5	Establish an end-of-life management system for waste ships, wrecks and sunken items on the seabed.
		Objective 2.6	Improve the management system for other specific waste categories.
3	Improve the hazardous waste management system.		

¹ <https://mingor.gov.hr/o-ministarstvu-1065/djelokrug/uprava-za-procjenu-utjecaja-na-okolis-i-odrzivo-gospodarenje-otpadom-1271/gospodarenje-otpadom/strategije-planovi-i-programi-7595/7595> (in Croat)

No	Objective	N° of Objective	Description
4	Remediate sites contaminated by waste.		
5	Continuously carry out education and information activities		
6	Improve the information system in waste management.		
7	Improve control of waste management.		
8	Enhance administrative procedures in waste management.		

Circular economy policy element	Included in policy
Waste Management	Waste Management Plan 2017–2022
<p>The Waste Prevention Plan is an integral part of the Waste Management Plan and contains objectives and waste prevention measures that separate the link between economic growth and environmental impacts related to waste generation, a description of existing waste prevention measures and an assessment of the usefulness of appropriate waste prevention measures.</p> <p>Waste prevention</p> <ul style="list-style-type: none"> - encouraging the reuse of demolition material; - organisation for information and education campaigns on the prevention of food waste; - work to improve food waste collection and processing systems; - promoting sustainable construction; - establishment of a food donation system; - organisation of a communication campaign for citizens; - encouraging prevention of waste plastic carrier bags; - promotion of home composting; - promoting green and sustainable public procurement; - encouraging the exchange and reuse of usable products. 	The Waste Prevention Plan 2017–2022 (an integral part of the Waste Management Plan)
Food Waste Prevention Plan	Food Waste Prevention Plan 2019-2022
<p>The Plan aims to prevent and reduce the generation of food waste. It aims to bring together in one place all measures and activities that contribute to the prevention of food waste in all phases of the food chain, from primary production, through processing, trade, catering and institutional kitchens to households. The plan is the first such comprehensive document on this issue produced in the Republic of Croatia.</p> <p>The Plan is accompanied by a detailed Programme for the implementation of the Plan. The implementation of this Programme will result in improving the legislative framework, drafting guides, establishing a system for preventing and reducing food waste, redirecting surpluses, and exchanging information that will significantly increase understanding of the negative effects of food loss, non-utilisation and waste among citizens responsible for handling food.</p>	

The National Development Strategy is an umbrella document and a comprehensive act of strategic planning which should guide the development of society and the economy in the long run. It promotes the green and digital transition to cleaner and more accessible energy by encouraging green and blue investments, by decarbonising buildings, and by developing a CE. It states that production sectors that accept the concept of a circular and decarbonised economy will be the basis for sustainable and competitive development. It encourages the development of a CE as one of the priorities in the implementation of public policies that will contribute to the development of a globally competitive, green and digital industry.

[National Development Strategy until 2030 \(OG 13/2021\)](#) (in Croat)

Targets are outlined in section of CE monitoring frameworks and their indicators beyond the ones from Eurostat (below)

The Low Carbon Development Strategy outlines the following vision: industry and agriculture will be efficient and connected to all sectors of the economy, reducing the generation of waste materials in an integrated and circular economy. The low carbon strategy therefore wants to create synergies with the concept of developing new green jobs, and generally with a concept of a CE in which resources are used as a whole and waste generation is minimised.

[The Low Carbon Development Strategy of the Republic of Croatia to 2030 with a view to 2050](#)

Visions of the low carbon development of some sectors by 2050 are as follows.

- The establishment of a waste management system in line with the principles of a CE will contribute to resource efficiency with a lower negative impact on people and the environment.
- Building design, construction and renovation will be carried out according to the principles of circular management of space and buildings with the use of resources coordinated with the needs and performance of buildings.
- Industry will promote the concept of a CE, including the recycling and recovery of scrap materials in their own processes and from other operators.
- The Low-carbon Development Strategy lists a number of measures, including those that support the implementation of a CE.
- Improving the sustainability of urban environments.

The Circular Governance Development Programme for Buildings:

- Sets up a CE platform;
 - establishes of a bioeconomy platform;
 - green public procurement;
 - prevention and minimisation of solid waste, increase in separately collected and recycled solid waste, minimisation of landfilled biodegradable waste, and use of biogas for the production of biomethane, electricity and heat.
-

Further relevant policies

Waste management plans on a regional level: according to Article 111 of the Waste Management Act regional self-government units and the City of Zagreb are obliged to adopt a waste management plan and inform Ministry of Economy and Sustainable Development about it. Such plans have to be evaluated at least once every six years.

Industrial Strategy of the Republic of Croatia 2014 - 2020 (OG 126/2014) ⁽²⁾

The purpose of the Strategy is to obtain an overview of the state of industrial activities and sub-activities in Croatia through industry analysis. The concept of a CE is not included in the industrial strategy, but one of the operational measures is to encourage cooperation between industry, education, science and technology and to adapt the educational and science systems to new technologies and the green economy.

Smart Specialisation Strategy 2016–2020 ⁽³⁾ and related Action Plan 2016–2017

The Smart Specialization Strategy of the Republic of Croatia for 2016–2020 is accompanied by the Action Plan for the implementation of the Strategy for 2016–2017. It contains goals and priority activities related to research, development and the commercialisation of innovation. The new Strategy is in process of being drafted.

Strategy for Encouraging Innovation in the Republic of Croatia 2014–2020 ⁽⁴⁾

The Strategy sees the development and systematic encouragement of innovation as fundamental values of economic participation, but also of society as a whole. It sets the strategic direction for the development of innovation and the innovation system. It emphasises strengthening the innovation potential of the economy, and encourages cooperation and the flow of resources between the businesses, public and scientific-research sectors. Furthermore, the Strategy determines the manner of communication and models of cooperation between the public, business and scientific research sectors for the development of new products, services, business processes and technology, and the manner of applying the results of scientific research in the economy and society as a whole.

Energy Development Strategy of the Republic of Croatia to 2030 with a view to 2050 (OG 25/2020) ⁽⁵⁾

The Strategy represents a step towards the realisation of the vision of low-carbon energy and ensures the transition to a new period of energy policy that ensures an affordable, secure and quality energy supply. The Strategy recognises the importance of the CE in waste management as well as the potential for the more intensive use of biomass and biogas in the energy sector. Among other things, it highlights the bioeconomy as a sector, which could generate the production of renewable biological resources and the conversion of those resources, together with waste streams, into value-added products such as food, feed, biological products and bioenergy.

Integrated National Energy and Climate Plan for the Republic of Croatia, for 2021–2030 (OG 123/17) ⁽⁶⁾

The Plan for 2021–2030 builds on existing national strategies and plans. It provides an overview of the current energy system and energy and climate policy. It also provides an overview of the national targets

² <https://vlada.gov.hr/UserDocsImages/2016/Sjednice/2014/182%20sjednica%20Vlade/182%20-%201.pdf>
(in Croat)

³ https://mzo.gov.hr/UserDocsImages/dokumenti/EUfondovi/OPKK_2014-2020/Strategija%20pametne%20specijalizacije%20Republike%20Hrvatske%20za%20razdoblje%20od%20016.%20-%202020.%20godine.pdf (in Croat)

⁴ <https://narodne-novine.nn.hr/clanci/sluzbeni/dodatni/434155.pdf> (in Croat)

⁵ https://narodne-novine.nn.hr/clanci/sluzbeni/2020_03_25_602.html (in Croat)

⁶ <https://mingor.gov.hr/UserDocsImages/UPRAVA%20ZA%20ENERGETIKU/Strategije,%20planovi%20i%20programi/hr%20necp/Integrated%20Nacional%20Energy%20and%20Climate%20Plan%20for%20the%20Republic%20of%20Croatia.pdf>

for each of the five key dimensions of the Energy Union ⁽⁷⁾ and the appropriate policies and measures to achieve those targets, for which an analytical basis should be established. In the Plan particular attention is paid to the targets to be achieved by 2030, which include the reduction of greenhouse gas emissions, energy from renewable sources, energy efficiency and electricity connection.

Measures listed in the Plan are in line with measures listed in national Low Carbon Development Strategy, including those that support the implementation of CE:

Decision of the Government of the Republic of Croatia on Green Public Procurement in Central Public Procurement Procedures (OG 49/2021) ⁽⁸⁾

Sustainable public procurement is encouraged through sectorial legislation and other legal documents such as the Decision of the Government of Croatia on Green Public Procurement in Central Public Procurement Procedures (2021). That Decision obliges the Central State Office for Central Public Procurement to apply green public procurement (GPP) criteria in central public procurement procedures. The Decision also obliges the Ministry of Economy and Sustainable Development to measure and publish details of annual savings in carbon-dioxide emissions from GPP.

The ministry has launched a national web page that is dedicated to GPP, with relevant information, examples, and educational materials ⁽⁹⁾.

National Chemical Safety Strategy (OG 143/2008) ⁽¹⁰⁾

The aim of the Strategy is to identify, on the basis of the extensive analysis and assessment of chemical safety, the main strategic lines and measures to establish a rational, dynamic and integrated chemical safety system fully in line with the legislation and practice of the European Union. The aim of the Strategy is to introduce the uniform development of all aspects of protection of health and the environment from the adverse effects of chemicals, with appropriate upgrading of existing protection regimes, through inter-agency cooperation.

National Agriculture Strategy to 2030 ⁽¹¹⁾

The Strategy, adopted by the Croatian Parliament on 25 February 2022, supports the ambition of the European Green Deal to transform the European economy into a zero-greenhouse gas emissions economy. In the implementation plan of the National Agriculture Strategy, one of the interventions within the framework of new opportunities for growth is the development and implementation of the national bioeconomy strategy in accordance with the Law on Agriculture. The planned Bioeconomy Strategy will contain specific activities, investment and sources of financing, both EU and national, for the development of selected value chains in the bioeconomy. Increased investment for research in agriculture will be focussed on the development of solutions for sustainable food and biomass production in the service of the circular bioeconomy, with continuous support, from research and development to pilot projects.

Sustainable Tourism Development Strategy to 2030 (being drafted) ⁽¹²⁾

This will be an umbrella strategic document, which will define the vision of further development of tourism, taking sustainability, development needs and potential into account.

Development Programme of Green infrastructure in Urban Areas for 2021–2030 ⁽¹³⁾ and Development Programme of Circular Economy of Space and Buildings for 2021–2030 ⁽¹⁴⁾, both adopted in 2021, direct

⁷ <https://www.eceee.org/policy-areas/energy-union/>

⁸ <https://zelenanabava.hr/dokumenti/Odluka-VRH-ZeJN-NN-49-2021.pdf> (in Croat)

⁹ <https://zelenanabava.hr/> (in Croat)

¹⁰ https://narodne-novine.nn.hr/clanci/sluzbeni/2008_12_143_3961.html (in Croat)

¹¹ https://narodne-novine.nn.hr/clanci/sluzbeni/2022_03_26_325.html (in Croat)

¹² <https://mint.gov.hr/strategija-razvoja-odrzivog-turizma-do-2030-godine/11411> (in Croat)

¹³ <https://mpgi.gov.hr/vijesti-8/donesen-program-razvoja-zelene-infrastrukture-u-urbanim-podrucjima/14152> (in Croat)

¹⁴ <https://mpgi.gov.hr/UserDocsImages/14146> (in Croat)

stakeholders in the construction sector towards sustainable construction and the principles of the CE in construction, reconstruction and demolition. Furthermore, to ensure greater circularity in the construction sector, a project was launched in 2021 to develop an Action Plan for construction waste in the CE for a period of five years.

Monitoring and targets

Assessment of circular economy performance

Croatia is developing a CE monitoring framework. For the chapter on Resource efficiency and the Transition to the Circular Economy in the **National Report on State of Environment** (being drafted; planned to be published by the end of 2022) the following groups and indicators will be used.

1. Energy consumption:

1.1. direct energy consumption.

2. Emissions to the environment and waste generation:

2.1. decoupling economic growth from the increase of environmental emissions;

2.2. generation of waste, excluding the majority of mineral waste, by domestic material consumption.

3. Efficiency of material use:

3.1. material flow (Sankey diagram);

3.2. domestic material consumption (DMC);

3.3. material footprint (raw material consumption, RMC);

3.4. material productivity;

3.5. material circularity rate.

4. Responses of the society:

4.1. recycling rate of all waste excluding major mineral waste (excluding the majority of mineral waste);

4.2. trade in recyclable raw materials;

4.3. by-product status;

4.4. end-of-waste status;

4.5. private investment, jobs and gross value added related to CE sectors;

4.6. GPP;

4.7. eco-labels.

5. Prominent topics:

5.1. sustainable food production and consumption;

5.2. plastics in the circular economy;

5.3. the CE in the construction and demolition sector.

Current Croatian strategic documents do not tackle CE topics adequately. When Croatia entered the EU in 2013, it adopted its main strategic documents at the time of or prior to accession. The CE only became a main policy topic in EU later, namely when the EU adopted the first CE Action Plan in 2015. Currently, there is a new cycle of drafting strategic documents and therefore a good opportunity to adequately include the main CE policies at a national strategic level. This has already been done in the new Agriculture Strategy to 2030 and the Energy Development Strategy to 2030 with a view to 2050. As concerns waste, the new Waste management act (OG 84/21) came into force on **31 July 2021**. This Act stipulates the measures to protect the environment and human health by preventing or reducing waste production, reducing the negative effects of waste generation and waste management, reducing the overall effects of the use of raw materials and improving the efficiency of the use of raw materials as well as increasing recycling and the re-use of recycled materials; which is necessary for the transition to a circular economy and the ensuring of the long-term competitiveness of the Republic of Croatia and the European Union. Moreover, a new waste management plan for the Republic of Croatia for the next 6 years is in preparation, in accordance with the circular economy.

Although Croatia has recognised the importance of managing resources more efficiently to secure long-term economic and environmental sustainability, in line with the European Union's 2018 Circular Economy Package, its circular development model has yet to take off. A forthcoming report by the Ministry of Economy and Sustainable Development and the World Bank shows that Croatia's economy is only 2.7 % circular, meaning that more than 97 % of all materials consumed each year never make it back into the economy as raw materials.

Waste management, including the collection and treatment of waste, is central for increasing circularity in Croatia as well as reducing the negative impacts of landfills on the environment, human health and greenhouse gas emissions. Today, more than 56 % of all municipal waste ends up in Croatia's 108 active landfills, significantly more than the EU's average landfilling rate of 23 %. Croatia's municipal waste represents the largest share, with only 34 % of it being recycled compared to the EU's average of 48 % in 2020.

Croatia's government has identified the construction and demolition waste sector as a priority in its circular approach to waste management, regardless of the good results in the recycling rate of construction waste – in 2020, Croatia's recovery rate was 60 %, while the EU target for 2020 was 70 %. This was prompted by two devastating earthquakes in 2020 and the large amounts of construction debris. The World Bank is supporting Croatia in this effort by helping the Ministry of Economy and Sustainable Development develop a five-year CE Action Plan for the construction sector. The aim is to showcase and lead other sectors to apply CE principles, targeting waste reduction and, where waste generation cannot be avoided, recovering economic value from it while avoiding negative impacts on the environment and climate.

Although the prospects for establishing a CE in Croatia are promising, strategic integration and sectoral activities are often insufficient. The CE philosophy requires the cooperation and coordination of all relevant sectors and stakeholders, both public and private, in order to achieve more circularity. An integrated CE strategy developed with broad stakeholder engagement could substantially support and promote CE approaches in Croatia.

The crisis caused by the COVID-19 pandemic led to a deep recession in 2020. Taking into account the fall in gross domestic product (GDP), Croatia is one of the three countries the most severely affected in the EU and the reduction of growth in Croatia is approximately twice the European average. The challenges in Croatia are further exacerbated by significant damage from the earthquakes that hit the Croatian capital in March 2020 and central Croatia in December 2020, creating additional pressure on public finances. Croatia is also very sensitive to the effects of climate change, which could cause shocks of similar magnitude in the future.

The pandemic has clearly shown the lack of diversity in the economy and the dominance of low-productivity sectors, making the economy particularly vulnerable to external shocks. The structure of the economy is characterised by a significant share of services and a reliance on tourism that suffered greatly from the consequences of the COVID-19 pandemic. The industrial base predominantly consists of industries using low and medium technologies, 47 % and 31 % respectively, while industries using high-medium and high technologies account for only 18 % and 4 %. Furthermore, total factor productivity ⁽¹⁵⁾ is growing relatively slowly, contributing less to GDP growth than in comparable countries.

¹⁵ *Total factor productivity (TFP)* is a measure of productivity calculated by dividing economy-wide total production by the weighted average of inputs, i.e. labour and capital.

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

The Croatian **National Development Strategy 2030 (NDS 2030)** defines four development directions:

1. sustainable economy and society;
2. strengthening crisis resilience;
3. green and digital transition; and
4. balanced regional development.

Regarding point 3., it is planned that Croatia will be among Europe's leaders in turning climate and environmental challenges into opportunities by ensuring a fair and inclusive transition to climate neutrality. The green and digital transition will be achieved by switching to cleaner and more affordable energy, encouraging green and blue investment, decarbonising buildings, developing the CE, strengthening self-sufficiency in food production, developing the bioeconomy, and preserving and restoring ecosystems and biodiversity.

Croatia will become a leader in the green economy and the introduction of cleaner, cheaper and healthier forms of transport by promoting a safe and sustainable transport policy. It will, therefore, invest in digital infrastructure and encourage the introduction of digital solutions in the interests of citizens and the Croatian economy, which will contribute to building the digital future of Europe.

Strategic goal (NDS 2030)	Indicator of success	Starting value	Target value
Ecological and energy transition for climate neutrality	The greenhouse emission (baseline year 1990)	75.23 % (2018)	65 %
	Municipal waste recycling rate	25.30 % (2018)	55 %
	Share of renewable energy sources in gross total energy consumption	28,02% (2018)	36,40%
Food self-sufficiency and bio-economy development	Labour productivity in agriculture	EUR 6 107/AWU* (2019)	EUR 10 000/AWU
Sustainable mobility	Global Competitiveness Index (GCI), 2nd pillar: Infrastructure	32 nd place (2019)	> 28 th place
Digital transition of society and the economy	Digital Economy and Society Index (DESI) of economic and social digitalisation	47.60 20 th place in the EU (2020)	Achieve EU average

*AWU – Annual Work Unit

Furthermore, the Republic of Croatia is in the process of completing the **quadrennial National Report on State of Environment** that should be accepted and published by the end of 2022 in which one chapter will be devoted to the CE.

Circular economy targets

Croatia has not identified a circular material use (CMU) rate yet.

Innovative approaches and good practice

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

- *Good practice example: public procurement, education (awareness-raising and training), spatial planning and urban policy*

Green Public Procurement Portal ⁽¹⁶⁾

The national green public procurement (GPP) web platform, established in 2015 and operated by the Ministry of Economy and Sustainable Development, communicates GPP criteria, publishes educational materials, runs webinars, lists eco-labels, and contains lifecycle analysis (LCA) tools and examples of good practice.

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

The National Environmentally Friendly Label ⁽¹⁷⁾

The Environmentally Friendly Label is a voluntary environmental instrument used on products, which, compared to similar products, have a less negative impact on the environment throughout their lifecycles. The Environmentally Friendly Label provides the consumer with complete, credible and scientifically based information on the environmental impact of the product. A register of products and services awarded the EU Ecolabel Croatia and the Croatian Environmentally Friendly labels by the Ministry of Economy and Sustainable Development can be found on the platform.

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

EU Ecolabel Croatia ⁽¹⁸⁾

A dedicated Facebook page communicates news about the award of the EU Ecolabel to products and services in Croatia, the development of European standards and other information important for consumers and producers who want to reduce their negative impact on the environment.

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

The For Our Beauty (Za ljepšu našu) project ⁽¹⁹⁾

For our beauty is an educational and information campaign conducted by the Fund for Environmental Protection and Energy Efficiency. Its aim is to raise awareness of the importance of sustainable waste management and encourage all citizens to handle waste properly and responsibly. It includes a blog and a Facebook page.

Examples of private policy initiatives (sectoral)

The Reduce Food Waste, Cook for your Guests project ⁽²⁰⁾

In 2021, the Environmental Protection and Energy Efficiency Fund, in cooperation with the Ministry of Economy and Sustainable Development, the Ministry of Tourism and Sports and the Faculty of Geotechnics at the University of Zagreb, launched Reduce Food Waste, Cook for your Guests as a pilot project. It was implemented in two hotels – the Park Plaza Histria Hotel in Pula and the Osijek Hotel in Osijek. Workshops were held for employees in the hotels at which they were introduced into the principles of planned food management, proper food storage and estimating of real meal quantities. In cooperation with the hotel

¹⁶ <https://zelenanabava.hr/> (in Croat)

¹⁷ <https://mingor.gov.hr/nacionalni-registar-eu-ecolabel-proizvoda-i-usluga/8145> (in Croat)

¹⁸ <https://www.facebook.com/EU-Ecolabel-Hrvatska-917984185032743/> (in Croat)

¹⁹ <https://zaljepsunasu.hr/> (in Croat)

²⁰ <https://www.fzoeu.hr/en/pilot-project-reduce-food-waste-cook-for-your-guests-presented-in-pula/8598>

staff at the Osijek Hotel, measurements of the total amount of food wasted in a week, divided into ten categories, were carried out. After implementation of reduction measures and recommendations, another round of measurements was made that showed that waste was reduced by 11 %. The Park Plaza Histria Hotel implemented another measuring method based on an estimate of food waste categories and implemented less reduction measures and recommendation. It, however, acquired a dehydration device for food waste so the hotel still reduced its volume of food waste by 21 %.

At the beginning of 2022, a third hotel, Terme sveti Martin na Muri Hotel, joined the project and carried out the first measurements.


Based on the results of the pilot project, the **Environmental Protection and Energy Efficiency Fund** continued the project and arranged the initial measurements in several hotels. It also issued a public call for co-financing for the procurement of food waste reduction devices for hotels and student canteens. The project and the public call are still ongoing.

The way forward

Addressing barriers and challenges

Croatia's successful transition to a CE will require more than just a change in consumer and business behaviour and mind-sets inspired by the idea of renewal and awareness that natural resources are not limitless. It will also need political and economic responses, requiring close collaboration among all stakeholders: the government, businesses, civil society, academia, the media and citizens.

Ranking types of barrier

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

Future policy plans

Closing the material loop requires rethinking the way products are designed, produced and consumed, as well as how materials are reused at the end of a product's lifetime. This offers opportunities for the Croatian economy and calls for strategies that should focus on four priority sectors: food, construction, plastics and textile manufacturing, given their significant environmental and socioeconomic impacts.

To facilitate this process, the **Circular Economy Committee**, an interdisciplinary advisory body to the Ministry of Economy and Sustainable Development, was established. Members are 14 organisations and professional associations representing all key sectors – public, private, academia and civil society. The Committee's task is to share knowledge and provide expertise to strengthen cooperation among all sectors and advocate the change of mindsets in today's throwaway culture to improve product longevity and recycling. One of the Committee's initiatives is to promote the creation of a Circular Economy Hub – a space for sharing knowledge, innovation and best practice among all stakeholders. In the future, the Hub could be a physical location where circular technologies could be demonstrated, scaled and recreated in a mini-household or production-line settings.

These efforts and measures are helping Croatia progress on making its economy more circular. The country must continue to push these efforts forward to protect the environment and create a more sustainable economy.

The Republic of Croatia adopted its **Recovery and Resilience Plan** in July 2021. The Plan foresees a programme of support for companies for the transition to an energy- and resource-efficient economy that is aimed at companies with up to 3 000 employees, as small and medium-sized enterprises (SMEs) represent 99 % of economic entities in Croatia.

The aim is to support faster and better adaptation of the economy to current and future environmental requirements, and also to increase production efficiency, preserve existing jobs and create new ones through investment in a green transition and the creation of green skills. The programme will focus on new investment in environmentally-friendly production processes and resource efficiency in private SMEs and medium-capitalised enterprises, in order to achieve the following goals:

- climate change mitigation and adaptation;
- sustainable use of natural resources;
- transition to a circular economy;
- pollution prevention and control.

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.

